Quality Counts:
Indiana Charter School Program Grant Application

2017-2018

Applicant Entity: Purdue Polytechnic High School

Contact Person for Grant: Scott Bess	Title: Head of School
Total Grant Funds Requested: (Up to $900,000): $891,823.00	Total Project Period Months Requested (24-60 months): 36 months
Application to: Open	Expected Date School will Open, Expand, or Replicate: 07.31.2017
Charter Award Date (indicate if expected): 12.04.2015	Charter Expiration Date: 06.30.2023
Proposed Charter School Address: 525 S. Meridian Street, Indianapolis IN 46225	
Applicant Address (if different than proposed address):	
Applicant Telephone: 317-832-1200	Applicant Email: sbess@pphs.purdue.edu
Fiscal Contact	
Fiscal Manager: Lori Thompson	Title: Controller
Telephone: 317-938-4857	Email: lori.indigo43@gmail.com

Charter School Board Contact Information	
1. Board President: Maureen Weber	2. Email: mweber@pltw.org
3. Board President Address: 3939 Priority Way South Drive, Suite 400 Indianapolis IN 46240	
Authorizer Contact Information	
1. Authorizing Agency: Indianapolis Charter School Board/OEI	2. Authorizing agency contact person: Monica Hingst
3. Authorizing agency contact telephone: 317-327-3711	4. Authorizing agency contact email: monica.hingst@indy.gov
5. Authorizing agency address: Office of Education Innovation, Office of Mayor Joe Hogsett, City of Indianapolis	
20 U.S.C. § 5203(d)(3) requires all Charter School Program (CSP) grant applications must be provided to the charter school authorizer and the authorizer must verify that the CSP applicant charter school has notified them of application submission. The signature by the designated official form the charter school authorizer signifies that this requirement has been met.	
Monica Hingst Authorizer Official Printed Name	Academic Performance Title Analyst
MHingst Signature	1/30/18 Date

Assurances

Each participating subgrant recipient does hereby agree to comply with the following assurances (mark each with an X):

_X_ 1. Subgrant funds will be expended during the specified grant period; standard accounting procedures will be utilized by subgrant recipients and records of all subgrant expenditures will be maintained in an accurate, thorough, and complete manner.

_X_ 2. Subgrant recipients confirm their understanding that funds for implementation activities will be awarded only if they are an open and operating school or have submitted an application to a charter school authorizer and plan to open with 18 months.

_X_ 3. Subgrant recipients will participate in all data reporting and evaluation activities as requested or required by the U.S. Department of Education, the Indiana Department of Education (IDOE), and Indiana Code, including on-site and desktop monitoring conducted by the Indiana Department of Education, annual, independent audits required by the state board of accounts that are publicly reported and include financial statements prepared with generally accepted accounting principles, annual reports, and a final expenditure report for the use of subgrant funds. This section includes participation in any federal or state funded charter school research or evaluations. Failure to submit required information may result in a withholding of grant funds or a non-renewal of subsequent year funding within the project period.

_X_4. Subgrant recipients will expend implementation funds only for the purpose of implementation activities in a charter school which is nonsectarian in its programs, admissions, policies, employment practices, and all other operations, and which will be in compliance with all Indiana laws and administrative rules regarding staff certification and licensure.

_X_ 5. Subgrant recipients will comply with all federal laws including, but not limited to, the Age Discrimination Act of 1975, Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Part B of the Individuals with Disabilities Education Act, and Uniform Grants Guidance (2 CFR § 200). This section requires each charter school to recruit, enroll, retain, and meet the needs of all enrolled students, including children with disabilities and English learners.

_X_ 6. Subgrant recipients will comply with all state and local laws and health and safety requirements applicable to Charter Schools, including but not limited to all laws related to student admissions and enrollment, non-discrimination, data reporting, compulsory student attendance, and accountability.

_X_ 7. Subgrant recipients will comply with all provisions of the Public Charter Schools Program of the U.S. Department of Education, including compliance with activities allowable for implementation funds. This section requires compliance with the Nonregulatory Guidance for CSP funds.

_X_ 8. Subgrant recipients ensure that the Charter School will receive funds through programs

administered by the U.S. Department of Education under which funds are allocated on a formulary basis.

_X_ 9. Subgrant recipients shall include important information on the website of the school to help parents and the community to make informed decisions about the education options available to their children, including information on the educational program, student support services, parent contract requirements (including any financial obligations or fees and information regarding textbook assistance), and enrollment criteria. This section requires the school to provide annual performance and enrollment data for the student body and subgroups of students to the IDOE in order to display on its public database.

_X_ 10. It is the responsibility of each Charter School that receives funds under this grant to comply with all required federal assurances. Any Charter School that is deemed to be in noncompliance with federal or state statute and fails to address areas of noncompliance will not be funded. Funded schools will be expected to cooperate with the Indiana Department of Education in the development of certain reports to meet state and federal guidelines and requirements. Funded projects will be required to maintain appropriate fiscal and program records. Funded schools will be required to participate in desktop and on-site monitoring activities. If any findings of misuse of funds are discovered, project funds must be returned to the Indiana Department of Education. The IDOE may terminate a grant award upon thirty days' notice if it is deemed by the Indiana Department of Education that the school is not fulfilling the funded program as specified in the approved project or has not complied with the signed assurances.

I have read the above and agree to all terms and assurances.

	1/29/2018
Signature of Project Contact	Date Signed
	1/30/18
Signature of Board President	Date Signed

Grade Levels to be Served		
Year (of Grant Implementation)	Grade Levels	Projected Student Enrollment
First Year	9, 10	300
Second Year	9, 10, 11	450
Third Year	9, 10, 11, 12	600
Fourth Year		
Fifth Year		
Maximum		

Student Demographics *indicate if actual or expected percentage of total student population* Actual Percentage		
Free/Reduced Price Lunch: 59.1%	Special Education: 16.2%	English Learners: 17.5%
Black: 35.7%	Native Hawaiian or Other Pacific Islander:	Hispanic: 18.2%
American Indian:	Multiracial: 9.7%	Asian: 3.9%
White: 32.5%	Male: 65%	Female: 35%

Funding Requested		
	Month/Year to Month/Year	**Funding Requested by Year**
Planning (if applicable, prior to opening)	to	
Year 1 Implementation	award date to 6/30/18	$205,028.00
Year 2 Implementation	7/1/18 to 6/30/19	$375,727.00
Year 3 Implementation (if applicable)	7/1/19 to 6/30/20	$311,068.00
Year 4 Implementation (if applicable)	to NA	
Year 5 (if applicable, do not utilize this row if utilizing the planning period)	to NA	
Total (max 5 years, planning + implementation)		$891,823.00

Charter School Program Areas Contacts	
Students with Disabilities:	Contact Name: Tonya Taylor Email: ttaylor@pphs.purdue.edu Phone Number: 317-832-1200
English Learners (including Title III):	Contact Name: Tonya Taylor Email: ttaylor@pphs.purdue.edu Phone Number: 317-832-1200
Title I, Part A:	Contact Name: Tonya Taylor Email: ttaylor@pphs.purdue.edu Phone Number: 317-832-1200
Title II, Part A:	Contact Name: Tonya Taylor Email: ttaylor@pphs.purdue.edu Phone Number: 317-832-1200

Management Organization Information
Will the school work with a charter or educational management organization? No If no, skip to the next page.
If yes, name the management organization: Employer Identification Number (EIN):
Is the management organization: For Profit Not for Profit

Employees of the school will be:	Employed by the school Employed by the management organization

Note about management organizations:
Charter School Program (CSP) grants are made to charter schools, not any other entity. Regardless of the charter school's relationship with a management organization, the charter school and board retain responsibility for the all aspects of the grant including, but not limited to application submission, budget decisions, and repayment of any misspent funds. Items purchased by the school with CSP funds are and remain the property of the school, not the management organization.
Grant applications and budgets may not include any management fees that the school incurs as part of the management contract but may pay for allowable activities carried out by the school or the management organization.

If applicable, the full contract or agreement with the charter management organization (CMO) or educational management organization (EMO) must be included with this application to ensure it meets the definition of arm's length requirements. In order to be considered eligible, the school must demonstrate that the CMO or EMO has no involvement with the administration of the subgrant. The following factors will be considered:

a) Whether the charter school's governing board is selected by, or includes members who are employees of the CMO or EMO;
b) Whether the charter school has an independent attorney, accountant, and audit firm that works for the charter school and not for the CMO or EMO;
c) Whether the contract between the charter school and the CMO or EMO was negotiated at "arms-length," clearly describes each party's rights and responsibilities, and specifics reasonable and feasible terms under which either party may terminate the contract (e.g., the charter does not lose the right to use the facilities)
d) Whether the fee paid by the charter school to the CMO or EMO is reasonable for the type of management services provided; and
e) Whether any other agreements (e.g., loans, leases, etc.) between the charter school and the CMO or EMO are fair and reasonable, documented appropriately, align with market rates, and include terms that will not change if the management contract is terminated.

As a general matter, subgrantees must avoid apparent and actual conflicts of interest when administering grants. For additional information on conflicts of interest, please see Section G of the federal CSP Nonregulatory Guidance.

Optional Elements: Competitive Preference Priorities (up to 3 additional points) Applications that address early childhood programs, postsecondary education, or rural area locations will receive preference points when applications are scored.		
Element	Addressed within Charter Application (cite page and paragraph/section # or mark N/A and address in next column or additional pages)	Additional Information (may attach additional pages if necessary, cite specific corresponding element number) Note: 2 page limit for optional elements if attaching additional pages.
CPP1: Provide an overview of the early childhood, postsecondary, or rural area model and the expected targets and outcomes targeted at these unique populations Indicate areas of focus Postsecondary		By taking a radically different approach to high school, we plan to change the trajectory of students who otherwise may not matriculate to a postsecondary experience or high paying technical job. Purdue Polytechnic High School (PPHS) is Purdue University's 9-12 innovation charter high school. We are the first site in a nationally growing network of college and career readiness charter high schools that will serve as an academic feeder system for Purdue University. We purposefully selected a partnership with the Indianapolis Public Schools (IPS). The struggles of historically underserved students in Indiana served as a catalyst for the creation of a school designed to move students who are not currently preparing to go on to **post-secondary education** into a position where they are equipped to take advantage of opportunities to succeed, particularly in technical and STEM-related careers. We know exposure to different **career pathways**, work-based learning opportunities and internships will better prepare students for **college and future**

		careers. To that end, our students begin working on challenges and projects created by our business and industry partners. Through the design challenge process, students at PPHS have multiple contacts with professionals in a variety of career pathways. These contacts range from field trips and project kickoff events to one-on-one mentoring and instructional delivery. For example, in our last design challenge, students received instruction on DNA and cell structure from a molecular biologist at Dow AgroSciences. Students have daily access to mentors to help with project work, core academic skills, and critical 21st Century Skills. We believe it is essential to provide students with access to a guide who can help them understand what path they want to pursue, and then give them the tools and assistance to get there. Our staffing model includes a **career and college coordinator** who works directly with students to prepare them for all of the non-academic factors that lead to success beyond high school. This includes designing and overseeing programing and resources such as **trips to Purdue University's West Lafayette campus**, soft-skill development, mentorship program, paid internships, and job shadow opportunities. We implement a **mentorship program** that pairs students with a mentor from a local business or organization to help guide students as they navigate the polytechnic curriculum. *Mentors advise on fields of study, understand the opportunities and challenges ahead and support the student's transition from high school to post-secondary education or the workforce.* Our mentorship program provides academic, social, and emotional support to help students stay engaged at school. Students benefit from an additional positive adult role model relationship that spans school, life, and work. The PPHS internship program is one of the core components that sets our

		educational model apart from other high schools in Indiana. We expect all of our students, by end of sophomore year, to select a career pathway that most interests them and articulate what they need to do in order to be successful in that pathway. By the end of the senior year, all students will have experienced at least one **internship**. If the student is going to college, they will also have completed at least one **dual credit class** and the necessary steps to gain college entrance and financial aid. *For students planning to enter the workforce, they will have completed an industry certification in their desired career pathway and will have the skills and materials necessary for successful interviews.* Student success at PPHS is multi-faceted. Certainly, students will be measured by how well they perform on state-mandated tests, their mastery of state standards, and the attainment of a higher level diploma. *We also expect students to achieve certification(s) in a technical skill related to one of Indiana's primary career pathways along with transferable dual credit college courses.* However, we view all of those accomplishments as activities rather than outcomes. The overarching theme by which we track our desired outcomes in student success, is how they do when they leave us. For many, that will be how well they persist and succeed in post-secondary education. For others, their success will be in obtaining employment in a high-paying technical position in one of Indiana's primary career pathways. Whichever route they take, the skills and characteristics needed are similar. Out of our initial class of 150 freshman students, we expect that over two-thirds of them will meet the criteria to be admitted to Purdue University. Through our agreement with Purdue, our students will receive **direct admittance to the Purdue Polytechnic Institute in West Lafayette** (formerly the College of Technology) if they meet minimal targets on the SAT or ACT. Additionally, we are

		currently in the process of negotiating similar arrangements for direct admission to half of the Colleges at Purdue. These agreements are a true win-win. In Purdue University's 2014 freshman class, there were only 12 who were graduates of IPS. From a statewide perspective, of the 48,000 Indiana high school graduates in 2014 who took the SAT, only 101 African-American students and 156 Latino students scored at the average of Purdue's incoming freshman class. Our direct admit agreements provide a tangible incentive to our students and provide Purdue University with access to a robust pipeline of college ready students from groups that are currently underrepresented on campus.

Required Elements

In order to streamline the application process and to ensure that the application does not duplicate efforts from the charter application to the charter school authorizer, the entity may state where the information regarding the below elements are already available within the charter application. However, if the eligible applicant needs to expand or more succinctly state the charter agreement (between the organizer and authorizer) in order to attend to all elements for the CSP grant application, then utilize the provided space within the application or attach additional pages.

Element	Addressed within Charter Application (cite page and paragraph/section # or mark N/A and address in next column or additional pages)	Additional Information (may attach additional pages if necessary, cite specific corresponding element number) Note: 30 page limit for required elements if attaching additional pages. Page limit does not include the budget.
1. Provide an overview of the project, including the **vision of the charter school** and expected outcomes aided by the CSP funds.	Pg: 6-7	The road from high school to higher education can be filled with obstacles that impede college access and success, particularly for low-income, underrepresented minority students. Purdue Polytechnic High School (PPHS) is designed specifically to provide students with the preparation they need to continue their education at Purdue University or proceed directly to high-tech careers. The PPHS curriculum is multidisciplinary and project-based, organized to develop not only deep knowledge but also applied skills and workplace experiences. Instruction at all grade levels balances practical STEM applications and the humanities, helping students to learn the problem-solving, critical-thinking, communication and leadership skills sought by employers. Students tackle grand challenges through industry-sponsored projects. The design process is at the center of everything we do at PPHS, and we have organized the essential structure of the school to take full advantage of design thinking. We eliminated pre-determined master schedules that separate academic learning into discrete subject areas. Rather, students use design thinking to drive solutions for industry-sponsored challenges. which brings unique emphasis to core academic concepts and empowers students to develop creative

		and user-centric solutions. Industry and community partners and Purdue alumni have shown high interest in the PPHS student mentorship and internship programs. Mentors provide after-school tutoring, guidance in labs, and support students in their personal learning community during a project cycle. Students will begin internships in their junior and senior years at PPHS and will also have multiple opportunities to take dual credit college courses. Because each student's schedule is unique and based on their abilities and interests, accommodating experiences outside the school walls is part of the core structure of the school. PPHS is requesting funds under the **new high quality charter school category** of the Quality Counts CSP grant to fully equip our labs to ensure the success of our students and school. With the funds, we are equipping world-class maker spaces and science labs for students to apply their academic skills to real-world problems and challenges that are put forth by our industry partners. With the equipment and tools obtained through the funds, our students will create and test prototypes of their solutions. Funds will also be used to support transportation needs to give students access to our growing school and numerous community/industry partnerships. Project-based learning is a highly effective educational model for high school aged students that is extremely expensive to implement with fidelity. The Quality Counts CSP grant will allow us to fully execute our model.

1a) Describe the vision of the charter school.	Pg: 8-12	PPHS-Indianapolis' vision is to create an environment of academic excellence characterized by industry-focused experiential learning; mentors who nurture, guide and trust; and students who develop a natural thirst to learn in preparation for their lifelong journeys. Our vision is twofold: develop a new generation of skilled talent by seamlessly transitioning graduates from high school to college to high-tech, high-wage jobs and; increase the number of underserved and underrepresented students attending Purdue University. Like many cities, an unacceptably small number of Indianapolis' students of color and students navigating poverty have the opportunity to succeed in today's workforce or pursue higher education. Despite their skills and potential, many of these students attended high schools that currently do not provide programs that support their success. Our goal is to ensure education becomes their pathway to the American dream. To achieve this, PPHS adopted a blending of secondary and post-secondary education with an infusion of industry leadership and participation. PPHS has a rigorous STEM design-based curricula delivered in career-focused learning environment. We have a deep commitment to providing students with an interdisciplinary approach to education, experiential learning and all the necessary supports to be successful. **Our multi-faceted model leverages Purdue University expertise, our dedicated staff, community programming and resources, and industry partnerships through mentorship and internship programs.**

		[1] https://research.collegeboard.org/
1b) Describe the particular need for the school within the specific community, and how the community will be informed about the charter school.	Pg: 8-12, 54, 77	When applying for our charter application we identified a strong need for more high performing quality high school options in in Indianapolis. In March 2013, IFF, a nonprofit community development institution, released a report indicating that, city-wide, Indianapolis has only 17 schools serving high concentrations of students from low-income families that are high performing (IFF, 2013). The report recommends that Indianapolis needs at least 45,000 additional high quality seats in schools to drastically improve education for its students. **PPHS is intentionally located in one of the high priority areas identified in the IFF report.** With three Indianapolis Public Schools (IPS) closing since the release of the 2013 IFF report, the need now is even greater. As an Innovation Network Charter School within IPS, we can **directly recruit IPS students and give priority admissions status** to students living in the IPS district boundaries. PPHS opened July 31, 2017 with 159 ninth graders. Our target enrollment was 150 students and the number of **applications received exceed 400.** Of the 159 enrolled students at the start of the year, 92 students live within the IPS district. Like most Indianapolis Public Schools (IPS) and charter schools, Purdue Polytechnic High School is participating in Enroll Indy's OneMatch application process. Priority status for admission is given to students who complete the application, live in the Indianapolis Public Schools district and/or are siblings of current PPHS students. Our target enrollment for our second cohort is 160 students and at the close of Round 1 for applications on January 15, PPHS had

		received 174 applications for 9th grade with 114 listing PPHS as first choice. 84 of those students live within IPS and primarily reside on the East Side, specifically from the following zip codes: 46218, 46205, 46201, 46203. 46235. The East Side of Indianapolis is where our permanent facility is located and where we targeted student recruitment. Student demand from this current school year and the 2018-2019 school year illustrates strong community need for PPHS. Additionally, PPHS is in the process to be certified by the IDOE as a STEM school, the only certified STEM high school within IPS. **PPHS was recognized as an innovative best practice to improve local education agencies in the IDOE's 2017 Quality Counts Proposal.** Families and other community members were engaged during the design process of PPHSl through focus groups and surveys. The residents voiced a compelling need for a school with a strong educational model in the community. The families were looking for something engaging and different. Students desired to work on relevant, real world problems. Community and Higher Education industry partners were looking for a program that prepared students academically and socially, with a particular emphasis on analytical thinking skills and teamwork. Students and parents were looking for smaller schools that provide an individualized and hands on approach to education.
1c) Describe the curriculum framework to be used in the school, including the key instructional practices and the research base that guides curriculum development.	Pg: 8-37	**Design-based learning is the backbone of PPHS's redesigned and re-imagined educational model.** Student work is focused on solving problems through design challenges and projects. These problems are presented in the context of real-world issues that come from the cities and neighborhoods our students live in as well as from business and industry partners. Students work with others to

		develop solutions to complex issues, navigate barriers and arrive at a successful outcome. **Academic content is delivered in the context of the design challenges to enable full integration of subject matter across all academic areas.** Instead of using a predetermined master schedule that assumes all students progress at a standard rate, PPHS has created a model where a student's schedule changes on a weekly basis, depending on the design challenge in front of them and the academic skills needed by that student at that point in time. Students who already have core academic skills will advance to advanced topics, while students who are behind can continue to work on the necessary skills. All students, however, will be expected to apply the academic skills they are learning, regardless of level, to the design challenge at hand. Student progress through core academic courses throughout all of the design challenges and are awarded credits at the end of the semester. For grade 9, students can earn up to 18 credits: 12 core academic courses and 6 career pathway courses. **Each design challenge has embedded Indiana academic standards that align to the core academic and career pathway courses.** Students also have the opportunity to earn elective credits through personalized work. All of our students will have the academic preparation necessary to demonstrate mastery of state standards and pass state mandated high school graduation exams. We expect Purdue Polytechnic High School students to earn high scores on college entrance exams to qualify for admission to Purdue and other four-year universities. Some Purdue Polytechnic High School students, however, may choose to directly enter the workforce after graduation. These students will work on higher-end technical certifications that will enable them to qualify for jobs that offer higher wages and a career pathway. Whichever route Purdue Polytechnic

		High School graduates take, we strongly believe all students should be academically prepared to maximize their learning and earning potential. Most of our students entering ninth grade will have very limited exposure to STEM career opportunities. All students will learn about major career pathways that offer strong employability options and interact with business professionals through mentor relationships. Students will take part in internships and earn industry-recognized certifications. Purdue Polytechnic High School curriculum will have a **heavy emphasis on 21st century skills** and the importance of academic excellence, professionalism and collaboration. Purdue Polytechnic High School graduates will be **academically prepared to pass high school graduation exams, persist and succeed in post-secondary education, and/or obtain employment in a high-tech, high-wage job**. Our Learning Labs are an integral component of designed based personalized learning. These innovative labs (Quant, Comms, STEM and Makerspace) and how they are utilized are what set PPHS apart from other high schools. The labs provide centralized space for students of all ability levels to collaborate, question, and explore the subject matter (including all state academic standards) they encounter in their projects. Collectively, these collaborative learning spaces can be referred to as the Learning Commons. The Learning Commons approach has been developed and implemented over the last five years by Dr. Kevin Berkopes, Director of the Mathematics Assistance Center at IUPUI. The PPHS Learning Commons are more robust and intrical to the PPHS curriculum and academic model than most learning centers in secondary settings. Instead of solely focusing on remediation, the PPHS Learning Commons emphasizes collaboration as an essential element of all students' learning. This collaborative environment mirrors the professional learning culture students will

		encounter in the workplace, and accelerates the pace of skill acquisition as students serve both as teachers and as learners. The PPHS Makerspace is the creative center for design and production where students put their imaginative and innovative ideas into form. This area will contain all the materials and machines for students to design, create, and work through their Challenge Solutions and build their unique prototypes. Learning from experienced makers, from teachers to fellow techies, students will gain new tools and attain ever-higher levels of proficiency bringing their ideas to life. The PPHS Makerspace is our in-house prototyping lab, where students are equipped with the tools, materials, and skills to make their ideas a reality. We know the benefits of design thinking and inquiry-based learning help students develop the knowledge and skills necessary to be successful in a rapidly changing world. Problem based learning and inquiry-based strategies have been shown to raise students science and math achievement.[1] Rather than confining students to the role of information consumer demanded by traditional education settings, our Makerspace provides PPHS students a learning space where they become the constructors of their own learning outcomes. With the right resources, guidance, and support from coaches and volunteers, we help students see that they can truly create anything using tools ranging from "low-tech," like cardboard and other recycled materials, to "high-tech," like 3D printers and Arduino microcontrollers. This type of lab allows students to learn on industry-standard tools, develop higher fidelity solutions to project challenges, and further develop their engineering and design skills. Our makerspace is an integral part to the design

[1] (Gordon, Rogers, Comfort, Gavula, & McGee, 2001; Schneider, Krajcik, Marx, & Soloway, 2002).

		process, providing a space for students to create, test, and iterate their cycle challenge solutions. It is through learning-by-doing, that students begin to internalize our core values of collaboration, innovation, and communication. The Quant Lab is the heart of quantitative inquiry and exploration at PPHS. The Quant Lab is a location for every student to come to while learning and doing quantitative skills and tasks. This can be mathematics coursework, but can also be physics, biology, chemistry, data analysis, and more. Each student in the Quant is both learner and teacher, and engages in exploration and discovery with their peers - and so every student, from the lowest to highest mathematical skill levels, stands to gain from using the space. Similarly, the Comms Lab is the hub for all things communication, whether visual or written, verbal or nonverbal. The Comms collaborative environment enhances the skills and work of each student in presenting, interpreting, analyzing, and disseminating information, no matter the student's beginning level. Students use the Comms Lab for support from content area experts and their fellow students in writing, reading, and conventions; they may also utilize the Comms Lab as needed during their personal learning time for guidance with proofreading, perfecting their product pitches, and other communications-based task.
1d) Describe the specific ways in which the educational program will be innovative, unique, and enable all students, including students with disabilities and English learners, to meet or exceed Indiana's challenging academic standards.	Pg: 48-54	The innovative curriculum model and structure of PPHS lends itself to being an inclusive environment for all learners. Due to this, students with disabilities and English learners are able to use supports and access the curriculum alongside their peers. In addition, all new incoming students will participate in diagnostic assessments at the beginning of the school year to identify skills gaps. Assessment results and prior performance data will assist teachers and staff in identifying students'

		knowledge and skills so they close any academic gaps. The school will focus significant resources on extensive tutoring, mentoring, and remediation in grades 9 and 10 to bring students up to grade level and prepare them for higher levels of learning in later grades. Additional supports will continue, as needed, as students progress through grades 11 and 12. Differentiated instruction such as vertical text sets and parallel problems and student grouping techniques will be utilized in all classrooms and subjects so that all students, regardless of achievement level, will have the opportunity and conditions necessary to succeed at the highest level possible. PPHS is currently serving students with disabilities and English Learners and has appropriately developed plans of study for all students to access the curriculum to meet or exceed Indiana academic standards.
1e) Describe how the school will prepare students to be college and career ready in future postsecondary and workplace environments.	Pg: 11-18	PPHS seeks to ensure that all students who complete its academic program are prepared to seamlessly transition into post-secondary education or the workplace. Because of the close relationship with Purdue University in West Lafayette, the academic program has been matched to the skills identified by Purdue faculty as essential to student success. Therefore, students will be held to high expectations and the school's curricula will be rigorous and designed to challenge students to reach their maximum potential, while weaving in career-focused learning. The curriculum will provide students with new knowledge and challenge them to apply STEM concepts with design- and problem-based learning to solve real-world challenges that they will face in their careers. Only after students demonstrate mastery and complete an exit capstone, generally, at the end of 10th grade, will they select and advance through a defined career cluster in areas of focus that include advanced manufacturing, supply chain and logistics, and computer and information technology (which align to Purdue Polytechnic Institute majors). The PPHS Board of Directors and curriculum experts will continuously seek inclusion of additional career clusters that align with

		Central Indiana's most high-growth, high-demand careers. Throughout each course progression, curriculum will be infused with career themes related to each career cluster, as well as the common employability skills that the school's industry partners report to be in highest demand (adaptability, interpersonal communication skills, critical thinking, problem solving, and professionalism). ***In grades 11-12, Students will build upon the skills and knowledge gained and focus earning college credits and industry credentials.*** Students will continue to learn through design challenges, distance learning to interact with faculty at Purdue University, and in the workplace. Students will be paired with business mentors to help reinforce how the technical and common employability skills they learn in the classroom are used in at the workplace on a daily basis. Students who meet the admissions criteria will have direct admittance into Purdue Polytechnic Institute to continue on to post-secondary education.
1f) Describe how the school will sustain activities when CSP funds are no longer needed (use to inform your sustainability budget year)		As we put together our budget for the CSP, we specifically targeted items that were one-time, start-up elements. We are using CSP funds to outfit our science lab and maker space with tools and systems that will last a number of years, along with our technology infrastructure and learning labs. All of learning spaces are critical elements of our educational model. Additionally, we are seeking funding to purchase two activities buses for transportation to internship and job shadow opportunities, community partners and also for sports and extracurricular activities. **From a cash flow perspective, our school becomes cash positive once we enter year four.** Our operating budget, excluding any additional philanthropy, shows $30,000 in net income in year three and then going to a steady state net income of $300,000 to $400,000 from year four and out. We have allocated money in our yearly budget to fund replacement costs once the purchased items

		reach the end of their useful life.
2. Provide an overview of the **expertise of the charter school developer(s)** to open, replicate, or expand the high-quality charter school.	Pg: 82-84	Scott Bess is Head of School for Purdue Polytechnic High School and Shatoya Jordan serves as PPHS Principal. Both bring their experience working with Goodwill Education Initiatives (GEI), Goodwill's arm that identifies and launches new educational opportunities throughout the Indianapolis region, and its Excel Center, a network of high schools for adults who had previously dropped out. Scott, is the former president & CEO of GEI. Under Scott's leadership, GEI grew from a single, small high school to a network of schools serving over 3,500 students across Indiana. At the time he left GEI to join Purdue, all 11 of the network schools were ranked an "A" or "B" under Indiana's accountability system. The model was licensed to other Goodwill organizations across the country, and GEI supported those schools on a contractual basis. Before assuming this role in 2004, he was chief information officer for Goodwill Industries of Central Indiana and served in similar technology roles in the private sector. Scott began his career as a teacher and coach in the Beech Grove school system. He also served four terms as a member of the Danville Community Schools board. Scott received a bachelor's degree in math education from Purdue and a master's degree in teaching from Marian University, where he was a part of the Turnaround School Leadership program. Shatoya completed The Mind Trust Innovation School Fellowship prior to starting as PPHS Principal in 2017. She had been a teacher and administrator with the Excel Center since 2010. As regional director, she was responsible for the

		academic and operational performance of several schools. She previously was a school director and lead teacher at the center. Before joining the Excel Center, she was a science teacher in the Indianapolis Public Schools and a local charter school. Shatoya earned her bachelor's degree in physical education, health and safety science, and biology and her master's degree in leadership administration, both from Marian University. Gary Bertoline is Dean of Purdue Polytechnic Institute (PPI) and serves of the PPHS Board of Directors. Dean Bertoline and PPI are our school's chief sponsor on campus in West Lafayette. Much of our curriculum mirrors the transformational work occuring at PPI. Additionally, many of the career pathways we focus on map directly to programs and majors at PPI. Dean Bertoline and his faculty have been intimately involved in several design elements of the school. Maureen Weber currently serves as Chairwoman of the high school's Board of Directors. Ms. Weber brings extensive knowledge to her leadership role with PPHS. Her career has spanned many sectors, but each has involved a common set of skills – the ability to think critically and creatively, communicate, and solve problems. First an attorney, then deputy commissioner for Indiana's Department of Workforce Development and Bureau of Motor Vehicles, chief operating officer for the Indiana Department of Education, and vice president of customer experience for Indiana University Health, and as Chief Strategy Officer for Project Lead The Way, Maureen has led major strategic initiatives that have transformed organizations. She also previously chaired the Indiana State Charter School Board from 2012-15.

2a) Identify the key personnel involved in the development and describe their previous experience.	Pg: 82-84	The leadership team has deep experience in project-based education, in urban education, and in school startups. Additionally, the team has strong contacts within the business and social sector communities. In addition to Head of School Scott Bess and Principal Shatoya Jordan, PPHS has several key personnel involved in the development of the high school. Tonya Taylor serves as the Student Services Director, and also comes to Purdue Polytechnic High School from Goodwill Education Initiatives. Tonya has been recognized nationally for her work in designing innovative programs for students with special needs, with a special emphasis on transition plans for students exiting their high school experience. Susie Howard is the Chief of Staff for Purdue Polytechnic High School. Along with coordinating all back office services, Susie heads up the external business relationships with industry partners to drive the design challenge process. Prior to coming to Purdue Polytechnic High School, Susie worked for Indiana Family and Social Services Administration, and EmployIndy, the workforce investment board for Central Indiana. Kristi Mann is Lead Instructor. She leads curriculum development and coaches the teaching staff. She was previously at Conexus Indiana as Director of Education and Workforce Programs, focused on leading quality assurance efforts to advance workforce initiatives, including Hire Tech and A+ Partners.
2b) If selecting to replicate or expand a high-quality school, provide data and analysis that clearly demonstrates the model replication or expansion will deliver strong	N/A	***We are applying for CSP funding as a new quality charter school as PPHS just opened in August 2017 with an inaugural freshman class of 150 students.*** We are a newly designed curricular model in the middle of our first year and do not yet have an IDOE Annual Performance Report.

academic growth and student achievement while displaying no significant issues in operational management. The analysis must reference the school's Annual Performance Report found on IDOE Compass (or a similar report if not an existing Indiana model).		PPHS administers NWEA assessments three times per year. Students took a beginning-of-year benchmark assessment on 8/7/17, a, mid-year assessment on 12/5/17, and will plan to take an end-of-year assessment by the end of the academic year. Based on the first two NWEA assessments, students demonstrated growth in all three categories: language usage, reading and math. Students performing at or above grade level plus students that met their growth goal fall to winter 2017 was 87.59% in Math, 84.03% in Reading, and 84.03% in Language Usage.
3. Provide an overview of the **charter school goals**.	Pg: 12, 92-97	PPHS holds both itself and students to high standards. The PPHS Board of Directors adopted all of the academic, financial and organizational goals outlined in the Performance Framework for Mayor-Sponsored Charter Schools. The Board also adopted goals that relate to the PPHS educational performance and organizational viability. Additionally, we have established goals that support the PPHS mission to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution. *Our charter agreement goals* are listed below: 1. Students graduate from Purdue Polytechnic Indianapolis High School having earned college credit or an industry-recognized credential. >40% 2. Students demonstrate mastery of identified cognitive skills needed to be successful in college persistence, career readiness, and life readiness. >70%

		3. The school will maintain a high student retention rate. >70% 4. The total number of secured internships and business and faculty mentors are sufficient for each 12th grader to have an internship or mentor. >120
3a) Describe 3-5 specific, measurable goals to address the academic needs of all students.	Pg: 12, 48-54, 92-94	We plan to use nationally normed assessments to measure academic growth of all students. *The goals listed below were established by PPHS Board of Directors and also track to goals for CSP funding.* Additionally, **these goals helped inform the direct admissions policy criteria with Purdue University**. The admissions policy gives PPHS graduates who meet minimal scores on the SAT or ACT direct admission into the Purdue Polytechnic Institute in West Lafayette. 1. NWEA Growth Goals a. 85% students performing at or above grade level and students meeting their Math NWEA growth targets b. 85% students performing at or above grade level and students meeting their Reading NWEA growth targets c. 85% students performing at or above grade level and students meeting their Language Usage NWEA growth targets 2. SAT Suite Growth Goals a. 5% increase in students meeting SAT benchmark scores every year assessment is administered b. 60% of students meeting SAT benchmark scores

		3. College and Career Readiness a. 90% of students are college and career ready by graduation as determined by the College Board's SAT benchmark and the number of students who get an industry certification 4. 75% of students will pass the Math and ELA components of ISTEP+ 5. 25% student growth on project cycle rubric from first to last project of the year
3b) Describe the methods utilized to evaluate the progress toward achieving the stated goals. The evidence must include student achievement data on ISTEP+.	Pg: 92-94, 99-116	All of the academic goals we have are measured by vertically aligned assessments (NWEA, SAT Suite) given over time. Because our students will not take ISTEP+ until the spring of their sophomore year, we chose to include assessments that could be given early in the freshman year and provide a baseline as students progress through their academic experience. We gave the initial NWEA test two weeks after school started this year, and gave the Winter assessment in December. We will use those results to adjust our programming as we proceed through the back half of this year. We will give the Spring NWEA in late May to get a read on how our students did after a full year of instruction. Because our instructional model is personalized to every student, we will use the NWEA results through and after the freshman year to adjust our strategies with each student. Likewise, we are using the PSAT9 results to provide supports and enhancements to students who are lagging behind the projected college readiness score. We gave the first administration of the PSAT9 in October, and will repeat the test in May, which will give us an additional growth data point. For students whose score indicates a strong performance, we will design additional opportunities to continue to challenge them in all areas.

		Once our students take the ISTEP+ exam at the end of their sophomore year, we will use those results in conjunction with the other assessments to have a full picture of their strengths and weaknesses. *It is our goal that over 75% of our students will pass the Math and ELA components of ISTEP+*, and by using the the NWEA and PSAT9 assessments, along with the Mindplay curriculum and assessments, we will have a clear picture of student progress towards that passing goal for ISTEP+.
3c) Describe how the school will ensure all stakeholders, including staff, students, and community are aware of the school's goals.		PPHS staff are dedicated to achieving academic and operational goals. We have a regular quarterly evaluation with our authorizer and the Office of Education Innovation where progress on school goals are of topic. School goals are communicated through marketing materials used for student and teacher recruitment, reinforced at staff, student and Board meetings and retreats. The Board receives a metrics dashboard at monthly Board meetings to track progress towards targets and goals. PPHS hosts parent night three times per year to discuss school goals, student progress and school operations. PPHS also issues a weekly school newsletter to parents and staff and a monthly newsletter to external partners. These serve the dual purpose of being informative while also soliciting feedback. Additionally, Purdue University President Mitch Daniels highlighted the high school and our goals in his annual open letter to the University community and alumni.

4) Provide an overview of how the charter school expects to accomplish the goals stated in section 3 with the **use of the CSP funding**.		CPS funding will equip the Quant and Comms Labs, STEM (science) Lab, and Makerspace, to provide centralized space for students of all ability levels to collaborate, question, and explore the subject matter (including all state academic standards) they encounter in their projects. Collectively, these collaborative learning spaces can be referred to as the Learning Commons. The Learning Commons emphasizes collaboration as an essential element of all students' learning. This collaborative environment **mirrors the professional learning culture students will encounter in the workplace, and accelerates the pace of skill acquisition as students serve both as teachers and as learners.** The Learning Commons provide a space for students to dive more deeply into subject material and create an environment that facilitates learning by doing. Students can hone their scientific understanding of concepts by exploring, prototyping and testing ideas. These labs provide students with opportunities to **directly apply the academic content they learn in workshop shops and learn technologies and equipment utilized in high tech, high demand jobs.** Accessible technology and equipment also empowers our students and even teachers to do more creative, complex and thorough work. The PPHS Makerspace is a STEM Lab, a space for students to integrate their understanding of STEM concepts in a workshop atmosphere. Rather than learning a concept and then demonstrating their understanding on a test, PPHS students synthesize background knowledge and apply their creative skills to learn, create, and solve personally meaningful problems using industry-standard tools and techniques. The Learning Commons are **critical component to career and college readiness** and help student hone 21st Century skills while learning on industry-recognized

		tools, machines and technologies. **Outfitting these labs with technology and equipment will facilitate student achievement and help ensure PPHS is implementing our pedagogical model with fidelity to achieve our goals.**
4a) Provide a budget narrative to address each budgeted line item to demonstrate alignment between the grant goals and proposed expenditures.		There is **direct alignment between our CSP Grant goals and proposed expenditure**s outlined in our grant budget. Proposed expenditures support purchase of technology and build out of our Learning Commons, an integral piece to the PPHS model. As previously stated, our **Learning Commons is where the bulk of our students will spend their day to acquire skills and knowledge necessary to be college and career ready.** PPHS is requesting a total of $891,823.00 over a period of three years. Year 1: $205,028 ● Activities buses ● Staff (9) and student (165) devices for FY19 ● Small supply budget for Maker Space and Science Lab Year 2 (while still in temporary space): $375,727 ● All equipment, supplies, and training for Quant and Coms Lab ● Staff (9) and student (165) devices for FY20

		● Partial supply budget for Maker Space and Science Lab Year 3 (Permanent facility--PR Mallory building): 311,068 ● All equipment and supplies for Maker Space ● Equipment and supplies for Science Lab ● Staff (9) and student (165) devices for FY21 **Transportation** We are requesting using the CSP Grant funds to purchase two activities buses. These buses will be utilized to take students to internships, travel to Purdue University, school sponsored events and extracurricular activities. We tried to contract with IPS for use of their activities bus fleet. It has either proven to be cost-prohibitive or buses are unavailable for use when we need them. **Learning Commons** To build out the Learning Commons, we propose to use the CSP grant dollars to support one-time costs for equipment, technology, materials, and technical assistance. Specific requests for each lab space are listed below. <u>Makerspace</u> The PPHS Makerspace is the creative center for design and production where students will put their imaginative and innovative ideas into form. This area will contain all the materials and machines for students to design, create, and work through their Challenge Solutions and build their unique prototypes. Learning

		from experienced makers, from teachers to fellow techies, students will gain new tools and attain ever-higher levels of proficiency bringing their ideas to life. The funds provided by this grant will allow us to expand upon what we are already doing at PPHS so that students can learn on industry-standard tools, develop higher fidelity solutions to our cycle challenges, and further develop their engineering and design skills. In our Makerspace 2.0, we propose having a "clean space" for digital design projects and a "dirty space" for laser cutting, CNC Routing, and woodworking equipment. <u>STEM (Science) Lab</u> The Science Lab is the space where students conduct experiments related to biology, chemistry and physics to help explain, predict and sometimes control the processes responsible for the phenomena we observe. The Lab is where students can dive more deeply into subject material. Similar to the Makerspace, the Science Lab is an environment that facilitates learning by doing. Students can hone their scientific understanding of concepts by exploring, prototyping and testing ideas. We propose to use CSP grant funding to build out the laboratory space in our permanent facility with the appropriate equipment and to ensure it is a safe space to conduct experiments. Equipment needs range from microscopes to fume exhaust hoods. <u>Comms and Quant Labs</u> The Quant Lab is the heart of quantitative inquiry and exploration at PPHS. The Quant Lab is a location for every student to come to while learning and doing quantitative skills and tasks. This can be mathematics coursework, but can also be

		physics, biology, chemistry, data analysis, and more. Each student in the Quant is both learner and teacher, and engages in exploration and discovery with their peers - and so every student, from the lowest to highest mathematical skill levels, stands to gain from using the space. Similarly, the Comms Lab is the hub for all things communication, whether visual or written, verbal or nonverbal. The Comms collaborative environment enhances the skills and work of each student in presenting, interpreting, analyzing, and disseminating information, no matter the student's beginning level. Students use the Comms Lab for support from content area experts and their fellow students in writing, reading, and conventions; they may also utilize the Comms Lab as needed during their personal learning time for guidance with proofreading, perfecting their product pitches, MindPlay, and any other communications-based task. We propose to use the CSP grant funding to implement a digital platform and touchscreen Prysm technology to facilitate a natural, collaborative peer-to-peer learning environment supporting a technology-enabled personalized curriculum. **Technology** PPHS leverages technology in everything we do. We are a one-to-one school as each student is issued a chromebook during orientation. Each student having a chromebook allows PPHS to have more personalized and student-centered instruction. Our students are dependent on different platforms, tools, and software to facilitate the design process. Most of the student work is collaborative and and teams. Individual chromebooks help with greater student engagement and facilitates better classroom instruction. Accessible technology and equipment also empowers our students and even teachers to do more creative, complex and thorough work.

		We propose using the CSP grant funding to purchase 174 chromebooks per grant year for students and staff. Additionally, our teachers and students have very dynamic schedules and move from classroom space to lab space throughout the day. Each Friday morning, students schedule themselves into a unique set of workshops and dojos for the following week. As a result, every student grouping is unique at each workshop or dojo session. This makes tracking attendance far more difficult than in the traditional setting, where a teacher sees a fixed group of students at a fixed time each week. We are proposing to use CSP grant funding to support the purchase of an RFID tracking system that uniquely links a student ID (required to wear) to that student's location within the school building. RFID attendance tracking will allow usage data to be unobtrusively and accurately collected for the Learning Commons spaces: the Makerspace, STEM Lab, Quant Lab, and Comms Lab. Not only can this help with logistical planning and staffing, but it can inform instructional strategies and practice: What correlations exist between use of the Learning Commons and course performance? What behavior may we therefore encourage? Is there a limit to the amount of benefit derived from using the Learning Commons? When do students choose to use or not use the Commons? Current efforts to track usage are subject to significant error as many students ignore the sign in system or forget to sign in/out.

4b) Describe how the costs are reasonable, allocable, and necessary in light of the project goals.		The expenditures listed in the proposed budget are **one-time, non-recurring costs** for equipment, technology, services, technical assistance associated with the equipping our school facility to ensure student success. Much of our academic model revolves around the work our students do in the Learning Labs. *Proposed expenditures were researched and quotes obtained from vendors to inform the budget.* We need these items to build out our infrastructure to have the technological capacity necessary to navigate our anticipated expansion of students.
4c) Describe how the school will develop the required capacity to continue implementation and operation in a high-quality manner after the grant expires	Pg: 87	We were intentional in only allocating CSP awarded funds to one-time, non-recurring costs. PPHS will have the **general funds moving forward to maintain, replace, and update licensure necessary for long term sustainability of the technology requested.** Our financial modeling shows that, based on state and federal revenues, PPHS will have a positive net income in the third year of operation. We have received local and national philanthropic support that has provide a positive bottom line through our launch year and our second year. We have budgeted appropriate amounts from our positive net income beginning in year four to allow for sustainability and eventual replacement of equipment purchased with this grant. This investment in our Learning Commons in our early years gets us over the acquisition "hump" and will facilitate student growth for years to come and position us to achieve our long-term goals. As Purdue University President and former Indiana Governor Mitch Daniels stated in his **letter of support for the IDOE's 2017 Quality Counts Proposal**, if our initial school launch is successful in the fall of 2017, we intend to replicate the school model throughout Indiana.

5) Provide an overview of the charter **school governance plan and administrative relationships**.	Pg: 70-82	Purdue Polytechnic High School of Indianapolis, Inc. was formed as an Indiana Nonprofit Corporation with IRS designated 501(c)(3) tax exempt status whose purpose is to oversee the operation of Purdue Polytechnic High School. The affairs of the corporation are managed, controlled, and conducted by, and under supervision of a Board of Directors. The officers consist of Chair, Secretary, and Treasurer and such other officers as the Board of Directors may otherwise elect. The role and responsibilities of the Board is described in our charter application and governance documentation which includes articles of incorporation and bylaws. The Board supports the school in developing students' academic and lifelong success leading to a positive impact on our communities and local economy. The core functions and responsibilities of the Board of Directors include: ● Act as the final authority for the school. ● Define a clear vision for the school. ● Review, evaluate, and adopt policies related to the school's operations. ● Set school priorities and expectations. ● Adopt performance standards related to the school's academic and operational performance. ● Approve annual budgets, set financial goals, monitor finances, and ensure that school accounts are audited.

5a) Describe the governance structure of the school, including any partnerships with Educational Management Organizations (EMOs) or Charter Management Organizations (CMOS) and why they were selected.	Pg: 73-79	Pursuant to its bylaws and Articles of Incorporation, the Board is currently composed of nine individuals. Three members of the Board were appointed by a duly authorized representative of Purdue University with the remaining members elected by the Board of Directors. The Board has an executed master services agreement with Purdue University to provide faculty support and expertise in designing and developing the school's educational model, academic program, and curricula. The Head of School serves as the chief administrator of Purdue Polytechnic High School and reports directly to the Board of Directors. The school principal reports to the Head of School, while all teaching staff and administrative staff report to the principal.
5b) Describe the extent to which the charter school and board are autonomous from other entities.	Pg: 69-79	PPHS is established as its own 501(c)(3) entity controlled by a Board of Directors. PPHS was *authorized by The Indianapolis Charter School Board*. The school has an *Innovation Network Agreement* with Indianapolis Public Schools, which allows PPHS to directly draw students from IPS middle schools and allows IPS to count PPHS student results as their own. The Agreement, however, still maintains complete PPHS autonomy from IPS in all manners of operation and governance. The school also has a master services agreement with Purdue University that allows PPHS to use the Purdue name and provides direct admittance of PPHS graduates who meet minimum qualifying standards into Purdue Polytechnic Institute in West Lafayette..
5c) Describe how the school will be managed and how the charter school leaders are empowered to make daily decisions.	Pg: 69-73, 79-82, 181	PPHS is managed by a nine person Board of Directors. The Head of School reports directly to the Board, while the school principal reports to the Head of School. School leadership is empowered to make daily decisions regarding the operations, academic excellence and financial management of PPHS.

5d) Describe the process to select board members.	Pg: 70, 79	Pursuant to its Bylaws, the Board of Directors will have no less than three and no greater than fifteen Directors. Purdue University appoints a number of Directors, although non-Purdue Directors will always hold the majority. The Board was initially established in August 2015 with five appointed Board of Directors. The Board established a Nominating Committee comprised of three members and four additional directors have been appointed to serve three year terms.
5e) Describe the governance training for board members, current and prospective.	Pg: 79	All Board members are required to participate in Board member orientation at the beginning of their three year term. Additionally, the Board uses Board on Track to manage governance operations. Board on Track provides expertise, training and web-based tools to help the Board be as effective as possible. Board on Track helps us with creating dashboards, assessments, CEO evaluation, meeting management, and document storage. Board on Track also informs us on how to use data to measure progress towards organizational goals, benchmark governance activities to national standards, and assess performance throughout the year in a continuous feedback loop.
5f) Describe the relationship between the charter school leadership, governing board, or authorizer with the chosen service providers to ensure no apparent or real conflict of interest would be involved, per (EDGAR) § 74.42.		PPHS is in full compliance of EDGAR 74.42 by ensuring there is no apparent or real conflict of interest in the relationship between PPHS leadership, Board of Directors and our authorizer with chosen service providers.

5g) Describe the relationship between the charter school and its authorizer, including the support the authorizer has provided in the planning process.		PPHS was authorized by the Indianapolis Charter School Board in December 2015. The Board of Directors and our leadership team work closely with the Office of Education Innovation in the Indianapolis Mayor's Office. Prior to opening for the 2017-18 school year, staff met with OEI on a regular monthly basis to review a pre-opening checklist. Once the school opened, meetings continued with OEI and shifted to a focus on compliance with the Performance Framework for Mayor-Sponsored Charter School. A representative from OEI attends the monthly PPHS Board of Directors meetings.
5h) Describe how the charter school will ensure timely and accurate data submission for state and federal reporting requirements.		The leadership team of PPHS has extensive experience operating charter schools in Indiana, and are intimately familiar with the various data submissions required by the state and federal agencies. Our Office Manager has handled data submissions for a network of 12 schools prior to coming to PPHS. In addition, we have contracted with Marian University to have consulting access to a state reporting expert and former Department of Education staff member. All of our staff members involved with state reporting have a long track record of submitting data reports accurately and on time.
6) Provide an overview of the **student recruitment and admissions process**.	Pg: 61-63	Like most Indianapolis Public Schools (IPS) and charter schools, Purdue Polytechnic High School is participating in Enroll Indy's OneMatch application process. Prospective students can apply through Enroll Indy and select Purdue Polytechnic High School as their first choice. Priority status for admission is given to students who complete the application, live in the Indianapolis Public Schools district and/or are siblings of current PPHS students. Round 1 for applications was open from November 15 – January 15. PPHS has 160 slots for students entering the 9th grade in fall 2018. At the close of **Round 1 for applications on January 15, PPHS had received 174 applications for 9th grade with 114 listing PPHS as first**

		choice. 84 of those students live within IPS and primarily reside on the East Side, specifically from the following zip codes: 46218, 46205, 46201, 46203. 46235. PPHS will proceed with Round 2 until all slots are filled. The PPHS community outreach coordinator is directly responsible for student recruitment. Our marketing and recruitment plan includes high school fairs, school tours, shadow days for prospective students, a media campaign, letters to IPS students and parents, coordination with IPS middle school counselors, targeted middle school outreach, and open houses for prospective families.
6a) Describe the school's recruitment plan, and compliance with Indiana Code 20-24-5.	Pg: 61-63	As a fully accredited charter high school, authorized by the Indianapolis Charter School Board, PPHS is in full compliance with the State's requirements for student recruitment. PPHS provides open enrollment for all high school students who wish to attend the school. Admission to the school will not be limited based on intellectual ability or prior academic performance, disability, race, socioeconomic status, gender, gender identity, religion, sexual orientation or any other factor that may be considered unlawful. Admissions policies will comply with all applicable state and federal laws. Any interested student or his/her family will be invited to submit an enrollment application to the school until a set deadline date. All scholars who complete and submit a timely enrollment application will be enrolled in the school. For the 2018-19 school year, Purdue Polytechnic High School is using Enroll Indy's OneMatch system to manage its enrollment process. Once a student is enrolled in the school, the student will be afforded the opportunity to attend the school in successive years without having to re-apply or partake in a lottery process.

		PPHS also complies with all Child Find regulations.
6b) Describe the public lottery process that will be conducted when more students apply than be accommodated.	Pg: 61-63	PPHs is participating in the Enroll Indy OneMatch application process for the 2018-19 school year. Per Enroll Indy's policies and procedures, schools are allowed to designate lottery priorities. PPHS gives priority status to: 1. In District "Applicants living within the IPS district." 2. Siblings "Applicants who have a sibling currently attending a school in a non-terminating grade will receive priority. Siblings are defined as students residing in the same household and/or students sharing the same parent/guardian. Students in terminating grades (i.e., an 8th grader in a K-8 school) do NOT earn sibling priority for younger siblings. The intention of sibling priority is to keep families together when possible."
7. Provide an overview of how the charter school will **meet the needs of educationally disadvantaged students**.	Pg: 48-54	Now more than ever, the need is great to deliver more innovative learning experiences and provide opportunities to high school students who have STEM capabilities but may not have access to tailored programs to ensure their success. This is particularly true for low-income, minority, and educationally disadvantaged students in Indianapolis. As such, PPHS is targeting students from diverse backgrounds who are eager for a challenging education that engages them in solving real world programs. PPHS is undoubtedly one way to increase the number of Indianapolis students who are prepared for college and beyond and help close the educational gap for many educationally disadvantaged students. The high school brings relevant and proven polytechnic education directly to students in Marion County. It will provide new

		learning experiences and fill a gap for students who have STEM capabilities, but have no access to tailored programs to ensure their success. Students will be immersed in hands-on, design-based learning experiences – all aimed at promoting achievement in postsecondary education and joining the workforce of the 21st Century.
7a) Describe how the school will comply with state and federal law to deliver appropriate services to meet the needs of students with disabilities, low-income students, English learners, homeless, and neglected & delinquent students.	Pg: 48-54	The mission of Purdue Polytechnic High School Student Services is to identify and serve students who meet the federal and state criteria as a student with a disability or identified as a English Language Learner and provide specialized services that empower students to become active members of society based on their individual strengths and abilities. We are **committed to ensuring the school is best meeting the needs of all learners through high quality individualized education plans which are vitally important to the success of those individual students and the entire school**. Purdue Polytechnic High School has developed comprehensive program plans that comply with state and federal law to deliver appropriate services to meet the needs of students with disabilities and English Language Learners. These plans include hiring highly qualified certified staff to deliver services, creating individual learning plans (IEPs or ILPs), progress monitoring based on individual student goals, and providing all related services. PPHS is committed to providing a continuum of services while maintaining compliance with all state and federal regulations. The programs are regularly evaluated using state compliance guidance. In addition, PPHS has **established a Student Services Team**. Heading up this team is Director of Student Services, Tonya Taylor. Tonya has over 18 years experience

		in education and currently holds a Special Education Administrator license. In addition to Tonya, the team is also made up of a licensed ELL teacher, licensed special education teacher, the Dean of School Culture, and related service providers. This team meets regularly to review student data, progress monitor based on students individual measurable goals, develop and deliver targeted professional development to staff, and ensure compliance of all state and federal regulations. As a result of this comprehensive plan, PPHS is currently in compliance with all state and federal regulations. In addition, students aged 24 and under who meet the federal definition of "homeless, neglected, or delinquent" will be provided a free and appropriate public education in the same manner as all other students of Purdue Polytechnic High School. Purdue Polytechnic High School has established safeguards that protect homeless, neglected, or delinquent students from discrimination.

8. Provide an overview of the **community outreach activities.**	Pg: 41-42	**Community partnership and engagement is vital and ongoing activity** for the Purdue Polytechnic High School team. *Of the members of PPHS founding team, one was chosen to focus solely on community outreach and what ways the school can most effectively impact the community.* We solicit feedback from student, families, and communities on the school progress, impact and its ability to meet the student and community need. We will make sure we are respecting the community and the students we serve. Our team pledges to be open minded to critiques and actively look for ways in which we can change in order to make sure we are adequately serving our stakeholders. Most high schools have both physical and virtual walls around them, holding students in and keeping others out. PPHS is doing the exact opposite. **PPHS is committed to alignment among education, industry and community partners because we believe it can lead to meaningful and relevant learning experiences that benefit both students and partners.** Our curriculum is industry-informed and our first project challenge was sponsored by the Indianapolis Zoo. Students learned biology, algebra and engineering design concepts through the context of conservation. The Indianapolis Zoo was so impressed by one of our student solutions to increase conservation efforts that they plan to pilot the idea. Other community partners to highlight are Eskenazi Health and the Irsay Family YMCA at CityWay. During the first few weeks of school, Eskenazi health and wellness coaches helped students set personal wellness goals for the year. These goals set students up for personal and academic success. Additionally, all PPHS students receive a YMCA membership and earn their Physical Education credits by participating in YMCA programming. The YMCA is located just two blocks from school campus. Beyond industry-informed curriculum, business professionals delivering academic

		workshops, and the PPHS mentoring and internship programs, PPHS students are required to participate in a Community Day each semester. Students choose from ten different community partners located near our permanent facility on the Near Eastside. These partners, like the John Boner Neighborhood Center, Englewood Recreation, Partners in Housing, have been engaged with our students, staff and families since we announce the location for our permanent facilities. **PPHS coordinates directly with Purdue University Office of Admissions** to support students and parents and help navigate college application process, financing and FAFSA. The PPHS career and college coordinator works with Purdue University Student Success Office which oversees programs like Purdue Promise (for 21st Century Scholars), Horizons (a Trio program) and Emerging Leaders. The PPHS community outreach coordinator and the college and career coordinator collaborate together to develop, facilitate, manage and grow community and industry partnerships.

8a) Describe how parents and the community are involved in the planning and design of the charter school.	Pg: 45-47	There is widespread knowledge that parental involvement is one of the most critical factors that lead to a student's educational success and attainment. PPHS is highly motivated to ensure parents, families, and community partners have an active and engaged voice in the direction of the school. Throughout the planning process and into the current school year the PPHS Board of Directors and staff have worked with a variety of partners to actively engage families and to build and maintain strong family-school partnerships. Our staff model includes a community and outreach coordinator who is dedicated to facilitating, engaging and maintaining those partnerships. In addition, PPHS has collaborated with parents and staff to create a Parent-Teacher Association (PTA). This group meets on a regular basis to support the overall school mission. For example, the PTA is working with student representatives from the Master Ops team to develop a Winter Fling. The PTA is also focused on fundraising opportunities, membership guidelines, and have developed a social media outlet for parents to get additional information.
9. Provide an overview of the **fiscal management plan.**	Pg: 86-87	PPHS risk management philosophy begins with its corporate structure. Board and staff are subject to various policies designed to minimize risk, including: conflict of interest, financial internal controls, records retention, and a whistleblower policy. This risk management philosophy extends into actual school operations. The Board of Directors by-laws have a specific statement regarding conflicts of interest and the Board formally adopted the policies listed above. These policies outline specific processes and actions and are reviewed and updated as necessary on an annual basis.

9a) Describe the internal controls over expenditures and how records will be maintained.	Pg: 88-89	During the Pre-Opening phase we documented our accounting policies and procedures and had them reviewed by Greenwalt CPAs. The school currently contracts with Indigo 43 to provide accounting services which gives us an additional layer of separation of duties to ensure that no one individual has the ability to process receipts or disbursements from beginning to end. In order to make a purchase, a staff member must prepare a purchase order and get the Principal's approval. It is determined at this time whether there are grant funds available for the purchase. Once approved, the Business Manager places the order for the equipment or supplies and the purchase order is forwarded to the Business Manager for processing. The Business Manager matches the invoice to the approved purchase order and forwards to the Controller (Indigo 43) for entry into the accounting system. The Controller enters the invoice with details as to what fund and/or grant will be utilized to pay for the purchase. Controller prepares an Open Invoice reports on a weekly basis, identifying which invoices should be paid, along with a report detailing current fund balances. The Chief of Staff reviews the report and gives final approval. The Business Manager prints checks for the appropriate invoices. The Head of School signs all checks and the Business Manager is responsible for sending them to the appropriate vendors. The Business Manager is responsible for maintaining all documents related to all purchases per the school's records retention policy. Many of these documents are scanned and kept in a digital format and then shared with appropriate personnel.

9b) Describe the process for managing this particular grant, including decision-making process, creation of the budget, and how items purchased are tracked. Schools working with an external provider must affirm that the charter school leaders are responsible for all aspects of the grant management.		Many staff members of the school have given input as to what equipment, supplies, etc are needed over the next few years to create an excellent learning environment for our students. Once the list was compiled, management along with the Controller determined which of these expenditures would be most suitable for this grant. Discussions also included the timing of expenditures in order to map out what funds should be requested each year. Once the grant is approved the Controller will set up a specific fund and grant code in the accounting system. These codes will be utilized on all transactions related to the grant. In addition, each transaction will be tagged as to which year of the grant the purchase is related to and which category of the grant budget. This will provide very detailed information when preparing the grant claim. The Controller is responsible for preparing grant claims. The claim and all supporting documentation will be provided to the Chief of Staff for final approval and submission to DOE. Once the purchases have been reimbursed, the transaction in the accounting system will be tagged to indicate this ensuring that there is no confusion as to which expenses have not yet been reimbursed. Periodically Controller will meet with school leaders to review the progress on the grant. School leadership is ultimately responsible for the approval of purchases, accuracy of grant claim requests, and overall management and compliance with all matters related to the grant.
9c) Describe how other state and federal funds will support the effective operation of the school or student achievement, including paying for staff and other related costs beyond initial startup costs support by the CSP grant.		Because PPHS was in operation prior to Indiana being awarded the CSP grant, we planned from the beginning to operate the school on an ongoing basis without CSP funds. We have raised philanthropic dollars to offset the operating deficit in years one and two, meaning that we can target the CSP dollars available towards one-time purchases of a startup nature. This includes outfitting our science lab and maker spaces. Our operating budget for the school shows that we approach break even status in the third year, and begin to return a positive cash flow in the

		fourth year and in every year thereafter. That net positive line includes all revenues from state and federal sources against all of our staff costs, facility expenses, curriculum needs and administrative overhead. Our plan is to use the net income to build a cash balance that can be used to replace equipment as it gets to the end of its useful life.
10. Provide an overview of the **facilities** to ensure they are safe, secure, and sustainable.	Pg: 87-88	PPHS conducted several months of site and facility due diligence to ensure that our permanent location was the right facility for our educational model, student and partners. We considered several qualifying criteria before choosing to locate in an old manufacturing building on the **Near East side of Indianapolis, The PR Mallory Building at 3029 East Washington Street.** The *specific criteria* required a location: within a developing neighborhood in need of a high-performing high school; to effectively draw & serve target demographic from IPS district & Center Township; have an open concept that is welcoming to students & families and aligns with pedagogical model; within reasonable distance to industry partners; convenience for Purdue University faculty and; space to outfit Learning Commons labs.
10a) Describe the school's facility plan, including how the student enrollment and other available funding will meet the facility needs		We have opened PPHS in a facility that provides adequate space for our students and matches our operating model. We are renting this space for the first year and have the option to renew our lease for the second year of operation. We have secured a long-term facility that is undergoing renovation and will be completed in time for the 2019-20 school year. Our lease for that facility allows us to spend only 18% of our state revenue on our total facility cost, including utilities and maintenance. We have modeled that cost against our total revenues and expenses, and it allows us to be break even in the third year of operation and

		achieve a positive cash flow in the fourth year and every year thereafter.
10b) Describe how the charter school has considered the transportation needs of the school's students and provide an overview of the transportation plan.		PPHS partnered with IndyGo to provide students with an annual transit pass in lieu of yellow school bus service. Students use a special IndyGo pass incorporated on the student ID cards for unlimited access to all regular IndyGo routes. The high school is currently located just a few blocks from the Julia M. Carson Transit Center with a regular shuttle looping to an IndyGo stop next to the high school during the school start and dismissal times. *By integrating an annual pass into the student ID our students have expanded transportation access that extends beyond to and from classes to include extracurricular activities and internship/employment opportunities*. This innovative partnership cost significantly less than leveraging IPS bus services and has been more efficient and effective transportation option. Despite the innovative partnership with IndyGO, we have identified times and circumstances when owning a school bus is a necessity. PPHS is proposing to use CPS grant dollars to purchase two activities buses. These buses will be utilized to take students to internships, travel to Purdue University, school sponsored events and extracurricular activities like VEX robotics competitions and athletic events.

Required Appendices	
A) Charter Application to Authorizer (New, Replication) or Amendment to Existing Charter (Expansion)	Yes ____X_____
B) Budget Form/Narrative (use required form)	Yes ____X_____
C) 2016-2017 Expanded Annual Performance Report (if applicable) or most recent *Found at compass.doe.in.gov > Accountability > Annual Performance Report*	Yes ___NA_____
D) Proof of non-profit status of the governing board of the charter school or proof that the application for such status has been made	Yes _____X____
E) Enrollment or student admissions policy	Yes _____X____
F) Agreement or contract between the charter school governing body and the management organization (if applicable)	N/A_____
G) School's discipline policy. Statute requires discipline policies that promote retention and reduce the overuse of discipline practices that remove students from the classroom	Yes ____X_____

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: APR 15 2016

PURDUE POLYTECHNIC HIGH SCHOOL OF
INDIANAPOLIS INC
115 W WASHINGTON ST STE 450 S
INDIANAPOLIS, IN 46204

Employer Identification Number:
47-5125364
DLN:
17053299308015
Contact Person:
DAVID A DOEKER ID# 31168
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
June 30
Public Charity Status:
170(b)()(A)(ii)
Form 990/990-EZ/990-N Required:
Yes
Effective Date of Exemption:
August 14, 2015
Contribution Deductibility:
Yes
Addendum Applies:
No

Dear Applicant:

We're pleased to tell you we determined you're exempt from federal income tax under Internal Revenue Code (IRC) Section 501(c)(3). Donors can deduct contributions they make to you under IRC Section 170. You're also qualified to receive tax deductible bequests, devises, transfers or gifts under Section 2055, 2106, or 2522. This letter could help resolve questions on your exempt status. Please keep it for your records.

Organizations exempt under IRC Section 501(c)(3) are further classified as either public charities or private foundations. We determined you're a public charity under the IRC Section listed at the top of this letter.

You're not subject to the specific publishing requirements of Revenue Procedure 75-50, 1975-2 C.B., page 587, as long as you operate under a contract with the local government. If your method of operation changes to the extent that your charter is not approved, terminated, cancelled or not renewed, you should notify us. You'll also be required to comply with Revenue Procedure 75-50.

If we indicated at the top of this letter that you're required to file Form 990/990-EZ/990-N, our records show you're required to file an annual information return (Form 990 or Form 990-EZ) or electronic notice (Form 990-N, the e-Postcard). If you don't file a required return or notice for three consecutive years, your exempt status will be automatically revoked.

If we indicated at the top of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

For important information about your responsibilities as a tax-exempt

organization, go to www.irs.gov/charities. Enter "4221-PC" in the search bar to view Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, which describes your recordkeeping, reporting, and disclosure requirements.

We sent a copy of this letter to your representative as indicated in your power of attorney.

Sincerely,

Jeffrey I. Cooper
Director, Exempt Organizations
Rulings and Agreements

Purdue Polytechnic High School Admissions Policy

Purdue Polytechnic High school is a tuition-free charter school open to any student in the state. PPHS serve a diverse socio-economic, racial and academically-skilled student population.

PPHS does not discriminate on the basis of race, color, gender, sex, gender identity, disability, religion, ancestry, national or ethnic origin, or any characteristic that is legally protected under applicable local, state or federal law in the administration of its educational policies, behavior policies, admissions policies, scholarship and loan programs, food service and athletic or other school-administered programs.

Like most Indianapolis Public Schools (IPS) and charter schools, Purdue Polytechnic High School is participating in Enroll Indy's One Match application process.

Round 1 for applications will be open from November 15, 2017 – January 15, 2017. PPHS has 160 slots for students entering the 9th grade in fall 2018.

Priority status for admission is given to students who complete the application, live in the Indianapolis Public Schools district and/or are siblings of current PPHS students.

Prospective students can apply by visiting pphs.purdue.edu, click apply and will be redirected to enrollindy.org/apply to complete the application.

Purdue Polytechnic High School Discipline Philosophy and Policy

Relationship, Culture, The Little Things, Parent Involvement, Consistency

Our discipline philosophy is based on the following beliefs that will encourage students to exhibit PPHS values.

PPHS Staff will inspire students to:

- Treat others with respect and dignity.
- Take personal responsibility and be accountable for their behavior.
- Support and foster an individual's chance for academic success and the achievement of other students.
- Work toward their potential and acknowledge and encourage demonstration of appropriate behaviors.
- Demonstrate an understanding of their inappropriate behavior(s) by stating in their own words what the infraction means and its impact on others and PPHS.

PPHS Staff will take pride in:

- Assuring the maintenance of appropriate behaviors and discipline is the shared responsibility of students, parents, Personal Learning Coaches, and administrators.
- Disciplining with dignity, consistently and with an understanding of the developmental levels of students.
- Listening to what the student is trying to communicate with his/her behavior before reacting.
- All stakeholders taking an active role in the behavioral issues involving their assigned students. They will be directly involved in providing support to students who are removed from normal daily operations of a school session such as the in-school suspension (ISS) program and those students who are suspended out of school.

Discipline Policy

Minor Behaviors: The following behaviors are addressed and redirected by supervising PPHS staff and/or Personal Learning Coach:

• Teasing • Inappropriate hallway behavior • Swearing • Disrespect to other students • Talking out of turn • Wandering hallways during project time • Lying • Unprepared for instruction	• Use of personal device inappropriately • Food theft • Inappropriate use of personal equipment • Tardiness • Littering • Excessive talking • Inappropriate clothing • Uniform violation

Action Steps for Minor Behaviors:

Step 1

- Verbal reminder to the student of the expected appropriate behaviors.

Step 2

- One-on-One meeting with documented "BIRP" to the student of the expected appropriate behaviors.
- Written reflection of "Plan of Action"

Step 3

- Move directly to step #1 of Major Behavior consequence.

Middle Behaviors: These behaviors are addressed and redirected by PPHS staff initially; but are referred to the school administration if behavior(s) is/ are consistently persisting.

• Cheating • Matches/Lighter • Skipping instruction	• Inappropriate touching • Abuse of school property • Inappropriate communication towards PPHS Staff

Action Steps for Middle Behaviors

Step 1

- One-on-One meeting to come up with a "Plan of Action"
    - Creating a BIRP

Step 2

- Move directly to step #1 of Major Behaviors.

Major Behaviors: Behaviors are immediately referred to the school administration.

• Fighting • Physical Aggression • Extreme Defiance • Off school grounds without permission • Vandalism • Smoking	• Inappropriate representation of school (Field trips, performances, athletics) • Deliberately visiting inappropriate internet sites and/or print material • Sexual Harassment • Sexual Behavior • Weapons *

• Drugs/alcohol • Serious Theft • Threats on Staff* • Bomb Threat*	• Bullying/Cyber Bullying • Inappropriate behavior on bus * • Defacing school property

*Possible police involvement

Action Steps for Major Behaviors

Step 1
- Referral to Administration

Step 2
- Home contact made by Administration

Step 3
- Restorative Conference with Parent(s)/Legal Guardian(s)/Stakeholder(s)

Step 4
- In /Out of School Suspension or Logical Consequence based off of Restorative Justice Conference

Step 5
- Reintegration fulfilled and completed reflection form before student returns to school

Suspension & Expulsion Policy

The following procedure is followed if suspension of a student is required.

1. Prior to any suspension, the school principal or his/her designee will advise the student in question of the particular misconduct of which he/she is accused and will state the basis for the accusation.
2. The student will be given an opportunity at the time to explain his/her version of the facts to the school principal or his/her designee. Any student whose presence poses a continued danger to persons or property or represents an ongoing threat of disruption may be removed immediately from the school premises without benefit of the above –described procedure. (IC 20-33-8-18)
3. The school principal or his/her designee, shall contact the parent by telephone, contact the parent in person, or send a certified letter to the address of the pupil to the parent or guardian of the student, giving notice of the suspension, the reason (s) for the suspension and establishing a date and time for a conference with the school administration or his/her designee as a requirement of re-admitting the student. The school is required to provide written notice of the suspension to the parent(s) via electronic communication (email, text) or mail that includes the reason for the suspension to the parent or parents of the suspended student. (IC 20-33-8-18)

4. During a suspension, student is forbidden to come on school grounds or to attend or participate in any school-sponsored events. (IC 20-33-8-14)

A student whose presence in school poses a continued danger to any person or property or any ongoing threat of disruption to the academic process shall be immediately removed from the school without the benefit of the prior procedures; however, the necessary procedure shall follow as soon as is practical.

The school is required to provide written notice of the suspension and the reasons to the parent or parents of the suspended student. Any parent or legal guardian of a suspended student has the right to appeal the suspension to the Head of School or designee of Purdue Polytechnic High School. The Head of School or designee will conduct a hearing on the merits of the case. The decision of the Head of School on the merit of the case, as well as the term of suspension, is final. Parents have five days to appeal the suspension in writing.
If the offense warrants a recommendation for expulsion, the school administration makes the recommendation. In the network offices of Purdue Polytechnic, a hearing office conducts a hearing. A determination of whether to expel the student is made by the hearing office; at the hearing, a third party can represent the student. (IC 20-33-8-19)

Until the hearing takes place, the student will remain on suspension. (IC 20-33-8-23)
The Purdue Polytechnic High School Board of Directors will not hear appeals of a student's expulsion. Students who wish to appeal will do so through the Marion County Courts. (IC 20-33-8-19)

Full Charter Application

PURDUE POLYTECHNIC INDIANAPOLIS HIGH SCHOOL

A charter school proposed by Purdue University

Presented to: Mayor Greg Ballard, Indianapolis, Indiana

Updated July 2017

PURDUE UNIVERSITY

PURDUE Polytechnic INSTITUTE

COLLEGE OF TECHNOLOGY

CHARTER APPLICANT INFORMATION SHEET

Name of Proposed Charter School: Purdue Polytechnic Indianapolis High School

Proposed School Address (if known): TBD

School District in which Proposed School would be located: Indianapolis Public Schools

Legal Name of Group Applying for the Charter: Purdue Polytechnic High School of Indianapolis, Inc.

Applicant's Designated Representative: Dr. Gary Bertoline

Address: Knoy Hall, Room 469
Purdue University
401 N. Grant Street

City: West Lafayette

State: Indiana

Zip code: 47907

Daytime telephone: 765-494-2552

E-mail address: bertoline@purdue.edu

The proposed school will open in the fall of school year: 2017

Proposed Grade Levels & Total Student Enrollment

	School Year	Grade Levels	Maximum Student Enrollment
First Year	2017-18	9	150
Second Year	2018-19	9-10	300
Third Year	2019-20	9-11	420
Fourth Year	2020-21	9-12	540
Fifth Year	2021-22	9-12	540
Sixth Year	2022-23	9-12	540
Seventh Year	2023-24	9-12	540
Maximum	2024-25	9-12	540

Is this a single-gender or co-educational school?
Co-educational

If single-gender, please indicate who will be served by school:
n/a

Are you planning to work with a management organization?
Purdue Polytechnic High School of Indianapolis, Inc. does not intend to contract with a full service education management organization.

If so, please indicate the name of management organization:
n/a

Have you submitted this application to other authorizer(s)?
No

If so, please list the authorizer(s) and the date(s) of submission:
n/a

Do you plan to submit this application to another authorizer before the Mayor's Office makes a final determination on your application?
No

If so, please indicate the name of the authorizer:
n/a

Have you submitted any other applications to an authorizer in the previous five (5) years?
No

If so, please indicate the name of the authorizer, the date, and the name of the school on the application.
n/a

Table of Contents

Charter Applicant Information Sheet ii
Executive Summary vi
Narrative 1
I. Vision 1
A. Mission 1
B. Need 1
C. Goals 5
II. Educational Services Provided 5
A. Educational Model 5
B. Academic Standards 13
C. Curriculum 28
D. Assessment 35
E. Support for Learning 37
III. Organizational Viability and Effectiveness 54
A. Enrollment/Demand 54
B. Human Capital 56
C. Governance and Management 62
D. Community Partnerships 77
E. Financial Management 79
F. Budget 79
G. Facility 80
H. Transportation 81
I. Risk Management 81
J. Timeline 82
IV. Summary of Strengths 82
A. Performance Goals .....
B. Memorandum of Understanding .....
C. School Calendar/Assessment Calendar .....
D. Daily Class Schedule .....
E. Year 1 Curriculum .....
F. PPHS Workshop Template .....
G. Student Day in the Life .....

H. Student Progression Chart .....
I. Career Readiness Rubric .....
J. Student Handbook/School Discipline Policy .....
K. Staffing Plan/Job Descriptions .....
L. Letters of Support .....
M. Floor Plan .....
N. Insurance Certificates .....
O. Financial Management Contract .....
Governance Documentation .....
Articles of Incorporation .....
Bylaws .....
501c3 Tax Exemption .....
Leadership Information .....
Assurances .....
Budget……..

EXECUTIVE SUMMARY

Introducing the Purdue Polytechnic Indianapolis High School

The Purdue Polytechnic Indianapolis High School will help close the educational gap for many Indianapolis students. The mission of Purdue Polytechnic Indianapolis High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution. The flagship Purdue Polytechnic Indianapolis High School will develop a new generation of skilled talent by seamlessly transitioning students from high school and post-secondary education to high-wage, high-demand jobs. This will be accomplished by creating rigorous STEM-based curricula with Purdue University faculty and industry input, which are delivered through an integrated hands-on learning environment.

Now, more than ever, the need is great to deliver more innovative learning experiences and provide opportunities to high school students who have STEM capabilities but might not have access to tailored programs to ensure their success. Purdue Polytechnic Indianapolis High School is a unique solution that will cater specifically to these students and help them emerge with the knowledge and skills needed for personal, professional and community success.

The Purdue Polytechnic Indianapolis High School will be unlike any educational experience offered in Indiana and potentially, the nation. The rigorous curricula and learning environment are built on strong industry relationships, an innovative partnership with Purdue University and a goal to ensure a diverse student body succeeds in the 21st century economy.

The Purdue Polytechnic Indianapolis High School will be a new charter school, and specifically designed to develop a new generation of skilled talent by seamlessly transitioning students from high school and postsecondary education to high-wage, high-demand jobs.

Graduates will emerge in four years from Purdue Polytechnic Indianapolis High School with skills to meet the rapidly evolving needs of the 21st century, and with dual credits for continued postsecondary education, industry-recognized credentials or mastery in a defined high-tech career cluster. This high school also provides successful students a direct pathway to Purdue University for further education and skills mastery.

Industry plays an important role in curricula development; curricula will be informed by industry, align with industry needs and result in a robust pipeline of skilled, ready-to-work talent.

The Student Experience

Students will enter the Purdue Polytechnic Indianapolis High School with a supportive learning community dedicated to assisting at different levels of high school readiness for the intensive curricula the school will offer. Extensive tutoring, mentoring and remediation supports will be in place and could include extended school days or summer bridge programs.

The first two years of high school education will encompass the best practices in STEM-focused schools nationally. Only after students demonstrate mastery will they advance through a defined

career cluster in areas of focus that could include advanced manufacturing, supply chain and logistics, and computer and information technology.

In a rapidly changing technological culture and an ever-growing information-based economy, creative ideas are the ultimate resource; however, our current educational system does little to nourish and allow creativity to be central to learning. Today's system is built around fact-based learning, but the Internet makes almost every desirable fact instantly available through robust search engines. This means that we are preparing students with skills they will rarely need or use while ignoring what they actually need to be successful in the 21st century. At Purdue Polytechnic Indianapolis High School, learning in the 9th and 10th grades will be design-based and focused on science, technology, engineering and mathematics with a connection between those subjects and real-world challenges. The school will teach students *how* to learn rather than providing answers. Students will learn first-hand about STEM careers through work-based learning and internship opportunities.

Following an exit capstone, students entering 11th grade will select a career cluster, putting them on track to master skills, earn college credits and industry credentials. Students will be afforded the opportunity to learn in the high school classroom, in cohorts on the Purdue University campus and in the workplace. In the 12th grade, students will complete an internship of their selection within their chosen career cluster.

At the same time, Purdue will provide programs that help students' transition from high school to college and college-level courses. Purdue faculty will be invested in the student experience throughout the educational continuum – teaching in the classroom, providing professional development to certify high school teachers to teach dual credit courses and supporting students as they reach college.

Partnerships at Work

The Purdue Polytechnic Indianapolis High School is a multi-dimensional partnership model. It's a blending of K-12 and post-secondary education with an infusion of industry leadership and participation. Purdue University and industry partners and the community will be engaged and invested in many aspects of the polytechnic model.

Industry's role will be vital, working in partnership with Purdue to continuously develop the academic model, and define and refine the competencies students must master to succeed in the 21st Century economy. While Purdue professors and high school teachers certified to teach dual credit courses will deliver classroom instruction, industry will provide learning experiences to students through internships or other work-based learning opportunities and field trips, serving as mentors and helping students learn outside the classroom.

Building the future workforce is a priority for the continued success of our region and our students. The polytechnic approach gets us one step closer to bringing all the essential ingredients together for student, community and industry success.

Narrative

I. Vision

The mission of Purdue Polytechnic Indianapolis High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution.

A. Mission

The mission of Purdue Polytechnic Indianapolis High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution.

The flagship Purdue Polytechnic Indianapolis High School will develop a new generation of skilled talent by seamlessly transitioning students from high school and post-secondary education to high-wage, high-demand jobs. This will be accomplished by creating rigorous STEM-based curricula with Purdue University faculty and industry input, which are delivered through an integrated hands-on learning environment.

B. Need

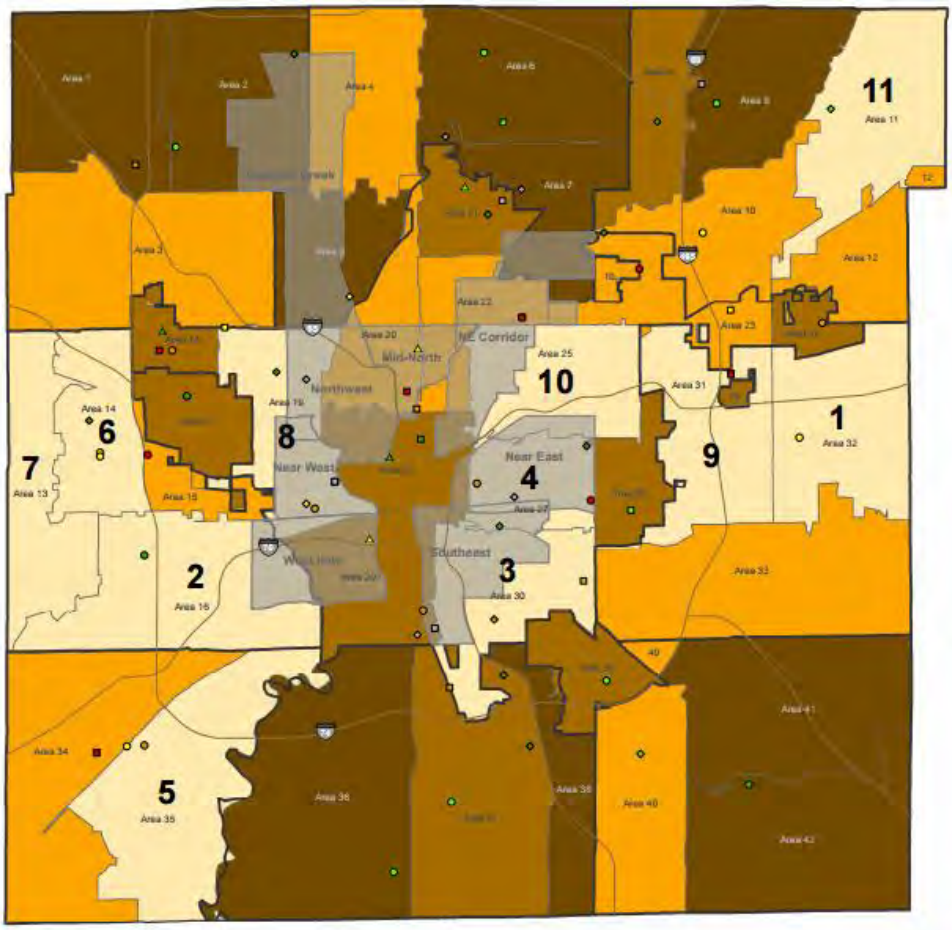
Purdue Polytechnic Indianapolis High school intends to target the typical, average student. These are likely the non-magnet school Indianapolis Public Schools (IPS) students who are not headed in an AP or IB trajectory, but are otherwise planning to earn a Core 40 diploma. Often, the top 25% of students are provided with many educational opportunities to set them up for success in high school and beyond and the bottom 25% of students are provided with a number of supports and services to help them reach their maximum potential. It is the remaining 50% of students that have difficulty accessing academic programs where they can become successful during high school and be well-prepared for life after high school – whether that is moving on to post-secondary education or directly into a job with growth potential.

> *"Two basic objectives [of Purdue Polytechnic] are to offer an alternative learning environment designed to better prepare students for today's workplace, and to increase significantly the unacceptable low number of Indianapolis Public Schools students who are qualified to succeed at Purdue."* –Mitch Daniels, President of Purdue University

There is a strong need for additional high quality schools in Indianapolis. In March 2013, IFF, a nonprofit community development institution, released a report indicating that, city-wide,

Indianapolis has only 17 schools serving high concentrations of students from low-income families that are high performing (IFF, 2013). The report recommends that Indianapolis needs at least 45,000 additional high quality seats in schools to drastically improve education for its students. In order to have the biggest impact, IFF identified 11 priority areas of the city, or geographical areas where the city should focus its resources. These 11 priority areas are depicted in the map to the left.

Purdue Polytechnic Indianapolis High School will provide Indianapolis students a much needed high quality school option, helping to increase the number of students who have access to a high quality seat. Beyond the need for a new, quality school option in Indianapolis, the need for Purdue Polytechnic Indianapolis High School is two-fold: many Indianapolis students are currently ill-prepared for college success and current projections indicate that today's youth will not have the skills needed in high-wage, high-demand careers.



Area rankings for Grades 9-12

- 1 - 11 (High Priority)
- 12 - 22
- 23 - 32
- 33 - 42 (Low Priority)

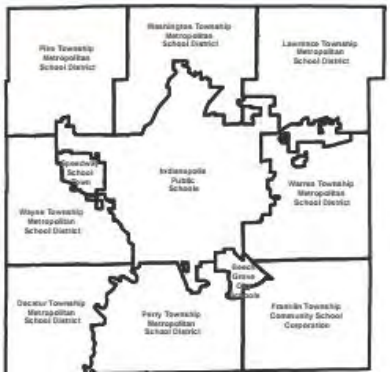
- Study Geography
- School District Boundary
- Lisc Quality of Life Communities

School Performance

- A - Exemplary Progress
- B - Commendable Progress
- C - Academic Progress
- D - Watch
- F - Probation
- No Grade

School Type

- District, neighborhood
- District, magnet/citywide
- Charter
- Private



Now more than ever, the need is great to deliver more innovative learning experiences and provide opportunities to high school students who have STEM capabilities but may not have access to tailored programs to ensure

their success. This is particularly true for low-income and minority students in Indianapolis. As such, Purdue Polytechnic Indianapolis High School is targeting students who are (1) a diverse group of men and women living in Center Township, (2) bored in a traditional education setting and have achieved average academic outcomes, (3) curious about the world around them, how things work, and how to make them work better, (4) eager for a challenging education that engaged them in solving real world problems, and (5) seeking a relevant, work-based learning environment that. Although Purdue Polytechnic Indianapolis High School is not intended to be a college preparatory high school, its goal is for students to graduate prepared to matriculate to Purdue or another college or directly into the workforce.

Preparing Students for Postsecondary Success

Purdue University and Marion County leaders share a common concern: the unacceptably small number of Indianapolis low-income and minority students who have the opportunity to succeed in college. Among the 48,000 Indiana high school graduates in 2014 who took the SAT, only 101 college-bound African Americans and 156 Latinos have SAT scores and GPAs on the range of the average Purdue freshman.[1] Even more startling, among that same set of graduates, only 7 college-bound African Americans and 16 Latinos had SAT scores and high school GPAs that would place them in the top 15% of Purdue freshmen. IPS high school SAT scores alone paint a compelling picture of how ill-prepared this student population is to pursue a college education. According to the Indiana Department of Education, SAT scores for the 2012 IPS high school graduates were significantly below the national average and College Board's college readiness benchmark.[2] On average, IPS students scored 1265 (on a 2400 scale) – more than 200 points below the national average of 1498 and nearly 300 points below the College Readiness Benchmark (1550) which predicts a 65 percent probability of obtaining a first year college GPA of B- or higher, which in turn is associated with a high likelihood of college success.

Of those students who do indicate that they are ready for college, far too few students are entering baccalaureate and sub-baccalaureate programs in technical fields that are related to our region's key economic drivers: manufacturing; alternative energy; life sciences; technology; health care; transportation and logistics; and advanced manufacturing. Even fewer students who enter technical fields of postsecondary education actually complete a degree or credential.

Purdue Polytechnic Indianapolis High School is undoubtedly one way to increase the number of Indianapolis students who are prepared for college and beyond and help close the educational gap for many Indianapolis students. The high school brings relevant and proven polytechnic education directly to students in Marion County. It will provide new learning experiences and fill a gap for students who have STEM capabilities, but have no access to tailored programs to ensure their success. Students will be immersed in hands-on, design-based learning experiences – all aimed at promoting achievement in post-secondary education and joining the workforce of the 21st Century.

---

[1] Source: College Board's Enrollment Planning Service

[2] Source: Indiana Department of Education and College Board SAT 2012 College-Bound Seniors Total Group Profile Report

Preparing Students for High Demand Careers

As a nation we need to expand our intellectual capital to meet the current demand for talented employees. The need in Indiana is no different, and has been the focus of both city and state leaders to align education with industry needs.

There exists a large gap in the number of technical jobs available in Central Indiana and the number of residents who possess the skills that employers require. This gap is only predicted to grow. A report by Hire Up Indy predicts that by 2025, "there will be a net new 51,500 technical job openings but not enough skilled talent to fill those jobs."[3] Furthermore, too few people are pursuing and completing postsecondary degrees that offer technical talent. Trends show that those graduates of leading technical education programs are more likely to pursue employment outside of the state. All of these factors indicate that 45% of those technical job openings will go unfilled – hindering Central Indiana's economy and also leaving large numbers of people missing out on opportunities in high-demand, high-wage careers. There is clearly a high need to prepare students for these technical jobs – most of which provide significantly higher than average wages. And the need is greatest in STEM, which will grow our region's economy and provide youth with the best opportunity for personal success. Unfortunately, Indianapolis' current education trends suggest that without improvements to the educational system, these shortages will continue for at least the next 15 years[4].

In addition to technical skills, employers have indicated that prospective employees with "common employability" skills (adaptability, interpersonal and communication skills, critical thinking, problem solving, and professionalism) are often difficult to find[5]. Purdue Polytechnic Indianapolis High School is designed so that students will be prepared for in-demand, high-wage jobs – this preparation includes providing students with both technical skills as well as common employability skills. The school will allow students to look forward to earning living wages and benefits that will allow them to achieve economic self sufficiency upon successful completion of the academic program and to earn a credential in their chosen career cluster. According to wage data from the Indiana Department of Workforce Development (IDWD), STEM careers provide employees with better-than-average wages. For example, on average, occupations in manufacturing earn $55,400 annually[6], and occupations in the IT, engineering, and life sciences industries earn $75,923, $70,255, and $62,190, respectively[7]. Purdue Polytechnic Indianapolis High School will provide students these promising career clusters.

---

[3] Source: http://www.hireupindy.org/

[4] Indiana Skills2Compete Coalition. (2010). *Indiana's forgotten middle-skill jobs: Meeting the demands of a 21st century economy*. Retrieved from http://mpcms.blob.core.windows.net/6864e884-8313-4d1f-97b8-696c824cfd60/docs/8d159b16-702d-4051-939f-631d69a11129/in-forgotten-ms-jobs.pdf (Indiana Skills2Compete, 2010)

[5] Indiana Career Council. (2013, December). *Indiana a state that works; Progress report to the Indiana Legislative Council; December 1, 2013 report*. Retrieved from http://www.in.gov/icc/files/Indiana_Career_Council_Progress_Report-Final.pdf

[6] Indiana Department of Workforce Development [IDWD]. (2013). *Indiana economic analysis report*. Retrieved from http://www.hoosierdata.in.gov/economic_analysis_report/FINAL%20INDIANA%20ECONOMIC%20ANALYSIS%20REPORT%202011.pdf

[7] IDWD. (2014). *Hoosiers by the numbers*. [Data file of 2012 average salaries in Indiana]. Retrieved from http://www.hoosierdata.in.gov/dpage.asp?id=24&view_number=2&menu_level=smenu3&panel_number=2

Interest in a Polytechnic School
The need for a school like Purdue Polytechnic Indianapolis High School is widely recognized. On November 10, 2015, the President of the United States announced a call to action to create more high schools that "incorporate elements of redesign, including more personalized and active learning, access to real-world and hands-on learning…deeper ties to post-secondary institutions, and a focus in expanding STEM opportunities for…groups of students who are underrepresented in high-growth, well-paying fields."

On June 18, 2015, Purdue University formally announced its plans to open Purdue Polytechnic Indianapolis High School. Since then, there has been a significant amount of interest at the school. A web trend analysis shows that in just over a month of Purdue's announcement, there have been 5,680 unique views of Purdue Polytechnic Indianapolis High School's website and other related news. There have been a total of 6,376 views, meaning that not only are people interested in learning about the school, but many people are following up to learn more.

Additionally, Purdue University set up a booth at the Indiana Black Expo and distributed information about Purdue Polytechnic Indianapolis High School. During this time, the school generated a large amount of interest and there were a large number of students indicating an interest in attending the school as well as parents interested in sending their children to such a school.

C. Goals
Purdue Polytechnic Indianapolis High School will hold both itself and students to high standards. The Board will adopt all of the academic, financial and organizational goals outlined in the Mayor's Performance Framework. The Board will also adopt goals that relate to the school's educational performance and organizational viability and support the high school's mission to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution. These goals are outlined, below. Please see Attachment A for more information on Purdue Polytechnic's identified educational performance and organizational viability goals.

<u>Educational Performance Goals</u>:
1. By graduation, students are prepared for post-secondary education success.
2. By graduation, students demonstrate the skills needed to be successful in the workplace by participating in at least one on the job experience.

<u>Organizational Viability Goals</u>:
1. The school will maintain a high student retention rate of 85%.
2. All students have access to an industry or faculty mentor.

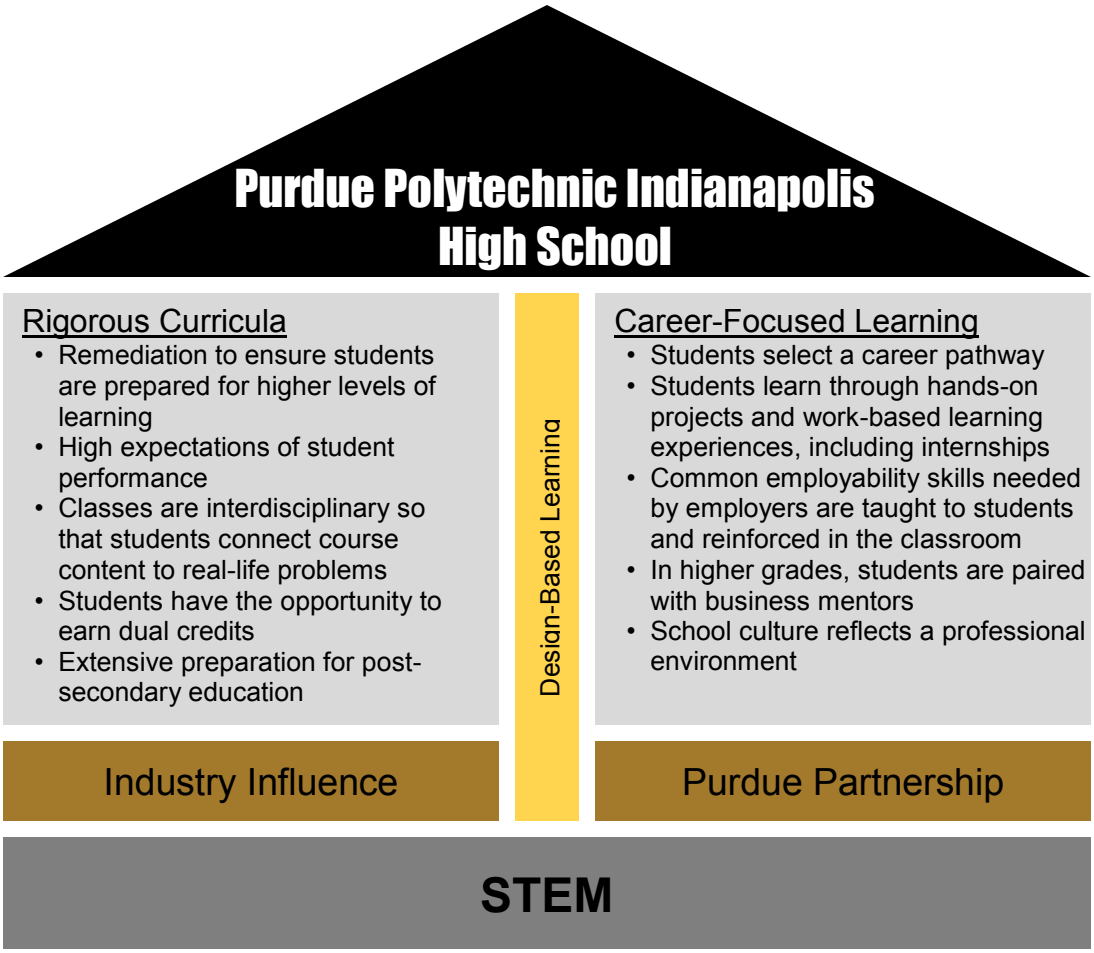
II. Educational Services Provided

A. Educational Model
Educational Model

Polytechnic is not a new concept. In fact, the first Polytechnic Institute was started in Paris, France and was devoted to instruction in many technical arts or applied sciences to serve the needs of the emerging Industrial Age in the late 18th and start of the 19th centuries. More polytechnics were created around the world – all serving the needs of the Industrial Age. The learning hierarchy was based on math and science at the top, humanities in the middle, and art and creativity at the bottom. This system was developed for the needs of the 19th century economy and society in the midst of the Industrial Revolution and it provided the foundation for success.

The system developed in the 19th century is no longer relevant in the 21st century. In a rapidly changing technological culture and an ever-growing information-based economy, creative ideas are the ultimate resource. Polytechnic high schools focus teaching students applied arts and sciences. Many polytechnic school models focus on STEM and some provide students with internships and business mentors, and others focus on college preparation. . The Purdue Polytechnic Indianapolis High School will be unlike any educational experienced offered in Indiana and potentially, the nation. Purdue Polytechnic Indianapolis High School will combine all of these pieces while focusing on creativity and innovation and providing students with a STEM-focused education that prepares them for either college or careers of their choice. What distinguishes Purdue Polytechnic from any other high school in the country is that (1) the school focuses on providing students both dual credit and industry certifications, (2) it uses a design-based approach to STEM education, (3) the school intentionally focuses on social and emotional development in learning, and (4) eligible students will receive direct access to Purdue University.

Purdue Polytechnic's educational model is based on rigorous curricula and a career-focused learning environment centered around STEM and with the backbone of this school model being design-based learning. The school is built on strong industry relationships and innovative partnership with Purdue University as well as a goal to ensure a diverse student body succeeds in the 21st Century economy. In order to make this possible, the school will adopt an interdisciplinary approach to education and experiential learning. It's a blending of secondary and post-secondary education with an infusion of industry leadership and participation. This educational model is being modeled after the innovative learning environment developed for post-secondary students at the Purdue Polytechnic Institute on the Purdue campus in West Lafayette, Indiana.



Industry-Influence

"Industry will be our collaborators, partners and advisors, working with our faculty to develop the academic model, and to define and refine the competencies students must master to succeed in the 21st Century economy. Graduates will have the skills to meet the evolving needs of industry and with dual credits for continued postsecondary education, as well as industry-recognized credentials and mastery in a defined high-tech pathway." –Gary Bertoline, Dean of Purdue Polytechnic Institute

Industry input will be critical to the success of Purdue Polytechnic Indianapolis High School. Research strongly suggests that involving employers in education and training beyond traditional career days and student visits to the workplace can have a dramatically positive

impact on workers (and students as future workers) and employers.[8] In the past year, Purdue's College of Technology has been undergoing a major transformation to become the Purdue Polytechnic Institute. This transformation is profound and designed to produce graduates who not only have deep knowledge, applied skills, and experiences in their chosen discipline, but also proven problem solving, critical thinking, communications, and leadership skills sought by industries and communities. Each department in the college has an industry advisory board which makes recommendations that have factored into the Institute's transformation. The input of these advisory boards is the basis for developing Purdue Polytechnic Indianapolis High School's curricula. Not only should post-secondary graduates be acquiring the skills and knowledge needed in today's workforce, but this learning should begin before college, at the secondary level in order to prepare those students who wish to enter directly into the workforce as well as expose these skills to students who wish to enter into post-secondary education.

Based on a 2013 survey of employers, employers indicated that regardless of a graduate's field of study, every student should acquire: knowledge of human cultures and the physical and natural world (broad knowledge in the liberal arts and sciences); intellectual and practical skills; personal and social responsibilities; and integrative and applied learning. As such, these skills and knowledge will be engrained into Purdue Polytechnic Indianapolis High School's curriculum, and a focus on these skills will be woven into the school's culture. Please see the Curriculum section and School Culture subsection for more details.

Industry partnerships will also have a strong influence on Purdue Polytechnic Indianapolis High School's school model through work-based learning experiences. Industry will help write curricula that meets their needs, will deliver hands-on experience through work-based learning and internship opportunities, and will mentor students as they select their educational and career clusters and define their areas of educational focus. Industry partners will also be instrumental in donating school equipment for students to learn and practice technical skills, act as business mentors and mentors for science fairs and robotic competitions, and support the school and student body through various school clubs and activities.

Purdue Partnership

A close partnership with Purdue University sets Purdue Polytechnic Indianapolis High School apart. Through a licensing agreement with Purdue University, Purdue Polytechnic Indianapolis High School may use the Purdue name and logo. Purdue University will make its faculty available to high school students for classroom instruction, assist the school with curriculum design, and provide professional development opportunities for high school staff. Purdue will also appoint representatives of the university to sit on the high school's Board of Directors, seek to create internship opportunities for students, and create other campus-based learning

[8] Ross, M., Gatz, C., Kazis, R., Ng, J., and Svajlenka, N. (2015, July). *Unemployment among young adults: Exploring employer-led solutions.* Brookings Metropolitan Policy Program, The Brookings Institution. Retrieved from http://www.brookings.edu/~/media/research/files/reports/2015/07/20-young-adults-jobs/bmpp_srvy_unemploymentyouth_july20.pdf

opportunities to further aid the high school's instruction. Please see Attachment B for a draft of the MOU between Purdue University and EmployIndy with the school.

STEM-Focus

Purdue Polytechnic Indianapolis High School's educational model will encompass the best practices in STEM-focused schools nationally.

Combining Rigorous Curricula with Career-Focused Learning

Purdue Polytechnic Indianapolis High School is the beginning of an educational continuum that starts with general STEM education, followed by skills mastery in a specific STEM field and hands-on experience in the workplace. This intense high school program is the stepping stone to post-secondary studies at Purdue University, or another university or the workplace, where students continue a rigorous pathway toward a high-tech career with the precise skills industry need.

Purdue Polytechnic Indianapolis High School seeks to ensure that all students who complete its academic program are prepared to seamlessly transition into post-secondary education or the workplace. Therefore, students will be held to high expectations and the school's curricula will be rigorous and designed to challenge students to reach their maximum potential, while weaving in career-focused learning. Because the school is targeting the middle 50% of students, many students will likely enter the school in need of remediation. The school will focus significant resources on extensive tutoring, mentoring, and remediation in grades 9 and 10 to bring students up to grade level and prepare them for higher levels of learning in later grades. The curriculum will provide students with new knowledge and challenge them to apply STEM concepts with design- and problem-based learning to solve real-world challenges that they will face in their careers.

Only after students demonstrate mastery and complete an exit capstone at the end of 10th grade, will they select and advance through a defined career cluster in areas of focus that include advanced manufacturing, supply chain and logistics, and computer and information technology. The school's Board and curriculum experts will continuously seek inclusion of additional career clusters that align with Central Indiana's most high-growth, high-demand careers. Throughout each course progression, curriculum will be infused with career themes related to each career cluster, as well as the common employability skills that the school's industry partners report to be in highest demand (adaptability, interpersonal communication skills, critical thinking, problem solving, and professionalism).

In grades 11 and 12, Purdue Polytechnic High School's academic program will build upon the skills and knowledge that students have gained and focus on putting students on track to earn college credits and industry credentials. Students will be afforded the opportunity to learn through problem-based projects, through distance learning to interact with faculty at Purdue University, and in the workplace. Students will be paired with business mentors to help reinforce how the technical and common employability skills they learn in the classroom are used in at the workplace on a daily basis. Continued successful mastery of skills may provide students for direct admittance into Purdue programs to continue on to post-secondary education.

Design-Based Learning

The backbone of Purdue Polytechnic Indianapolis High School's educational model is design-based learning. This is a specific type of design-based learning where students are presented with a problem and must design a solution to address the challenge. Through this method of learning, students will be guided to stretch beyond simply solving a problem and to rather find the root cause of a problem and identify barriers to a solution – including social, economic, and political situations. To approach a challenge, students must ask questions to fully understand the issue at hand (What is the problem? What needs improved? Who are the people? What are the solutions that already exist?). Students use a systems approach and apply creativity and the scientific process of discovery to solve the problems which they are presented. This level of engagement in the learning process provides students with deep understanding and a greater likelihood of internalizing knowledge. With a heavy emphasis on learning-by-doing, Purdue Polytechnic is designed to produce graduates who have deep knowledge, applied, skills, and experiences in their chosen discipline.

Instructional Methods

Instruction at Purdue Polytechnic Indianapolis High School is student-centered and teacher facilitated. Teachers will model the design thinking approach to facilitate project management and facilitate acquisition of learning. All teachers will use the following 5 step design think approach:

Initiate → Empathize → Analyze → Execute → Reflect

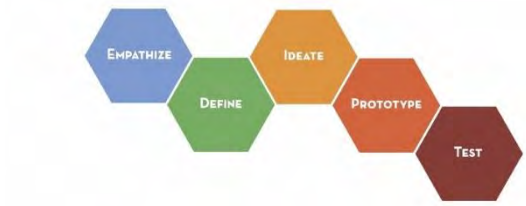
The stages:

1. Initiate: Learn about the challenge and its context; conduct background research.
2. Empathize: Understand the needs and motivations of users and stakeholders.
3. Analyze: Define the problem, synthesize data, and ideate solutions.
4. Execute: Prototype solutions, conduct trials, iterate, and implement.
5. Reflect: Identify lessons learned and areas for growth, and commit to next steps.

Why this process?

There are as many different design processes as there are people designing. A few of the most popular are those of the Stanford d.school and global design firm IDEO:

d.school



IDEO

At PPHS, we wanted a design process that spoke the language of the educational environment it would inhabit. Not only must our process drive solutions to real world problems, but also the core acquisition of knowledge and skills by our students.

Our design phases encapsulate each of the ideas within the d.school and IDEO models: problem definition and ideation fall within our Analyze phase, discovery encompasses Initiate and Empathize, and so on. Our process uniquely brings emphasis to core academic concepts such as analysis and reflection, empowering students to develop creativity, and user-centric solutions while simultaneously furthering their academic progress.

Rough map between PPHS, d.school, and IDEO design processes:

<table>
<tr><th>d.school</th><th>PPHS</th><th>IDEO</th></tr>
<tr><td></td><td>Initiate</td><td rowspan="2">Discovery</td></tr>
<tr><td>Empathize</td><td>Empathize</td></tr>
<tr><td>Define</td><td rowspan="2">Analyze</td><td>Interpretation</td></tr>
<tr><td>Ideate</td><td>Ideation</td></tr>
<tr><td>Prototype</td><td rowspan="2">Execute</td><td>Experimentation</td></tr>
<tr><td>Test</td><td rowspan="2">Evolution</td></tr>
<tr><td></td><td>Reflect</td></tr>
</table>

School Calendar

Purdue Polytechnic Indianapolis High School will operate on an extended year calendar with 2 semesters. Compared to a traditional school calendar of 180 days, Purdue Polytechnic students will attend school 195 days out of the year. Please see Attachment C for Purdue Polytechnic High school's anticipated school calendar for the 2017-2018 school year.

Purdue Polytechnic High School will also feature 3 immersion sessions, first three weeks of the school year, three weeks in between the first and second semester, and 3 weeks at the end of the year. During the immersion weeks, students drive their own learning experiences, from executing planned activities, to planning exhibition to create an opportunity to present project capstones to family and the community; also, students will have the choice to explore learning opportunities relating to college and career readiness. The goal of the immersion sessions is to guide students in meaningful reflection on learning plans, map out the academic experience, and involving the community and families in the project capstones of the students. Accompanied and guided by their teachers, students grow as leaders, listeners, and thinkers, reflecting on their own lives and future endeavors.

Students who earned a course grade of a D or F or 11th and 12th graders who have not yet passed the state graduation assessments will participate in small group learning communities at school for most of the school day during the immersion sessions. Students may utilize the week to re-engage in projects cycles to improve their levels of mastery and resulting course grade. Teachers facilitate this work, consulting with small groups of students throughout the week. Students who have not passed the required 10th grade state summative assessments will work with teachers to build appropriate intermediate level skills, advanced reasoning skills, reading skills and strategies, and mathematics skills and strategies. Additionally, these students will have the opportunity to engage in activities for part of the school day during the immersion session.

The school will also operate using extended school days, where students attend Purdue Polytechnic High School from 9:30 a.m. -4:30 p.m. Monday through Friday. This schedule is designed to increase the amount of time that students are actively engaged in their learning so as to reinforce educational success. The schedule will provide for two advisory periods of a total of 55 minutes at the beginning of the school day and at the end of the school day. During morning advisory periods, students meet with an advisor (Personal Learning Coach), set academic and personal goals, check in regarding their goals, character building, discuss school values and school announcements. During the afternoon advisory period students work on workplace readiness skills, career exploration, and social- emotional learning. In grade 12 (Capstone Level), students also work on a capstone project related to their chosen career cluster.

Please see Attachment D for sample plan of study for year one.

A Student's Typical Day

9:30 am-10:00am	After speaking with Mr. Bowling, Jose goes to his morning advisory where he reviews his observation notes with one of his classmates and then looks at the PPHSI weekly schedule. Jose decides that the Health Dojo about diabetes will help him gain the content knowledge he needs to understand why the staff at the retirement center is having a hard time with the large percentage of residents suffering from diabetes.

10:00am - 12:00pm	After advisory, Jose goes to the Collaborative Makerspace to work with his cross-functional team developing prototypes for the new cafeteria layout. Mr. Jones comes over to Jose and his team and asks them what they have learned from their observations of other cafeterias and interviews with cafeteria patrons and food service workers. Jose's team members share their results and then decide on steps for the 2nd prototype and start working.
12:00pm-12:30:pm	Jose grab some food and heads to find his working group. His group wanted to meet up at lunch and continue the discussion from the makerspace. His group decides the layout needs a review from Mr. Goodin, the Biology teacher. They want a more information on the concept of cell function related to the was glucose provides energy for the cell.
12:30pm-2:00pm	Next, Jose attends the Diabetes workshop where he learns how diabetes impacts a person's body, how to manage diabetes effectively, and how to create a supportive environment for people with diabetes. Jose thinks he can use some of the things he learned to guide his work with the staff and retirees at the retirement center.
2:00pm-3:00pm	Jose spends an hour and half of flex time to hang in the Quant (Math) Lab as he complete the Khan Academy module on solving two step equations.
3:00pm- 4:00pm	Jose decides to spend an hour of his flex time in the Comms (Writing) Lab to get help from tutors on the finishing touches of his Biography of his grandmother who battles Diabetes.
4:15pm-4:45pm	At the end of the day, Jose heads back to advisory to reflect on his day, plan what he needs to accomplish after school, and decide what he needs to focus on tomorrow. He checks his academic dashboard to see his progression in Algebra I and plans to attend a Dojo to help him master identifying the domain and range of relations represented in a table. Then, Jose plans to use that skill to quantify some of the data he is going to accumulate from his study with the nurses and create a table to use as a visual representation for the staff and residents. Jose says goodbye to his advisory mates and instructor. He thinks to himself: "I can't believe the day went by so quick". He takes off to the retirement center for his next round of research.

A Teacher's Typical Day

8:40 am- 8:45am	As Mr. Bowling walks towards the entrance of PPHSI, he thinks about his personalized learning plan meeting with Shantel scheduled for morning advisory. He is excited to celebrate Shantel's completion of

	her Algebra I credit. He discusses with Shantel what skills she needs to build in order to earn mastery in English 10. Mr. Bowling also thinks about the resources he plans to share with Shantel, which will support her *Learning from Failure* project.
8:45am -9:30pm	When Mr. Bowling enters PPHS,I he drops his bag and lunch off in his office then walks out to the hallway to greet students. “Good morning, Jose, how did your research at the retirement center go last night? Did you get the information you needed?” “Wow, Mr. Bowling! I learned a lot about the interests and concerns of the residents and the needs of the staff. I am going to look over my observation notes in advisory and decide what my next steps are going to be. I think we can design a solution to make a difference for both the residents and staff.” Mr. Bowling smiles thinking about how much Jose has grown through his work at the retirement center and the development of his project. After welcoming students in the hallway, Mr. Bowling heads to his morning advisory where he greets his students.
9:30pm-10:10:pm	Students in Mr. Bowling’s advisory open their daily calendars and personal learning profile dashboards. Mr. Bowling reviews the upcoming academic dojos, extended learning pop-out sessions, and Makerspace slots available. Students complete their schedules and ask Mr. Bowling clarifying questions. Next, Mr. Bowling gives the students a writing prompt to complete and share with their advisory mates while he completes personal learning plan (PLP) meetings. Mr. Bowling calls Shantel to begin her weekly PLP meeting. During the meeting, Mr. Bowling asks Shantel to give him an overview of her personal learning profile dashboard. Shantel starts by pointing out the Algebra I badge she recently earned, and she and Mr. Bowling celebrate. Then, Shantel proceeds to explain she is having a difficult time developing the counterclaim portion of her argumentative writing piece. Mr. Bowling suggests Shantel visit the writing center for targeted support and take the *Different Perspectives* argumentative writing Dojo. Lastly, Shantel gives Mr. Bowling an update on her progress and next steps to complete her *Learning from Failure* project. Mr. Bowling shares some resources that he found for her project and they discuss how she can incorporate them. Shantel thanks Mr. Bowling for his help and Mr. Bowling congratulates Shantel on her progress.

10:30pm-12:00pm	Mr. Bowling releases his PLC. Then he proceeds to the space assigned for his introductory workshop on Diabetes which is schedule to run twice today. He is looking forward to discussing the components of that affects the body that may lead to Diabetes, and statistics surrounded around the epidemic.
12:00pm-12:30pm	Lunch
1:00pm- 2:30pm	Mr. Bowling will rotate to spend time in the space assigned for students to work independently until his next workshop.
2:30pm-4:00pm	Mr. Bowling introduces Diabetes to another group of students.
4:15pm-4:30pm	Students in Mr. Bowling's advisory open their daily calendars and personal learning profile dashboards. Mr. Bowling reviews the upcoming academic dojos, extended learning pop-out sessions, and Makerspace slots available. Students complete their schedules and ask Mr. Bowling clarifying questions. After reflecting about the day and reviewing the schedule for next week, Mr. Bowling releases students for dismissal.

B. Academic Standards

Exit Standards

All coursework at Purdue Polytechnic Indianapolis High School aligns with Indiana Academic Standards or college requirements for dual credit courses. While exit standards will differ for students depending on their plans of study, the following represents the *minimum* exit standards required of all students for mathematics, English language arts, and science.

Mathematics

All students will complete four years of mathematics coursework, and while many will complete Pre-calculus, Trigonometry and Calculus, depending on their plans of study, students may select Advanced Modeling and Analysis/Probability and Statistics or Finite Mathematics as their fourth year mathematics courses. However, the mathematics exit standards that are shared by *all* Purdue Polytechnic Indianapolis High School Students are the Indiana Academic Standards for Algebra II and include the following outcomes and skills.

Mathematics Process Standards

- PS.1: Make sense of problems and persevere in solving them
- PS.2: Reason abstractly and quantitatively
- PS.3: Construct viable arguments and critique the reasoning of others.
- PS.4: Model with mathematics.
- PS.5: Use appropriate tools strategically.
- PS.6: Attend to precision.

PS.7: Look for and make use of structure.
PS.8: Look for and express regularity in repeated reasoning.

Algebra II Content Standards

Complex Numbers and Expressions

AII.CNE.1: Know there is an imaginary number, i, such that $i^2 = -1$, and every complex number can be written in the form a + bi, with a and b real. Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.

AII.CNE.2: Translate expressions between radical and exponent form and simplify them using the laws of exponents.

AII.CNE.3: Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide algebraic rational expressions.

AII.CNE.4: Rewrite algebraic rational expressions in equivalent forms (e.g., using laws of exponents and factoring techniques).

AII.CNE.5: Rewrite rational expressions in different forms; write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x), using long division and synthetic division.

AII.CNE.6: Find partial sums of arithmetic and geometric series and represent them using sigma notation.

Functions

AII.F.1: Determine whether a relation represented by a table, graph, or equation is a function.

AII.F.2: Understand composition of functions and combine functions by composition.

AII.F.3: Understand that an inverse function can be obtained by expressing the dependent variable of one function as the independent variable of another, as f and g are inverse functions if and only if f(x)=y and g(y)=x, for all values of x in the domain of f and all values of y in the domain of g. Find the inverse of a function that has an inverse.

AII.F.4: Understand that if the graph of a function contains a point (a, b), then the graph of the inverse relation of the function contains the point (b, a); the inverse is a reflection over the line y = x.

AII.F.5: Describe the effect on the graph of f(x) by replacing f(x) with f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative) with and without technology. Find the value of k given the graph of f(x) and the graph of f(x) + k, k f(x), f(kx), or f(x + k).

Systems of Equations

AII.SE.1: Solve a system of equations consisting of a linear equation and a quadratic equation in two variables algebraically and graphically with and without technology (e.g., find the points of intersection between the line y = –3x and the circle $x^2 + y^2 = 3$).

AII.SE.2: Solve systems of two or three linear equations in two or three variables algebraically and using technology.

AII.SE.3: Represent real-world problems using a system of linear equations in three variables and solve such problems with and without technology. Interpret the solution and determine whether it is reasonable.

Quadratic Equations and Functions

AII.Q.1: Represent real-world problems that can be modeled with quadratic functions using tables, graphs, and equations; translate fluently among these representations. Solve such problems with and without technology. Interpret the solutions and determine whether they are reasonable.

AII.Q.2: Use completing the square to rewrite quadratic functions into the form $y = a(x + h)^2 + k$, and graph these functions with and without technology. Identify intercepts, zeros, domain and range, and lines of symmetry. Understand the relationship between completing the square and the quadratic formula.

AII.Q.3: Use the discriminant to determine the number and type of solutions of a quadratic equation in one variable with real coefficients; find all solutions and write complex solutions in the form of $a \pm bi$ for real numbers a and b.

Exponential & Logarithmic Equations and Functions

AII.EL.1: Write arithmetic and geometric sequences both recursively and with an explicit formula; use them to model situations and translate between the two forms.

AII.EL.2: Graph exponential functions with and without technology. Identify and describe features, such as intercepts, zeros, domain and range, and asymptotic and end behavior.

AII.EL.3: Identify the percent rate of change in exponential functions written as equations, such as $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)12^t$, $y = (1.2)^t/10$, and classify them as representing exponential growth or decay.

AII.EL.4: Use the properties of exponents to transform expressions for exponential functions (e.g., the expression 1.15^t can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%).

AII.EL.5: Know that the inverse of an exponential function is a logarithmic function. Represent exponential and logarithmic functions using graphing technology and describe their inverse relationship.

AII.EL.6: Use the laws of exponents to derive the laws of logarithms. Use the laws of logarithms and the inverse relationship between exponential functions and logarithms to evaluate expressions and solve equations in one variable.

AII.EL.7: Represent real-world problems using exponential equations in one or two variables and solve such problems with and without technology. Interpret the solutions and determine whether they are reasonable.

Polynomial, Rational, and Other Equations and Functions

AII.PR.1: Solve real-world and other mathematical problems involving polynomial equations with and without technology. Interpret the solutions and determine whether the solutions are reasonable.

AII.PR.2: Graph relations and functions including polynomial, square root, and piecewise-defined functions (including step functions and absolute value functions) with and without technology. Identify and describe features, such as intercepts, zeros, domain and range, end behavior, and lines of symmetry.

AII.PR.3: Solve real-world and other mathematical problems involving rational and radical functions, including direct, inverse, and joint variation. Give examples showing how extraneous solutions may arise.

Data Analysis, Statistics, and Probability

AII.DSP.1: Make inferences and justify conclusions from sample surveys, experiments, and observational studies. Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.
AII.DSP.2: Use technology to find a linear, quadratic, or exponential function that models a relationship for a bivariate data set to make predictions; compute (using technology) and interpret the correlation coefficient.
AII.DSP.3: Organize, graph (e.g., line plots and box plots), and compare univariate data of two or more different data sets using measures of center (mean and median) and spread (range, inter-quartile range, standard deviation, percentiles, and variance). Understand the effects of outliers on the statistical summary of the data.
AII.DSP.4: Record multiple observations (or simulated samples) of random events and construct empirical models of the probability distributions. Construct a theoretical model and apply the law of large numbers to show the relationship between the two models.
AII.DSP.5: Understand dependent and independent events, and conditional probability; apply these concepts to calculate probabilities.
AII.DSP.6: Understand the multiplication counting principle, permutations, and combinations; apply these concepts to calculate probabilities.

English Language Arts

All students will complete four years of English language arts coursework, and while many will take college level English during their senior year, the minimum exit standards required of all students are the Indiana Academic Standards for English Language Arts, Grades 11-12 and include the following outcomes and skills.

Grades 11-12 English Language Arts Content Standards

READING: Literature

Learning Outcome

11-12.RL.1 Read a variety of literature within a range of complexity appropriate for grades 11-CCR. By the end of grade 11, students interact with texts proficiently and independently at the low end of the range and with scaffolding as needed for texts at the high end of the range. By the end of grade 12, students interact with texts proficiently and independently.

Key Ideas and Textual Support

11-12.RL.2.1 Cite strong and thorough textual evidence to support analysis of what a text says explicitly as well as inferences and interpretations drawn from the text, including determining where the text leaves matters uncertain.
11-12.RL.2.2 Compare and contrast the development of similar themes or central ideas across two or more works of literature and analyze how they emerge and are shaped and refined by specific details.
11-12.RL.2.3 Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (*e.g., where a story is set, how the action is ordered, how the characters are introduced and developed*).

Structural Elements and Organization

11-12.RL.3.1 Analyze and evaluate how an author’s choices concerning how to structure specific parts of a work of literature (*e.g., the choice of where to begin or end a story, the*

choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.

11-12.RL.3.2 Analyze a work of literature in which the reader must distinguish between what is directly stated and what is intended (*e.g., satire, sarcasm, irony, or understatement*) in order to understand the point of view.

Synthesis and Connection of Ideas

11-12.RL.4.1 Analyze multiple interpretations of a story, play, or poem, evaluating how each version interprets the source text and the impact of the interpretations on the audience.

11-12.RL.4.2 Analyze and evaluate works of literary or cultural significance in history (American, English, or world) and the way in which these works have used archetypes drawn from myths, traditional stories, or religious works, as well as how two or more of the works treat similar themes, conflicts, issues, or topics.

READING: Nonfiction

Learning Outcome

11-12.RN.1 Read a variety of nonfiction within a range of complexity appropriate for grades 11-CCR. By the end of grade 11, students interact with texts proficiently and independently at the low end of the range and with scaffolding as needed for texts at the high end of the range. By the end of grade 12, students interact with texts proficiently and independently.

Key Ideas and Textual Support

11-12.RN.2.1 Cite strong and thorough textual evidence to support analysis of what a text says explicitly as well as inferences and interpretations drawn from the text, including determining where the text leaves matters uncertain.

11-12.RN.2.2 Compare and contrast the development of similar central ideas across two or more texts and analyze how they emerge and are shaped and refined by specific details.

11-12.RN.2.3 Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of a text.

Structural Elements and Organization

11-12.RN.3.2 Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

11-12.RN.3.3 Determine an author's perspective or purpose in a text in which the rhetoric is particularly effective (*e.g., appeals to both friendly and hostile audiences, anticipates and addresses reader concerns and counterclaims*), analyzing how style and content contribute to the power, persuasiveness or beauty of the text.

Synthesis and Connection of Ideas

11-12.RN.4.1 Delineate and evaluate the arguments and specific claims in seminal U.S. and world texts, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.

11-12.RN.4.2 Synthesize and evaluate multiple sources of information presented in different media or formats as well as in words in order to address a question or solve a problem.

11-12.RN.4.3 Analyze and synthesize foundational U.S. and world documents of historical and literary significance for their themes, purposes, and rhetorical features.

READING: Vocabulary

Learning Outcome

11-12.RV.1 Acquire and use accurately general academic and content-specific words and phrases at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Vocabulary Building

11-12.RV.2.1 Use context to determine or clarify the meaning of words and phrases.

11-12.RV.2.3 Analyze nuances in the meaning of words with similar denotations.

11-12.RV.2.4 Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (*e.g., conceive, conception, conceivable*).

11-12.RV.2.5 Select appropriate general and specialized reference materials, both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, part of speech, etymology, or standard usage.

Vocabulary in Literature and Nonfiction Texts

11-12.RV.3.1 Analyze the meaning of words and phrases as they are used in works of literature, including figurative and connotative meanings; analyze the cumulative impact of specific word choices (*e.g., imagery, allegory, and symbolism*) on meaning and tone (*e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone*).

11-12.RV.3.2 Determine the meaning of words and phrases as they are used in a nonfiction text, including figurative, connotative, and technical meanings; evaluate the cumulative impact of how an author uses and refines the meaning of a key term or terms over the course of a text.

11-12.RV.3.3 Interpret figures of speech (*e.g., paradox*) in context and analyze their role in the text.

WRITING

Learning Outcome

11-12.W.1 Write routinely over a variety of time frames for a range of tasks, purposes, and audiences; apply reading standards to support analysis, reflection, and research by drawing evidence from literature and nonfiction texts.

Writing Genres: Argumentative, Informative, and Narrative

11-12.W.3.1 Write arguments in a variety of forms that –

a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
c. Use effective transitions as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
d. Establish and maintain a consistent style and tone appropriate to purpose and audience.

e. Provide a concluding statement or section that follows from and supports the argument presented.

11-12.W.3.2 Write informative compositions in a variety of forms that –

a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
d. Choose language, content-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic, recognizing and eliminating wordiness and redundancy.
e. Establish and maintain a style appropriate to the purpose and audience.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

11-12.W.3.3 Write narrative compositions in a variety of forms that –

a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters.
b. Create a smooth progression of experiences or events.
c. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
d. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).
e. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.
f. Provide an ending that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.

The Writing Process

11-12.W.4 Apply the writing process to –

a. Plan and develop; draft; revise using appropriate reference materials; rewrite; try a new approach, focusing on addressing what is most significant for a specific purpose and audience; and edit to produce and strengthen writing that is clear and coherent.
b. Use technology to generate, produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

The Research Process: Finding, Assessing, Synthesizing, and Reporting Information

11-12.W.5 Conduct short as well as more sustained research assignments and tasks to build knowledge about the research process and the topic under study.

a. Formulate an inquiry question, and refine and narrow the focus as research evolves.
b. Gather relevant information from multiple types of authoritative sources, using advanced searches effectively, and annotate sources.
c. Assess the strengths and limitations of each source in terms of the task, purpose, and audience.
d. Synthesize and integrate information into the text selectively to maintain the flow of ideas.
e. Avoid plagiarism and overreliance on any one source and follow a standard format (e.g., MLA, APA) for citation.
f. Present information, choosing from a variety of formats.

SPEAKING AND LISTENING

Learning Outcome

11-12.SL.1 Listen actively and adjust the use of spoken language (*e.g., conventions, style, vocabulary*) to communicate effectively with a variety of audiences and for different purposes.

Discussion and Collaboration

11-12.SL.2.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) on grade-appropriate topics, texts, and issues, building on others' ideas and expressing personal ideas clearly and persuasively.

11-12.SL.2.2 Stimulate a thoughtful, well-reasoned debate and exchange of ideas by referring to specific evidence from materials under study and additional research and resources.

11-12.SL.2.3 Work with peers to promote collegial discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

11-12.SL.2.4 Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.

11-12.SL.2.5 Conduct debate and discussion to allow all views to be presented; allow for a dissenting view, in addition to group compromise; and determine what additional information or research is required to deepen the investigation or complete the task.

Comprehension

11-12.SL.3.1 Integrate multiple sources of information presented in diverse media and formats (*e.g., visually, quantitatively, orally*) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

11-12.SL.3.2 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

Presentation of Knowledge and Ideas

11-12.SL.4.1 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

11-12.SL.4.2 Create engaging presentations that make strategic and creative use of digital media (*e.g., textual, graphical, audio, visual, and interactive elements*) to add interest and enhance understanding of findings, reasoning, and evidence.

MEDIA LITERACY

Learning Outcome

11-12.ML.1 Critically analyze information found in electronic, print, and mass media used to inform, persuade, entertain, and transmit culture.

11-12.ML.2.1 Evaluate the intersections and conflicts between visual and verbal messages, and recognize how visual techniques or design elements carry or influence messages in various media.

11-12.ML.2.2 Analyze the impact of the media on the public, including identifying and analyzing rhetorical and logical fallacies.

Science

While students at Purdue Polytechnic Indianapolis High School may take a variety of science courses, all students will complete a sequence of Integrated Chemistry and Physics, Biology, Chemistry, and Physics. The minimum exit requirements for all students are the Indiana Academic Standards for Physics, including the following outcomes and skills.

Literacy Standards for Science and Technical Subjects

Reading Standards for Literacy in Science

Key Ideas and Details

11-12.RS.1 Cite specific textual evidence to support analysis of science, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

11-12.RS.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

11-12.RS.3 Follow precisely a complex multistep procedure when carrying out experiments or taking measurements; analyze the specific results based on explanations in the text.

Craft and Structure

11-12.RS.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific context relevant to grades 11-12 texts and topics.

11-12.RS.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

11-12.RS.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

Integration of Knowledge and Ideas

11-12.RS.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

11-12.RS.8 Evaluate the hypotheses, data, analysis, and conclusions in a science text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

11-12.RS.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Range of Reading and Level of Text Complexity

11-12.RS.10 By the end of grade 12 read and comprehend science texts in the grades 11-CCR text complexity band independently and proficiently.

Writing Standards for Literacy in Science

Text Types and Purposes

11-12.WS.1 Write arguments focused on discipline-specific content.

a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.

c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.

e. Provide a concluding statement or section that follows from or supports the argument presented.

11-12.WS.2 Write informative/explanatory texts, including scientific procedures/ experiments.

a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.

c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.

d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.

e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).

11-12.WS.3 Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In science, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations that others can replicate them and (possibly) reach the same results.

Production and Distribution of Writing

11-12.WS.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

11-12.WS.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

11-12.WS.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

Research to Build and Present Knowledge

11-12.WS.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

11-12.WS.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectivity to maintain the flow of ideas, avoiding plagiarism and overreliance on any once source and following a standard format for citation.

11-12.WS.9 Draw evidence from informational texts to support analysis, reflection, and research.

Range of Writing

11-12.WS.10 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Physics Content Standards

Motion and Forces

P.1.1 Using motion, maps, graphs and algebraic equations, describe, measure, and analyze constant acceleration motion in one dimension in terms of time and the vector quantities of displacement, velocity and acceleration.

P.1.2 Using motion, maps, graphs and algebraic equations, describe, measure, and analyze constant acceleration motion in two dimensions in terms of time and the vector quantities of displacement, velocity and acceleration. Consider specifically projectile motion and uniform circular motion.

P.1.3 Describe the magnitude and direction of kinds of forces, including both contact forces and non-contact forces, those that act at a distance. Find the net force acting on an object using free-body diagrams and the addition of forces. Use Newton's three laws to deductively analyze static and dynamic systems.

P.1.4 Use Newton's Law of Universal Gravitation and the laws of motion to quantitatively analyze the motions of orbiting objects such as the moon, the planets and satellites (i.e., Kepler's Third Law of Planetary Motion).

Energy and Momentum

P.2.1 Describe qualitatively and quantitatively the concepts of momentum, work, kinetic energy, potential energy and power.

P.2.2 Quantitatively predict changes in momentum using the impulse-momentum theorem and in kinetic energy using the work-energy theorem.

P.2.3 Analyze evidence that illustrates the Law of Conservation of Energy and the Law of Conservation of Momentum. Apply these laws to analyze elastic and completely inelastic collisions.

P.2.4 Describe and quantify energy in its different mechanical forms (e.g., kinetic, gravitational potential, elastic potential) and recognize that these forms of energy can be transformed one into another and into non-mechanical forms of energy (e.g., thermal, chemical, nuclear and electromagnetic).

Temperature and Thermal Energy Transfer

P.3.1 Describe temperature, thermal energy and thermal energy transfer in terms of the kinetic molecular model. Expand the concept of conservation of mechanical energy to include thermal energy.

P.3.2 Describe the kinetic molecular model, use it to derive the ideal gas law and show how it explains the relationship between the temperature of an object and the average kinetic energy of its molecules.

P.3.3 Use the kinetic theory to explain that the transfer of heat occurs during a change of state.

P.3.4 Use examples from everyday life to describe the transfer of thermal energy by conduction, convection and radiation.

Electricity and Magnetism

P.4.1 Using Coulomb's law, describe and determine the force on a stationary charge due to other stationary charges. Know that this force is many times greater than the gravitational force.

P.4.2 Define electric field and describe the motion of a charged particle in a simple electric field. P.4.3 Describe electric potential energy and electric potential (i.e., voltage). Use voltage to explain the motion of electrical charges and the resulting electric currents in conductors.

P.4.4 Explain and analyze simple arrangements of electrical components in series and parallel circuits in terms of current, resistance, voltage and power. Use Ohm's and Kirchhoff's laws to analyze circuits.

P.4.5 Describe the magnetic forces and fields produced by and acting on moving charges and magnetic materials.

Vibrations, Waves

P.5.1 Identify properties of objects that vibrate by using Newton's laws to describe and explain the vibrational motion resulting from restoring forces, such as Hooke's Law in the case of spring or gravity in the case of a small amplitude pendulum.

P.5.2 Describe how vibrating objects can generate transverse and/or longitudinal waves so that energy is transmitted without the transfer of energy. Distinguish longitudinal waves from transverse waves.

P.5.3 Describe and analyze propagating waves in terms of their fundamental characteristics such as wave speed, wavelength, frequency or period, and amplitude.

P.5.4 Describe and explain the behavior of waves such as transmission, reflection, interference and polarizations. Qualitatively describe and explain the production and properties of standing waves.

Light and Optics

P.6.1 Understand the geometric nature of light in reflection and refraction and in image formation by lenses and mirrors. Use that geometric nature to graphically predict the formation of images by lens and mirrors.

P.6.2 Describe the electromagnetic spectrum (i.e., radio waves, microwaves, infrared, visible light, ultraviolet, X-rays and gamma rays) in terms of frequency, wavelength and energy. Recognize that all these waves travel in a vacuum at the same speed.

P.6.3 Understand that electromagnetic waves are produced by the acceleration of charged particles. Describe how electromagnetic waves interact with matter both as packets (i.e., photons) and as waves. Show qualitatively how wave theory helps explain polarization and diffraction.

Modern Physics

P.7.1 Explain that electrons, protons and neutrons are parts of the atom and that the nuclei of atoms are composed of protons and neutrons, which experience forces of attraction and repulsion consistent with their charges and masses. Distinguish elements from isotopes.

P.7.2 Explain that the stability of the nucleus, containing only positive or neutral particles, indicates the existence of a new force that is only evident within the nucleus, as it holds the particles together despite the strong repulsive electrical force.

P.7.3 Distinguish fission from fusion processes. Describe how the binding energies of protons and neutrons determine the stability and instability of nuclei.

P.7.4 Describe qualitatively how nuclear reactions (i.e, fission and fusion) convert very small amounts of matter into large amounts of energy.

P.7.5 Understand that fission results from large, less stable nuclei decomposing to form smaller, more stable nuclei. Understand that fusion results from small nuclei at high temperatures and pressures combining to form larger, more stable nuclei and releasing thermonuclear energy.

Grade Level Promotion

Students will enter the Purdue Polytechnic Indianapolis High School with a supportive learning community dedicated to assisting at different levels of high school readiness for the intensive curricula the school will offer. Extensive tutoring, mentoring and remediation supports will be in place and could include extended school days or summer bridge programs.

The first two years of high school education will encompass the best practices in STEM-focused schools nationally. Only after students demonstrate mastery will they advance through a defined career cluster in areas of focus that could include advanced manufacturing, supply chain and logistics, and computer and information technology.

In a rapidly changing technological culture and an ever-growing information-based economy, creative ideas are the ultimate resource; however, our current educational system does little to nourish and allow creativity to be central to learning. Today's system is built around fact-based learning, but the Internet makes almost every desirable fact instantly available through robust search engines. This means that we are preparing students with skills they will rarely need or use while ignoring what they actually need to be successful in the 21st century. At Purdue Polytechnic Indianapolis High School, learning in the 9th and 10th grades (Foundation Level) will be design-based projects focused on science, technology, engineering and mathematics with a connection between those subjects and real-world challenges. The school will teach students *how* to approach learning with the design thinking process rather than providing answers. Students will learn first-hand about STEM careers through specific real-world challenges and industry partnerships.

Following an exit capstone, students entering 11th grade (Core Level) will select a career cluster, putting them on track to master skills and/or earn college credits and industry credentials. Students will be afforded the opportunity to learn on the high school campus, in cohorts on college campus and in the workplace. In the 12th grade (Capstone Level), students will complete a portfolio of the academic and career exploration accomplishments and work that encompasses all four years.

Along with Purdue faculty, industry partners will be invested in the student experience throughout the educational continuum. Some of the ways the Purdue Faculty and industry partners will be invested is by teaching workshops, providing professional development, teach dual credit courses and supporting students as they prepare for college and/or career.

C. Curriculum

Integrated STEM Curriculum

A STEM-focused high school, the curriculum of Purdue Polytechnic Indianapolis High School follows the model delineated in *STEM Road Map: A Framework for Integrate STEM Education.*[9] The school's integrated STEM curriculum is aligned to Indiana college and career readiness standards and to three state career and technical education (CTE) pathways: Advanced Manufacturing, Information Technology, and STEM and is based on distinguishing characteristics described by Bryan, Moore, Johnson, and Roehrig[10]:

- The content and practices of one or more anchor science and mathematics disciplines define some of the primary learning goals.
- The integrator is the practices of engineering and design as the context and/or an intentional component of the content to be learned. The engineering design or

[9] Johnson, C. J., Peters-Burton, E. E., & Moore, T. J. (Eds.). (2016). *STEM road map: A framework for integrated STEM education*. New York, NY: Routledge.
[10] Bryan, L. A., Moore, T. J., Johnson, C. C., & Roehrig, G. H. (2016). Integrated STEM education. In Johnson, C. J., Peters-Burton, E. E., & Moore, T. J. (Eds.). (2016). STEM road map: A framework for integrated STEM education (pp. 23-37). New York, NY: Routledge.

engineering practices related to relevant technologies require the scientific and mathematical concepts through design justification.
- The development of 21st-century skills is emphasized.
- The context of instruction requires solving a real-world problem or task through teamwork and collaboration.

Purdue Polytechnic Indianapolis High School students learn to approach all integrated STEM design-based learning (DBL) units through design thinking, through which they bring together what is desirable from a human point of view with what is technologically feasible and economically viable. Design thinking teaches students to rely on their ability to be intuitive, to recognize patterns, to construct ideas that are emotionally meaningful as well as functional, and to express themselves through means beyond words or symbols. The design thinking process involves three overlapping spaces: inspiration, ideation, and implementation. Inspiration is the problem or opportunity that motivates the search for solutions. Ideation is the process of generating, developing, and testing ideas. Implementation is the path that leads from the project stage into people's lives.[11]

Alignment to Indiana Academic Standards

Purdue Polytechnic Indianapolis High School maps all coursework to Indiana Academic Standards. Teachers collaborate to map integrated design based learning (DBL) projects to the Indiana Academic Standards, and standards that are outside of the scope of the projects are taught via inquiry-based instructional units. While most content standards will be integrated into DBL units, parts of some courses will require additional instruction during separate class periods outside of the DBL block, and some courses such as world language are taught entirely outside of the DBL block. Teachers of all disciplines facilitate the learning activities that occur within the DBL block. In grades 9 - 11, the theme and topics of the DBL units are provided to students, with increasing student choices available within the projects as students progress from grade 9 to grade 11. 11th grade projects are aligned to students' chosen career cluster and are facilitated by mentors from the student's selected focus industry. In 12th grade, students pursue a STEM focused design challenge of their choice that aligns with their selected career cluster. Attachment E describes a sample DBL unit for grade 9, including standards and student learning objectives. Attachment F illustrates alignment to Indiana Academic Standards in the Algebra I curriculum map.

Indianapolis Public Schools 2013-14 ISTEP+ Data

	Grade 7 Passing	Grade 8 Passing
Mathematics	55.0%	54.8%
English language arts	51.9%	49.1%

Based on school accountability data, it is projected that a large percentage of students enrolling in Purdue Polytechnic Indianapolis High School will be achieving below grade level proficiency in English language arts and mathematics. Because of the need for basic skill remediation and the high stakes nature of the grade 10 ISTEP+ assessments, these students will build their

[11] IDEO.org. (2015). *The field guide to human-centered design*. Boston, MA: IDEO.

reading, writing, and mathematics skills while engaging with the material at a higher depth of knowledge and real world application.

Students in Grade 9 and 10 will participate in Bridge coursework that allows students to build basic skills in mathematics and English language arts while developing the 21st century skills of communication, teamwork, and critical thinking through design-based learning experiences.

Mathematics

Students participate in mathematics coursework developed by the collaborate efforts of Purdue Polytechnic Indianapolis High School teachers and professors from the Purdue University Polytechnic Institute. The mathematics curriculum is based upon the Understanding by Design (UbD) curriculum design model for planning curriculum and instruction. Teachers approach the curriculum not as list of instructional activities, but as an approach to developing students' understandings through conceptual knowledge and skills. Using a process of "backward design," teachers begin at the end, with the standards, understandings, knowledge, and skills that they want students to acquire. Teachers plan backward, using a three-stage instructional process framework in which the enduring understandings and essential questions of the mathematics course are emphasized. Stage one involves determining the broad understandings that students will gain; stage two requires teachers to decide how students will demonstrate their understanding and what criteria will be used to measure it; and stage three involves planning the rich instruction and learning experiences that help students construct new knowledge and skills and develop the depth of understanding required by the standards. In addition to fluency in calculations, students learn to persevere through complex problems requiring higher levels of cognitive demand. They learn multiple ways to approach and solve real world problems that relate to their larger DBL project.

Most students will enter grade 9 ready for Algebra I, and these students will complete Algebra I in two semesters. Students whose mathematics placement scores indicate a need for remediation will take an extra semester of Algebra Enrichment and will complete the course in three semesters. Students who enter grade 9 having completed Algebra I in middle school will begin Geometry. Regardless of the entry point into the mathematics curriculum, Challenge-based projects are designed to assess, then develop, student's capacity to apply their mathematical thinking flexibly to non-routine, unstructured problems, within math and from the real world problems that students have not been taught how to solve.

The challenge includes deciding on a strategy to solve the problem, applying the strategy, and then checking the solution to see if it works. The students are asked to compare different approaches to a specific problem, understanding, critiquing, and learning from them. The workshop follows a format and flow that involves the following phases: Prior to the lesson, a day or so before, the teacher assigns the task for students to complete individually. These typically take 10 to 15 minutes. The task is an unstructured non-routine problem, designed to reveal student's capabilities and limitations in problem solving. The task within the problem -based project remains the focus throughout the workshop. The teacher assesses the student's responses to the task, noting their approaches to the problem and their difficulties. Teachers are

encouraged to give feedback to their students by creating questions that will direct problem solving. The teacher chooses or devises questions that direct students' attention to the strategies for design thinking approach.

The workshop: Students begin by individually reviewing their own solutions to the task in light of the questions raised by the teacher. After this reflection, students move into small groups to compare and build on their strategies for the problem. The teacher's role is to observe the groups, looking for different approaches and support their collective problem solving through questions. The teacher facilitates the sharing of different approaches in a whole class discussion, with selected groups explaining their strategies. The students are then given some sample student responses for the same problem to discuss in their groups.

The sample responses show a range of approaches at different levels of completeness and mathematical sophistication. The work includes solutions using numbers, tables, graphs and/or algebraic reasoning. The students are asked to analyze and critique the work, compare solutions, and comment on their strengths and weaknesses. After the lesson students work alone, again, to improve their individual solutions to the task and/or engage in a final reflection on what they have learned. Please see Attachment F for a Sample Mathematics Curriculum Map for Algebra I.

Science

The purpose of integrating Science in the challenge-based projects is to develop scientific literacy in all students. As a result, students learn: that science, mathematics, and technology are interdependent human enterprises with strengths and limitations; key concepts and principles of science; characteristics of the natural world and both its diversity and unity; and that scientific knowledge and ways of thinking may be applied for individual and social purposes. The science is coordinated for Grades 9 -12 and is aligned with both state and national content standards and performance outcomes. The curriculum reflects the belief that all students can learn science. The curriculum considers the multicultural backgrounds and various abilities, achievement levels, interests, and learning styles of students. Educational strategies, methods, technologies, and resources are varied in order to ensure and promote the independence of students as learners.

Science education prepares students for a global society in which environmental, social, and economic issues are related to science, mathematics, and technology. Therefore, the curriculum emphasizes the process skills designed on a continuum through all content standards. Scientific literacy is best achieved by meeting the individual needs of students using an assortment of developmentally appropriate, student-centered activities. Project challenges actively engages students in learning and encourages enjoyment of the scientific process, while developing an understanding of important concepts and skills. Within the project cycle, inquiry based experiences, hands-on explorations, laboratory experiences, demonstrations, field experiences, student discourse, and the use of all forms of available technologies and community resources are considered components of the learning process.

Effective assessment is an ongoing process of monitoring student learning, guiding further instruction, and improving the project cycle. A variety of formal and informal assessment options are implemented to provide opportunities for success for students with different learning styles and to provide broad information about student learning. Examples include journals, projects, teacher observation, models, self-evaluations, quizzes, laboratory reports, and various digital tools to demonstrate student understanding.

Inquiry-based, standards-aligned science concepts are designed for students to access through their multidisciplinary challenge-based project. Taking advantage of school's 1:1 initiative; students can digitally interact with new learning material via video and computer software modules. Common learning experienced may include opportunities to demonstrate collaborative learning, critical thinking, problem solving, global citizenship, digital literacy, creativity, and innovation.

It is the goal of the Purdue Polytechnic High School that graduates know the basic concepts of, and the interrelationships among, biology, chemistry, physics, other approved science courses, and engineering design and will be able to apply scientific skills and processes to real-world settings. To meet this goal, students will: Understand and apply basic concepts, principles and theories, chemistry, physics, earth and space sciences, and engineering design and their interrelationships.

- Recognize and participate in scientific endeavors which are evidence-based and encourage inquiry that leads to a greater understanding of the world.
- Identify and solve problems through scientific exploration, including the formulation of hypotheses, design of experiments, use of technology, analysis of data and drawing of conclusions.
- Select and properly use appropriate laboratory technology, equipment, and materials.
- Understand and utilize, when appropriate, existing and emerging technologies.
- Analyze the possibilities and limits of science and technology in order to make and defend decisions about societal issues.

English Language Arts

Inquiry-based design characterizes all English language arts courses at Purdue Polytechnic Indianapolis High School. In grades 9 and 10, the English language arts standards-based curriculum is incorporated into the student DBL project as well as taught in standalone courses, while in grades 11 and 12, the English language arts standards and curriculum is fully embedded into the DBL units. Essential components of the English language arts curriculum include: close reading of informational and literary nonfiction texts; reading and writing reports of information; reading and writing across multiple texts; close reading of literature; and close reading of poetry.

English Language Arts Topics by Grade Level

Design thinking approach to learning characterizes all English language arts courses at Purdue Polytechnic High School. English language arts standards-based curriculum is incorporated into and full embedded in the student CBL project. Essential components of the English language arts curriculum include: close reading of informational and literary nonfiction texts; reading and writing reports of information; reading and writing across multiple texts; close reading of literature; and close reading of poetry.

The English Language Arts curriculum and instructional design center around a metacognitive framework that focuses on 4 dimensions: knowledge-building, cognitive, personal, and social, ensuring that students acquire the schema necessary to build the critical thinking skills needed to comprehend and interact with new content.13 In all communications workshop, the facilitator utilize modeling and speaking metacognitively about the academic tasks. Scientifically based research performed by the U.S. Department of Education indicate that explicit instruction in disciplinary literacy strategies positively affect reading comprehension and student self-confidence. Fourteen Purdue Polytechnic High School teachers embed disciplinary literacy strategies into all areas of curriculum and instruction, making it clear to students how an expert reader of a particular discipline reads and makes meaning of text. Incorporating disciplinary literacy strategies with the gradual release of responsibility model requires extensive teacher modeling, leading to independent student mastery.

Social Studies

The Purdue Polytechnic Indianapolis High School social studies curriculum is embedded in the student's CBL project. The Indiana Academic Standards are emphasized in deep learning of essential concepts through authentic performance. All units emphasize the capacity to explain, interpret, apply shift perspective, empathize, and self-assess, all of which are indicators of understanding. As in all areas of the curriculum, teachers are coaches of understanding rather than purveyors of content knowledge and skills. In Grade 9, students engage with curriculum aligned to Geography and History of the World standards, in grade 10, students work with US History, and in grade 11 students master content standards for Government and Economics within their CBL projects.

Social study concepts that are embedded in the CBL Project requires critical thinking, a contribution of new ideas and reflection throughout the entire process. As such, the student is at the center of the experience, with the teacher as co-partner and guide Starnes 1999. As teachers create inquiry curricula around student's interest and strengths, they also help students broaden the ways in which they think, question, and explore.
The social studies curricula emphasize the use of primary and secondary source documents and texts as well as the research process. Teachers provide an atmosphere of curiosity with opportunities for discussion, brainstorming and reflection.

Sample Lesson Plans

Dual Credit Opportunities

Students in grades 11 and 12 will have the opportunity to earn dual high school and college credits in core content areas and in many of the CTE pathway courses. Research indicates that students who participate in dual enrollment courses are significantly more likely to complete a bachelor's degree then comparison groups and those benefits are even greater for students whose parents never attended.15 The majority of the dual credit courses will be part of the majors from Purdue Polytechnic Institute entry level courses and Vincennes Early College options, guaranteeing the transfer of these credits to all Indiana public college and university campuses, assuming adequate grades.

High School Course	HS Credits
Design Thinking 101	2
Aerospace Engineering	2

Summer Programming

All Purdue Polytechnic Indianapolis High School students will be encouraged to take part in summer programming in Indianapolis and on the Purdue University campus in West Lafayette, Indiana. Purdue Polytechnic Indianapolis High School is developing a summer camp for high school students that is modeled after Purdue's STEM Academic Boot Camp. The camp will be designed to be an intensive program which offers students the opportunity to develop study habits that will lead to success, attend daily classes, explore the school, and meet other incoming students. Students may explore their own interests, develop new skills, meet other students with similar interests, and get a taste of life on a college campus. This programming is varied across content areas and student interest. Examples include:

Purdue Polytechnic Institute STEM Summer Camps	
STEM ABC Camp	Summer transition program and academic boot camp for students entering Purdue Polytechnic Institute in the fall.
TEAM Camp	Technology Expanding All Minds – for 8th, 9th, and 10th grade students to explore the ways women in technology help make a difference in the world. Areas of discovery include: new uses and ideas in computer graphics, information technology, aviation, construction management, leadership, and applied engineering.
TOTAL Camp	Turned onto Technology and Leadership – for 8th and 9th graders. Areas of discovery include: new uses and ideas in computer graphics, information technology, aviation, construction management, leadership, and applied engineering.
Purdue Engineering Summer Camps	
Seminar for Top Engineering Prospects (STEP)	A dynamic, one week opportunity to explore the many disciplines within engineering the exciting future career opportunities that they bring. Students are placed into teams of four to learn fundamental engineering design skills and engage in an engineering design competition.

Engineering Minority Summer Engineering Workshop	Students learn about the many different projects engineers work on; experience life as an engineering student on Purdue's campus; interact with current engineering college students; and work with students from across the country that plan to make a positive impact in their community.
Additional Purdue University On-Campus Summer Opportunities	
Boiler Vet Camps	The only camp of its kind in Indiana, Boiler Vet Camp gives want-to-be veterinarians or veterinary technicians the chance to live out their dreams. This camp is designed for students who are interested in becoming veterinary healthcare professionals and provides a preview into the real and vast fields of veterinary medicine.
Summer Biology Experience	Encourage high school students to study biology and consider a career in the Biological Sciences upon graduation. The program develops connections between the sciences through work in biology.
Purdue Summer Leadership Institute	This 3-day activity is designed to create better and more confident, competent, and well prepared student leaders in the area's high schools, so they can positively influence their peers. It is also designed to familiarize students with the concepts taught in Purdue's programs in the Technology Leadership and Innovation (TLI) Department.
Adventures in Computer Science High School Camp	Students gain hands-on experience with programming, algorithms, problem solving, web-design, app development and embedded systems. Students will also gain experience using MIT's App Inventor, Scratch, Boe-Bot's from Parallax, and web development using HTML, CSS and JavaScript. The aim is to begin developing competency in each discipline and focus on computational thinking patterns.
Duke Energy Academy at Purdue	A secure energy future, both in the United States and abroad, needs solutions that come from a diverse energy portfolio. Unfortunately, we face a national crisis in the number and quality of students entering the STEM disciplines that will have a future impact on our nation's ability to lead the world in the energy sector. To address these issues, Purdue University has launched an Energy Academy to inspire high school students and teachers in energy sciences and engineering.

Purdue Polytechnic Indianapolis High School's school development team is also pursuing relationships with community organizations that have related summer programming. Any events geared towards middle school students will be used as recruitment strategies for students interested in attending Purdue Polytechnic Indianapolis High School.

D. Assessment

Students at Purdue Polytechnic Indianapolis High School will participate in all state mandated standardized assessments. Beyond these mandatory assessments, students will take the Scholastic Reading Inventory upon enrollment to determine their current level of reading comprehension. Students will take this assessment once each trimester for goal setting, course placement, and reporting purposes. Students will also take a school created, standards aligned mathematics assessment, which along with current state test scores and credit attainment inform students' mathematics course placement.

Purdue Polytechnic Indianapolis High School will also administer a state approved formative assessment at regular intervals to measure growth and to inform instruction. Students will take a school created, standards aligned final exam for each of their high school courses and will take University final exams for all dual credit courses. Student projects will be assessed using rubrics

that are co-created by teachers and the students themselves, and beginning in ninth grade each student will create an electronic portfolio of student and teacher selected artifacts.

Prior to taking dual credit courses students take University placement assessments, such as the Compass exam to ensure readiness for college credit-bearing coursework. Students who do not attain the required cut score will take remedial coursework to ensure college and career readiness by graduation. Students whose industry certifications require TABE scores also take this assessment along with the certification exam upon completion of the certification coursework.

Purdue Polytechnic Indianapolis High will keep abreast with any changes to state standards and diploma requirements and will make adjustments to the curriculum and plans of study, as appropriate.

Reporting & Disaggregation

Purdue Polytechnic Indianapolis High School has an innovation and learning specialist dedicated to full data analytical support. Once the school receives assessment data from formative and/or summative assessments, our staff will upload the data and provide immediate actionable data analysis. Purdue Polytechnic Indianapolis High School will have access to digital dashboards that illustrate disaggregated achievement data across all demographic breakdowns and all exceptionalities. Examples of characteristics used to disaggregate student assessment data include race/ethnicity (country of origin); generation status; immigrant/refugee status; age; gender; free or reduced lunch status; English proficiency level; disability; and other exceptionalities. This information is provided to the school administrative team, with tiered classroom level access made available to teachers. Data is reported as soon as received and uploaded into the data dashboard tool.

Continuous Improvement

Purdue Polytechnic Indianapolis High School will implement professional learning communities (PLCs) that will meet weekly to discuss student progress and to make needed adjustments to instruction based on data. Recognizing that assessment data alone will not improve teaching and learning, assessment data is integrated with other data for regular review. In addition to data generated from common assessments, Purdue Polytechnic Indianapolis High School will include data gathered from conversations with students, teachers, and other adults who intervene in the learning equation. In order to guide the work of the PLC teams, the school will gather data about student perceptions of what works best for their learning. Data about student levels of engagement, their desire to learn, their need for appropriate feedback, and their perspective on the quality of teaching are added to other assessment data for a more robust and contextual view of student achievement and instructional improvements needed.

Disaggregated formative and summative assessment data in association with the additional data described above will allow the professional learning communities to apply a cycle of continuous improvement to engage in inquire, action research, data analysis, planning, implementation, reflection, and evaluation. Characteristics of the process include:

- The weekly use of data to determine student and educator learning needs;

- Identification of shared goals for student and educator learning;
- Professional learning to extend educators' knowledge of content, content-specific pedagogy, how students learn, and management of classroom environments;
- Selection and implementation of appropriate evidence-based strategies to achieve student and educator learning goals;
- Application of the learning with leader support;
- Use of evidence to monitor and refine implementation; and
- Evaluation of results.

E. Support for Learning

School Culture

Like every school, Purdue Polytechnic Indianapolis High School will work to develop a positive, supportive and safe school environment that is conducive to high academic achievement. Separating itself from most other schools, however, the culture of Purdue Polytechnic Indianapolis High School will be built on three cornerstones: (1) academic excellence; (2) professionalism; and (3) collaboration.

Academic Excellence

At Purdue Polytechnic Indianapolis High School, a high school diploma is not an end goal, but rather a milestone. Purdue Polytechnic Indianapolis High School will present students with a rigorous academic program that will empower and prepare students to move the world forward. As described in the previous section, students will be held to high expectations and the school's curricula will be rigorous and designed to challenge students to reach their maximum potential. The curriculum will provide students with new knowledge and challenge them to apply STEM concepts with design- and problem-based learning to solve real-world challenges that they will face in their careers and the academic program will build upon the skills and knowledge that students have gained and focus on putting students on track to earn college credits and industry credentials.

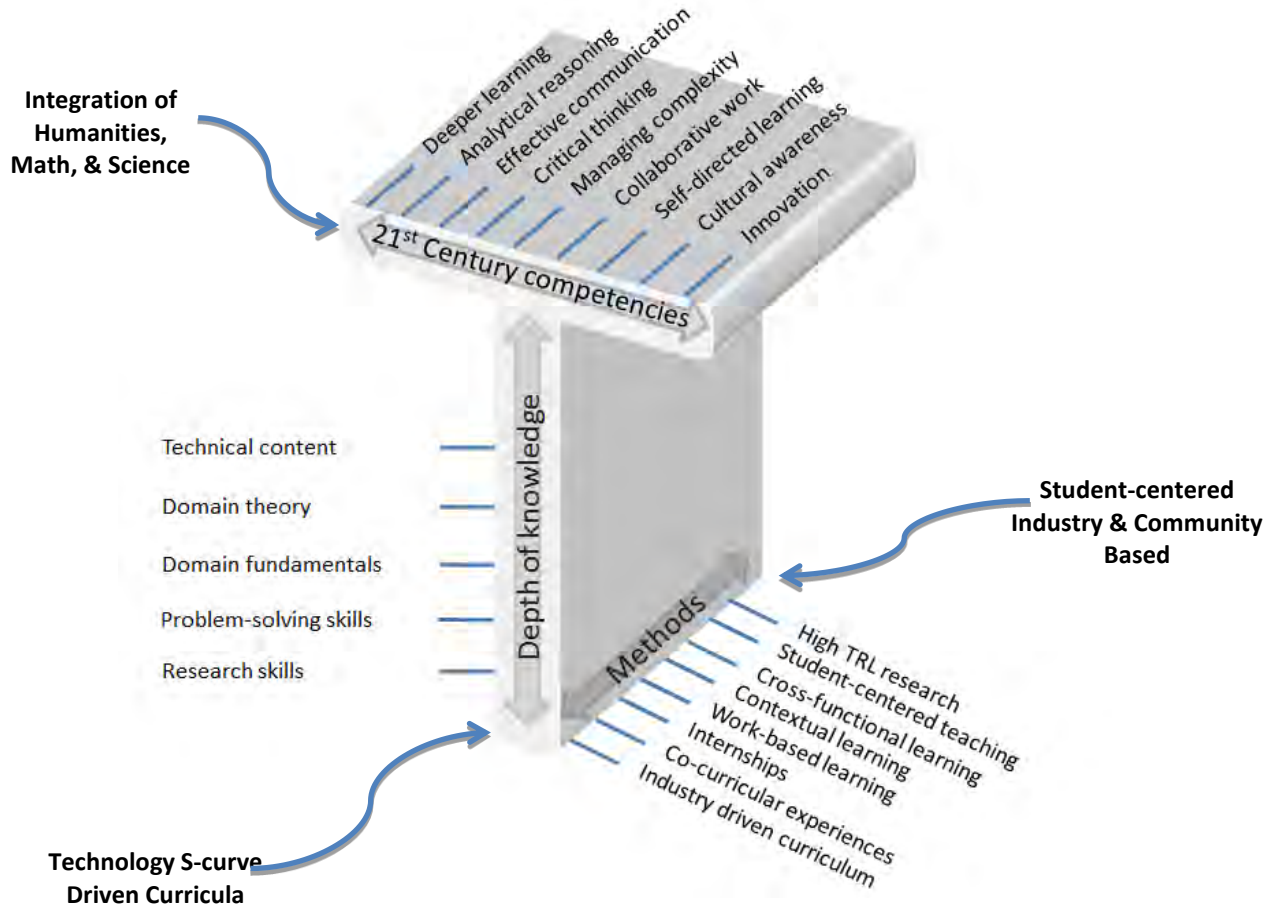
Professionalism

Purdue Polytechnic will create a school culture that reflects a professional environment in today's workplace. Students will be held accountable for showing up to school on time and prepared to work, being respectful towards their peers, and completing projects and assignments successfully and in a timely manner. The school environment is focused on not only holding students to high standards, but also preparing them for expectations that will be placed upon them in post-secondary education and throughout their careers. To that end, the school's curricula and culture will be infused with common employability skills development opportunities. Students will also be evaluated on their ability to demonstrate key common employability skills that employers have identified as most critical. Please see the Career Readiness Rubric, Attachment I, for more details.

Collaboration

Purdue Polytechnic Indianapolis High School's commitment to creating a collaborative school environment is what perhaps sets it apart from most high schools. Purdue Polytechnic aims to develop a collaborative school culture, laying the foundation for students to develop into "T-

shaped professionals." In yesterday's workforce, professionals were expected to be one-dimensional – having the deep disciplinary knowledge and skills needed in their field of work or study. In today's workforce, "T-shaped" young professionals will need to become multi-dimensional and build their careers in a constantly changing world that is becoming more and more globally interconnected. Employers are seeking professionals who not only have a deep disciplinary knowledge, but who also have skills that are valuable across all roles and workplaces. Employers need workers who can collaborate across a variety of different disciplines and handle information across different sources. These professionals can communicate across social, cultural, and economic boundaries and advance professional relationships across organizations. Please see to graphic on the following page.



Together, these three cornerstones support Purdue Polytechnic Indianapolis High School's mission to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution.

<u>Strategies for developing a positive school culture</u>

The development of Purdue Polytechnic Indianapolis High School's culture will begin with students and families. The school will seek to implement parent engagement strategies that are recommended by the United Negro College Fund (UNCF).[12] These strategies include:

1. **Connect parents' high aspirations for their children's educational attainment with a clear pathway on how to get there.** A survey by UNCF indicates that over 87% of parents have high aspirations for their children graduate from both high school and college. Purdue Polytechnic Indianapolis High School is committed to not only communicating to parents about their child's performance in the school and overall school performance; the high school is committed to sharing information with parents on what students are supposed to be learning at each grade level and subject. In a non-traditional educational setting like Purdue Polytechnic Indianapolis High School will provide, it will be important for school staff to clearly articulate to parents the purpose of projects that are presented through design-based learning as well as the skills and knowledge students are expected to gain and practice along the way. In some cases, staff will also need to be clear on why those skills or knowledge may be important for students chosen career cluster. To that end, the Board is connecting with the Center for Leadership Development to investigate partnership opportunities and utilizing programs such as Parent Chat, The College Prep Institute, Success Prep, and Self-Discovery/Career Exploration Project.
2. **Meet parents where they are with appropriate messaging and support.** School staff must confront the realities that students and their families may be facing. It is anticipated that a number of students at Purdue Polytechnic Indianapolis High School will come from low-income households. Families should be supported and the school should work to connect families to social services agencies and other organizations that will help them overcome barriers they face. Information will also be presented to families in a manner that puts their children's educational interests first and through various channels. These channels may include QR codes connected to student work, online resources, community forums hosted at the school, faith-based organizations, and other community gathering centers, and parent-led information sessions.
3. **Engage parents through voices that resonate with them.** In order to engage parents in the school, the school cannot take a "top down" approach. Purdue Polytechnic Indianapolis High School will engage community leaders and faith-based leaders who have already gained the trust and respect of the population the school intends to serve. These leaders will be engaged to assist the school in delivering key messages to parents, including the importance of educational success, ways in which they can effectively engage in their children's education, and conveying the magnitude of college and career readiness.
4. **Strengthen the relationship between parents and the school.** Purdue Polytechnic Indianapolis High School will work with community leaders to make parents feel

[12] Bridges, B.K., Awokoya, J.T., & Messano, F. (2012). Done to Us, Not With Us: African American Parent Perceptions of K-12 Education. Washington, DC: Frederick D. Patterson Research Institute, UNCF. Retrieved on November 5, 2015 from http://www.uncf.org/fdpri/Portals/0/fdpri.Done_to_Us_Not_With_Us.pdf

welcomed at the school and to facilitate opportunities to be involved in their students' learning.

By leveraging the support of community partners, including Stand for Children and area faith-based organization, the school will identify prospective students and families who are interested in enrolling in Purdue Polytechnic Indianapolis High School. The school will create a prospective parent advisory board to listen and understand the needs and concerns of parents as well as their desires for how the school will feel and act. It is critical to understand what parents need to ensure that they feel the school is a welcoming place with their children's best interests at the forefront of all it does and a place where their children are safe.

The prospective parent advisory board will help to identify, develop, and implement resources and programs that build school culture to ensure that the school culture is being developed in partnership with the community.

Students will also play an active role in developing a positive school culture. The school will host pre-enrollment camps for students who have indicated that they plan to attend Purdue Polytechnic Indianapolis High School. The purpose of these camps are to allow students and their families to become acclimated to the school, provide summer learning, and participate in the development of key policies and initiatives. One key initiative will include having students select a school mascot and design a school logo. Students will be asked to help modify and further develop the school's discipline plan and they will be presented with various opportunities to identify which school policies are most important to them and will be engaged to ensure that they have a voice in both the development and implementation of those policies.

Family-School Partnerships

There is widespread knowledge that parental involvement is one of the most critical factors that lead to a student's educational success and attainment. The Board of Purdue Polytechnic Indianapolis High School is highly motivated to ensure that parents, families, and community partners have an active and engaged voice in the direction of the school. To that end, the Board plans to engage a variety of partners to actively engage families and to build and maintain strong family-school partnerships. For more information on the strategies that will be used to engage parents and families in the school and to develop strong family-school partnerships, please refer to the section, above.

To gauge parental satisfaction with the school, Purdue Polytechnic Indianapolis High School will engage Stand for Children. Any issues that are identified as concerns to parents will be raised at the parent advisory board and discussed so that the school has a clear plan for corrective action.

School Discipline Plan

Purdue Polytechnic Indianapolis High School is committed to creating and maintaining a safe, positive, learning community that nurtures and inspires every student to thrive academically, socially, and emotionally.

Please see Attachment J for a copy of Purdue Polytechnic Indianapolis High School's school discipline policy. The discipline policy outlines how discipline issues with be handled with both the general student population and students with special needs.

F. Special Student Populations

Purdue Polytechnic Indianapolis High School's approach to educating students includes plans to ensure that all learners have the greatest chance towards educational success. This includes students from the general education population, students with limited English proficiency, children with special needs, students who enter below grade level and students who are academically advanced.

Students Below Grade Level

Data on the academic performance of area Indianapolis High Schools suggests that many students will enter Purdue Polytechnic Indianapolis High School below grade level and in need of remediation. The school will focus significant resources on extensive tutoring, mentoring, and remediation in grades 9 and 10 to bring students up to grade level and prepare them for higher levels of learning in later grades. Additional supports will continue, as needed, as students progress through grades 11 and 12. All new incoming students will participate in diagnostic assessments at the beginning of the school year to identify skills gaps. Assessment results and prior performance will assist teachers and staff in identifying students' knowledge and skills gaps so they may be brought up to speed of students with advanced knowledge and skills may be further enriched. Differentiated instruction such as vertical text sets and parallel problems and student grouping techniques will be utilized in all classrooms and subjects so that all students, regardless of achievement level, will have the opportunity and conditions necessary to succeed at the highest level possible.

In order to begin serving the needs of students who are entering below grade level, Purdue Polytechnic High School will offer a summer boot camp during which students will build basic skills in reading and mathematics while applying their learning to science, engineering, and arts projects.

Purdue Polytechnic Indianapolis High School anticipates serving students below grade level and has appropriately developed plans of study for students who need remediation. Please see Attachment D for a sample plan of study for each grade level and for students who are performing below grade level, on grade level, and above grade level.

Students Above Grade Level

Purdue Polytechnic Indianapolis High School will likely appeal to students above grade level because it will provide students with ample opportunities to earn dual credit opportunities, work with Purdue University faculty and participate in other campus-based learning opportunities. At the same time, Purdue will provide programs that help students' transition from high school to college and college-level courses. Teachers will differentiate instruction so that advanced students will work at higher levels of Bloom's Taxonomy and Depth of Knowledge models. Design-based learning, a specific type of design-based learning where students are presented

with a problem and must design a solution to address the challenge will be implemented in order to fully engage intellectually gifted students. Through this method of learning, students will be guided to stretch beyond simply solving a problem and to rather find the root cause of a problem and identify barriers to a solution – including social, economic, and political situations.

Purdue Polytechnic Indianapolis High School anticipates serving students above grade level and has appropriately developed plans of study for students who are academically advanced. Please see Attachment D for a sample plan of study for each grade level and for students who are performing below grade level, on grade level, and above grade level.

Students with Special Needs

Standard Operating Procedure (SOP) for Special Education

Special Education Mission: Provide high quality individualized education programs in which all students are empowered to reach their potential and become contributing members of society.
The mission of special education is to identify and serve students who meet the federal and state criteria as a student with a disability and provide specialized services that empower students to become active members of society based on their individual strengths and abilities. We are committed to ensuring the school is best meeting the needs of all learners through high quality individualized education plans which are vitally important to the success of those individual students and then entire school.

General Policies and Timelines
Public schools are required to provide students with disabilities with a FAPE in the LRE as defined below.
"Article 7 requires that each eligible student with a disability enrolled in a public school between the ages of 3 and 22 be provided with a **Free Appropriate Public Education or a FAPE.** FAPE is defined as special education and related services that are provided at public expense, and in accordance with an IEP (at no cost to the parent(s).

A **student with a disability** is a student who has been evaluated in accordance with [Article 7] and determined eligible for special education and related services by a CCC.

Special education is specially designed instruction provided to students who have been determined eligible through an educational evaluation. It must be provided at no cost to the parent(s) and in accordance with the student's IEP.

Related services are services such as occupational therapy (OT), physical therapy (PT), an educational interpreter, transportation, etc. that are necessary to allow the student to benefit from his/her special education.

"At no cost" means that the parent(s) do not have to pay extra for special education and related services. The school may charge for the same things that it charges the parent(s) of a student without disabilities (such as textbook rental, lab fees, etc.).

It is the responsibility of the **case conference committee (CCC)** to determine what services are appropriate depending on the student's individual educational needs. The CCC is a group of individuals, including parent(s) and school personnel, that determines if the student is eligible for special education and if so, determines the special education and related services to be provided to the student. The CCC must meet at least annually.

Article 7 describes the process for parent(s) and school personnel to use in making educational decisions and developing the student's **individualized education program or IEP**. An IEP is the written document, developed by parent(s) and school personnel, describing how the student will participate in the general education curriculum, and any special education or related services to be provided.
Special education services must be provided in the **least restrictive environment (LRE)**. This means that a student with a disability is educated with students without disabilities to the maximum extent possible for each individual student.

**Source: Navigating the Course*

- All applicable policies, procedures, and timelines follow the guidelines set forth by Article 7 and IDEA.
- Every school site has at least (1) Special Education Coordinator who acts as the Teacher of Record for all students with an IEP.
- A case conference is held for each student at least **once** annually
- Any new student must have a move-in case conference within **10 days** of enrollment
- Staff must make at least **3 documented attempts** to request the student (or guardian) to participate in the case conference. If these attempts are unsuccessful then the conference may be held without the student (or guardian)
- After IEP development, school must provide a copy of the finalized IEP to the student (or guardian) within **10 business days**.
  Written permission (Signature of Implementation) must be obtained from student (or guardian) to provide services.
  All students (14 years and older) will have a developed transition plan that includes post-secondary goals.
  Students who have or may have a disability covered under IDEA or Section 504 have certain rights—called procedural safeguards. Copies of those safeguards are offered at each meeting held. A complete copy can be found {Here}.

Evaluation Process

In general, educational evaluations are completed to assess any areas of educational need. These evaluations are used to help the CCC make informed decisions regarding educational services for students. All evaluation processes were adapted from Article 7 Guidelines (511 IAC 7-40).

In order to initiate an educational evaluation the school, guardian, or student must make a request (written or verbal) to evaluate. Guardian and/or student must provide written consent for the evaluation to begin.

Procedures after a request has been made:

- Notify Special Education Director, Obtain Permission to Test, Complete Appropriate forms in IIEP
- Email Special Education Director and School Psychologist and include following information email:
    - Name
    - Age
    - Gender
    - DOB
    - School Site
    - Areas for evaluation
    - Complete Social Development History, Teacher Report Form, Student Report Form
    - Scan all forms to School Psychologist and SPED Director
    - Work with School Psychologist to set up times for testing
    - After evaluation testing is complete and final report is ready schedule the case conference

After a written request has been made, the evaluation team must complete the evaluation and hold a case conference within **50 school days**.

The Multidisciplinary Team may include:

- General Education Teacher
- Special Education Teacher
- Contracted School Psychologist
- Speech/Language Pathologist
- Coach
- Related Service Providers
- Guardian
- Student

*School Psychologist will always attend initial/reevaluation conferences.

*Note: All other applicable timelines for completing educational evaluation are to be followed as per Article 7 guidelines.

Written Notice: Within 10 school days after a request to evaluate is made, school must provide written notice responding the request. This notice should include a copy of procedural safeguards.

English Language Learners (ELL): They may be identified for Special Education placement if they meet the following criteria.

1. Consistent, objective monitoring indicates that the EL is significantly struggling, and as collaboratively identified by EL program staff, classroom teacher(s), and other staff.
2. The student's academic struggles are not related to second language acquisition.
3. An interpreter must be furnished if the child's dominant language is other than English. It is preferable that the psychologist is proficient in the native language of the child, but if that is not possible, an interpreter may be used who is from the culture and language of the child. It cannot be a family member and must represent a non-biased party

(*Source: DOE English Language Learner Guidebook*)

ReEvaluation Guidelines: Every three (3) years the school, student, and guardian must consider the need to reevaluate. The CCC may request a reevaluation to determine if a student is eligible under a different eligibility category or related service. If a reevaluation is deemed necessary all applicable timelines and procedures are to be followed in accordance with the evaluation flowchart.

RtI Process: There is a developed RtI process in place. This includes tiered interventions for students who may need additional educational or behavioral supports. If a student is struggling, staff may utilize RtI interventions to support the growth of students. These interventions should be implemented with fidelity and monitored for progress. If a student does not make education gains, a referral for special education evaluation may be made.

Assessment and Evaluation Materials: All materials used will be selected and administered accurately and with fidelity which ensures no racial or cultural bias. All professional functions will be executed in a manner consistent with the code of educational ethics and confidentiality, the State of Indiana, as well as all applicable state and federal laws and regulations regarding individuals with disabilities.

The following is a sample of the assessments that may be used and/or tailored to assess a specific area of education need. These assessments will be used to provide relevant information to assist the case conference committee in determining the student's eligibility in special education. These materials assess specific areas of educational need and do not provide a single general IQ but rather reflect the student's achievement.

<u>Full Battery Psychoeducational Assessment</u>
(includes measures of IQ such as WISC-IV, WAIS-IV, or SB5, and measures of Achievement such as WIAT-II, Woodcock-Johnson, basic psychosocial development to diagnose Learning Disabilities, mood disorders, anxiety disorders, conduct disorders such as Connors, Brown ADD forms, etc)

<u>Full Battery plus Autism/Aspergers Disorder</u>

Adds measures of autism and Aspergers, as well as a thorough family interview, interview with teachers, and in depth classroom observation.

Full Battery plus Adaptive Testing
Adds measures of to determine adaptive functioning and ability to conduct ADLs, may include parent/teacher interview and classroom observation.

Triennial Re-evaluation
(includes brief measures of IQ such as the WASI or KBIT and brief measures of achievement such as the WRAT, basic psychosocial development to diagnose Learning Disabilities, mood disorders, anxiety disorders, conduct disorders such as Connors, Brown ADD forms, etc as needed)

Re-Evaluations
(includes measures of IQ such as WISC-IV, WAIS-IV, or SB5, and measures of Achievement such as WIAT-II, Woodcock-Johnson). Every evaluation will include assessment, data, and analysis in the following categories:

- Developmental history
- Cognitive ability
- Academic achievement
- Functional and adaptive behavior
- Communication Skills
- Motor and sensory
- Medical and/or mental health information

During the initial case conference the Multi-Disciplinary team will review assessment data, achievement information and parent input to help the CCC determine whether the student is eligible for special education services. As student will not meet eligibility criteria if the determinant factor is:

- Lack of appropriate instruction in reading, including the essential components of reading instruction which means explicit and systematic instruction in: (i) phonemic awareness; (ii) phonics; (iii) vocabulary development; (iv) reading fluency, including oral reading skills; and (v) reading comprehension strategies; lack of appropriate instruction in math (IAC 7-40-6)
- If the CCC determines that the student only needs a related service, but not special education (IAC 7-40-6)

Child Find
IDEA and Article 7 (511 IAC 7-40-1) require that all school districts must identify, locate, and evaluate students with disabilities. Purdue Polytechnic High School does adhere to the child find mandate for all students from birth through age twenty-one (21). The Child Find process occurs during an enrollment period but is also ongoing.

After the completion of enrollment paperwork, the Office Manager and/or Teacher of Record (TOR) will begin the child find process by requesting all records from students sending school.

If special education records are confirmed then PPHS staff will :

a. Update SIS
b. Requests transfers in IIEP
c. Notify lead TOR of students ready for a move-in onference

Removals

Article 7 use the term removal to refer to any situation in which a student is removed from his/her placement for any period of time. Schools often describe removals as detention, in-school suspension, out-of-school suspension, expulsion, etc.

The school may remove a student with a disability for up to ten (10) consecutive school days when the student breaks school rules as long as the same discipline would apply to a student without a disability who broke the same rule. The school may remove the student up to the ten (10) consecutive school days each time the student breaks such rules. If the student is ever removed for only part of a day, it counts as a whole day of removal.

After a student has been removed for more than ten (10) cumulative school days in the school year:

- The school principal or his/her designee must decide if this removal is a change of placement (see below), and
- The school must provide special education services to the student during this and any future days of removal. The school does not have to provide any services to the student during the first ten (10) school days the student is removed.

Manifestation

Within ten (10) school days of the date of the change of placement for disciplinary reasons, the CCC must meet to decide if the student's behavior/misconduct is a manifestation of (caused by) the student's disability. Article 7 calls this a manifestation determination. If the CCC determines that the student's behavior/misconduct is a manifestation of the student's disability, the CCC must take further action.

The CCC must review all of the relevant information about the student, including the IEP, teacher observations, and information provided by the parent(s), and answers the following questions:

- Was the student's behavior/misconduct caused by or does it have a "direct and substantial relationship" to the student's disability?
- Was the student's behavior/misconduct caused by the school's failure to implement the student's IEP?

If the answer to either question is “yes,” the student’s behavior/misconduct is considered to be a manifestation of the student’s disability.

If the behavior/misconduct is a manifestation of the student’s disability, the CCC must:

- Conduct a functional behavioral assessment (FBA) (if it has not already been conducted) and implement a BIP (for more information on FBAs and BIPs, see the section on IEPs).
- Review the BIP (if a BIP has already been developed), and make any changes needed to address the student’s behavior/misconduct.

The student cannot be removed or otherwise disciplined for the behavior/misconduct, and the student must go back to his/her regular placement (unless the parent(s) and the school decide to change the student’s placement).

There is one exception to this rule – if the student has been removed to an interim alternative educational setting (IAES) due to misconduct involving weapons, drugs or serious bodily injury, the school may keep the student in the interim setting for up to 45 school days, even if the CCC decides that the conduct was caused by the student’s disability (see section below on IAES).

In addition, if the CCC decides that the student’s behavior/misconduct was caused by the school’s failure to implement the IEP, the school must take immediate steps to fix the problem.

If the CCC decides that the behavior is not a manifestation of the student’s disability, the student may be removed or otherwise disciplined in accordance with the school’s disciplinary policies for nondisabled students. The school must provide educational services to the student while the student is removed. The CCC decides what educational services the student needs and where the student will be placed during the removal. The services designed by the CCC must allow the student to:

- Continue to participate in the general education curriculum, even though the student is a different setting;
- Progress toward meeting the goals in the student’s IEP; and
- Receive services described in an FBA and/or BIP (if appropriate) to address the student’s misconduct.

Due Process and Mediation Procedures

Due Process

1. Request must be made in writing
2. Within **10 days** of receiving the parent's request for a due process hearing, the school must send the parent(s) a written response about the issues in the due process hearing request.
3. The school must schedule the meeting within **15 days** of the date it received the parent's request for a due process hearing
4. If an agreement is reached, both parties have **3 business days** to change or cancel the agreement. After this date, it is a legally binding document.
5. If no agreement is reached, school must request due process hearing within **30 days**.
6. Reference pages 84-85 of Companion Guide for guidelines on Due Process Hearing.

Mediation

- May be requested by the parent or the school, is voluntary, and must be agreed to by both the parent and the school in order for the mediation to occur.
- There is no cost to the parents or the school.
- Mediation sessions are scheduled in a timely manner, in a location convenient to both parties.
- All discussions that occur in a mediation session are confidential and cannot be used as evidence in a due process hearing or court proceeding.
- Mediation may be requested before or at the same time as a request for a due process hearing.
- If the disagreement is resolved through mediation, the parties must put their agreement in writing.
- The written mediation agreement:
    - Must be signed by both the parent and the school's representative,
    - Must describe the parties' agreement,
    - Must state that all discussions that occurred during the mediation are confidential and will not be used as evidence in a due process hearing or other civil court proceeding, and
    - Is a legally binding agreement that may be enforced through the state complaint process or in federal or state court.

Complaints

A complaint is a claim that a school:

1. Has not implemented federal or state special education rules; or
2. Has failed to comply with an order issued by an independent hearing officer.

For example, the person filing the complaint might claim the school failed to do something it is required to do, such as not providing all of the services listed in the student's individualized education program (IEP). Or, the person filing the complaint may say the school is doing something the rules say it **cannot** do, such as changing the student's placement without giving the parent(s) prior written notice.

The violation alleged in the complaint must have occurred within **one year** of the date the complaint is filed. A complaint is not used to resolve a disagreement with the school about the student's eligibility, evaluation, services, placement or the provision of a free appropriate public education.

Who may file a Complaint?
A complaint may be filed by the parent(s) or any other individual, a group of individuals, or by an agency or organization.

What must be included in all Complaints?

- A complaint must be in writing by way of either a letter or a complaint form (form may be completed electronically, but must be printed and have a handwritten signature);
- The student's name and address;
- The name of the school corporation and school the student attends;
- A statement that the school is not following one or more requirements of Article 7 or IDEA 2004 (link is external);
- Any facts about the situation;
- A recommendation for how the situation should be resolved (if the person filing the complaint has a recommendation);
- Contact information for the person filing the complaint;
- Signature of the person filing the complaint (A complaint must be signed. The Indiana Department of Education (IDOE) will not investigate an anonymous complaint.);
- Be faxed, mailed or hand delivered to the IDOE (Office of Legal Affairs) and to the School Corporation (Superintendent or the local special education director). Within ten (10) calendar days of the date the complaint is received by the public agency, the public agency has the discretion to do any of the following:

1. Respond to the complaint in writing and forward the response to the division of special education and the complainant.
2. Resolve the complaint with a written agreement signed by the public agency and the complainant. The agreement must:
    a. Be forwarded to the division of special education; and
    b. Specify whether any issues remain that require investigation.
3. Notify the division of special education that it should begin investigating the complaint because the public agency will not be exercising the options in subdivision

4. Agree with a parent who has filed a complaint to engage in mediation under section 2 of this rule.

If the public agency and a parent who has filed a complaint agree to engage in mediation, the mediation must be completed within twenty (20) calendar days from the date the parties agree in writing to engage in mediation. If a mediation agreement is executed by the parent and the public agency, the public agency must forward the mediation agreement to the division of special education.

A written complaint report shall be issued by the division of special education within forty (40) calendar days of receiving the complaint, unless an extension has been granted under subsection.

Seclusion and Restraint Policy

This policy is to supplement but not replace school wide discipline plans. It is a guideline for managing students who are displaying disruptive behaviors. Indiana's Commission on Seclusion and Restraint (Indiana Code 20-20-40) states, "*The purpose of this policy is to insure that all students and staff are safe in school, and that students who may have behavior crises are free from inappropriate use of seclusion or restraint*."

Crisis Prevention

Definition of Crisis Prevention: The methods, techniques, or services used to offer immediate support to students who are experiencing behavior distress or problems. This includes intervention from trained staff who understand how to address aggressive, violent, or out-of-control behaviors.

In accordance with school-wide discipline plans, <u>all</u> classrooms should implement classroom behavior plans that enforce a positive learning environment. These plans should include behavior expectations, de-escalation strategies, and positive reinforcements.

1. PPHS will have staff certified in the instructor program through the Crisis Prevention Institute in Nonviolent Crisis Intervention Training.
2. PPHS will provide all staff members with Nonviolent Crisis intervention Training.
3. This training will be recurrent and provided to all staff.
4. Any staff involved in an incident (seclusion/restraint) must engage in a de-brief session and complete appropriate documentation.
5. A program review will be completed at the end of each year.

SECLUSION

Definition of Seclusion: The confinement of a student alone in a room or area from which the student physically is prevented from leaving. The term does not include a supervised time-out or scheduled break, as described in a student's individualized education program, in which an adult is continuously present in the room with the student.

1. Seclusion should not be used as a form of punishment or consequence. Seclusion should only be used with a student who is displaying physical behaviors that pose a threat to themselves or others.
2. The door to the seclusion room or space should remain unlocked at all times.
3. Seclusion should only be used as long as necessary to de-escalate the situation or in accordance with a student's BIP or IEP.
4. Adult supervision is required. Students should never be left unattended.
5. Seclusion shall only be used by staff members who are certified in Non-Violent Crisis Intervention.
6. Appropriate documentation must be completed and parent/guardian informed.

RESTRAINTS

Definition of Restraints: The physical contact between a school employee and a student in which the student unwillingly participates and that involves the use of a manual hold to restrict freedom of movement of all or a part of a student's body or to restrict normal access to the student's body. The term does not include (1) briefly holding a student without undue force in order to calm or comfort the student, or to prevent unsafe behavior, such as running into traffic or engaging in a physical altercation, (2) physical escort, or (3) physical contact intended to gently assist or prompt a student in performing a task or to guide or assist a student from one area to another. Restraints include any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of an individual to move their body freely.

Physical restraints may **ONLY** be used as a last resort. Physical restraints should only be used when a student poses a threat to themselves or others. It should never be used as a form of discipline or punishment to the student.

If it is deemed necessary to use physical restraints, the following guidelines must be followed:

1. Restraints should be used ONLY by staff who have a current certification in Crisis Prevention Intervention (CPI).
2. Any restraint used should be an approved CPI restraint.
3. Restraints should ONLY last as long as necessary for the student to gain control of their behavior and no longer pose a threat to themselves or others
4. Appropriate documentation must be completed and parent/guardian informed.

No student will be restrained and/or placed in seclusion by school staff unless the student's behavior poses an imminent risk of injury to him/herself or others. However, significant violations of the law including assaults on students and staff will be reported to the police. As soon as possible after any such use of restraint and/or seclusion, the parents or guardian will be informed and will be provided with a detailed account of the incident including the circumstances that led to the use of restraint and or seclusion.

Special Education Related Services
We provide a structured learning environment that meets the unique needs of students as they work toward a high school diploma. Each student receives individualized academic and behavioral planning in their least restrictive environment. Given students' range of skill levels and backgrounds, we offer flexible coursework and a commitment to individual attention that gives each student a realistic path for his or her educational success and career prospects. In addition to this, students also have a variety of services available to them:

- **Speech and Language Therapy**, **Occupational Therapy, Physical Therapy:** All provided in accordance with a student's IEP.

Educational Records
In accordance with IDEA and Article 7, we maintain a student's special education records for at least three years after the student exits the special education program. The files are routinely maintained, kept confidentially, and available to inspect and review. In addition, with regards to educational records, we adhere to the following guidelines:

- We obtain parental consent before releasing a student's educational records. In the event the student is over (18), we would also release records directly to the student.
- We provide parents and/or students access to review and inspect the educational record at their request and without delay.
- We provide the parent and/or student access to review and inspect the educational record before and CCC Meeting, manifestation determination, or due process.

Section 504
Adapted from : http://www.ed.gov/about/offices/list/ocr/504faq.html

Section 504 is federal civil rights law under the Rehabilitation Act of 1973. It provides protection against discrimination for individuals with disabilities. A student is entitled to a Section 504 Accommodation Plan if they have been identified and the evaluation shows that the individual has **a mental or physical impairment that substantially limits one or more major life activities.** This determination is made by a team of knowledgeable individuals, including the parents, who are familiar of the student and his/her disability.
With respect to the guidelines, we engage students in the following process:

- Referral Form which includes a consent to evaluate
- Formal invitation to Section 504 Meeting
- Identification Form
- Accommodation Plan
- Due process/Mediation
- Manifestation

The Following is the procedure used for the implementation of a 504:

1. Staff evaluates Special Services Eligibility during enrollment process
2. Staff and/or TOR Fills out Child Find Form to search for any previous records
3. Staff helps students who answer yes to any question obtain needed documentation
4. A 504 conference is scheduled at a mutually convenient time for all team members
5. An accommodation plan is developed
6. Student signs "Consent for Section 504 Services" on Plan
7. Completed 504 plan goes into student management system as attachment and is placed in student's file
8. 504 services and accommodations are implemented

SPED Standardized Testing Procedures

Many students with disabilities will require testing accommodations in order to participate in testing programs on an equal basis with their nondisabled peers. Such accommodations provide students with the ability to demonstrate mastery of skills and attainment of knowledge without being limited or unfairly restricted due to the effects of a disability. At present time this includes NWEA, ISTEP+, and ECA. This will also include any state mandated testing for students. Accommodations will be delivered in accordance with a student's IEP. Those accommodations will be implemented with fidelity for all state mandated testing as well as any district level standardized assessments.

Assurance of FAPE

Purdue Polytechnic Indianapolis High School will provide a Free and Appropriate Education to all enrolled students with disabilities.

III. Organizational Viability and Effectiveness

A. Enrollment/Demand

Enrollment

Grade	School Year				
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
9th	150	150	150	150	150
10th	--	150	150	150	150
11th	--	--	120	120	120
12th	--	--	--	120	120
Total	***150***	***300***	***420***	***540***	***540***

Purdue Polytechnic Indianapolis High School will open in the fall of 2017 and will provide open enrollment to any student who seeks a polytechnic, STEM-focused education that will prepare them for post-secondary education or a career. The school will open serving students in 9th grade and will add a grade level in each subsequent year until the school reaches full capacity, serving grades 9-12. Purdue Polytechnic's projected maximum student enrollments.

The school will be intentionally small, in order to create a supportive learning community dedicated to assisting students at different levels of high school readiness for the intensive curricula the school will offer. Grade caps at each grade level are set in order to appropriately anticipate student attrition.

Demand

The need for a school like Purdue Polytechnic Indianapolis High School is widely recognized. On November 10, 2015, the President of the United States announced a call to action to create more high schools that "incorporate elements of redesign, including more personalized and active learning, access to real-world and hands-on learning…deeper ties to post-secondary institutions, and a focus in expanding STEM opportunities for…groups of students who are underrepresented in high-growth, well-paying fields."

Furthermore, on June 18, 2015, Purdue University formally announced its plans to open Purdue Polytechnic Indianapolis High School. Since then, there has been a significant amount of interest in the school. A web trend analysis shows that in just over a month of Purdue's announcement, there have been 5,680 unique views of Purdue Polytechnic's website and other related news. There have been a total of 6,376 views, meaning that not only are people interested in learning about the school, but many people are following up to learn more.

Additionally, Purdue University set up a booth at the Indiana Black Expo and distributed information about Purdue Polytechnic Indianapolis High School. During this time, the school generated a large amount of interest and there were a large number of students indicating an interest in attending the school as well as parents interested in sending their children to such a school.

Student Recruitment

With the help of Purdue University, Purdue Polytechnic Indianapolis High School has already set a plan in motion to make the community and prospective students aware of the benefits that will come through the high school. A marketing campaign was launched as soon as the development of the school was first announced. Purdue Polytechnic Indianapolis High School anticipates recruiting students through a number of channels.

> Outreach to current and prospective partner organizations. Several meetings have been held with potential school partners in order to fully explain the school. Promotional materials have been distributed to potential industry partners to help spread the word and make more community members aware of the school. Many of these partners will likely be key referral channels.

News media releases. There have already been a handful of news releases regarding the school. Additional media releases will be released as Purdue Polytechnic receives charter approval and as the school begins accepting student interest forms.
Public information meetings. To supplement other strategies, a number of neighborhood-based informational meetings will be announced and held. This will allows direct interaction with prospective students and allow students and their families to meet with staff, ask questions and pick up enrollment application materials.
Information booths. The school will set up information booths at fairs, festivals, and other events where many Marion County residents will visit. Information has already been disseminated during the Indiana Black Expo in July.
Website development. A website will be developed for the school. The website will include academic program descriptions, enrollment information, and frequently asked questions.
Social media. Facebook and email blasts will be used to disseminate information about Purdue Polytechnic Indianapolis High School and its upcoming events.

In addition to these efforts, members of Purdue Polytechnic Indianapolis High School's school development team are engaging with community resources such as Stand for Children, the Indianapolis Recorder, Indianapolis Public Libraries, the Center for Leadership Development and grass top community organizations to develop student recruitment materials and additional strategies for recruiting the school's target population.

Enrollment Process

As a public school, Purdue Polytechnic Indianapolis High School will provide open enrollment for all high school students who wish to attend the school. Admission to the school will not be limited based on intellectual ability or prior academic performance, disability, race, socio-economic status, gender, gender identity, religion, sexual orientation or any other factor that may be considered unlawful. Admissions policies will comply with all applicable state and federal laws.

Any interested student or his/her family will be invited to submit an enrollment application to the school until a set deadline date. All scholars who complete and submit a timely enrollment application will be enrolled in the school. For the 2018-19 school year, Purdue Polytechnic High School will be using Enroll Indy to manage its enrollment process.

Once a student is enrolled in the school, the student will be afforded the opportunity to attend the school in successive years without having to re-apply or partake in the school's lottery process. Students living within Indianapolis Public School district boundary, siblings of enrolled students, children of staff will be given priority for enrollment.

B. Human Capital

Teacher Qualifications

All teachers at Purdue Polytechnic Indianapolis High School will be licensed to teach in Indiana and will be highly qualified in their content area. Although some teachers may be new to the

teaching profession, an ideal teacher candidate will have demonstrated record of effectiveness in elevating student achievement levels, and experience working in urban education.

In addition to these basic qualifications, Purdue Polytechnic Indianapolis High School is seeking qualified teacher candidates that are able to demonstrate the following attributes and qualities:

- **Innovative.** Teachers must be able to embrace new technologies and ways of thinking and create lesson plans that keep students engaged and interested and finds new ways to present materials.
- **Evolving.** Teachers must be open to new ways of doing things and dedicated to continuous improvement. Purdue Polytechnic Indianapolis High School is designed to be dynamic and provide students with hands-on learning experiences that are relevant to a very fast-paced and changing world.
- **Engaging.** Teachers must be able to create lessons plans that are new and exciting for students so that students are able to enter class everyday eager to learn.
- **Adaptable.** Teachers must be willing to make adjustments and changes to lesson plans and ways of instructing to ensure that every students understands concepts and materials that are presented in class. Teachers must be able to "think on their feet" to quickly indentify a new or better way of explanation or demonstration.
- **Trustworthy.** Teachers must be able to gain the trust of students, families, and school staff. Any distrust will negatively impact the school's learning environment and culture as well as student learning.
- **Resilient.** Teachers must be highly dedicated to ensuring that all students receive a high quality education that will prepare them for life after high school – whether that's in college or a career. Teachers need to be resilient in overcoming obstacles and helping students overcome obstacles – both anticipated and unforeseen – that may present themselves.
- **Accountable.** Teachers must be able to demonstrate compassion for students and others around them, but also hold their students to high expectations and also hold themselves accountable to equally high expectations.
- **Caring.** Above all, teachers must be able to demonstrate to students and their families that the well-being and best interests of students is their highest priority.

Recruitment and Selection

A variety of recruitment strategies will be used to ensure that the best teachers are recruited and selected to teach at Purdue Polytechnic Indianapolis High School.

- Leverage the talent and expertise of Purdue's knowledgeable and experienced Human Resources staff.
- Raise awareness of Purdue Polytechnic Indianapolis High School. The Board and school development team will need to heavily market the school not only to make the community aware of the benefits of enrolling in Purdue Polytechnic Indianapolis High School, but also so that the talent pool is aware of the school as a potential place of employment.
- Streamline staff recruitment efforts to focus on the unique aspects of Purdue Polytechnic Indianapolis High School. Purdue Polytechnic Indianapolis High School's academic

environment will be very appealing to eager teachers who want to hold students accountable for their own academic success and have access to ample resource to help students succeed.

- Continue to develop robust partnerships with organizations that assist with teacher placement as well as various Colleges of Education.
- Begin hiring school staff early, to reduce competition for selecting top talent. To that end the Board has begun, sourcing candidates for the School Director position will Head of School position will be teaching almost year-round, it is vital that staff salaries be competitive with the local teaching market. Furthermore, in order to recruit top talent, salaries and benefits will be competitive with other local schools. These benefits include: medical, dental, vision, basic life and AD&D insurance; an employee assistance plan; educational assistance program; 403(b)/401(k) retirement plan; and personal and paid holidays off.

Professional Development

The instructional and curricular model of Purdue Polytechnic Indianapolis High School is innovative and unique, and all teachers will require professional development focused on planning, facilitating, and assessing multidisciplinary, design-based learning. The school will implement a new teacher induction program for all teachers prior to the opening of the school, and as new teachers are hired each year, new teacher induction programming will take place in the summer and throughout the school year. Purdue University will provide training to the head of school and teacher leaders, and the school will then implement a train-the-trainer model.

Purdue Polytechnic Indianapolis High School provides teachers with ongoing, job-embedded, and differentiated professional development based on principles of adult learning. For example, adults learn more from opportunities to consider and discuss problems and solutions than from having the “right” solution dictated to them. Differentiation and flexibility characterize professional development, with a focus on teachers being able to improve their individual practice. Job-embedded professional development may include: action research, case discussion, coaching, critical friends groups, data teams/assessment development, examining student work/tuning protocol, implementing individual professional growth/learning plans, lesson study, mentoring, portfolios, Teacher-Based Teams, and study groups.

In addition to professional development days during the school year, the school incorporates structured, formalized time and resources for coaching, collaboration, and reflection during weekly professional learning community meetings. Purdue Polytechnic Indianapolis High School will continue to monitor and evaluate the implementation of professional development for teachers. The school leadership will develop the professional development calendar for the school year and will delineate outcomes and define measures for making sure that the outcomes are achieved, ensuring that professional development resources are used efficiently and effectively. In addition to weekly meetings, virtual and interactive professional development resources will be posted to the school’s learning management system, and the school will leverage the learning management system as a collaborative tool for continuous improvement.

Teachers' professional goals serve as a focus for professional development and are aligned with student growth measures that are part of the teacher evaluation system. A productive feedback loop between professional development and teacher observation and evaluation ensures that teachers are receiving the tools necessary to be effective in the classroom.

Evaluation

Purdue Polytechnic Indianapolis High School will utilize the RISE rubric for staff evaluation. All teacher evaluation and instructional coaching will focus on improving teachers' ability to support the school's mission to provide a richly integrated learning environment for students and providing them a hands-on, STEM-focused education and teaching the 21st century skills needed to be successful in college and careers. Teachers will receive information and support on the evaluation process during the new teacher induction program prior to the beginning of school, and professional development during the school year will be contextualized through the lens of the RISE rubric. Teachers will practice the student learning objective goal-setting process, selecting and approving end of course assessments and using data points to assess student mastery as they develop design-based learning units.

Purdue Polytechnic Indianapolis High School will evaluate all certificated employees, including teachers and administrators annually. The evaluation process applies to all of the following:

- classroom teachers (special education teachers use both the RISE Rubric (50%) for their regular classroom teaching as well as the Special Education-TOR IIEP Evaluation Rubric (50% for their special education duties)
- speech language pathologist (use School Support Personnel Rubric)
- head of school (use RISE Principal Evaluation Rubric)

Certain individuals provide clinical services on an hourly basis to Purdue Polytechnic Indianapolis High School students on IEPs and 504s. The need for these services is variable each year. These are hourly contractors who are not subject to the annual evaluation process nor performance pay under 20-28-9. These may include but are not limited to OTRs, PTs, autism consultant, and hourly contracted school psychologists.

Clerical staff, instructional assistants, and tutors are not required to hold a teaching license for their positions (although they may happen to hold one). They are not evaluated using the Purdue Polytechnic Indianapolis High School Evaluation Plan, nor eligible for performance pay under IC 20-28-9. These employees' direct supervisors do performance reviews annually using an evaluation form for non-certificated employees that has led to performance-based pay recommendations.

Certificated employees' evaluations are calculated using the following weights: 50% RISE Teacher Effectiveness Rubric; 25% Student Learning Objectives (SLOs); 25% School-wide Learning Measure

The head of school will collect evidence regarding the employees' work, conducting, at least five observations of the employee's work—at least two extended observations and three short observations with feedback as shown below:

- Unannounced short observations—20-30 minutes written feedback uploaded within two school days of observation
- Announced extended observations—full class period, written feedback uploaded and conference held within five school days after observation, first observation is announced within a one-week window in first semester with pre/post-observation conferences, one unannounced in second semester with post-observation conference. (If teacher and evaluator agree, the post-observation meeting can occur after the five-day window.)
- The director and lead teacher may opt to do other unscheduled short observations during the school year as needed.

Evidence collected during observations will be recorded and linked to indicators on the RISE Teacher Effectiveness Rubric Evidence for an observation will consist of script, coded rubric sections applicable to scripted evidence, and comments offering additional actionable feedback or coaching specific to any area coded as needing improvement or ineffective. Staff members perform and share with their primary evaluator a self-assessment using the Teacher Effectiveness Rubric.

All conferences between evaluators and employees will be documented with notes about the points discussed, uploaded to the evaluation software as an artifact, and tied to the appropriate rubric indicators if evidence emerges during the conference. Announced observations include a pre-observation and post-observation conference, while unannounced observations include a post-observation conference.

Objective measures of student achievement and growth will be part of every employee's evaluation in the form of the School-wide Learning Measure (SWL) for all evaluated employees and the Student Learning Objectives measures (SLOs) created by employees to assess the growth and mastery levels of their students.

Classroom teachers will create one Class SLO (a mastery goal based upon student starting points and covering all/most standards for one class) and one Targeted SLO (a growth/mastery goal targeting a group of students with either a low level of preparedness or unique area of need) for one class that they teach in following the process outlined in the SLO Handbook published by the Indiana Department of Education in 2012. Teachers review at least three common data points (selected in collaboration with staff members who teach the same courses) to determine student readiness levels for help in setting SLO goals. Assessments for measuring the success of Class SLOs (including ECA) will be chosen by teachers and approved by the head of school using locally-developed forms and guidelines based upon the DOE SLO Handbook published in 2012.

Where state assessments or district standardized assessments do not exist for a particular course, teachers will select/produce common assessments, and they will be encouraged to use these for their Class SLO. The cut score for any locally-created common assessment is set at 70%. Teachers of high ability students may choose to set a higher goal for those students. Teachers of high ability students who must use ISTEP+ as their end of course assessment are

asked to use Pass Plus as the passing score for those high ability students and assign their readiness level with that higher bar in mind.

At the end of the school year, each evaluator will examine evidence from observations with the Teacher Effectiveness Rubric. Considering mode and trends in the evidence collected for each indicator, the evaluator will use his/her judgment to assign a final score for each domain on the rubric, weight them according to the rubric domain weights (10% planning, 75% instruction, 15% leadership for teacher rubric, for example), subtract a point if Core Professionalism standards are not met, and determine a final score for the Teacher Effectiveness Rubric portion of the summative evaluation.

If a certificated employee receives a rating of ineffective or improvement necessary, the evaluator and the certificated employee shall develop a remediation plan of not more than ninety (90) school days in length at the start of the next school year to correct the deficiencies noted in the certificated employee's evaluation using locally-developed forms to document the plan and progress monitoring. The plan will include options for professional development including, but not limited to, district workshops, observing effective teachers, web-based and print resources, printed resources and selected sample video clips, help from a literacy or STEM coach to co-plan/co-teach, additional formative observations with coaching, and use of license renewal credits for additional training.

Staffing Model

The below chart provides the number of teachers and school staff that will be hired during the start-up year as well as the number of staff hired at full capacity. All full-time school staff will be eligible for benefits including: medical, dental, vision, basic life and AD&D insurance; 403(b)/401(k) retirement plan; and personal and paid holidays off. At a minimum, all teachers will be licensed to teach in Indiana and will be highly qualified in their content area.

Please see Attachment K for updated staffing model.

Position	# of Positions at Start Up	# of Positions at Capacity	Estimated Starting Salary
Principal	1	1	$100,000
Lead Teacher	1	1	$87,500
Office Manager	1	1	$40,000
Guidance Counselor	0	3	$40,000
Career & College Coordinator	1	1	$47,000
Innovation & Learning Strategist	1	1	$55,000
Community Outreach Coordinator	1	1	$50,000
Teachers*	10	33	$43,000 – 58,000
Registrar	0	1	$40,000
School Nurse	1	1	$27,000

*The number of hired special education teachers will be based on need and the number of students enrolling in the school with IEPs.

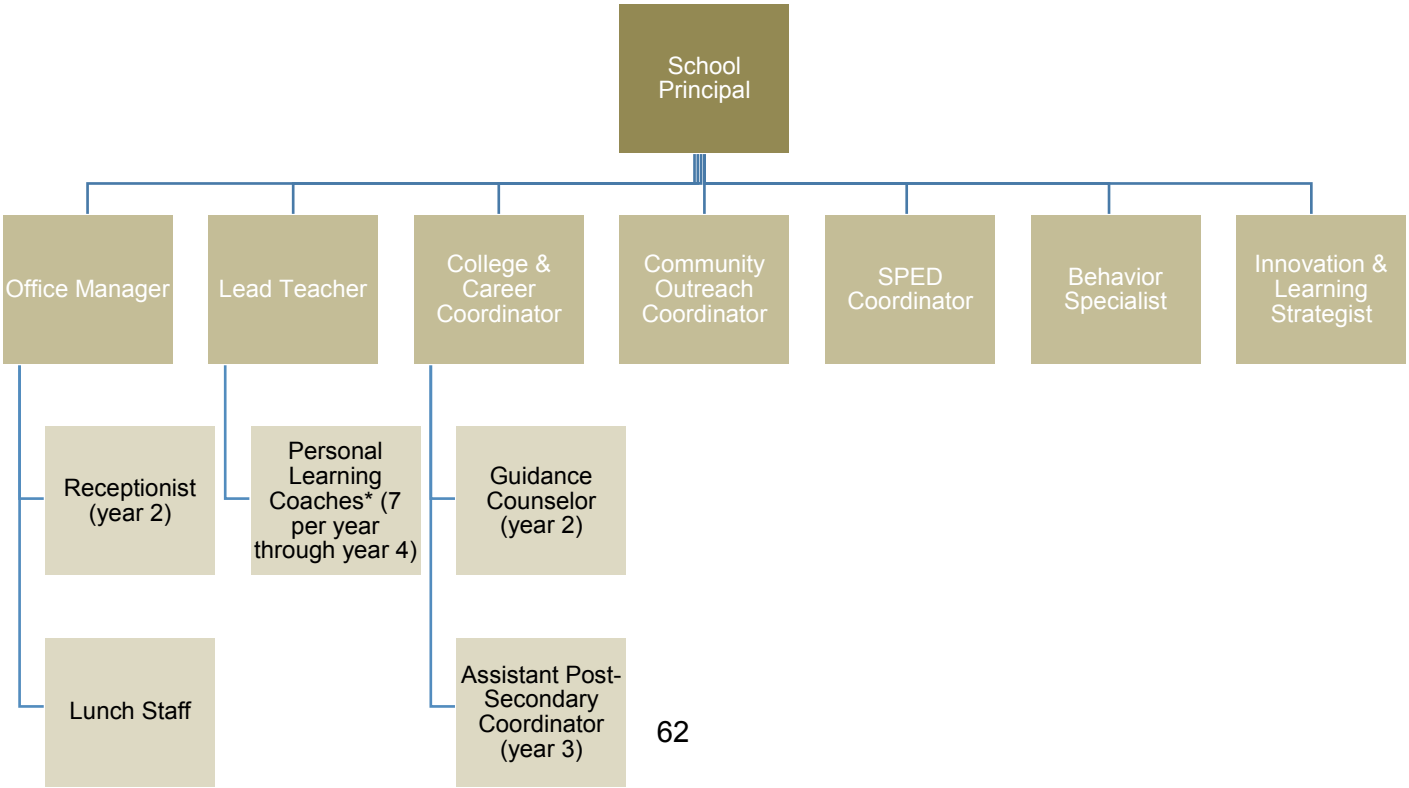
C. Governance and Management

Organizational Structure

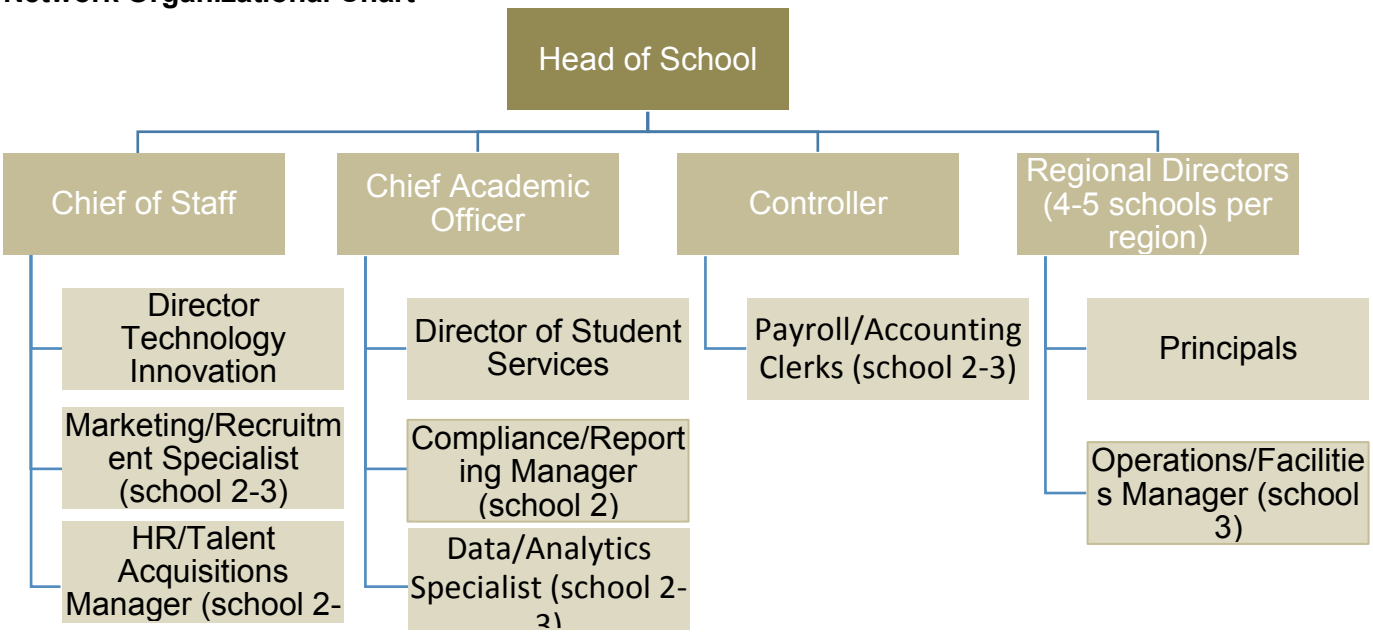
Purdue Polytechnic High School of Indianapolis, Inc. has been formed as an Indiana Nonprofit Corporation whose purpose is to oversee the operation of Purdue Polytechnic Indianapolis High School.

The affairs of this corporation shall be managed, controlled, and conducted by, and under supervision of, The Board of Directors. The officers shall consist of Chair, Secretary, and Treasurer and such other officers as the Board of Directors may otherwise elect. The role and responsibilities of each of these positions is further described in the following subsection. Please see the Governance Documentation section for Purdue Polytechnic High School of Indianapolis, Inc.'s Articles of Incorporation and Bylaws. The Governance Documentation section also includes an engagement letter with Faegre Baker Daniels indicating that the firm will file for the school's 501(c)(3) tax exemption status.

School Organizational Chart



Network Organizational Chart



Pursuant to its bylaws and Articles of Incorporation, the Board will be composed of no less than three and no greater than fifteen individuals. A number of members of the Board will be appointed by a duly authorized representative of Purdue University with the remaining members elected by the Board of Directors. The Board will also contract with Purdue University to provide faculty support and expertise in designing and developing the school's educational model, academic program, and curricula.

The Head of School will serve as the chief administrator of Purdue Polytechnic Indianapolis High School and report directly to the Board of Directors. All school staff will report directly to the Head of School. The general governing structure as well as the organizational charter for the school is depicted, above.

Roles and Responsibilities

Board of Directors

The Board supports the school in developing students' academic and lifelong success leading to a positive impact on our communities and local economy. The core functions and responsibilities of the Board of Directors include:

- Act as the final authority for the school.
- Define a clear vision for the school.
- Review, evaluate, and adopt policies related to the school's operations.
- Set school priorities and expectations.
- Adopt performance standards related to the school's academic and operational performance.
- Approve annual budgets, set financial goals, monitor finances, and ensure that school accounts are audited.

- Provide a forum for community members to be heard regarding concerns about the school.
- Hire, evaluate, and hold the school leader accountable to high expectations.
- Act as the authority and oversight for the school's contract with Purdue University and on-going relationship with the university.
- Evaluate its own performance and sometimes take action aimed at improving its own effectiveness in raising student achievement and maintaining the school's operational and financial viability.

Chair

The Board Chair is an active and voting member of the Board of Directors. The Chair shall preside at all meetings of the Board of Directors and shall be responsible for implementing policies established by the Board of Directors. The Chair shall perform such other duties as the Board of Directors may prescribe.

Secretary

The Secretary shall be the custodian of all papers, books, and records of the Corporation other than books of account and financial records. The Secretary shall authenticate records of the Corporation as necessary. The Secretary shall perform the duties usual to such position and other duties as the Board of Directors or the Chair may prescribe.

Treasurer

The Treasurer shall prepare and maintain correct and complete records of account showing accurately the financial condition of the Corporation. All notes, securities, and other assets coming into the possession of the Corporation shall be received, accounted for, and placed in safekeeping as the Treasurer may from time to time prescribe. The Treasurer shall furnish, whenever requested by the Board of Directors or the Chair, a statement of the financial condition of the Corporation and shall perform the duties usual to such position and such other duties as the Board of Directors or the Chair may prescribe.

Other Officers

Each other officer of the Corporation shall perform such duties as the Board of Directors of the Chair may prescribe.

Head of School

The Head of School serves as the chief administrator of the school, chief liaison to Purdue University and the Purdue Polytechnic Institute, as well as the lead liaison within the community. The position is responsible for managing the day-to-day affairs of the school and for implementing and refining policies, programs, and curricular activities in a manner that promotes the educational development and advancement of each student and the professional development of each staff member. The Head of School is responsible for carrying out the vision that Purdue Polytechnic Indianapolis High School will develop a new generation of skilled talent by seamlessly transitioning students from high school and post-secondary education to high-wage, high-demand jobs and implementing the school's mission to develop students'

lifeline success by preparing them with the skills needed to succeed in today's workplace through a STEM-focused education and experiential learning. The Head of School's specific responsibilities related to school management, school operations, and community outreach are described in the Head of School's job description, provided in Attachment K.

Career and College Coordinator

The College and Career Pathways Coordinator will build relationships, systems, and programs to ensure that each Purdue Polytechnic High School student's academic experience is connected to each student's post-secondary plan. The College and Career Pathways Coordinator will provide direct advising and pathway coordination for students as they progress towards graduation. The College and Career Pathways Coordinator will be instrumental in the implementation of a comprehensive foundational college and career-development program, which will allow for mentorship, internship, and job shadowing. The College and Career Pathways Coordinator will develop and maintain an industry–based network of community partners and colleges. The College and Career Pathways Coordinator will interact with all stakeholders that are essential for student success such as graduates/alumni, industry professionals, parents, school staff, and community partners.

Director of Instructional Technology

The Director of Instructional Technology works under the Head of School to provide leadership and support to school staff with a focus on the integration of educational technology into the learning process. The position is well versed in data analysis and using data to identify opportunities and areas for improvement both operationally and academically. The position oversees the management of the school's essential technology and systems. The Director of Instructional Technology's specific responsibilities are described in the Director of Instructional Technology's job description, provided in Attachment K.

SPED Coordinator

The SPED Coordinator will facilitate an academic experience with social supports tailored specifically to the needs of students. Teachers and students work together to schedule time for instruction, which can occur individually, in small groups, or in large groups depending on the learning styles of the students. Fulfilling the role as a personal learning coach, teachers will encourage students to demonstrate high levels of social responsibility, personal accountability, and independent thinking. Through design-based problems and projects teachers will facilitate student learning in a variety of formats to master Indiana state standards, pass state high school graduation exams, and meet college requirements. Additionally, under the direction of the school leader, the special education coordinator plans and provides for appropriate learning experiences for students with disabilities in accordance with a student's Individual Education Program (IEP). The person in this position is responsible for creating a flexible program and learning environment that provides specialized instruction for students with disabilities, such that the students benefit from the general education curriculum to the greatest extent possible when supported with supplemental aides, accommodations, and other needed supports.

Teacher

Teachers will facilitate an academic experience with social supports tailored specifically to the needs of students. Teachers and students work together to schedule time for instruction, which can occur individually, in small groups, or in large groups depending on the learning styles of the students. Fulfilling the role as a personal learning coach, teachers will encourage students to demonstrate high levels of social responsibility, personal accountability, and independent thinking. Through design-based problems and projects teachers will facilitate student learning in a variety of formats to master Indiana state standards, pass state high school graduation exams, and meet college requirements.

Industry Advisory Board

Purdue Polytechnic Indianapolis High School will offer students significant opportunities to work with local employers through internships, mentors, design-based learning, speakers and worksite visits. In order to support these talented students, Purdue Polytechnic will convene an advisory board of individuals, including representatives of local employers, Purdue alumni, community leaders and public sector representatives to:

- Identify internship opportunities for all students in their final year of high school.
- Leverage networks to provide students with professional mentors who can offer advice and guidance about academic matters, career options and workplace expectations for students.
- Offer opportunities for students and staff to visit worksites, observe operations and talk with employees about their work.
- Identify speakers who can talk with students on campus about careers and industry trends.
- Review Purdue Polytechnic curricula to ensure that students will graduate with the skills and technical expertise employers expect.
- Support the success of Purdue Polytechnic and its students and assure its sustainability.

The success of Purdue Polytechnic depends on support from the Indianapolis community and the Purdue alumni network. Through active participation in the Purdue Polytechnic Advisory Board, members can help develop the next generation of skilled talent in Central Indiana and ensure that these students are prepared to earn a living wage throughout their careers.

At the time of charter submission, members of Purdue Polytechnic's school development team have met with a number of local employers, Purdue alumni, community leaders and public sector representatives who have expressed interest in serving in an advisory capacity.

Governing Board

Board Member Information

Gary Bertoline, Dean and Distinguished Professor, Purdue University, Polytechnic Institute. Dr. Gary Bertoline is the Dean of the Purdue Polytechnic Institute and a Distinguished Professor of Computer Graphics Technology and Computer & Information Technology at Purdue University. He earned his PhD at The Ohio State University in Industrial Technology Education and was on the faculty in the College of Engineering for 3 years before coming to Purdue University in 1990. From 1995 through 2002, Gary served as Department Head of Computer Graphics Technology

at Purdue University. He also served 5-years as the Associate Dean for Graduate Programs in the College of Technology before becoming dean of the college.

Gary led the development of the Envision Center for Data Perceptualization at Purdue University and served as its Director for 5 years. Gary also had a major role in the build-out of Purdue's campus cyberinfrastructure while serving as Associate VP and Director of the Rosen Center for Advanced Computing (RCAC) that he co-founded. He recently co-founded the Indiana Next Generation Manufacturing Competitiveness Center (IN-MaC) as well as the Polytechnic Institute at Purdue University. The Polytechnic initiative is a major effort to transform the college's curricula and learning experience for the students to prepare graduate for the 21st century requirements of industry and society.

He has authored numerous papers in journals and trade publications on engineering and computer graphics, computer-aided design, and visualization research. He has authored and co-authored seven text books in the areas of computer-aided design and engineering design graphics. Gary's research interests are in scientific visualization, interactive immersive environments, distributed and grid computing, workforce education and STEM education.

Julie Griffith, Vice President for Public Affairs, Purdue University. Julie has served in role as Vice President for Public Affairs since 2011. Previous to her University appointment, Julie served as Duke Energy's Vice President of Government Affairs & Foundation Relations. She served in roles of increasing responsibility within Duke and its predecessor companies, as well as that of Spectra Energy, a Texas-based energy company and its predecessor companies and has an extensive background in marketing, business development, and government and regulatory affairs.

Purdue's Office of Public Affairs includes the Office of Engagement, Technical Assistance Program, Purdue Healthcare Advisors, Purdue Center for Regional Development, Governmental Relations, Community Relations, Marketing and Media, Purdue's radio station WBAA and Trademarks and Licensing.

Julie is committed to her community and currently serves on the boards of the International Center, American Lung Association, Conexus, Community Action of Greater Indianapolis, Connect2Help, the Wabash Center, Greater Lafayette Chamber, Indiana Societies of both Washington D.C. and Chicago, the Dean's Advisory Council for Ball State University's College of Sciences and Humanities and Council of Advisors.

Her former affiliations include the Boards of Directors of Big Brothers Big Sisters of Central Indiana, the Ruth Lilly Health Education Center, Richard G. Lugar Excellence in Public Service Series, Rivers Institute of Hanover College, Young Voices of Indianapolis, Indianapolis Opera and the Business Council of Women in Government.

George Pillow, President, Pillow Logistics. George E. Pillow, Jr. is President and Chief Executive Officer of Pillow Logistics. Pillow Logistics is one of the four largest independent courier companies in the State of Indiana, according to the Indianapolis Business Journal.

Celebrating its twenty sixth year in business, Pillow Logistics maintains an impressive client list including: IU Health (Methodist, IU and Riley Hospitals), Andrew's Air Force Base in Maryland, Wishard Health Services, Eli Lilly and Company, and G-Tech (lottery terminals).

George began his road to success at Shortridge High School in Indianapolis. In 1967, he discovered basketball, a favorite past time, which took him to All City, All Sectional, All Regional, All State, and Indiana All Star. He was also named the Outstanding Athlete of the Year at Shortridge High School.

Mr. Pillow went on to Indiana State University, where he established himself as one of basketball's greatest. A few of his most memorable highlights in 1971 include All Conference, Most Valuable Player, Leading Scorer, and Converse All American. George was recently inducted into the Indiana Basketball Hall of Fame, as well as the Indiana State University Hall of Fame.

After graduating from Indiana State University, George embarked on an equally impressive business career, first as a Senior Account Manager at Xerox Corporation, then as Cabinet Member under former Governor Robert Orr. In 1984, George was awarded the Sagamore of the Wabash by Governor Robert Orr; the highest honor in the State given to an individual. His final stop prior to founding Pillow Express Delivery, Inc. was the Assistant Executive Administrator for the Department of Health and Human Services.

Currently Mr. Pillow is serving as a Commissioner on the Indiana Horse Racing Commission of Indiana. George has served as a trustee of the Children's Museum, the largest children's museum in the United States. He has also served as Executive Board member of the Indianapolis Chamber of Commerce Advisory Board, the Eiteljorg Museum, City of Indianapolis Economic Development Commission, and Stanley K. Lacy Leadership Graduates. George has continued to be a community leader and business advocate by serving with the Organizing Committee to bring the National Athletic Collegiate Association Headquarters from Missouri, Kansas to Indianapolis, Indiana, the Transition Team for Governor-Elect Mitchell Daniels, as well as Committee member for the State of Indiana Interstate I-69 Highway Project; the Assistant Executive Coordinator for the Circle City Classic, and finally, as a Trustee on the Board of Indiana State University and on the board of Directors for the Columbia Club.

Jamal Smith, Executive Director, Indiana Civil Rights Commission. Jamal Smith currently serves the State of Indiana as Executive Director of the Indiana Civil Rights Commission; transitioning from his role as the Governor's Senior Advisor for Minority Affairs. Prior to his position with the State of Indiana, Jamal was the Director of Marketing and Business Development for United States Synchronized Swimming (USSS), the National Governing Body for the Olympic Sport of Synchronized Swimming.

Over the past 14-years, Jamal's professional experiences have included government affairs, marketing & business development, event management, as well as community engagement. He has managed teams of professionals and oversees a budget of more than $12 million. Jamal has participated on sales teams that have generated an excess of $16 million, developed and implemented organizational marketing plans, and led recruitment campaigns resulting in

increases of more than 300%. In addition, Jamal has overseen more than twelve (12) international events including the selection and announcement of the 2008 Olympic Synchronized Swimming Team.

As Executive Director of the Indiana Civil Rights Commission, Jamal's recent focus has been the oversight and implementation of many of the State's programs and initiatives; ensuring the inclusion of Indiana's most underrepresented populations. Jamal continuously pulls from his experiences with the Black Coaches Association (BCA), where he transformed the BCA membership from 249 members to 3,000+, organized collaborative relationships with similar organizations, and orchestrated conversation amongst NCAA athletic directors (AD) resulting in a 200% increase in AD membership activity.

Jamal is recognized as a leader professionally as well as throughout the community. His diverse group of board appointments includes serving as Chair of the Governor's Commission on Minority and Women's Business Enterprises, the Indiana Blood Bank Board of Directors and the Indiana Health Information Technology, Inc. Board of Directors. In addition, Mr. Smith spends a great deal of time as a basketball coach and mentor within the city of Indianapolis. For this work, he was honored recently with the 2014 Rev. Charles Williams Award from Indiana Sports Corp and Indiana Black Expo.

Jamal graduated from Wright State University in 1999 with a bachelor's degree in History; completing his MBA in 2000, also from Wright State University. His undergraduate tenure includes a successful career as an intercollegiate basketball player. As a student athlete, Jamal has received many awards and much recognition for his performances on the court as well as in the classroom. Mr. Smith went on to continue his education at Purdue University where he graduated in 2002 with an MS Degree in Sports Management & Athletic Administration.

Maureen Weber, Sr. Vice President and Chief Strategy Officer, PLTW. As Chief Strategy Officer, Maureen Weber supports the successful growth of the organization, helping to provide the vision, leadership, and management necessary to execute day-to-day operations and implement high-impact company growth strategies.

Ms. Weber joined PLTW from Indiana University Health, the most comprehensive healthcare system in Indiana, where she served as the vice president of customer experience. In this capacity, she was responsible for building and executing strategies to drive service improvements across the care continuum and enhancing convenience of and access to system services. She also served in a number of operational and policymaking roles for the State of Indiana and was accountable for leading the transformational agenda for several state agencies.

Ms. Weber chairs the Indiana Charter School Board, is a member of the Executive Committee of EmployIndy, and serves on a variety of other boards and commissions in the Indianapolis community.

Ms. Weber earned a juris doctorate from the Georgetown University Law Center, where she served on the Georgetown Journal of Law & Public Policy, and a bachelor's degree from the Georgetown University School of Foreign Service, with a concentration in Science and Technology in International Affairs.

Michelle L. Carnahan, *Chief Operating Officer, Lilly International Business Unit, Eli Lilly Co.* Ms. Carnahan serves as chief operating officer for Lilly International Business unit as well as global alliance leader for the Boerhinger Ingelheim/Lilly alliance. She is responsible for the mid- and long-term business unit strategy for diabetes and integration across all functions in Lilly Diabetes. As global alliance leader, she is accountable for the strategy, operations and P&L of the Alliance with its 3 product families and the multiple brand formulations that will ultimately become a part of the Alliance.

Prior to her current position, Michelle was vice president for the Lilly USA musculoskeletal (MSK) business unit. In that role, she was responsible for the P&L as well as the overall marketing and sales strategy for Lilly USA's MSK franchise. Under her leadership and with her focus on delivering exceptional customer experience, the business unit regained Forteo sales growth after a period of decline post brand launch. And, Cymbalta significantly exceeded performance and growth expectations in the chronic musculoskeletal pain space.

Michelle earned her bachelor's degree in economics from DePauw University. She joined Lilly in 1992 as a sales representative. During her career, she has served in multiple marketing leadership roles for several of Lilly's brands. She's also held numerous cross-functional roles including national sales director, senior director of human resources for Lilly USA, global Six Sigma demand realization leader, and executive director for global marketing and sales.

Michelle has been a member of several executive teams including the Lilly Global Pharmaceuticals Sales and Marketing leadership team and the Lilly USA, LLC Board of Directors. She is currently a member of the Lilly Diabetes senior leadership team.

Wilmara Manuel, Executive Director Indiana Ballet Conservatory. Wilmara Manuel currently serves as the Executive Director of Indiana Ballet Conservatory. Manuel is a background is in Higher Education administration and she has served as Dean of Students ay New York University and Seton Hall University, and Director of Academic Services Division at New Jersey City University. She has extensive experience in recruitment, admissions, international studies and study abroad, national scholarship competitions (Rhodes, Marshall, and Luce), academic policy, and internship programs.

Manuel has served on the Glen Echo Park Board in Glen Echo, MD, The Children's Museum in Indianapolis, and the Parent Association and Travel Auction Committee at the International School. She has also served on the 2015 Gala Planning Committee of the Women's Fund of Central Indiana.

Manuel moved to Indianapolis 4 years ago when her husband accepted the position of President of the University of Indianapolis. She holds a BA in Broadcast Journalism and MA in Higher Education Administration from New York University.

Ken Kobe, Business and Financial Consultant, Kenneth Kobe LLC. Ken Kobe most recently served as Executive Director and Chief Operating Officer of Barnes & Thornburg LLP, one of the 100 largest law firms in the United States, with 550 attorneys in 12 offices throughout the country. Prior to his time at Barnes & Thornburg, Kobe served in several leadership roles in Indiana State Government included State Budget Director. In that role, Kobe was the principal advisor to the Governor of Indiana and director of an agency responsible for the analysis of budget and revenue issues and the administration of state appropriations.

Mr. Kobe received his Bachelor of Arts from Denison University and his Master of Arts in Public Administration from Ohio State University. Mr. Kobe has served on the board of directors for several community organizations including: Easter Seals Crossroads of Indianapolis, Indiana Institute for Global Health, Building Tomorrow, and School for Hope, Inc.

Maria Quintana President, Q2u Strategic Advisory Group. Prior to starting her own strategic advising firm, Q2u, Ms. Quintana was a senior policy advisor with Bose Public Affairs Group. She has extensive commercial and public finance experience with more than 35 years at JPMorgan Chase. Ms. Quintana advised and connected state and local government, corporations, universities, health care and non-profit institutions that seek capital strategies for growth.

Ms. Quintana retired as the executive vice president and managing director for JPMorgan Chase in April 2015 after a career that began in 1979. She earned her bachelor's degree from Indiana University and holds an MBA from Indiana Wesleyan University.

Ms. Quintana was recognized by the Indianapolis Business Journal as one of Indianapolis' "Women of Influence" in 2010. Active in the community, Quintana serves as an advisory member of the Local Initiatives Support Corporation and co-chair of Great Places 2020.

Collective Qualifications

Collectively, the Board represents K-12 education, postsecondary education, the community, and business aligned to Purdue Polytechnic Indianapolis High School's selected career clusters. The Board commits to being good stewards of public funds by ensuring that funds are spend carefully and all revenue and spending is accounted for. Collectively, the Board has over 40 years of serving on boards of local community and state organizations, and managing schools in the local community.

Each Director's resume and signed memorandum are provided in the Leadership Information section.

Policy- & Decision-Making

Purdue Polytechnic High School of Indianapolis Inc.'s Board of Directors is the sole governing authority of Purdue Polytechnic Indianapolis High School and has the power and authority to establish policies for and make decisions on behalf of the school. The Board of Directors will establish policies used by the school to conduct operations, including finances, enrollment, program evaluation, evaluating the school leader, and other operational aspects. The Board may establish new or change existing policies by taking action with a majority vote during an official Board meeting. The Board will request input from school leadership, Purdue University, industry partners, and the community at large in establishing school policies that affect the betterment of the school.

Board Recruitment and Selection

Pursuant to its Bylaws, the Board of Directors of Purdue Polytechnic High School of Indianapolis, Inc. will have no less than three and no greater than fifteen Directors. Purdue University shall appoint a number of Directors, although non-Purdue Directors will always hold the majority. New Directors shall be elected by a majority of Directors.

Board Development

At the time of prospectus submission Purdue Polytechnic Indianapolis High School's Board of Directors consists of five high caliber individuals who have ample leadership experience and collectively have over 30 years serving on Boards of Directors. The Board Chair will be an active participant in all board education opportunities offered through the Mayor's Office of Education Innovation. In evaluating its own performance, the Board may move to take action aimed at improving its own effectiveness in raising student achievement and maintaining the school's operational and financial viability. In such event, the Board will consult with experienced education providers or the Office of Education Innovation to determine board development and training opportunities.

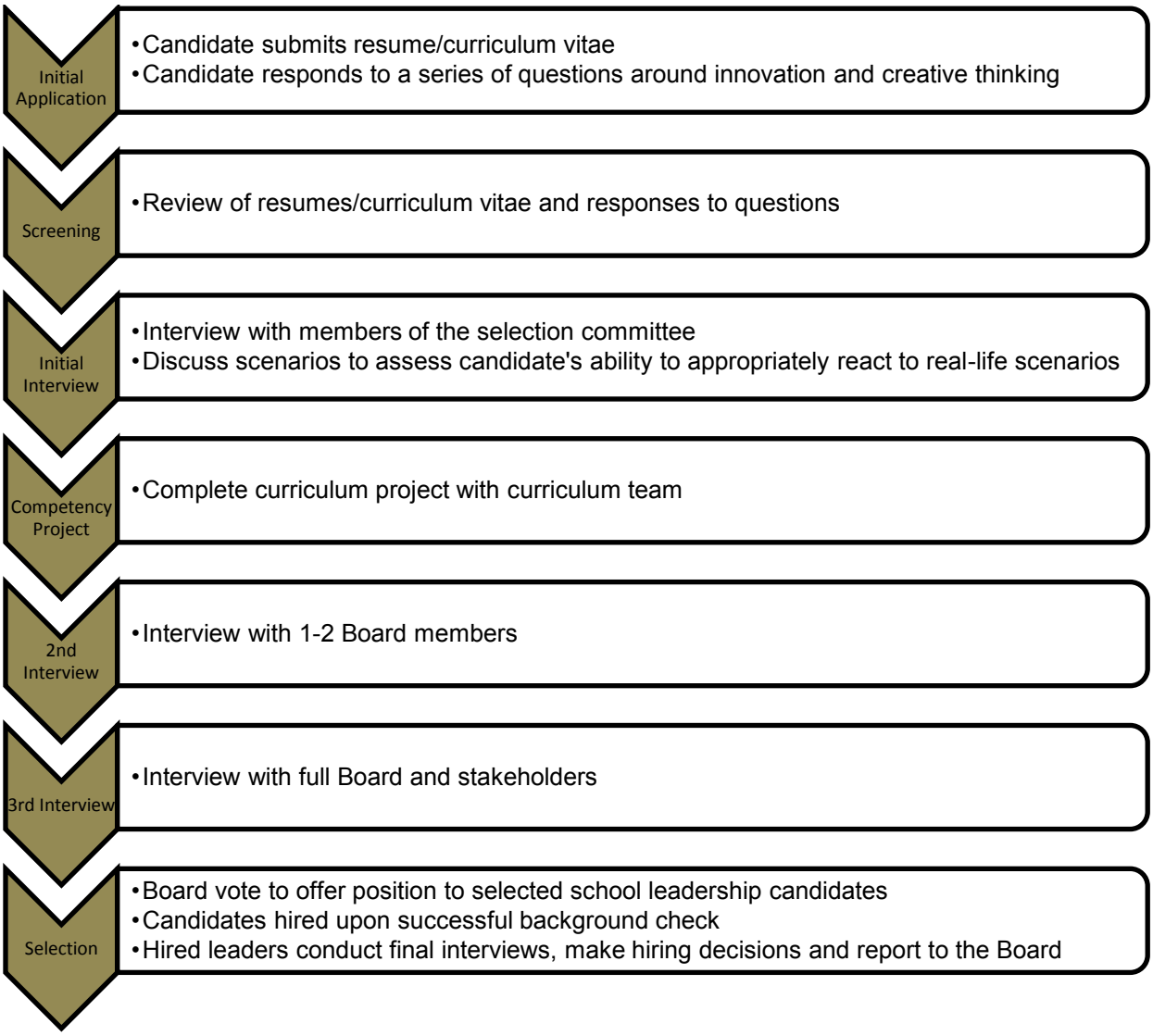
The Board intends to be fully engaged in the oversight and governance of Purdue Polytechnic Indianapolis High School. At full capacity, the Board will consist of no less than three and no greater than fifteen individuals. The Board will strive to be well-balanced and maintain its membership with subject-matter expertise in education, legal matters, finance, business, community leadership, and the industries related to the school's available career clusters. The Board will seek to recruit individuals to fill any gaps in these areas by resolution of the Board of Directors from time to time. The Board will also include at least one Purdue University representative (please refer to the Board's Bylaws in the Governance Documentation section).

School Leadership & Staff Recruitment

A high quality school leader and effective staff will be critical to the success of Purdue Polytechnic Indianapolis High School. The Board will make the final selection of the Head of School and will work with its partners at Purdue University to screen candidates, select finalists, and identify the school leader. The Board also anticipates working with community and business leaders to develop a selection committee and solicit input on selecting a final school leader candidate. The process of hiring a school leader is outlined on the following page.

The Board has solicited interest from prospective school leader candidates through multiple channels. To find the best possible leader for the new, innovative Purdue Polytechnic Indianapolis High School, the Board is casting a wide net to recruit and hire a top level leader who is entrepreneurial, visionary, passionate, and able to successfully launch an endeavor as innovative as this high school. This leader will be appropriately and competitively salaried. The school is utilizing a host of mechanisms to find the right leader for this non-traditional school including the recruiting professionals at EmployIndy, Purdue's Executive Recruiting team, and sites like LinkedIn, Indeed, and other recruiting sources. Additionally, the school is utilizing national networks, to recruit top talent for the Head of School position, including:

- Indiana School Personnel Job Bank (Department of Education)
- Purdue networks, including alumni newsletters, doctoral program network, etc.
- National Alliance for Public Charter Schools' job board
- National Association of Black School Educators
- National Association of School Principals
- Marian University's Academy for Teaching and Learning Leadership



In addition to the above resources, job announcements are posted at Purdue University as well as other area universities and Purdue Polytechnic Indianapolis High School will reach out to the I-STEM Resource Network to help spread the word of available teaching positions at the school. Lastly, Purdue Polytechnic Indianapolis High School will engage various transition to teaching programs, including the Woodrow Wilson Teaching Fellowship, with the goal to find industry experts who have made a conscious decision to utilize their skills to engage a new generation of students and future workers.

The qualifications of the selected Head of School will include:

- Bachelor's degree in relevant field required, Master's degree or PhD preferred
- Current Indiana Administrator's license preferred but not required
- 5+ years in a school-related leadership role
- Prior experience successfully managing professionals
- Familiarity with experiential learning and educating students in a STEM-focused environment

- Prior experience in urban education required
- Strong communicator at a variety of levels

More than two dozen qualified candidates have submitted applications and resumes for the Head of School position. The Purdue Search and Selection group is inviting the top candidates for first round interviews in November. The Board anticipates making a final selection in early 2016.

Please see Attachment K for The Head of School's job description.

School Development
In addition to the Board of Directors, the following individuals have been integral in the development of Purdue Polytechnic Indianapolis High School and will continue to be integral throughout the school's start-up.

Dr. Gina DelSanto, Chief of Staff, Purdue University. Gina earned a Master's and Ph.D. in the humanities from Indiana University. She has spent most of her career in higher education, including administrative positions as director of learning support programs and as associate provost at Butler University. As senior deputy commissioner for the Indiana Department of Workforce Development, Gina oversaw the state's adult education program; the Career and Technical Education program; and training and support programs aimed at reducing the state's middle skills gap. Since 2006, Gina has served on the board of directors for Goodwill Education Initiatives, the organization holding the charters for the Indianapolis Metropolitan High School and the Excel Centers.

Role in school development: Gina has joined leaders from Purdue, EmployIndy, the Office of Indianapolis Mayor Greg Ballard, and others in the foundational planning for the Purdue Polytechnic Indianapolis High School. She represents Purdue's president in those discussions and briefs him on key decisions and progress on the initiative.

Brooke Huntington, Assistant Dean of K12 Outreach, Purdue University, Purdue Polytechnic Institute. In August 2015, Brooke Huntington was named Assistant Dean of K12 Outreach for the Purdue Polytechnic Institute. Raised in Madison, Indiana, Huntington began her career after graduation from Butler University with ArvinMeritor Inc. in Columbus, Indiana. At ArvinMeritor Inc. she held several management positions in product and market development including extended assignments in Sao Paulo, Brazil and Queretaro, Mexico. She completed her MBA from Indiana University Kelley School of Business in 2002. Brooke has served as the Deputy Commissioner for Driver and Vehicle Services for the Indiana Bureau of Motor Vehicles, Executive Director of Workforce and Economic Development for the Ivy Tech Community College of Indiana, and the Deputy Commissioner for Customer Solutions for the Indiana Department of Workforce Development. For the last seven years Brooke held the role of president and chief executive officer of EmployIndy where she worked closely with industry leaders, educators, government, and philanthropy to transform Indianapolis' talent pipeline.

Role in school development: Brooke will oversee the development and start-up activities of Purdue Polytechnic Indianapolis High School.

Kevin Kaluf,Ph.D, K-12 Education Director, Purdue University, Purdue Polytechnic Institute. Kevin is the Purdue Polytechnic K-12 Education Director. Dr. Kaluf served as a post-doctoral research associate for the Dean's Office the last year assisting Dean Bertoline with the beginning development of the Purdue Polytechnic Indianapolis High School. He earned his doctorate degree in Engineering/Technology Education from Purdue as well as earning a MS degree in Educational Leadership and BS degree in Technology Education from Purdue. Kevin also has a MA degree in Curriculum/Instruction from Olivet Nazarene University, a certificate in Charter School Leadership from Ball State, and has been very active as a Core Training Instructor with Project Lead the Way (PLTW) for many years. Kevin was a Technology/Pre-Engineering Teacher at Kankakee Valley High School in Wheatfield, IN for 12-years. Dr. Kaluf will oversee all aspects of K-12 STEM education-related activities for the Polytechnic Institute.

Role in school development: Dr. Kaluf will be responsible for planning, startup work and being a continuing liaison with the Purdue Polytechnic Indianapolis High School, with a special emphasis on creation of the high school curriculum.

Janet Rummel, Chief Academic Officer, Goodwill Education Initiatives. In this role, Janet supports the curriculum development of 13 Excel Centers and the Indianapolis Metropolitan High School. Janet has a Master's of Science in Education and is a doctoral candidate (PhD Curriculum and Instruction, Purdue University). Her professional experience includes years of service as a master teacher as well as administrative leadership roles, both in schools and in the Indiana State Department of Education and the Center for College and Career Readiness. Janet is a national expert in curriculum and provides consulting services to clients across the country. Janet has assisted every Excel Center with ensuring that its curriculum is aligned to state standards. Her experience developing curricula has ultimately led to over 1,000 adults earning their high school diplomas through Excel Centers.

Role in school development: Janet brings K-12 and STEM curriculum expertise in developing the curriculum for Purdue Polytechnic Indianapolis High School. Janet has played an integral role in developing the school's academic programming and curricula and will continue working with the school to further develop and refine its curricula.

Dr. Geanie Umberger, Associate Dean of Engagement, Purdue University Purdue Polytechnic Institute. Dr. Umberger currently teaches courses in regulatory science at Purdue and in Tanzania, Africa. Her research interests are in patient safety, access to safe and effective mediations, and technology innovation. Prior to joining to College, she was the Assistant Vice President for Research at Purdue where she focused on industry-academic research relationships, technology transfer, and economic development. In addition to her academic experiences, Dr. Umberger worked for IBM and Lexmark International, REGISTRAT (Contract Research Organization), NIOSH, and Bristol Myers-Squibb. Additionally she helped run her family-owned business, Hutchison Drug Store which started in 1926. She earned her doctorate

degree in Anatomy and Neurobiology from the University of Kentucky, College of Medicine; her MS in Public Health from the University of Kentucky College of Pharmacy. As Associate Dean for Engagement, Dr. Umberger is responsible for the college's relationships with corporate, academic, and government partners. In addition to building these relationships, she is responsible for the college's senior capstone and internship programs, workforce education and development, and advanced manufacturing programs.

Role in school development: Dr. Umberger will leverage her role with Purdue University to identify industry partners for Purdue Polytechnic Indianapolis High School.

D. Community Partnerships

Strong partnerships with industry organizations are critical to the success of Purdue Polytechnic Indianapolis High School. The school's educational model is designed upon the notion that in order to best prepare students for careers, those industries must be involved with the design of the school. Members of the school development team have reached out to multiple organizations to secure formal commitments to provide input and advisory in the school's curriculum, and to provide internships and business mentorships, as necessary and when possible. To date, letters of support have been collected from the Indiana Manufacturers Association and Conexus Indiana. Both of these organizations represent numerous industry partners in the advanced manufacturing, supply chain and logistics, and computer information technology fields.

Name of Organization	Representative from Organization	Address, phone number, and email address	Nature of the partnership with the school	Is a letter of support included in the application?
Purdue University	Mitchell E. Daniels, Jr. President	Hovde Hall, Room 200 610 Purdue Mall West Lafayette, IN 47907 765-494-9708	Endorsement for establishing the school; provision of financial support	Yes
EmployIndy	Nicole Thompson, Interim President and CEO	115 W. Washington St., Suite 450 South, Indianapolis, IN 46204 317-639-4441	Fiscal agent of school's initial planning grant; provided labor market data and analysis to align curriculum with employer needs	Yes
Indiana Manufacturers Association (includes	Brian Burton, President and CEO	101 W. Washington St., Suite 1050 East, Indianapolis, IN 46204	Participation in industry advisory board; providing internships;	Yes

membership organizations)		317-632-2474	providing business mentors	
Conexus Indiana (includes membership organizations)	Steven Dwyer, President and CEO	111 Monument Circle, Suite 1800, Indianapolis, IN 46204 317-638-2107	Participation in industry advisory board; providing internships; providing business mentors	Yes
Eli Lilly and Company	Robert L. Smith, Senior Director, Corporate Responsibility; President, Eli Lilly and Company Foundation	Lilly Corporate Center Indianapolis, IN 46285 317-276-2000	Participation in industry advisory board; providing internships; providing business mentors	Yes
Ports of Indiana	Rich Cooper, CEO	150 W. Market St., Suite 100 Indianapolis, IN 46204 317-232-9200	Participation in industry advisory board; providing internships; providing business mentors	Yes
Eleven Fifty Academy	John Qualls, President	1150 W. 166th St. Carmel, IN 46032 855-788-1150	Participation in industry advisory board; providing internships; assessment specific to the coding profession; serving as mentors to help students decide their field of study	Yes
General Electric Company	Anthony H. Denhart, Region Manager, Campus Relations	12722 Hamilton Crossing Carmel, IN 46032	Participation in industry advisory board; providing internships; providing business mentors	Yes

The Purdue Polytechnic Indianapolis High School development team is continuing to reach out to community organizations that will enrich the school's academic programming or wraparound supports for students. For example, the team is working with the Indianapolis Public Library to explore a partnership that ranges from a complete Shared System where the School Library functions similarly to a branch of the Public Library for its students, to more simply encouraging students to make use of library resources. The development team will also be hosting a luncheon for key community partners, including community leaders, to engage them in high school development discussions and further programming development.

Please see Attachment L for letters of support.

E. Financial Management

Purdue Polytechnic Indianapolis High School's finances will be managed with multiple levels of accountability and rigorous internal controls.

At the school level, Purdue Polytechnic Indianapolis High School will keep its financial functions and records on the Blackbaud Financial Edge Accounting platform.[13] The Board will hold the software license and fully manage and control all of its financial records, all of which will be instantly available to school personnel engaging in financial and accounting transactions. This school-level accounting activity will be supported through contracted services with Lori Thompson, Indigo43, which will provide a controller-level resource to audit financial transactions and records and create reports for the Board. This school-level financial activity will be monitored by the Board during each board meeting and through monthly and quarterly financial statements and reports. The Board also plans to adopt a policy regarding internal financial controls which will ensure that cash management and accrual accounting entries are segregated from financial reporting.

The Board will develop its budget annually beginning in February and March and present a draft annual budget for the subsequent July 1 – June 30 fiscal year to the full Board of Directors no later than June/

Purdue Polytechnic High School of Indianapolis, Inc., through its Board and its school leadership team, will investigate and pursue philanthropic funding opportunities. Additional solicitations of cash and in-kind support will be an ongoing expectation of the Purdue Polytechnic High School of Indianapolis, Inc.

Please see Attachment O for copy of Lori Thompson, Indigo43 contract.

F. Budget

There has already been a considerable amount of resources dedicated to the success of Purdue Polytechnic Indianapolis High School. USA Funds awarded EmployIndy a $500,000 planning grant to establish a plan to develop the school.

The school's Board and its partners plan to diligently seek additional revenue sources to support the start-up and ongoing operations of the school. Several philanthropic and private funders have been approached to support the school, after the school receives charter approval. If invited, Purdue Polytechnic Indianapolis High School also intends to apply to the Walton Family Foundation for a charter school start-up grant.

For the purposes of conservative budgeting, no non-committed funds have been included in the school's budget.

[13] This platform is compliant in all respects with Indiana State Board of Accounts requirements.

An electronic version of the school's budget has been provided to the Mayor's Office of Education Innovation. Please refer to that document for Purdue Polytechnic Indianapolis High School's detailed five-year budget, cash flow analysis, budget narrative and assumptions.

Contingency Plans and Sufficient Funds

Contingency planning is an integral part of the budget process so that unforeseen events, such as temporary gaps in funding or lower than anticipated financial results or lower than expected enrollment, can be addressed in a timely and efficient manner without disrupting the normal operations of the school. In any event, Purdue Polytechnic Indianapolis High School may consider delaying the purchase of some equipment and will explore reductions in staff. Above all, Purdue Polytechnic Indianapolis High School will not sacrifice the quality of the educational program or services provided to students. Purdue University has committed to providing financial support to the school in order to fill any operational gaps or budget shortfalls that might occur.

G. Facility

Purdue Polytechnic Indianapolis High School's Board and leadership are committed to bringing innovative, high-quality education to an urban neighborhood in Center Township. The board would prefer to locate in a diverse, developing neighborhood. The neighborhood will likely be located within priority area 3, 4, or 10 as identified by the most recent update of IFF's "supply gap" analysis of high quality High School seats. The board recognizes that location of the school will make a significant impact on the school's ability to attract, serve, and retain the intended students.

Purdue Polytechnic Indianapolis High School has actively been searching for the facility that best meets student, curricular, and community needs over the last three months. Recognizing the need for assistance and expertise to develop a space plan, conduct a financial feasibility analysis, prepare a site search, and perform due diligence of top properties, school leadership engaged IFF.

Purdue Polytechnic Indianapolis High School and IFF continue to review facility options near downtown Indianapolis. Facilities currently under consideration are:

Building Name	Location
PR Mallory Campus	3000 E. Washington St.
Ford Assembly Plant	1315 E. Washington St.
16 Tech	1375 W. 16th St.
Brougher Building	501 S. Meridian St.
Jireh Sports	2259 N. Ralston
Ivy Tech Automotive Building	1331 E. Washington St.
Cannon IV	950 N. Dorman St.
IPS School #28: Henry Wadsworth Longfellow	510 Laurel St.
IPS School: Shortridge High School	3401 N. Meridian St.

While the school development leadership team and IFF continue to explore a broad list of options, Indianapolis Public School #28 has emerged as a preferable potential site for the

school. This former middle school currently serves as the Positive Supports Academy alternative education program. The facility was originally built in 1967 and was renovated around 2010 including interior finishes, facility mechanicals, and roof. Purdue Polytechnic Indianapolis High School could lease the 90,000 sq. ft. facility which includes 30 classrooms, administrative offices, gymnasium, multipurpose room, cafeteria, and storage to accommodate the target enrollment of 550 students. Please see Attachment M for floor plans of School #28.

Purdue Polytechnic is open to the possibility of entering into an Innovation Network Agreement with Indianapolis Public Schools and has begun to explore this option with district leadership. At the same time, however, Purdue Polytechnic Indianapolis High School leadership continues to review other properties to house the school. IFF is assisting the school development team with a "Lease vs. Buy" analysis of the top contenders.

With the assistance of IFF it is expected that a facility will be selected in the first quarter of 2016 and requisition will take place by the end of second quarter 2016. Purdue Polytechnic Indianapolis High School expects to have the completed facility ready at the end of first quarter 2017.

After securing a facility, Purdue Polytechnic Indianapolis High School will begin the process of renovating the space to meet needs. Indianapolis Public School #28 is move-in ready, and would only need modest renovation-- some space reconfiguration to be more open and flexible, adding electrical capacity for equipment, and upgrading current labs. At this time any necessary changes to the building will be in compliance with code requirements for Indiana public schools including ADA accessibility.

The school's development team has also secured insurance for the school, which includes insurance for property, auto, umbrella, workers compensation, and general liability. These certificates are provided as Attachment N.

H. Transportation

Purdue Polytechnic Indianapolis High School will be open and accessible to all students. In order to provide all students with an equitable opportunity to attend the school, the Board plans to work with Indianapolis Public Schools by exploring an HB1321 agreement to provide students transportation to and from the school for students living within IPS's boundaries. In the event that a reasonable agreement cannot be reached, the school development team is intentionally seeking a school facility that is located on or near a bus line so that students may use the IndyGo system to attend school. In such case, the school will provide bus passes for those students who qualify for free or reduced price lunch.

I. Risk Management

The risk management philosophy of Purdue Polytechnic High School of Indianapolis, Inc. begins with its corporate structure. As an Indiana nonprofit corporation, Purdue Polytechnic High School of Indianapolis, Inc. is afforded certain liability exemptions through the Indiana Nonprofit Corporation Act ("Act") and is permitted by the Act to elect certain risk management techniques to minimize governing board liability. Please see the Articles of Incorporation of Purdue

Polytechnic High School of Indianapolis, Inc. In addition, Board and staff will be subject to various policies designed to minimize risk, including a conflict of interest policy and a policy regarding financial internal controls.

This risk management philosophy extends into actual school operations. Purdue Polytechnic Indianapolis High School will be highly reliant upon an active, professional partnership with Purdue University. This partnership will ensure that consistently applied best practice proven behavior management techniques and behavioral supports will be available to students of the school. This partnership and the support tit provides will enable Purdue Polytechnic Indianapolis High School to provide educational growth to its students in a safe environment.

Purdue Polytechnic High School of Indianapolis, Inc. will agree to the standard indemnification language found in the Contract for Charter. It will also obtain required liability insurance coverage from a provider of its choosing and has budgeted for such expense accordingly. The budget for Purdue Polytechnic Indianapolis High School has addressed the needs and potential risks associated with a relatively high concentration of students with special needs.

J. Timeline

Please see Attachment O for a timeline of start-up activities that Purdue Polytechnic Indianapolis High School will complete from charter approval to opening day.

IV. Summary of Strengths

Now, more than ever, the need is great to deliver more innovative learning experiences and provide opportunities to high school students who have STEM capabilities but might not have access to tailored programs to ensure their success. Purdue Polytechnic Indianapolis High School is a unique solution that will cater specifically to these students and help them emerge with the knowledge and skills needed for personal, professional and community success. Purdue Polytechnic Indianapolis High School is specifically designed to develop a new generation of skilled talent by seamlessly transitioning students from high school and postsecondary education to high-wage, high-demand jobs.

Purdue Polytechnic Indianapolis High School will provide students with an opportunity to “learn by doing” while designing their own solutions to real-world challenges and using the most up-to-date equipment and technology. Students will be supported by talented teachers who receive extensive training and professional development from a world-renowned university and will also have university resources available to them at their fingertips. Students will select a career cluster in the rapidly growing STEM industries and gain exposure to real-life jobs, skills, and solutions that are shaping the 21st century. Through Purdue Polytechnic Indianapolis High School’s academic program, students will graduate from high school with the skills needed to matriculate into a four-year university or enter directly into the workforce. The Purdue Polytechnic Indianapolis High School students will help steer learning making it more engaging, relevant, and fun.

The rigorous curricula and learning environment are built on strong industry relationships, an innovative partnership with Purdue University and a goal to ensure a diverse student body succeeds in the 21st Century economy.

ATTACHMENTS

Attachment A: Performance Goals

Purdue Polytechnic Indianapolis High School

Academic Performance Goal 1

Mission Statement:

The mission of Purdue Polytechnic Indianapolis High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution.

Performance: By graduation, students are prepared for post-secondary education success.

Annual Targets:

Goal: Students graduate from Purdue Polytechnic Indianapolis High School having earned college credit or an industry-recognized credential.					
Charter Year	**Calendar Year**	**Exceeds Standard**	**Meets Standard**	**Approaching Standard**	**Does Not Meet Standard**
1	2017-18	N/A	N/A	N/A	N/A
2	2018-19	N/A	N/A	N/A	N/A
3	2019-20	N/A	N/A	N/A	N/A
4	2020-21	>50%	50 – 40%	30 – 40%	<30%
5	2021-22	>55%	55 – 45%	35 – 45%	<35%
6	2022-23	>60%	60 – 50%	40 – 50%	<40%
7	2023-24	>60%	60 – 50%	40 – 50%	<40%

Assessment Tools and Measures: The number of graduates earning an industry certification or receive at least 3 transcripted college credits

Attachments: N/A

Rationale for Goal and Measures: Preparing students for career pathways and enabling them gain admission into post secondary-secondary education is essential to Purdue Polytechnic's mission.

The measures associated with this goal far exceed the measures set forth by the Indiana Department of Education's (IDOE) A-F College and Career Readiness measure (25%). These measures are appropriately rigorous.

After the school's first year of being evaluated on this goal, the Board of Directors plans to work with the Mayor's Office to re-evaluate these annual targets.

Assessment Reliability and Scoring Consistency: The data used to calculate this measure will be from the Indiana Department of Education's calculated accountability results.

Baseline Data: N/A. Data will be made available when IDOE publishes its college and career readiness measure used to calculate state accountability results. Please note that the school will not produce graduates until after its fourth year of operation (2020-21).

Purdue Polytechnic High School

Academic Performance Goal 2 Mission Statement: The mission of Purdue Polytechnic Indianapolis High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution.

Performance: By graduation, students demonstrate the skills needed to be successful in college and workplace.

Annual Targets:

Goal: Students demonstrate mastery of identified cognitive skills needed to be successful in college persistence, career readiness, and life readiness.

Charter Year	Calendar Year	Exceeds Standard	Meets Standard	Approach Standard	Does Not Meet Standard
1	2017-18	N/A	N/A	N/A	N/A
2	2018-19	N/A	N/A	N/A	N/A
3	2019-20	N/A	N/A	N/A	N/A
4	2020-21	≥80% of students score 6 or above	70- 79.9% of students score 6 or above	60-69.9% of students score 6 or above	<60% of students score 6or below
5	2021-22	≥85% of students score 6 or above	75- 84.9% of students score 6 or above	65-74.9% of students score 6 or above	<65% of students score 6or below
6	2022-23	≥90% of students score 6 or above	80- 89.9% of students score 6 or above	70-79.9% of students score 6 or above	<70% of students score 6or below
7		≥95% of students score 6 or above	85- 94.9% of students score 6 or above	75-84.9% of students score 6 or above	<75% of students score 6or below

Assessment Tools and Measures: Summit Cognitive Skills Rubric

Attachments: See Attachment B

Rationale for Goal and Measures: Preparing students for the workplace either immediately after graduation or after they complete post-secondary education is

essential to the mission of Purdue Polytechnic Indianapolis High School. The Summit cognitive skills outline the key practices believed to be important for college and career readiness.

Assessment Reliability and Scoring Consistency: Purdue Polytechnic High School will use[1] the Cognitive Skills Rubric, developed with the Stanford Center for Assessment, Learning, and Equity (SCALE) aligned to Common Core and Next Generation Science standards"

Baseline Data: Cognitive Skill Rubric Levels based by Grade:

Grade 9: 3.5-5.5

Grade 10: 4- 6

Grade 11: 4.5- 6.5

Grade 12: 5.5- 8

[1] (Brown, 2016)

Purdue Polytechnic Indianapolis High School

Operational Performance Goal 1

Mission Statement:

The mission of Purdue Polytechnic Indianapolis High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution.

Performance: Student remain enrolled in the school to gain the skills and experiences needed to succeed in post-secondary education or the workplace.

Annual Targets:

Goal: The school will maintain a high student retention rate.					
Charter Year	**Calendar Year**	**Exceeds Standard**	**Meets Standard**	**Approaching Standard**	**Does Not Meet Standard**
1	2017-18	N/A	N/A	N/A	N/A
2	2018-19	≥80% of students are retained	70 – 79.9% of students are retained	60 – 69.9% of students are retained	<60% of students are retained
3	2019-20	≥85% of students are retained	75 – 84.9% of students are retained	65 – 74.9% of students are retained	<65% of students are retained
4	2020-21	≥90% of students are retained	80 – 89.9% of students are retained	70 – 79.9% of students are retained	<70% of students are retained
5	2021-22	≥90% of students are retained	80 – 89.9% of students are retained	70 – 79.9% of students are retained	<70% of students are retained
6	2022-23	≥90% of students are retained	80 – 89.9% of students are retained	70 – 79.9% of students are retained	<70% of students are retained
7	2023-24	≥90% of students are retained	80 – 89.9% of students are retained	70 – 79.9% of students are retained	<70% of students are retained

Assessment Tools and Measures: Student enrollment records. The percent of students retained from one school year to the next.

Attachments: N/A

Rationale for Goal and Measures: Maintaining a steady student enrollment is also important to Purdue Polytechnic Indianapolis High School's financial viability and ability to meet its performance goals.

The benchmarks associated with this goal are meant to become more rigorous as the school becomes more well-established and also gains a positive reputation in the community and throughout Marion County.

After the school's first year of being evaluated on this goal, the Board of Directors plans to work with the Mayor's Office to re-evaluate these annual targets.

Assessment Reliability and Scoring Consistency: Accurate student enrollment records are maintained and reported to the Indiana Department of Education on a weekly basis.

Baseline Data: At the recommendation of the Mayor's Office of Education Innovation, student attrition rates from Herron High School (April 2015 Replication Application) were assessed in determining appropriate benchmarks.

Purdue Polytechnic Indianapolis High School

Operational Performance Goal 2

Mission Statement:

The mission of Purdue Polytechnic Indianapolis High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution.

Performance: All students have access to an industry or faculty mentor and internship.

Annual Targets:

Goal: The total number of secured internships and business and faculty mentors are sufficient for each 12th grader to have an internship or mentor.

Charter Year	Calendar Year	Exceeds Standard	Meets Standard	Approaching Standard	Does Not Meet Standard
1	2017-18	N/A	N/A	N/A	N/A
2	2018-19	N/A	N/A	N/A	N/A
3	2019-20	N/A	N/A	N/A	N/A
4	2020-21	>120 total available internships and mentors	120 total available internships and mentors	100 total available internships and mentors	80 or fewer total available internships and mentors
5	2021-22	>120 total available internships and mentors	120 total available internships and mentors	100 total available internships and mentors	80 or fewer total available internships and mentors
6	2022-23	>120 total available internships and mentors	120 total available internships and mentors	100 total available internships and mentors	80 or fewer total available internships and mentors
7	2023-24	>120 total available internships and mentors	120 total available internships and mentors	100 total available internships and mentors	80 or fewer total available internships and mentors

Assessment Tools and Measures: The number of committed internships by industry partners and the number of committed mentorships by industry partners and Purdue faculty.

Attachments: N/A

Rationale for Goal and Measures: Hands-on work experiences and mentors help students learn the skills needed to be successful in post-secondary education and the workplace.

After the school's first year of being evaluated on this goal, the Board of Directors plans to work with the Mayor's Office to re-evaluate these annual targets.

Assessment Reliability and Scoring Consistency: N/A

Baseline Data: N/A. Please note that students will not participate in internships until their senior year of high school. The school will open with grade 9 only and grow a grade level each year until it reaches full capacity, serving grades 9-12. The school will begin serving grade 12 during its fourth year of operation (2020-21).

Attachment A.5: Summit Cognitive Skills Rubric

Attachment A.5: Summit Cognitive Skills Rubric

Close alert

Analysis & Synthesis	5	6	7	8
Comparing/ Contrasting Identifying and describing similarities and differences and use them to support an argument or explanation	Identifies significant similarities and differences relevant to a specific claim/main idea/thesis. Explains in a limited way why the similarities/differences are meaningful within the frame of reference (i.e., the claim/main idea/thesis).	Analyzes or evaluates significant similarities and differences relevant to a specific claim/main idea/thesis. Thoroughly explains why the similarities/differences are meaningful within the frame of reference. Organizes points of comparison in a logical way.	Analyzes or evaluates significant similarities and differences relevant to a specific claim/main idea/thesis, including an explanation of how the similarities/differences support a specific claim/main idea/thesis. Organizes points of comparison in a way that supports understanding and analysis.	Analyzes or evaluates significant similarities and differences relevant to a specific claim/main idea/thesis, including an explanation of how the similarities/differences refine or sharpen a specific claim/main idea/ thesis. Organizes points of comparison in a way that best highlights and frames similarities and differences for analysis and understanding.
Critiquing the Reasoning of Others Evaluating arguments, explanations, and solutions, including identifying logical fallacies and missteps	Delineates and evaluates the argument/explanation and specific claims, assessing whether the reasoning is valid and/or the evidence is relevant and sufficient. Where applicable, identifies	Clearly delineates and evaluates the argument/explanation and specific claims, thoroughly assessing in detail whether the reasoning is valid and/or the evidence is relevant and	Clearly delineates and evaluates the argument/explanation and specific claims, thoroughly assessing in detail whether the reasoning is valid and the evidence is relevant and	All of Level 7 PLUS Identifies and evaluates the appropriateness of the premise(s) or principle(s) on which the argument is constructed, and, where

Analysis & Synthesis	5	6	7	8
	some false statements and fallacious reasoning (logical fallacies).	sufficient. Where applicable, identifies false statements and fallacious reasoning (logical fallacies) and considers alternate claims or evidence that would improve the logic of the argument/explanation.	sufficient. Identifies false statements and fallacious reasoning and thoroughly explains alternate claims or evidence to improve the logic of the argument/explanation.	applicable, suggests alternate premise(s) or principle(s).
Identifying Patterns and Relationships Analyzing and organizing information (including numerical and visual) to identify patterns and/or relationships to answer a question or solve a problem	Organizes information into useful structures. Accurately identifies patterns and some relationships among patterns.	Organizes information into useful structures. Accurately identifies significant/relevant patterns and relationships among patterns.	Organizes information into useful structures. Identifies and explains significant/relevant patterns and the relationships among patterns. Makes note of examples and data that do not fit the pattern(s) or relationship(s).	Organizes information into useful structures. Identifies and explains significant/relevant patterns and relationships among patterns. Identifies and explains examples and data that do not fit the pattern(s) or relationship(s).
Interpreting Data/Info Interpret data and/or information from sources and draw justifiable conclusions from data.	Provides an accurate interpretation of data/information. Applies some analytic strategies (e.g., sorting, compare/contrast) or concepts (e.g., mean, mode) to characterize the data/information.	Provides an accurate interpretation of data/information. Applies appropriate analytic strategies or concepts to characterize the data/information. Considers the context from which the data/information arose.	Provides a thorough, accurate interpretation of data/information. Applies multiple analytic strategies or concepts to characterize the data/information. Considers the context from which the data/information arose. Recognizes gaps or outliers in the data/information.	Provides a thorough, accurate interpretation of data/information. Applies multiple analytic strategies/concepts and determines which strategy/concept is best for the purpose of the analysis. Considers the context from which the data/information arose. Explains gaps or

Analysis & Synthesis	5	6	7	8
				outliers in the data/information.
Justifying / Constructing an Explanation Using logic and reasoning to justify a response or explain a phenomenon	Provides a logical chain of reasoning to explain or justify steps, procedures, or phenomena in support of an overall solution strategy / procedure or a holistic explanation of the phenomenon. Develops explanation/justification with relevant detail/examples.	Applies a specific premise (such as a disciplinary principle, axiom, or theory) to explain or justify a solution, strategy, response, or phenomenon. Fully develops explanation/justification through relevant detail and examples. Acknowledges limitations, tradeoffs, and/or alternate explanations /approaches.	Applies one or more specific premises (such as disciplinary principles, axioms, or theories) to insightfully explain or justify a solution, strategy, response, or phenomenon. Fully develops explanation/justification through detail and examples. Responds to limitations, tradeoffs, and/or alternate explanations/approaches.	Uses a variety of logical strategies and relevant, sufficient detail and examples to develop a sophisticated, persuasive explanation or justification that fully takes into account limitations, tradeoffs, and/or alternate explanations/approaches.
Making Connections & Inferences Connecting ideas and making inferences based on evidence or reasoning	Makes clear and relevant inferences based on evidence and partially explains the larger significance of the inference. Connections to the larger idea are made through multiple examples but may have some gaps in explanation or may not be fully developed.	Makes clear, relevant, thoughtful inferences and explains their larger significance. Where applicable, identifies limitations of inferences based on gaps in evidence. Connections to the larger idea are clearly made through multiple examples.	Makes clear, highly relevant and thoughtful inferences and thoroughly explains their larger significance. Where applicable, identifies limitations of inferences based on gaps in evidence. Uses inferences as the basis for predictions or broader generalizations. Connections to the larger idea are clearly made through multiple	Makes clear, highly relevant, insightful inferences and thoroughly explains their larger significance with sophisticated insight or originality of interpretation. Where applicable, identifies limitations of inferences based on gaps in evidence. Uses inferences as the basis for predictions or broader generalizations. Connections

Analysis & Synthesis	5	6	7	8
			examples, including attempts at non- or counter-examples.	to the larger idea are clearly made through multiple examples, including non- or counter-examples.
Modeling Representing concepts** with models, visual representations or symbols. And/Or Using appropriate tools to understand and analyze situations. **"Concepts," in this dimension, refers to abstract situations/information, processes, and systems	Identifies significant components of a concept and develops an accurate visual and/or model to represent key features. Visual or model begins to make visible the relationship of the components to the whole.	Identifies significant components of a concept and develops accurate visual(s) and/or model(s) to represent key features. Visual(s) or model(s) highlight the relationship of the components to the whole and makes visible the relationships among components.	Identifies significant components of a complex concept and develops accurate visual(s) and/or model(s) to represent key features. Visual(s) or model(s) highlight the relationships of the components to the whole and the relationships among components. Model allows for manipulation and/or testing of a proposed idea, process, or system.	Develops and/or uses multiple types of models to accurately represent and manipulate complex concepts. Visuals or models highlight the relationships of the components to the whole and the relationships among the components. Evaluates the merits and limitations of each model and moves flexibly between model types as appropriate to the purpose.
Composing / Writing	5	6	7	8
Argumentative Claim Developing a strong opinion/ argument through clear, well-sequenced claims.	Claims and subclaims are clearly introduced and organized in a way that makes relationships among claims & subclaims clear and supports the reader's understanding. Some attention is given to the significance of claims.	Claims and subclaims are clear, focused, and consistent throughout the writing; the sequencing of the claims and subclaims builds the reader's understanding throughout the writing. The significance of	Claims and subclaims are clear, precise, and consistent throughout the writing with some nuance; the sequencing of the claims and subclaims creates a coherent structure that builds the reader's understanding throughout the	Claims and subclaims are clear, precise, and nuanced throughout the writing; the sequencing of the claims and subclaims creates a complex and coherent structure that builds the reader's understanding throughout the

Analysis & Synthesis	5	6	7	8
		the claims is clearly established.	writing. The significance of the claims is clearly established and developed.	writing. The significance of the claims is clear and persuasive.
Counterclaims Acknowledging and developing alternate or opposing positions	Develops counterclaims with some evidence or detail and points out their limitations.	Develops counterclaims fairly with sufficient evidence or detail, pointing out their strengths and limitations in a way that anticipates the audience's knowledge level and concerns.	Develops counterclaims fairly and thoroughly with sufficient evidence or detail, pointing out their strengths and limitations in a way that anticipates the audience's knowledge level, concerns, values, and possible biases.	Develops counterclaims fairly and thoroughly with highly relevant evidence or detail; refutes counterclaims thoroughly and strategically, conceding points where appropriate to strengthen the writer's own argument.
Explanation of Evidence Analyzing how the selected evidence support the writer's statements (e.g., claims, controlling ideas).	Provides clear analysis that accurately explains how the selected evidence supports claims or statements.	Provides insightful and clear analysis that thoroughly and accurately explains how the evidence supports claims or statements; where applicable, analysis acknowledges some weakness(es) or gaps in the evidence.	Provides insightful, clear, compelling analysis that thoroughly and accurately explains how the evidence supports claims or statements; where applicable, analysis addresses weakness(es) or gaps the evidence.	Provides insightful, compelling analysis that thoroughly, accurately, and concisely explains how the evidence supports claims or statements; where applicable, analysis clearly addresses weakness(es) or gaps in the evidence; analysis is elegant in its precision and/or sophistication and originality.
Informational / Explanatory Thesis	Main idea/thesis is clear, focused, and consistent throughout the writing;	Main idea/thesis is clear and complex; relevant, sufficient supporting ideas are explicitly	Main idea/thesis is complex, focused, and consistent; highly relevant supporting	Main idea/thesis is complex, precise, and consistent; significant, highly relevant

Analysis & Synthesis	5	6	7	8
Constructing explanations or conveying ideas and information through clear, well-organized, relevant ideas.	supporting ideas are relevant, organized in a way that makes relationships among ideas clear and that supports the reader's understanding.	connected to main idea and organized logically to create a coherent structure that builds the reader's understanding throughout the writing.	ideas are tightly connected to the main idea and with each other to create a complex and coherent structure that builds the reader's understanding throughout the writing.	supporting ideas build on the main idea and on one another in an elegant progression to create a complex and coherent structure that builds the reader's understanding throughout the writing.
Integration of Evidence Representing evidence accurately (via notes, summary, and/or paraphrase) and including evidence in text.	Evidence is presented objectively and accurately, positioned appropriately in the text, and contextualized with introductory and/or explanatory phrases or statements.	Evidence is presented objectively and accurately, positioned and contextualized appropriately, and purposefully excerpted, paraphrased, or summarized to highlight the aspects that are most relevant or important to the argument, explanation, or analysis.	Evidence is presented objectively and accurately, positioned and contextualized appropriately, and excerpted, paraphrased, or summarized strategically. Evidence is integrated into the text in a variety of ways (e.g., breakout quotes, combination of summary and direct quote) that support the argument, explanation, or analysis and develop a consistent tone appropriate to the purpose.	Evidence is presented objectively and accurately and integrated seamlessly and strategically into the text in a variety of ways that support the argument, explanation, or analysis and develop a consistent and sophisticated tone appropriate to the purpose.
Introduction and Conclusion Framing a composition with a relevant introduction and conclusion.	Introduction includes relevant background or context information about the topic, introduces main idea(s) or claim(s), and establishes purpose for writing.	Introduction includes relevant and sufficient background or context information about the topic, introduces main idea(s) or claim(s), and establishes purpose for writing;	Introduction clearly contextualizes the topic, and clearly establishes the main idea(s) or claim(s) and purpose for writing; introduction is engaging.	Introduction clearly and concisely contextualizes the topic and establishes the main ideas(s) or claims(s); introduction clearly establishes the purpose and

Analysis & Synthesis	5	6	7	8
	Conclusion summarizes the content presented and pulls multiple ideas together in relation to the main idea(s) or claim(s).	introduction is engaging. Conclusion summarizes, pulls ideas together, and highlights important points of the content presented; when appropriate, conclusion considers some implication(s) of the content presented.	Conclusion summarizes, highlights, and/or extends ideas as appropriate; when appropriate, conclusion addresses implications or significance of the content presented.	outlines the structure of the content that follows; introduction is engaging and inviting. Conclusion strongly supports the content presented by clearly summarizing, highlighting, and/or extending ideas as appropriate; when appropriate, conclusion clearly addresses implications/significance of and/or acknowledges questions that arise from the content presented.
Narrative Developing an oral or written narrative that relates connected experiences, events, procedural steps, or the like (whether they are real or imagined)	Orientation (including point of view), storyline, and/or organization of experiences, events, and/or steps are clearly established; organizational sequence is logical, coherent, and/or unfolds naturally and smoothly; where appropriate, multiple narrative techniques are used effectively (e.g., description, dialogue, pacing, or reflection); description includes precise vocabulary and, where appropriate, vivid	All of Level 5, plus: Uses a variety of techniques to sequence experiences/events/steps so that they build on one another to create a coherent whole, a particular tone and/or mood, and/or a specific outcome.	All of Level 6, plus: Uses narrative techniques to provide deep insight into the content (personalities and motivations, significance of events, etc.) Develops multiple plots, storylines, or sequences of events/steps.	All of Level 7, plus: Manipulates pace and other narrative elements to highlight the significance of experience/events/steps or create specific effects.

Analysis & Synthesis	5	6	7	8
	details and sensory language; conclusion clearly follows from the narrated experiences/events/steps.			
Organization (Transitions, Cohesion, Structure) Using text structure and transitions to communicate with clarity and coherence.	Paragraphs and/or sections are connected and logically build upon one another to deepen understanding of ideas and clarify relationships among ideas. Transitions are varied and appropriately and effectively used.	Paragraphs and/or sections are connected and clearly and logically build upon one another to deepen understanding of complex ideas and to clarify relationships among those ideas. Transitions are varied and appropriately and effectively used. Sequencing of paragraphs and use of transitions help build cohesion.	Sequencing of paragraphs and/or sections creates a coherent whole that deepens understanding of the content and builds toward a particular outcome. Transitions are appropriate, effective, and varied in their structure and location.	Sequencing of paragraphs or sections creates a coherent whole that deepens understanding of the content and clearly guides the reader toward a particular outcome. Transitions are appropriate, effective, and varied in their structure and location. Sequencing of ideas and transitions is seamless and fluid, and enhances the purpose of the writing.
Selection of Evidence Using relevant and sufficient evidence to support claims	Selects a variety of relevant evidence that is sufficient to support main claim(s); evidence still only generally supports subclaims.	Selects a variety of detailed, relevant evidence that is sufficient to support both main claim(s) and subclaims.	Selects a variety of detailed, significant evidence that is sufficient to support and develop both main claim(s) and subclaims	Selects the most significant evidence that is highly appropriate to the audience's knowledge of the topic or other concerns to persuasively support and develop both claim(s) and subclaims.

Inquiry	5	6	7	8
Asking questions Developing focused, answerable inquiry and research questions	Questions are valid, testable or researchable, and based on patterns or observations.	Questions are valid, focused, testable or researchable, based on patterns/observations, current research, and/or a specific model or theory.	Questions are valid, precise, testable or researchable, and based on patterns/observations, specific evidence from current research, and/or a specific model or theory.	Questions are valid, precise, testable or researchable, based on patterns/observations, specific evidence from current research and/or a specific model or theory, and push standard thinking on a given topic or in a particular discipline.
Designing Processes and Procedures Following and/or developing step-by-step processes to use in the course of answering problems/prompts or conducting inquiries/investigations	Creates an orderly action plan that addresses all aspects of a problem/prompt with some inefficiencies.	Creates a clear and orderly action plan that is mostly replicable and addresses all aspects of a problem/prompt in an efficient way. Includes a rationale for some steps or aspects of the plan.	Creates a clear, detailed action plan that is fully replicable and addresses all aspects of a problem/prompt in an efficient way. Includes a rationale for several steps or aspects of the plan. Where applicable, includes some alternate or contingency plans.	Creates a clear, detailed, fully replicable action plan to address a problem/prompt as efficiently as possible. Includes a rationale for the complete plan. Where applicable, acknowledges potential weaknesses or limitations of the plan and includes thorough alternate or contingency plans.
Predicting/ Hypothesizing Developing hypotheses and predictions	Constructs a testable hypothesis about the investigated question, with a basic description of the variables (“if.. then…”). Hypothesis relates to	Constructs a clear, testable hypothesis about the investigated question, with an accurate description of the variables ("if... then..."). Hypothesis is based on	Constructs a precise, testable hypothesis about the investigated question, with an accurate explanation of the relationship between variables ("if... then...	Constructs a precise, testable, and insightful hypothesis about the investigated question, with accurate and thorough explanation of the relationship between

Inquiry	5	6	7	8
	observation, research, or scientific principle.	observation, research, scientific principle, model, or theory.	because...)" Hypothesis is based on observation, research, scientific principle, model, or theory.	variables ("if... then... because"). Hypothesis is based on observation, research, scientific principle, model, or theory.
Products & Presentations	5	6	7	8
Conventions Using discipline-appropriate conventions to support clear expression of ideas and information	Uses the conventions of the discipline appropriately; some minor errors, while noticeable, do not impede understanding.	Uses the conventions of the discipline appropriately with almost no noticeable errors.	Applies the conventions of the discipline consistently to support clear expression of ideas and information. Errors are so few and so minor that the reader would be unlikely to notice them unless specifically looking for them.	Applies the conventions of the discipline consistently and precisely to support clear, sophisticated expression of ideas and information.
Multimedia in Oral Presentation Integrating multiple mediums, including technology, to create high-quality spoken presentations	Most multimedia components and visual displays clarify or illustrate information and ideas and strengthen arguments, explanations, and/or narratives by highlighting significant points.	All multimedia components and visual displays are purposeful and effective (i.e., clarify, illustrate, and strengthen arguments, explanations, and/or narratives) and add interest to the presentation.	Multimedia components and visual displays are purposeful, engaging, effective, and strategically/efficiently used to enhance understanding of arguments, explanations, and narratives.	Multimedia components and visual displays are purposeful, engaging, effective, and strategically/efficiently used to enhance understanding of arguments, explanations, and narratives. Integration of multimedia into presentation is seamless, engaging, and sophisticated.

Inquiry	5	6	7	8
Multimedia in Written Production Integrating technology to create high-quality written products	Uses technology, including the internet, to effectively and efficiently produce, publish, and update individual or shared writing products. Uses appropriate technology/media tools to illustrate ideas or show relationships among information/ideas effectively.	Uses technology, including the internet, to produce, publish, and update individual or shared writing products. Uses appropriate technology/media tools to illustrate ideas or show relationships among information/ideas by taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	Uses technology, including the internet, to produce, publish, and update individual or shared writing products. Uses carefully selected technology/media tools creatively to illustrate ideas or show relationships among information/ideas by taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	Uses technology beyond commonly used tools to explore novel and effective ways of producing writing products.
Oral Presentation Using appropriate public speaking strategies, including interaction with presentation mediums, to engage the audience and communicate points	Uses consistently appropriate eye contact, adequate volume, clear pronunciation, and appropriate body posture (e.g., calm, confident).	Demonstrates consistent control of eye contact, volume, pronunciation, and body posture. Uses some variation in volume and inflection to emphasize key points. Uses some body movements to enhance articulation.	Demonstrates strong control of eye contact, pronunciation, and body posture. Varies volume and inflection to maintain audience interest and emphasize key points. Uses fluid body movements to help audience visualize ideas. May use additional engagement techniques such as humor, anecdotes, rhetorical questions, etc. as appropriate to the context.	Demonstrates strong control of eye contact, pronunciation, and body posture. Varies volume and inflection to maintain audience interest and emphasize key points. Uses fluid body movements to help audience visualize ideas. Demonstrates a particularly engaging voice or style of presentation.

Inquiry	5	6	7	8
Precision Expressing ideas and information with exactness, specificity, correct use of terminology, and refinement	Consistently expresses ideas with clarity and specificity. Consistently defines terms, symbols, etc.	Consistently expresses ideas with clarity and specific, highly relevant detail. Consistently defines terms, symbols, etc.	Expresses ideas with clarity and efficiency, using no more detail than is needed for the given purpose. Consistently defines terms, symbols, etc.	Expresses ideas and information with near-perfect clarity and efficiency, using no more detail than is needed for the given purpose. Consistently defines terms, symbols, etc. Expression is refined and sophisticated.
Style and Language (Tone, Academic Language, Syntax) Using appropriate style in a written product, including academic language, tone, and syntax	Consistently uses a formal style with consistently appropriate academic or specialized language. Sentence patterns are somewhat varied, with strong control over basic sentence structures and variable control over more complex structures.	Consistently uses a formal style and academic/specialized language when most appropriate but also varies style and language effectively given the purpose, audience & conventions of the writing. Sentence structures are varied and effective.	Consistently uses a formal style and academic/specialized language when most appropriate but also varies style, language, tone, and voice effectively given the purpose, audience & conventions of the writing. Sentence structures are varied and used strategically to enhance meaning by drawing attention to key ideas or reinforcing relationships among ideas.	Style, language, tone, and voice build ethos and high reader engagement. The style, language, tone, and voice are perfectly appropriate to the audience, and effectively accomplish the author's purpose. Sentence structures are varied, used strategically to enhance meaning, and are often powerful or beautiful.

Speaking & Listening	5	6	7	8
Discussion / Contribution	Expresses original ideas clearly and persuasively;	Expresses original ideas clearly and persuasively.	Expresses original ideas clearly and persuasively.	Expresses original ideas clearly and persuasively.

Speaking & Listening	5	6	7	8
Communicating ideas and contributing to discussion through questioning, connecting, and probing	connects to the ideas of others and builds new pathways of discussion. Attempts to deepen discussion by asking connecting questions or building on the responses of others.	Builds new pathways of discussion that are clearly connected to the ideas of others. Propels conversations by relating to broader themes.	Builds new pathways of discussion that are clearly connected to the ideas of others. Uses questions and summarization to preserve focus. Propels conversations by relating to broader themes.	Builds new pathways of discussion that are clearly connected to the ideas of others. Uses questions and summarization to preserve focus. Propels conversations by relating to broader themes, probing reasoning and evidence and/or promoting divergent and creative perspectives.
Norms / Active Listening Using roles and norms to support collegial discussions and completion of group work	Adheres to teacher-enforced collegial discussion norms. Facilitates progress toward specific goals & deadlines. Attempts to establish individual roles within the group as needed.	Adheres to teacher- and group-enforced collegial discussion norms. Effectively facilitates progress toward specific goals & deadlines. Establishes appropriate individual roles within the group as needed.	Adheres to and helps enforce collegial discussion norms. Sets clear goals & deadline and facilitates conversation and interaction to meet them. Manages individual roles within the group as needed.	Applies collegial discussion norms to promote civil, democratic discussions & decision-making. Sets clear and detailed goals & deadlines and effectively facilitates conversation/interaction to meet them. Efficiently manages individual roles and partnerships within the group as needed.
Preparation Entering a discussion or presentation with appropriate evidence and relevant details.	Comes to discussions having read & researched material for teacher-provided questions; explicitly draws on texts & research to stimulate	Come to discussions with responses and evidence generated with peers through studying, research, or inquiry; explicitly draws on texts and	Come to discussions with self-generated questions from studying, research, and/or inquiry. Attempts to move discussion along by using	Comes to discussions with self-generated, sequenced, specific questions and evidence to move the discussion along purposefully

Speaking & Listening	5	6	7	8
	a thoughtful, well-reasoned exchange of ideas.	research to stimulate a thoughtful, well-reasoned exchange of ideas.	those questions at appropriate moments.	(i.e., toward an intended outcome or desired understanding).
Textual Analysis (Close Reading)	5	6	7	8
Development Explaining the connection between events, ideas or concepts in a text using specific details.	Analyzes clearly and accurately the development of a complex event, individual (e.g., someone with conflicting motivations) and/or idea/concept within a text. Analysis includes how the complex event, individual, and/or idea/concept is introduced, explained, and developed, and how it connects, is distinguished from, and interacts with other elements in the text.	Analyzes clearly and accurately how a series of events or ideas/concepts unfolds in a text, including when and how they are introduced and developed, the connections between/among them, and how they contribute to the development of the storyline or theme/central idea of the text.	Analyzes clearly and accurately how a complex series of events or ideas/concepts unfolds in a text, including when and how they are introduced and developed, the connections between/among them, and how they contribute to the development of the storyline or theme/central idea of the text.	Analyzes clearly and accurately the development (e.g., introduction, unfolding, connections, interactions) of a complex event, individual, and/or idea/concept or a series of complex events and/or ideas/concepts within a text. Analysis includes an evaluation of the effectiveness of the development.
Point of View/Purpose Analyzing the point of view or purpose of a character, narrator, and/or author/speaker and how that point of view influences the message or meaning of the text	Accurately describes author's/speaker's point of view or purpose and analyzes how that point of view or purpose is conveyed and developed through the use of relevant details in the text. Explains how author's point	Analyzes author's/speaker's point of view, including its development, limitations, biases, and differences from and responses to other points of view. Explains how author/speaker uses rhetoric or differences in point of	Analyzes author's/speaker's point of view, including its development, limitations, biases, and differences from and responses to other points of view. Analyzes author's/speaker's use of rhetoric or differences in	All of Level 7 PLUS: Identifies cases where the rhetoric or the development of point of view is particularly effective and analyzes how the point of view and/or rhetoric contributes to the

Speaking & Listening	5	6	7	8
	of view differs from others, including the limitations or biases of the author's/speaker's point of view. Where applicable, explains how the author acknowledges and responds to conflicting evidence or viewpoints.	view to create specific effects.	point of view to create specific effects. Analyzes the effect of cultural experience on author's/speaker's point of view.	power, persuasiveness, or beauty of the text.
Structure Analyzing an author's structural writing choices how they (3-5): contribute to the overall structure of the text; (6-12): affect the clarity and effectiveness of arguments, explanations, or narratives	Accurately and thoroughly describes the key organizing features and sections in a text. Evaluates the effectiveness of a particular sentence, paragraph, or section in developing the central idea/theme.	Accurately and thoroughly describes the key organizing features and sections in a text. Evaluates the effectiveness of particular sections in developing the central idea/theme of a text, as well as other key ideas/claims or elements (e.g., tone, meaning) of a text.	Efficiently describes the key organizing features and sections in a text. Evaluates the effectiveness of the overall structure of the text in developing the argument, explanation, or narrative.	Efficiently describes the key organizing features and sections in a text. Evaluates the effectiveness of the overall structure of the text in developing the argument, explanation, or narrative, including whether the structure helps makes points clear and/or convincing, and the text engaging. When applicable, proposes structural changes that could improve the development of the argument, explanation, or narrative.
Theme/Central Idea	Identifies a major theme/central idea in a text	Identifies multiple themes/central ideas in a text	Identifies multiple themes/central ideas in a text	Identifies multiple themes/central ideas in a text

Speaking & Listening	5	6	7	8
Determining theme(s)/central idea(s) with details that convey the central idea(s)	and provides an accurate explanation of how that theme/central idea is developed through specific details. Provides some explanation of how the theme/central idea interacts with supporting ideas or other elements in the text (e.g., setting, plot, character).	and provides an accurate analysis of their development and interaction with each other and with supporting ideas or other elements in the text (e.g., setting, plot, character).	and provides a thorough, accurate analysis of their development and interaction with each other and with supporting ideas or other elements in the text (e.g., setting, plot, character). Where applicable, interprets theme/central idea through a critical lens or framework.	and provides a sophisticated analysis of their development and interaction with each other and with supporting ideas or other elements in the text, including an evaluation of which theme/central idea is the most significant and why. Where applicable, persuasively interprets theme/central idea through a critical lens or framework.
Word Choice Analyzing the effect of language, specifically word choice, on the meaning, tone, or mood of a text, and explaining how word choice relates to context or medium.	Identifies words and phrases that impact the meaning and tone of the text; clearly and accurately explains the meaning of those words and phrases as they are used in the text (including figurative, connotative, and technical meanings). Clearly explains the impact of those specific word choices on the meaning and/or tone of the text. Generally explains how specific word choices relate to context or medium.	Identifies words and phrases that impact the meaning and tone of the text; clearly and accurately explains the meaning of those words and phrases as they are used in the text (including figurative, connotative, and technical meanings). Explains the cumulative impact of those specific word choices on the meaning and/or tone of the entire text. Clearly explains how specific word choices relate to context or medium.	Identifies words and phrases that impact the meaning and tone of the text; clearly and accurately explains the meaning of those words and phrases as they are used in the text (including figurative, connotative, and technical meanings). Explains the impact of a pattern of word choices on meaning and/or tone, including how patterns of word choice relate to context or medium. Where applicable, generally explains how an author uses or refines	Identifies words and phrases that impact the meaning and tone of the text; clearly and accurately explains the meaning of those words and phrases as they are used in the text (figurative, connotative, and technical meanings). Analyzes the impact of a pattern of word choices on meaning and tone and the relationship between word choice and context or medium. Where applicable, clearly analyzes how an author uses or refines the

Speaking & Listening	5	6	7	8
			the meaning of a key term/concept over the course of a text.	meaning of a key term/concept over the course of a text.
Using Sources	5	6	7	8
Contextualizing Sources Identifying how a source is situated within the world of its origin (time period, location, socio-political climate, cultural conditions, etc.) and explaining how the perspectives within the source shape and/or are shaped by those conditions	Provides accurate information about the historical, scientific, political, economic, social, and/or cultural conditions of the source's origin. Makes connections between these conditions and the contents of the source.	Provides accurate, relevant information about the historical, scientific, political, economic, social, and/or cultural conditions of the source's origin, including (where relevant) events and conditions leading up to or immediately following the source's creation. Generally explains how these conditions shape the meaning or significance of the source.	Provides accurate, relevant information about the historical, scientific, political, economic, social, and/or cultural conditions of the source's origin, including (where relevant) events and conditions leading up to or immediately following the source's creation. Clearly explains how these conditions shape the meaning or significance of the source.	Provides thorough, relevant information about the historical, scientific, political, economic, social, and/or cultural conditions of the source's origin, including (where relevant) events and conditions leading up to or immediately following the source's creation. Uses analysis of these conditions to strengthen and refine an argument or explanation.
Selecting Relevant Sources Selecting sources that support answering a particular research question with relevant, credible information that distinguishes between fact and opinion	Selects sources that provide detailed, credible information relevant to the research question. Where applicable, sources vary in perspective and/or format.	Selects sources that provide detailed, comprehensive, credible information relevant to the research question. Where applicable, sources vary in perspective and/or format.	Selects sources that provide nuanced, comprehensive, credible information relevant to the research question. Where applicable, sources vary in perspective and/or format. Any gaps or limitations in sources are noted.	Selects sources that provide nuanced, comprehensive, credible information relevant to the research question at a level of detail and complexity appropriate to the audience and purpose of the research. Where applicable, sources vary in perspective and/or

Using Sources	5	6	7	8
				format. Any gaps or limitations in sources are noted and the impact of those gaps and limitations is discussed.
Synthesizing Multiple Sources Integrating information across multiple sources to support an argument or explanation	Connections among sources are made by grouping similar information/positions from multiple sources or identifying significant differences between sources (in content and/or type).	Information from multiple sources is compared and grouped to deepen or extend an argument or explanation.	Information from multiple sources is compared, grouped, and synthesized with the student's own claims or ideas to form a cohesive, supported argument or explanation.	Significant and nuanced connections are made among the sources and synthesized with the student's own claims or ideas to form a cohesive, supported, compelling argument or explanation.

Attachment B: Memorandum of Understanding

PURDUE POLYTECHNIC HIGH SCHOOL OF INDIANAPOLIS, INC.

MEMORANDUM OF UNDERSTANDING

Purdue University ("Purdue") and EmployIndy (the "Parties") are negotiating in good faith the articulation and execution of a formal agreement (the "Formal Agreement") that will contemplate various terms and conditions governing the Parties' relationship in connection with the operation of a STEM-focused charter high school in Indianapolis (the "High School"). By execution of this Memorandum of Understanding (the "MOU"), the Parties express their commitment to collaborate in good faith toward the execution of the Formal Agreement, and they acknowledge and agree that the Formal Agreement will address the following matters, among others:

The governance entity for the High School	EmployIndy will provide for the creation of a nonprofit, tax-exempt legal entity that will govern and oversee the operation of the High School (the "School Corporation"). The governing body of the School Corporation will include one or more representatives appointed by Purdue.
Reimbursement	The Parties will agree on a reimbursement framework that will fairly compensate Purdue (and, if appropriate, the School Corporation) for certain expenses incurred in connection with the operation of the High School.
Performance Standards	The Parties will agree on a set of minimum performance standards for the High School, which may include (among other standards) graduation rates, standardized tests scores, and Indiana Department of Education accountability assessments.
Use of Purdue University name and logo:	Subject to the terms of a licensing agreement customarily required by Purdue, the School Corporation will have the ability to use the name and logo of Purdue in connection with the High School, provided that the High School meets the aforementioned minimum performance standards.
Access to Purdue faculty in classroom settings:	Purdue will make its faculty accessible to the High School's students for classroom instruction. Such access, which may include a minimum number of hours to be agreed upon, may include remote web-based access. Some of the High School's courses may be taught entirely by Purdue faculty.
Access to Purdue assistance on curricular enhancements:	Purdue will provide assistance on curriculum design, will seek to create internship opportunities for the High School's students, and will create other campus-based learning opportunities to further aid the instruction provided by the High School.
Teacher development:	Purdue will work with the School Corporation to create teacher development opportunities to enhance the High School teachers' training.
Consultation on professionals:	The School Corporation and Purdue will consult regularly with one another regarding the selection, evaluation, and retention of various professionals engaged in work on behalf of the High School (e.g., development professionals), whether or not such professionals are Purdue employees.

Intellectual property: The Parties will agree on an intellectual property policy to address the ownership, protection, and licensing of intellectual property created by Purdue (and/or its faculty), the School Corporation (and/or its faculty), or a third party in connection with the operation of the High School.

The matters described above are not intended to, nor shall they be construed as, setting forth binding legal commitments on the Parties to this MOU. The sole obligation to which the Parties commit by execution of this MOU is the obligation to exercise good faith in negotiating, preparing, and executing a Formal Agreement addressing the matters described above. The Parties further acknowledge that the Formal Agreement will be executed by Purdue and the School Corporation.

PURDUE UNIVERSITY

By: Steven R Schultz
Name: Steven R. Schultz
Title: Legal Counsel, Purdue University
Date: 9-4-15

EMPLOYINDY

By: Nicole Thompson
Name: Nicole Thompson
Title: Interim CEO and President
Date: 9-4-15

Attachment C: School Calendar

Purdue Polytechnic High School Indianapolis

2017-2018

Academic Calendar

July 17

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August 17

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 17

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

October 17

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

November 17

Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

December 17

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

January 18

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February 18

Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

March 18

Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April 18

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May 18

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June 18

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July 18

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August 18

Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

	School Days
	PD Day for Staff
	Staff & Students OFF
	New Staff Orientation

1	July 31- Aug 18 Rookie Camp
2	Aug 21-Sept 29 Topic One
3	Oct 17-Nov 21 Topic Two
4	Nov 27-Dec 14 Reset
5	Jan 2-Feb 2 Topic Three
6	Feb 5-Mar 16 Topic Four
7	Apr 2-May 4 Topic Five
8	May 7-Jun 15 Topic Six
9	Jun 18- Jun 29 Rookie Camp

ISTEP Testing

Showcases

Breaks

Oct 2-13 Fall Break
Nov 22-24 Thanksgiving Break
Dec 15-Jan 1 Winter Break
Mar 19-30 Spring Break
June 18-Aug 3 Summer Break

Created using a template from www.vertex42.com/calendars

Attachment D: Sample Plans of Study

Project Cycle 1, Year 1

PURDUE UNIVERSITY. Polytechnic High School

Theme: Leadership and Responsibility	Project Phase 1	Indiana Pathways Focus: General Science	Industry & Community Partner: Indianapolis Zoo

Challenge Story
The mission of the Indianapolis Zoo is to "empower people and communities, both locally and globally, to advance animal conservation." Indianapolis Zoo President and CEO, Mike Crowther states on the zoo website, "we're not a zoo doing conservation; we're a global conservation organization that is a zoo." The Indianapolis Zoo drives conservation efforts locally, nationally, and globally through the Indianapolis Prize, which is the world's leading award for animal conservation. The zoo also offers experiences, tips and resources to "help everyone make a difference in our natural world." The Indianapolis Zoo shows leadership by promoting conservation efforts and helping people understand what actions they can take to be responsible global citizens.

Challenge
The challenge by the Indianapolis Zoo to the students of PPHS is to develop one potential intervention that will increase conservation efforts locally.

Values: The Story	
Innovate	Prototyping is a valuable way to learn as we go and iteratively provide better and better solutions.
Collaborate	Many different community leaders and partners have a stake in the challenges we solve. Establishing and maintaining strong relationships with these partners is critical to success.
Communicate	As we develop solutions to challenges, we need to get our ideas out of our own heads and into others'. Effective communication is a vital skill to develop and constantly improve.

Key Takeaways-Big pictures concepts, cut across 4-6 weeks, could be values. One box not separated out by subject. Learn rather than do.	
Learn different type of careers associated with the pathways. Demonstrate leadership skills by educating and convincing others to practice conservation. Learn to effectively communicate and advocate for a conservation intervention.	Understand and analyze conservation movements nationally and globally. Understand early 20th century progressive movement. Understand linear vs. exponential relationships. Understand the impact of pollution on citizens and society.

Learn to analyze, critique, and extract key details from texts, websites, and primary sources to support claims and reasoning with sufficient evidence for intended purpose and audience.

Learn to acknowledge different perspectives.

Understand how to plan, revise, edit, rewrite, or try a new approach, focusing on addressing what is most significant for a specific purpose and audience.

Understand how to effectively give and receive feedback.

Learn to present products and learning effectively and creatively.

Understand the capacity of ecosystems.

Learn to interact professionally with community leaders and members.

Learn to navigate the project management plan.

Learn to interpret and visualize data and statistics to support/refute claims.

Design products that model and expand best practices in conservation.

Outcomes for initiate and empathize since it is first project.

Learn the prototyping process.

Understand ethical considerations related to the challenge.

Learn that you have a role in improving your community.

Understand how to use the scientific method for investigation.

Understand how zoos have evolved and the challenges they face.

Design Thinking Approach				
Initiate (Identify the challenge, context, research,)	**Empathize** (users, needs and motivations, stakeholders with story)	**Analyze** (root cause, ideate solutions)	**Execute** (prototype, testing, implement)	**Reflect** (what learned)
• Journal Entries • Project Management Plan	• Journal Entries • User/Client Interviews/Surveys	• Journal Entries • Thought Process Diagrams • Content proof points (math, ecology, text analysis, etc.)	• Journal Entries • a model/prototype of the intervention • Verbal/Visual product • Written product	• Journal Entries • Peer debrief • Partner debrief

always a kickoff day for new projects

Week 1	INITIATE	INITIATE	INITIATE	INITIATE	INITIATE
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
9:30	PLC: Pre Survey, L&R Activity	PLC: Best Practices in Leadership and Responcibility	PLC: Midweek PMP Check-in	PLC: Check-in	PLC: Facilited Discussion: Why Conservation?
10:00	Whole School: Conservation Kickoff Event My role in conservation			Zoo Field Trip: 10:30-1:30: Overview, Table Talks and Lunch 1:30-4:30: Research, Design Thinking, Ecology	
10:30		Research Zoo	Research Conservation		Content: 1.5 Hours
11:00					
11:30			PLC: 1-on-1		
12:00	Lunch	Lunch	Lunch		Lunch
12:30	Resource Types (1)	Workshop: Ecosystems (19)	A Walk in Someone Else's Shoes Examining Different Perspectives (23)		Content: 2 Hours
1:00	Readings in Conservation (2)				
1:30		Content: 1 Hours	Content: 2 Hours		
2:00	Field Trip Intro (3)				
2:30	Conservation Movement (4)	Linear vs Exponential Relationships (20)			Follow-up Zoo Research
3:00		Content: 1.5 Hours			
3:30	Research Zoo		Using the Scientific Method (22)		Empathy Skill Activity
4:00					
4:30	PLC: PMP Check-in, Updating PMP for Tomorow	PLC: Ethical Considerations	PLC: Field Trip Logistics and Expectations	PLC: Zoo Reflection	PLC: PMP Check-in, Updating PMP for Week 2
	PLC	Whole School	WKSHP (ALL) / DOJO (SOME)	Independent	Field Trip/Event

workshops rotational by project cycle

start + end always → only constants besides lunch

independent for deliverables + programming

dojos can include remediation, technical training, etc

Mind Play
Khan Academy

Week 2	EMPATHIZE	EMPATHIZE	EMPATHIZE	EMPATHIZE	EMPATHIZE
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
9:30	PLC: Generic User Group Analysis, Empathy application. More details later	PLC: Review questions and practice with partners prior to fair 1 on 1s	PLC: Conservation Fair debrief to -Share out fair experience -Split into project groups -Groups solidify end user -Groups take deep dive into user group/team	PLC: 1-on-1s Rewrite and finalizing questions to ask end users with groups	PLC: 1-on-1s
10:00					
10:30		Workshops: Different ways to communicate w/end user (7)			Workshops: Rapid ideation on generic topic to prepare to practice for conservation intervention (12)
11:00	Workshops: Conservation Literature Jigsaw (5)	Workshops: Conservation Politics and Policies (8)	Workshops: Designing questions/survey for them -write better questions -workshop on survey questions	Personalized Time -Mindplay -Khan Academy	
11:30					
12:00	Lunch	Lunch	Lunch	Lunch	Lunch
12:30	Workshops: Convservation Literature Jigsaw	Consevation Fair	Workshops: Designing questions/survey for them -write better questions -workshop on survey questions (11)	Personalized Time: -Mindplay -Khan Academy	Workshops: Practice user interviews and practice feedback (13)
1:00	Workshops: Writing Effective Questions to ask C Fair participants (6)				
1:30	Personalized Time: -Mindplay -Khan Academy -Creating Questions to ask Conservation Fair participants - Review participant websites		Personalized Time: -Mindplay -Khan Academy -Conservation policy research -End User research		Personalized Time: Mindplay -Khan Academy
2:00					
2:30		Personalized TIme: -Mindplay -Khan Academy			
3:00					
3:30		Workshop: Professional Business Letter (9)			
4:00					
4:30	PLC: Professional Interaction best practices to prepare for fair Project Management Check-ins/ Reflection	PLC: Project Management Check-ins/ Reflection	PLC: Project Management Check-ins/ Reflection Share questions with PLC	PLC: Project Management Check-ins/ Reflection	PLC: Project Management Check-ins/ Reflection

PLC	Whole School	WKSHP (ALL) / DOJO (SOME)	Independent	Field Trip/Event

Week 3			ANALYZE	ANALYZE	ANALYZE
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
9:30	**No School**	**No School**	PLC: Intro Data Organizing	PLC: Defining a problem	PLC: Pitch ideated solution
10:00			Look at & organize data	Ideate solutions specific problem Research problem Re-ideate	Content: 1.5 Hours
10:30			Content: 1.5 hrs		
11:00					
11:30					1:1 Doc check-in
12:00			Lunch	Lunch	Lunch
12:30			Content: 1.5 hrs	Content: 1 hour	Content: 1.5 Hours
1:00					
1:30				Digging into Data (21)	
2:00			Share out data - insights Categorize opportunities - define problems Run through ideation several problems Share out ideations		Content integraiton with solution
2:30				Content: 1 hour	Low-fidelity prototype activity
3:00					
3:30				Content integration with solutions	Solution celebration
4:00					
4:30			PLC: Reflection	PLC: Updating PMP	PLC: Reflection through first solution

	PLC	Whole School	WKSHP (ALL) / DOJO (SOME)	Independent	Field Trip/Event

Week 4	EXECUTE	EXECUTE	EXECUTE	EXECUTE	EXECUTE
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
9:30	PLC: Review Prior Week, PMP Check-IN	PLC: Value Focus Discussion/Community Building Activity	PLC: Refresher on Giving and Receiving Feedback Introduction To Informational Pitch	PLC: Midweek PMP Check-in	PLC: Practice Pitch
10:00	Sketching (14)			Receate Prototype w/ Adjustments	
10:30	CAD (15)	Create Prototype	Work on Pitch		Content: Pitch to Users
11:00	Google Draw (16)				
11:30	GoogleCode (17)				
12:00	Lunch	Lunch	Lunch	Lunch	Lunch
12:30	Start prototype	Work on Prototype/ Content: 4 Hours	Work on Pitch /Content	Recreate Prototype/ Content	Content: 3 Hours
1:00					
1:30					
2:00	Content: 2.5 Hours			PLC 1-on-1	
2:30				Recreate Prototype/ Content	
3:00			PLC: Present Prototype and Reflect		
3:30					
4:00					PLC: PMP Check-in, Updating PMP for Week 5
4:30	PLC: PMP Check-in, Updating PMP for Tomorow	PLC: Reflection		PLC: Reflection	
	PLC	Whole School	WKSHP (ALL) / DOJO (SOME)	Independent	Field Trip/Event

personal
learning
community

Week 5	EXECUTE	EXECUTE	EXECUTE	EXECUTE	EXECUTE
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
9:30	PLC: Review Prior Week, PMP Check-IN	PLC: Final Pitch Preview "What Do I Need To Prepare For?"	PLC: Midweek PMP Check-in	PLC: Check-in	**PLC: PITCH DAY PUMP UP**
10:00	Share User Feedback Plan For Next Steps	Finalized Prototype / Pitch Materials & Content: 2 Hours	Finish Prototype & Pitch Content: 1.5 Hours	Corrections on Pitch and Prototype Content: 2 Hours	Finalized Prototype / Pitch Materials & Content: 2 Hours
10:30					
11:00	Content: 1 Hour				
11:30			PLC: 1-on-1		
12:00	Lunch	Lunch	Lunch	Lunch	Lunch
12:30	Persuasive Pitch (18)	Finalized Prototype / Pitch Materials & Content: 4 Hours	Content: 1 Hour	Finalized Prototype / Pitch Materials & Content: 4 Hours	Pitch Set-up
1:00	Start Finalized Prototype / Content: 3.5 Hours				Content: 1 Hour
1:30			Trial Run for Pitches		
2:00					Pitch Day
2:30					
3:00			Content: 1 Hour		
3:30					
4:00			PLC: Reflection on Pitch, Next Steps for Corrections		
4:30	PLC: PMP Check-in, Updating PMP for Tomorow	PLC: Reflection		PLC: Reflection	PLC: Pitch Day Reflection and Next Steps
	PLC	Whole School	WKSHP (ALL) / DOJO (SOME)	Independent	Field Trip/Event

PURDUE UNIVERSITY Polytechnic High School

Project Phase 1 Indianapolis Zoo Curriculum Alignment Table

Takeaway	When	Deliverable(s)	Standards
Learn different type of careers associated with the pathways.	Rookie Camp, Zoo Field Trip	Personal Learning Plan, Interest Profiles Results	PCC-2.1-2.4
Demonstrate leadership skills by educating and convincing others to practice conservation.	Week 4	Capstone Pitch	PCC-6.5 DAR-1.2
Learn to effectively communicate and advocate for a conservation intervention.	W2, W4, W5, W8	Capstone Pitch	PCC-7.2 DAR-1.2 EDD-1.2
Learn to analyze, critique, and extract key details from texts, websites, and primary sources to support claims and reasoning with sufficient evidence for intended purpose and audience.	W1, W2, W5. PLT	MindPlay Progress Report	9-10.RL.1 9-10.RL.2.1-2.3 9-10.RN.1 9-10.RN.2.1 9-10.RL.4.1 9-10.RV.1 EDD-1.4-5
Learn to acknowledge different perspectives.	W23	Graphic Organizer, Reflection	PCC-6.3 9-10.SL.2.5
Understand how to plan, revise, edit, rewrite, or try a new approach, focusing on addressing what is most significant for a specific purpose and audience.	W9, Ongoing in PLC and Writing Lab	Business letter to government official, company, or organization	PCC-7.2 DAR-2.1-2.4 9-10.W.3.1 9-10.W.3.2 9-10.W.4
Understand how to effectively give and receive feedback.	PLC Week 4, Ongoing in PLC	Reflection, Project Management Plan and Journal	PCC-6.5 DAR-1.4

Takeaway	When	Deliverables	Standards
Learn to present products and learning effectively and creatively.	W14-18, PLC Week 4	Capstone	EDD-1.1-2 DAR-1.2 9-10.SL.4.1-4.2
Understand the capacity of ecosystems.	W19, Field Trip Experience	Content Expert Created	B.3.1-3.3
Learn to interact professionally with community leaders and members.	PLC Wk1-2, Field Trip, Conservation Fair	Reflection, Field Trip Guide, and Capstone Pitch	PCC-7.1
Learn to navigate the project management plan.	Rookie Camp, Ongoing in PLC	Project Management Plan	EDD-1.1 DAR-1.3
Understand and analyze conservation movements nationally and globally.	W4, 5, 8	Content Expert Created	USH.9.1 - 9.5
Understand early 20th century progressive movement.	W4, 5, 8	Content Expert Created	USH.3.2 & 3.3 USH.9.1 - 9.5
Understand linear vs. exponential relationships.	W20, PLT	Khan Academy Progress Report	Al.L.1-6, Al.QE.1-2
Understand the impact of pollution on citizens, animals, and society.	Field Trip, Conservation Fair	Field Trip Guide	EDD-1.6 B.3.1-3.3
Learn to interpret and visualize data and statistics to support/refute claims.	W21, organizing interview data ANALYZE	Leave to Teachers	Al.DS.1-6 EDD-1.2
Design products that model and expand best practices in conservation.	Week 4	Prototypes, Capstone Project	EDD-1.3,1.6,2.1
Learn the prototyping process.	W14-17, prototyping activity	Iterations of Prototypes	EDD-2.1-2.3

Takeaway	When	Deliverables	Standards
Understand ethical considerations related to the challenge.	PLC WK 1	Portion of the PMP	EDD-2.8 PCC-6.5
Learn that you have a role in improving your community.	Kick-off Wk 1, PLC Wk 1	Conservation Kick-off Event, Reflection	PCC-6.5
Understand how to use the scientific method for investigation.	W 22	Science Dance	B.3.3
Understand how zoos have evolved and the challenges they face.	Field Trip	Field Trip Guide	EDD-1.6

Project Phase 1 Indianapolis Zoo Values Alignment Table

Value	When	Deliverables
Innovation	Wk1 Whole School Kick-off, Wk 3 Low Fidelity Prototype Activity, Week 4 Prototype Activities	Design Thinking Process, Prototypes, Capstone Project
Communication	Wk 1 Whole School Kick-off, Ongoing in PLC, Zoo Field Trip, Conservation Fair, Capstone Pitch	Journals, Pitch, Business Letter, PLC Discussions, Field Trip Guide,
Collaboration	Wk1 Whole School, Ongoing in PLC, Ongoing Capstone Project Work Time, Week 4 Pitch	PLC, Project Management Plan, Capstone Project

Project Phase 1 Indiana State Course Alignment

Indiana State Course	Indiana State Code	Indiana State Course	Indiana State Code
BIOLOGY I (B)	3024	ENGINEERING DESIGN AND DEVELOPMENT (EDD)	5698
ENGLISH 9 (E)	1002	DIGITAL APPLICATIONS AND RESPONSIBILITY (DAR)	4528
ALGEBRA I (A)	2520	PREPARING FOR COLLEGE AND CAREERS (PCC)	5394
UNITED STATES HISTORY (USH)	1542		

Foundation Year(s) Indiana State Course Alignment

Indiana State Course	Indiana State Code Number of Credits	Indiana State Course	Indiana State Code Number of Credits
BIOLOGY I (B)	3024 (2)	ENGINEERING DESIGN AND DEVELOPMENT (EDD)	5698 (2)
ENGLISH 9 (E)	1002 (2)	DIGITAL APPLICATIONS AND RESPONSIBILITY (DAR)	4528 (2)
ALGEBRA I (A)	2520 (2)	PREPARING FOR COLLEGE AND CAREERS (PCC)	5394 (1)
UNITED STATES HISTORY (USH)	1542 (2)	HEALTH & WELLNESS EDUCATION	3506 (1)
INTEGRATED CHEMISTRY-PHYSICS	3108 (1)	PHYSICAL EDUCATION I	3542 (1)
SPEECH	1076 (1)	ART HISTORY	4024 (1)

Attachment E: Year 1 Curriculum

Project Cycle 1-6, Year 1

Indianapolis Zoo

Challenge Story
The mission of the Indianapolis Zoo is to "empower people and communities, both locally and globally, to advance animal conservation." Indianapolis Zoo President and CEO, Mike Crowther states on the zoo website, "we're not a zoo doing conservation; we're a global conservation organization that is a zoo." The Indianapolis Zoo drives conservation efforts locally, nationally, and globally through the Indianapolis Prize, which is the world's leading award for animal conservation. The zoo also offers experiences, tips and resources to "help everyone make a difference in our natural world." The Indianapolis Zoo shows leadership by promoting conservation efforts and helping people understand what actions they can take to be responsible global citizens.

Challenge
How can conservation efforts be increased and enhanced locally?

Fair Oaks Farms

Challenge Story
The world's population is projected to increase to over 9 billion people by 2050 (Godfray et. al., "Food Security: The Challenge of Feeding 9 Billion People," *Science*, 2010). At the same time, standards of living are rising around the world, resulting in higher demand for nutrient-rich food. As a result, 70% more food needs to be produced by 2050. While that task is daunting, we've been there before. In the past half-century, the world's population doubled, yet advances in technologies resulted in a dramatic increase in food production, allowing us not only to meet that need but also dramatically lower the proportion of people in the world who go hungry. Locally, organizations such as Fair Oaks Farms help us meet this global challenge. By adopting and developing the latest technologies, from autonomous tractors to automated feeders to the latest nutritional supplements, Fair Oaks creates efficiencies that allow them to greatly increase their food production. Moreover, they do so while actively promoting stewardship of the environment, such as capturing cow and pig waste and transforming it into fuel. To meet the world's food needs, Fair Oaks and farms all across the state will need to continue to innovate and improve.

Challenge
How will Indiana contribute to the challenge of feeding nine billion people without overwhelming the planet by 2050?

Indy Fuel

Challenge Story
Indianapolis is home to several minor league establishments. The Indy Fuel is a minor league hockey team affiliated with the Chicago Blackhawks and resides at Indiana Farmers Coliseum at the Indiana state fairgrounds. Minor league organizations have to create a major league atmosphere on a minor league budget. The Indy Fuel continues to struggle to attract new fans, especially in areas close to the fairgrounds.

The National Hockey League likes to brand itself as the "coolest game on earth". What makes the game so "cool" is not just the fact that it is played on ice, but because of the tremendous speed and power in which it is played. A tremendous amount of work goes into preparing facilities and players for the game and getting fans in the door.

Challenge

How can the Indy Fuel enhance the experience of the fan and the player to drive success both on the rink and at the ticket booth?

Indy Star

Challenge Story

"The news" is a central component of our society and a constant in many people's everyday lives. At their best, new sources are how we seek to educate each other and understand current events, identifying and establishing shared knowledge and truth. The internet and other technological innovations have enabled broader access to information than ever before, but have also introduced new challenges. Individuals are able to virtually wall themselves off from others with differing viewpoints, and judging the credibility of an information source can be challenging.

Traditional local forms and venues for news such as newspapers now struggle to compete in today's information marketplace. A report released in 2012 by the Council of Economic Advisers stated , "the newspaper industry is declining faster than any other industry in the United States. The Wall Street Journal stated in an article, "global spending on newspaper print ads is expected to decline 8.7% to $52.6 billion in 2016." This rapid decrease is forcing companies to push digital platforms and "reconsider the format of their print products and the types of content they publish."

Challenge

How can local news outlets such as the Indy Star reinvent themselves to address the 21st century technological and social environment?

Subaru

Challenge Story

In 1989 Subaru opened its Lafayette plant and produced 4087 vehicles. In 2016, the Lafayette plant produced 313,511 vehicles, and Snbaru is looking to expand its production capacity to 450,000 vehicles annually. At the same time, the plant continues to improve the qnality of its products and the safety for its workforce, as well as reduce its impact on the environment. As Subaru continues to deliver better and better results and produce more products, the bar, and the challenge, is raised for continuing that success.

Challenge

How can Subaru continuously deliver more products to more people with higher efficiency and higher quality?

IndyGo

Challenge Story
Every year in Indianapolis 10 million people choose to use public transportation. Indygo's traditional "hub and spoke" system has 31 fixed routes, each with different weekday, Saturday and Sunday schedules. Their current configuration has been basically the same plan as the 1980's. While public transportation has stayed the same, the bulk of job centers have moved. This setup is confusing to many residents and struggles to connect people to jobs. Early in 2016, Indianapolis residents voted overwhelmingly to tax themselves and use this additional revenue to expand the bus system. The promise is that a smarter, more efficient transportation system for Indianapolis will help the city maintain and increase its status as a world-class place in which to live, work and play. This expanded service will make 3x more residents near frequent service. There are big hopes for the new system but with many new players in the transportation market no one is sure if the changes will attract the new riders needed.

Challenge
How can we improve the transportation network in Indianapolis to support and sustain a vibrant economic and social environment?

Attachment F: PPHS Workshop Template

PPHS Workshop Template

Workshop Description:		
Workshop Special Accomodations:		
Project Phase Alignment		
Project Phase:	**Project Challenge:**	**Focus Takeaways:**
Indiana Academic Alignment		
Indiana Course(s) Alignment:	**Indiana Standards:**	
PPHS Core Values Alignment		
Innovation	**Communication**	**Collaboration**
Workshop Process		
Workshop Agenda:		
Workshop Activity:		

Formative Assessments:
Workshop Reflections:

Attachment G: Day in the Life of a Student

Snapshot of different learning modes/activities

KEY

1. **Personalized Learning Community:** Develop and practice teamwork and employability skills. Teachers track competency levels, academic needs, and individual progress, and develop daily and weekly plans to reach academic and project plan goals.

2. **Dojo:** Hands-on, minds-on learning experiences. Teachers focus on 2-3 key standards to drive mastery of competency.

3. **Pop-Out:** Enhance personal interests or project work at workshops.

4. **Collaborative Group:** Discuss and give feedback with other students on individual work and projects.

5. **Cross-Functional Team:** Work on school, community or industry projects with other students and teachers.

NOT PICTURED

6. **Makerspace & Skills Lab:** Work on prototypes and practice on skills trainers (examples electrical circuit trainer, CAD, welding) with guidance by teachers.

DAY IN THE LIFE
PURDUE POLYTECHNIC HIGH SCHOOL STUDENTS

EA/EOU

PURDUE POLYTECHNIC HIGH SCHOOL
INDIANAPOLIS

pphs.purdue.edu

PURDUE UNIVERSITY

Attachment H: Student Progression Chart

Snapshot of different learning modes/activities

STUDENT PROGRESSION CHART FOR PURDUE POLYTECHNIC HIGH SCHOOL

	FOUNDATION	CORE	CAPSTONE
	Students master content, knowledge, skills, and processes that will transfer to all career pathways. Successful completion of foundation level prepares students to access the core level.	*Students apply foundational competencies and learn content, knowledge, skills, and processes specific to career pathways. Successful completion of core level prepares students to access the capstone level.*	*Students apply foundational and core skills. Students demonstrate mastery of the competencies required to successfully fulfill their post-secondary plans.*
PERSONALIZED LEARNING	Learning experiences are supported by staff, community and industry partners, and peers. Students practice self-regulation and reflection. Projects and learning experiences are differentiated to meet students' needs, choice, and voice.	Learning experiences are supported by staff, community and industry partners, and peers. Students build the capacity to self-regulate and reflect. Projects and learning experiences are differentiated to meet students' needs, choice, and voice.	Students are self-regulated, self-aware, and self-reflective. Projects and learning experiences are differentiated to meet students' career pathways, needs, choice, and voice.
PROJECT BASED LEARNING	Staff and community and industry partners identify challenges and develop structure of projects. Students use a design-thinking approach to create solutions.	Industry and community partners identify challenges. Students develop structure of projects. Students use a design-thinking approach to create solutions.	Students identify issues from career pathway experiences. Students identify appropriate methods and processes to solve problems.
PREPARATION	Students acquire content knowledge, skills, and competencies to support learning. Students are exposed to various post-secondary options within each career pathway. Students assess and develop industry and college preparation skills.	Students acquire content knowledge, skills, and competencies to support learning. Students explore post-secondary options for each identified career pathway. Students participate in certification or college preparation exams.	Students apply and are accepted to colleges, certification programs, or employee training programs. Students engage with faculty and employees in chosen colleges or organizations. Students earn certifications or college preparation entrance exam scores.
PATHWAYS	Students are exposed to career pathways through large group mentoring, field trips, and guest speakers.	Students explore career pathways through individual mentoring, shadowing, workshops, and summer programs.	Students apply skills in an employment opportunity, internship, field experience, or on-campus experience.
PEOPLE	Students develop positive relationships with staff, families, community, industry partners, and Purdue faculty to support students as they successfully complete the foundation level.	Students nurture positive relationships with staff, families, community, industry partners, and Purdue faculty to support students as they successfully complete the core level.	Students are supported as they transition to post-secondary implementation and staff connects them to post-secondary opportunities.

Attachment I: Career Readiness Rubric

Skill	Evaluation		
	Exceeds Standard	**Meets Standard**	**Below Standard**
Attendance Punctual; demonstrates self-management	Always in class on time; all missed classes are due to excused absences	Consistently shows up to class on time; any missed classes are due to excused absences	Usually not in class on time; absences are unexcused
Time Management Turns in work on time	Always turns work in on time; always focused on the task at hand	Consistently turns work in on time; typically focused on the task at hand	Usually does not turn work in on time; generally not focused on the task at hand
Work Ethic Exhibits strong work ethic; prepared for class	Always prepared for class; always maximizes available class time	Most always prepared for class; frequently uses class time effectively	Often is not prepared for class; frequently uses class time ineffectively
Professionalism Exhibits a positive attitude; Exhibits good behavior; Takes care in personal presentation	Always portrays a positive attitude; always demonstrates good behavior; always demonstrates good personal presentation; embraces new ideas and challenges	Consistently portrays a positive attitude; consistently demonstrates good behavior; consistently demonstrates appropriate personal presentation; open to new ideas and challenges	Generally portrays a negative attitude; does not demonstrate good behavior; demonstrates poor personal presentation; resists new ideas and challenges
Communication Exhibits good listening skills; clear oral and written communication;	Always exhibits good listening skills; always uses clear, appropriate and organized language; able to communicate at a variety of levels	Consistently exhibits good listening skills; consistently uses clear, appropriate, and organized language	Demonstrates poor listening skills; demonstrates poor communication skills by using unclear, inappropriate, or unorganized language
Teamwork Works well within groups; demonstrates responsibility in a team setting	Always works well in a group; demonstrates self-awareness in accepting responsibility in a team setting; demonstrates leadership skills	Consistently works well within groups; demonstrates the ability to work collaboratively; takes initiative in a team setting	Does not work well in groups; demonstrates an unwillingness to work collaboratively; does not take personal responsibility for group work
Critical Thinking Demonstrates problem solving skills	Demonstrates the ability to think through problems, select appropriate strategies, and finds a way to solve problems	Consistently demonstrates problem solving strategies	Avoids problem solving; rarely seeks assistance when needed in solving problems
Quality of Work Academic performance	Always gives a best effort and produces a high quality of work	Consistently gives a best effort and completes all work	Demonstrates minimal effort and does not complete all work

Adapted from the US Department of Education's Perkins Collaborative effort and the National Career Readiness Certificate standards.

Attachment J: Student Handbook

PURDUE UNIVERSITY®

POLYTECHNIC HIGH SCHOOL

Student and Family Handbook

2017-2018

525 South Meridian Street
Indianapolis, IN 46225
317-832-1200
https://pphs.purdue.edu/

Table of Contents

School Calendar and Project Cycles	**2**
School Philosophy and Structure	**4**
General Information	**8**
School Procedures	**14**
Parent/Guardian Support	**22**
School Policies	**23**

School Calendar 2017-18

July 31, 2017	First Day of School
September 4, 2017	Labor Day- No School
September 5, 2017	Staff Development- No School
October 2-6, 2017	Fall Break
October 9-16, 2017	Staff Development-No School
November 22-24, 2017	Thanksgiving Break
December 15-29, 2017	Winter Break
January 1, 2018	Winter Break
January 2, 2018	School Resumes
January 15, 2018	Martin Luther King Day- No School
January 16, 2018	Staff Development-No School
February 19, 2018	Presidents' Day-No School
February 20, 2018	Staff Development-No School
March 19-23, 2018	Spring Break
March 26-30, 2018	Professional Development-No School
May 28, 2018	Memorial Day-No School
June 15,2018	Last Day of School

Project Cycle

July 31-August 18	Rookie Camp
August 21-September 29	Topic One
October 17-November 21	Topic Two
November 27-December 14	Reset
January 2-February 2	Topic Three
February 5-March 16	Topic Four
April 2-May 4	Topic Five
May 7-June 15	Topic Six

Philosophy and Structure

Mission

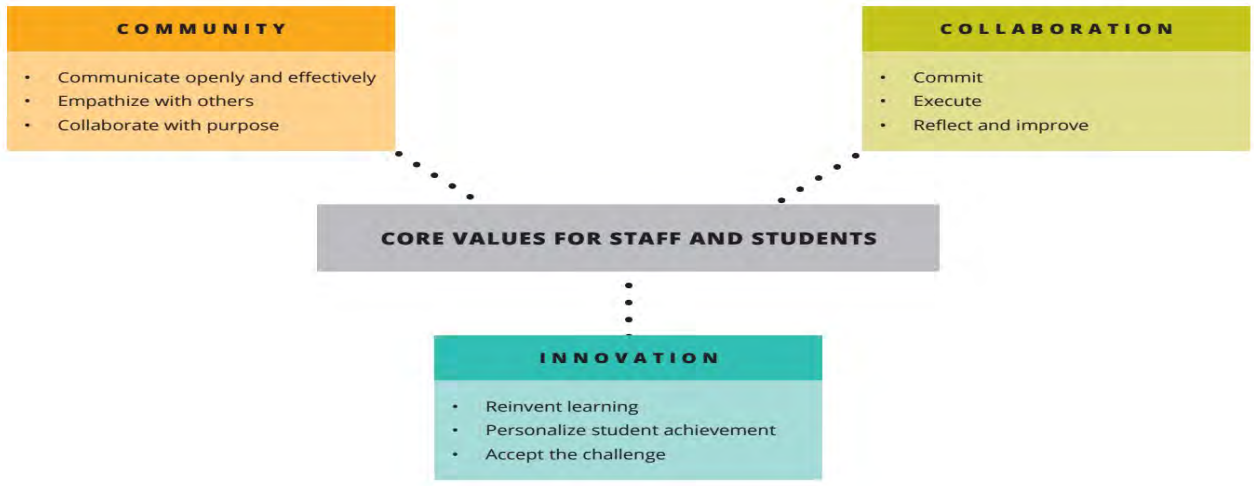
The mission of Purdue Polytechnic High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM-focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards admission to a post-secondary institution or an industry recognized certification.

Purdue Polytechnic High School will develop a new generation of skilled talent by seamlessly transitioning students from high school and postsecondary education to high-wage, high-demand jobs. This will be accomplished by creating rigorous STEM-based curricula with Purdue University faculty and industry input, which are delivered through an integrated hands-on learning environment.

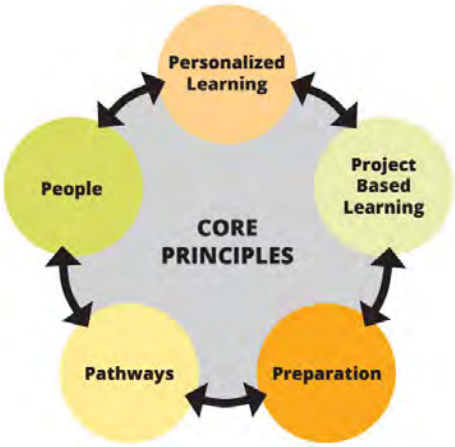
Vision

PPHS will prepare students to…

- ***Lead successful lives by meeting challenges with optimism, grit, and resilience***
- ***Navigate a rapidly evolving digital and global society***
- ***Create lasting, positive change in their local communities***



We believe building a culture of community, excellence and innovation will create a positive and supportive environment conducive to high academic achievement.



Personalized Learning

All students experience academic and social supports tailored specifically to their needs. This means that students learn to be responsible for recognizing their own gaps in academic knowledge and receive high quality instructional supports when they need it. This means there are no pre-defined schedules where students move in large groups from class to class. Teachers and students work together to schedule time for instruction, which can occur individually, in small groups, or in larger groups, and can be delivered in a variety of formats depending on the learning style of the student.

Problems and Projects

Student work is focused on solving problems through design challenges and projects. These problems are presented in the context of real world issues that come from the cities and neighborhoods our students live in and from business and industry partners. Students understand that there are rarely 100% right and wrong answers, but solutions that are better than others are the end goal.

Academic Progress

It is the goal of the school that students have the academic preparation necessary to allow them to gain entry to Purdue and other four-year universities. This means they need to certainly pass high school graduation exams, and it also means that they can score well enough on college entrance exams to be accepted to four-year universities. Not all students will choose to attend college, but we want to make sure they are prepared should they choose to do so.

Career Pathways

We recognize that, upon entry, our students have limited exposure to career options available to them. All students will have the opportunity to learn about the major career pathways that offer strong employability options and will interact with business professionals through mentorships. Students will take part in internships with business partners and will have the opportunity to gain industry-recognized certifications. Combined with a strong emphasis on 21st Century skills, students will be prepared for the workforce whether they elect to attend a postsecondary institution or go directly into a career.

People

It is our expectation that every student in the building has a strong relationship with at least one adult, and that every adult in the building has a strong relationship with at least one student. This means that the staff understands where each student comes from and the opportunities or barriers that presents, and those are taken into account in every decision related to that student.

School Structure

Learning Through Project-Based Learning

One of the basic structures PPHS is that the majority of the student's' school day will involve working on problem-based projects. By working through the projects, the student will learn math, science, reading, writing, and many more skills that he or she may have challenges learning in a classroom. Projects are meant to help students pick out a particular career. Throughout the project, students will learn the skills needed to go on to college and beyond.

Personalized Learning

Each student has an Individual Learning Plan. The Learning Plan team (the student, parent, personal learning coach, and relative PPHS Staff) work together to create a challenging and exciting plan. Learning Plan meetings for your student will be held six times a year.

Workshops (Dojo's)

Although there are no formal yearlong classes, there are groups that meet at different times during the school day depending on the need and interests of students. Some examples are book groups (students pick books and meet weekly to discuss them), quantitative studies (where students learn mathematical skill to use in their project work), technical skills training, singing groups, and community service groups. These are not the focus of a student's Learning Plan, but rather a way for the student to meet their goals, get help, and work collaboratively with other students.

Assessment

Students are expected to work toward the goals they've set, and reflect on their work and learning. Three to four times a year, the student will showcase his or her work to you and a panel of evaluators. Through this process of planning, doing and reflecting, students discover how to take responsibility for their own learning. Also, each project transition Personal Learning Coaches write a narrative assessing student work and learning.

Students will also attend workshops and participate in programming to prepare for state assessments, college readiness assessments, and career readiness assessments.

Preparing for College and Career

All students are required to apply to college during their Capstone year. Although they may decide not to attend, we feel that every student should have the option of attending college. Therefore, all students create a college portfolio, visit colleges, go on interviews, take the ACT or SAT, write essays and fill out applications. In addition, we hold parent nights to help parents fill out financial aid paperwork and learn more about the college process. Students are also encouraged to take a college class at a local college before graduation, so that they have already had some college experience before they graduate.

Personal Learning Communities (PLC's)
Each student is part of a small 15 -17-person community group. Their Personal Learning Coach builds relationships and helps them build a strong community while working on the goals in their Individual Learning Plans. You will be in close communication with your student's Personal Learning Coach. This advisory will stay together for 1 year. Personal Learning Communities go on trips together, debate issues, do community service, critique each other's work, plan school activities, and more.

Journal Writing
Each student writes in a learning journal three times per week. This is a way for students to reflect on their life and learning as well as communicate with their Personal Learning Coach. Personal Learning Coaches read and respond to these journal entries each week.

Organization, Self-Motivation and Time Management
These are probably three of the most important keys to success. PPHS students must learn to organize themselves, motivate themselves, and follow the project timelines they've created. The Super calendar is a planner that students use to plan their day, week, and project work.

Team Building
Because Personal Learning Communities work closely, a strong team must be built. Trust building activities are all an ongoing part of creating culture conducive to growing and learning. Personal Learning Coaches invest time towards building a safe, caring learning environment for their students.

Respect and Diversity
Respect and diversity are two important elements of life and learning at PPHS. The students have a great deal of responsibility for their own learning. However, with the freedom to pursue their interest, comes the responsibility to create the kind of community that is a safe learning environment for all students. As a community, we respect the diversity within our own community as well as throughout the world. As a community, we seek to understand our cultural, religious, ethnic, gender, and class differences as well as perspectives outside our community.

Mediation and Behavior Challenges
When there are conflicts between members of the school community, they are mediated to allow both parties to explain their thoughts and actions. Logical consequences are decided upon if further action needs to occur. Every decision is made one student at a time. Each situation is looked at separately to decide on the best decision for everyone involved

Grade Expectations
There are general expectations for students at PPHS. Every student learns and grows at his or her own pace – the important thing is for students to show growth in each area. It is up to

the Personal Learning Coach and Learning Plan team to determine these expectations based on the needs of each student.

Learning Goals:
In today's changing world, the most important thing students must learn is how to learn. The Learning Goals at PPHS focus on reasoning and problem solving, 21st Century skills as well as reading, writing, and mathematical thinking. Students use the Learning Goals to help expand their project work and challenge themselves with new ideas.

The Student Experience

Students will enter the Purdue Polytechnic High School with a supportive learning community dedicated to assisting at different levels of high school readiness for the intensive curricula the school will offer. Extensive tutoring, mentoring and remediation supports will be in place and could include extended school days or summer bridge programs. Purdue Polytechnic High School will teach students *how* to learn rather than providing answers. Students will learn first-hand about STEM careers through work-based learning and internship opportunities.

The mission of Purdue Polytechnic High School is to provide a rich integrated learning environment for students by providing them a hands-on, STEM- focused education which teaches them the skills and knowledge needed to be successful throughout their careers and paves the way towards employment in a high-demand career and/ or admission to a post-secondary institution.

During the Foundation years, 9th-10th grade students are expected to:

- Meet with the full Learning Plan team at least six times a year.
- Reflect on gaps in their learning and address them through project work.
- Create at least 6 Learning plans during the year.
- Build a portfolio of online work and saved hard copies.
- Showcase their work publically 3 times a year.
- Write in their journals 3 times a week
- Schedule their super calendar every week

General Information

Hours of Operation

The front office will be open from 8:30am-4:30pm daily to answer phone calls, take messages, and help families obtain any information they need. School day begins 9:35 am and ends at 4:45pm.

Late Arrival to School

All students arriving to school after 9:45 am are considered tardy and will require a pass from front office upon arrival to Learning Community.

School Homepage and Social Media

PPHS shares information online in a variety of ways. For general information about our school, including contact information and an overview of academics and student life, please visit our homepage: https://pphs.purdue.edu/

We also encourage you to follow us on social media, where we make frequent announcements.

Twitter @PurduePolyHS FaceBook Instagram

School Lunch Program

PPHS does participate in the National School Lunch Program. Breakfast and lunch will be available to students. Free and/or Reduced Lunch applications will be made available after July 1st.

Students are welcome to eat the lunch provided or pack their own lunch if they choose.

Recognition & Rewards

During the year, students are recognized for their work and behavior. At the end of each project cycle, students will be recognized for their academic achievement, demonstrating school value and professionalism, and excellent attendance. We will also provide opportunities for students to demonstrate their unique talents and skills and be recognized for these abilities.

Enrollment

Purdue Polytechnic High School participates in the Enroll Indy centralized application process. Our school is public, tuition-free, and is open to all residents in the state of Indiana.

For more information about the Enroll Indy process, application dates and additional information, please visit www.enrollindy.org.

Once you have received confirmation of placement in Purdue Polytechnic High School from the Enroll Indy office, parent/families are required to attend an Open House and Parent Engagement event. Enrollment packets will be distributed and steps to claim the student's seat at the school will be discussed. Please note, a student will not be enrolled in Purdue Polytechnic High School until the enrollment packet is completed and returned after the Enroll Indy confirmation.

Residency Policy

According to the Indianapolis Public School Innovation contract, a student must be a resident of Indianapolis Public School attendance zone to be eligible for preference status. PPHS shall verify residency for each freshman class and maintain residency documents on file. If a student is found to reside outside the Indianapolis Public School zone, the student will fill seats available after students who reside in Indianapolis Public School zone.

Transfer Policy

Families wishing to enroll or transfer to Purdue Polytechnic High School, or transfer to another charter school must be processed at an Enroll Indy. Please contact the school your student currently attends to get the forms and additional information about to request a transfer. Students will not be registered at a school site without receiving a placement from Enroll Indy.

Student Check-Out Policy

Parents and /or approved family members may choose to check out their student throughout the day, except in the last hour before dismissal (unless otherwise stated by the school). Additionally, parent/guardians may elect to have a trusted family member or friend pick up their child in the event of an emergency or other reason. Please ensure that anyone that may need to check-out your student is listed on the proper page of the child's enrollment or reenrollment paperwork each year.

Adults ages 18 and older, with valid picture ID and listed on the student's authorized sign-out sheet will be able to check out the student from school. This information will be verified by a staff member, and the adult will be required to sign the schools' check-out log. Even if the school is familiar with you or the authorized adult, a valid picture ID must be presented. This is for the safety and security of all of our students.

If an adult comes back to pick up a student and is not on the authorized list or does not have

a valid identification, the student will not be released. If a staff member feels the need to call the parent/guardian to confirm, he/she will only use a number officially listed in the student's record.

Emergency Closing of School

Purdue Polytechnic will adhere to the closing decisions of Indianapolis Public School District. To ensure student safety, emergency school closings may occur due to other situations such as power outages. All emergency school closures will be announced through an automated phone call to all numbers on record for each student, local news outlets, the school website, and our social media pages.

Attendance Policy

Student attendance, on-time, every day is strongly encouraged. Research indicates a positive correlation between attendance and grades. We strongly encourage for parents, guardians and students maintain a close contact with the school.

Excused Absence

According to school policy and state law, student absences can only be excused for illness, legal matters, bereavement, observance of special and recognized holidays of student's own faith, and visitation with parent or guardian who is a member of the United States armed forces or National Guard. In each case, an official notice must support the absence. Parent notes will be kept on file in the school office but do not represent official notices and will not legally excused student absence.

Unexcused Absence:

Any absence not mentioned as an excused absence will be marked as unexcused.

Tardiness:

Students must arrive at school on time to succeed in present and future endeavors. Students who arrive 15 minutes after the start time of the school day will be marked as tardy. Students who have an unexcused tardy will receive a tardy mark. The parents/guardians of students who are habitually tardy will be required to have an in-person conference with school administration. Three tardies equals one absence, which will negatively affect the student's attendance record.

Suspensions:

Absences due to suspension are unexcused and are counted against attendance requirement. Students who are suspended are required to make up academic work missed. The student and /or parent or guardian is responsible for collecting the work from the teacher.

Attendance Policy: When student is absent from school, the following procedures must be followed:

1. It is expected that a parent or guardian call the attendance voicemail 317-832-1200 before 10:00am of the day the absence occurs to notify PPHS of the absence. The following should be included on the voice mail message:

    - The student's' name (first, middle, and last) and grade (Please include the correct spelling of the name)
    - The name of the person making the call and the relationship to the student
    - The reason for the absence
    - The date(s) of the absence(s) and section if not the entire day
    - A telephone number so the call can be verified

2. If a parent does not have access to a phone, a note from the parent/legal guardian will be accepted on the day the student returns to school. If the absence is due to a medical, dental, or other professional appointment, a note of verification from the place of business is required. The note should include the date, time, and length of the appointment on professional letterhead with phone number and address.

3. All phone calls and verification notes must be received by the Attendance Office within 72 hours of the student's return to school in order for the absence to be excused. If a note or phone call is NOT received within 72 hours, the absence will be considered UNEXCUSED. The day of return is the first 24 hours. The attendance voice mail is available 24 hours a day, seven days a week. It is the responsibility of the student and parents to report absences to the school promptly.

Habitually Absent or Tardy Students

While we do our best to support parents, it is our obligation to report families of habitual absent or tardy students to the proper authorities.

Two Absences in a Project Cycle: If student is absent two times in a project cycle, it is considered a serious issue. A school staff member will contact the parent /guardian and will log the calls in the student data management system.

Five Absences in two Project Cycles: The student is considered habitually absent with five absences in two Project cycles. The Personal Learning Coach will refer student to administration for a parent conference. At the conference, the attendance policy will be reviewed and an attendance agreement will be signed and implemented.

Seven Absences in three Project Cycles: The student is at risk of failing. The Personal

Learning Coach will refer student to administration; a home visit will be scheduled.

10+ Absences in a Year: The student may be slower in pace to progress in the levels. He/she may be required to attend summer school. When a student is considered habitually truant the school is required by law to refer the parent to Juvenile Court system.

Health Policies and Procedures

The nurse's office works very hard to maintain the health of all the students. It is our goal to make sure all students have a safe and healthy place to learn. The following policies and procedures regarding the health of our students were created to ensure the safety, health, and the total welfare of all the students at PPHS.

Administration of Medication

Giving medication during school hours is discouraged and restricted to necessary medication that cannot be given at home; yet, some specific situations require it. In the instance that medication has to be given at school, parents/guardians MUST bring the medication to the school office before school, where it will be delivered to the nurse and stored in a secured (or locked) cabinet or refrigerator. If your child needs to take a prescription medication at school, please ask your pharmacy to provide a duplicate bottle for school usage. Any changes from your child's original prescription must be verified by the doctor, either by a fax or a new script. If your child has a medical condition which requires medication to be given on an asneeded basis, a doctor's note is requested with instructions for administration of medication and reason for the medication. All medications brought to school MUST be in the prescription bottle or original container. Medicine will not be given unless it is prescribed for the child bringing it to school and the container has his/her name on it.

All medications must be accompanied by a medication slip, including:

1. Student's Name

2. Medication Name

3. Directions (amount and time to be given)

4. Number of days to be given

5. Parent's signature, telephone number and date

Any medication, not in the original container, and with the child's name on it, will be held by the school nurse for a parent to pick up within one week. After that, it will be destroyed. Medications, whether prescription or over-the-counter, may not be given without written consent from parents or guardians.

Work Permits

Work Permits will be issued by the PPHS staff to students who are in good academic and behavior standing.

Per the Indiana Department of Labor, work permits are issued through accredited schools in Indiana. These schools have total discretion to refuse or revoke a work permit based on poor academics or attendance. If your school refuses your work permit for these reasons, there is no other office or agency that may issue the work permit. If you feel this rule is being applied unfairly, the family would need to first speak with the school principal. If the high school is refusing to issue the work permit for any other reason besides academics or attendance, please contact the Bureau of Child Labor by phone at (317) 232-2655 or by e-mail at child labor@dol.in.gov

Procedures

Dress Code Philosophy

Purdue Polytechnic High School's uniform requirements are intended to foster community through reducing socio-economic differences and ensuring safety. Our students should be judged on the merits of their actions, not on the labels or expense of their clothing. PPHS students will be interacting with numerous professionals and community members; keeping our students safe is our top priority.

Furthermore, PPHS will consistently drive towards excellence and innovation through all of our actions. By reducing the focus on what we wear, we can put our energy into what we create and accomplish together. Therefore, students are expected to be in uniform at all times during school.

Vendor Information

PPHS branded apparel will be purchased through a vendor. All other apparel and accessories may be purchased elsewhere provided they meet the requirements listed below. For any questions or concerns, please contact the vendor directly:

S2 Gear & Apparel

11945 Luxor Chase

Suite 101

Fishers, IN 4603

Site to order uniforms:
http://s2pros.com/index.php?main_page=index&cPath=115

Dress Code Policy

Students are not allowed to:

- Modify, embellish, or deface (including writing on) their uniform in any way
- Wear chains, spiked jewelry, or jewelry/accessories that represent violence in any manner
- Wear sunglasses in the school building.
- Wear slide-on sandals, flip-flops, slippers, or excessively high heels

Purdue Polytechnic High School reserves the right at any time to deem as inappropriate any clothing, accessories, or hair styling as it sees fit.

Base Uniform

- PPHS branded shirt or outerwear
- Khakis, Jeans, Shorts, Skirts, Skorts, or Capris
    - May not sag or be excessively loose, tight, and/or short (fingertips)
    - Must be intact and clean, not ripped

Professional Visits

Must be business or business casual attire-unless otherwise specified by a community partner and/or PPHS staff

Additional Uniform Rules

Students will not be permitted to school without proper attire. Students out of uniform will be provided with a temporary loaner that must be returned at the end of the day.

Clear Water Bottle

- May be reusable or recyclable plastic
- Must be colorless and transparent
- May only contain water – no other beverages are permitted
- Fruit may be added as long as it is not eaten outside of the lunch period and it does not discolor the water

Grooming

Students should refrain from personal grooming or preening during academic learning hours. This includes combing, brushing, or picking the hair, applying makeup, and using perfume, or cologne. These activities detract from the learning environment, disrupt others, and are not related to academic success. Students will be redirected when found grooming themselves, with the possibility of confiscation of any items and referral to School Administration.

Student ID Card

- Must be student's own Purdue Polytechnic High School-issued photo ID card in plastic case
- Must be worn visibly above and outside of all clothing at all times during the school day
- ID card will serve as IndyGo Bus Pass
- May not be defaced, broken, or obscured in any way
    - Such ID cards are treated as missing and will be replaced immediately
    - Students will be issued one free ID card per semester. Additional ID cards must be purchased for $5.
    - If ID cards are forgotten, students can purchase a temporary ID for $1.

Violation of Uniform Policy

School staff will consistently enforce the following procedures when the uniform policy is violated. School administration will not remove the student from the instructional process or send student home for uniform; however, a parent will be contacted if deemed necessary (flip flops/slippers, wrong length, tank tops, inappropriate showing of skin…etc.). Staff will direct students to correct inappropriate attire that can be immediately corrected and will be issued a warning. If the inappropriate attire cannot be corrected immediately, staff will take the following steps:

1st Offense	All students will receive a warning for any uniform violation.
2nd Offense	Parent(s)/ Legal Guardian (s) will be contacted and student will receive a **loaner** for the duration of the day and must be returned at end of day.
3rd Offense	The parent (s)/ legal guardian (s) will be contacted for a conference with school administration. Student will also receive a **loaner** for the duration of the day and must be returned to staff at the end of day.
4th Offense	The parent (s)/ legal guardian (s) will be contacted for a conference with school administration. Student will also receive a **loaner** for the duration of the day and must be returned to staff at the end of day. School administration will determine if outside assistance is needed. However, if appropriate student may be assigned appropriate reprimand

Behavior Expectations

Purdue Polytechnic High School focuses on setting high expectations for all students using positive systems to emphasize professionalism and deter negative behavior such as the following:

- Interventions for conflict resolutions and using restorative approaches
- shared values
- strong sense of community
- supportive relationships
- providing incentives and rewards

Our high expectations for our students reflect our faith in the potential of each student to learn the self-discipline and demeanors to succeed in school and life. We believe investing in character education enables students with tools that leads to better

judgements.

Cell Phones and Personal Electronic Devices

Students may use their cell phones during class time for instructional purposes with the teacher's permission, during lunch, and between classes. Phones must be silent and out of sight during instructional time.

Each user is responsible for his/her own cell phone and/or personal electronic devices and should use it responsibly and appropriately. PPHS takes no responsibility for stolen, lost, or damaged cell phones or personal electronic devices, including lost or corrupted data on those devices. While school employees will help students identify how to keep personal devices secure, students will have the final responsibility for securing their own devices. Please check with your homeowner's policy regarding coverage of personal electronic devices, as many insurance policies can cover loss or damage.

Discipline Policy

Minor Behaviors: The following behaviors are addressed and redirected by supervising PPHS staff and/or Personal Learning Coach:

• Teasing • Inappropriate Hallway behavior • Swearing • Disrespect to other students • Talking out of turn • Wandering hallways during project time • Lying • Unprepared for instruction	• Use of personal device inappropriately • Food theft • Inappropriate use of personal equipment • Tardiness • Littering • Excessive talking

Action Steps for Minor Behaviors:

Step 1

- Verbal reminder to the student of the expected appropriate behaviors.

Step 2

- Verbal reminder to the student of the expected appropriate behaviors.
- Consequence applied by teacher.
- Student submits/makes amend.

Step 3

- Verbal reminder to the student of the expected appropriate behaviors.
- Home contact made by Personal Learning Coach.

Step 4

- Move directly to step #1 of Major Behavior consequence.

<u>Middle Behaviors:</u> These behaviors are addressed and redirected by PPHS staff initially; but are referred to the school administration if behavior(s) is/ are consistently persisting.

• Defacing School Property • Cheating • Inappropriate clothing • Matches/Lighter	• Skipping Instruction • Inappropriate touching • Abuse of school property. • Inappropriate communication towards PPHS Staff. • Uniform violation

Action Steps for Middle Behaviors

Step 1

- Verbal reminder to the student of the expected appropriate behaviors.

Step 2

- Verbal reminder to the student of the expected appropriate behaviors.
- Consequence applied by teacher.
- Student submits/makes amend.

Step 3

- Verbal reminder to the student of the expected appropriate behaviors.
- Home contact made by Personal Learning Coach.

Step 4:

- Move directly to step #1 of Major Behavior consequence.

<u>Major Behaviors:</u> Behaviors are immediately referred to the school administration.

• Fighting • Physical Aggression • Extreme Defiance • Off school grounds without permission • Vandalism • Smoking • Inappropriate representation of school (Field trips, performances,	• Drugs/alcohol • Serious Theft • Deliberate inappropriate internet sites and/or print material • Sexual Harassment • Sexual Behavior • Weapons • Bullying/Cyber Bullying • Inappropriate behavior on Bus

athletics)	

Action Steps for Major Behaviors

Step 1:

- Referral to Administration

Step 2:

- Home contact made by Administration.

Step 3:

- Conference with Parent(s)/Legal Guardian(s)

Step 4:

- In /Out of School Suspension

Step 5:

- Written apology to offended parties and completed reflection form before student returns to school.

Transportation

We have a responsibility to ensure the safety of all our students. It is our job to make sure every child has a safe, calm ride to school each day. Students are expected to show our school values everywhere, and this includes their bus rides to and from school each day. Buses can be high risk areas for student misbehavior and bullying. Therefore, we have created a stern set of expectations for students as they ride the bus. The expectations are backed up by non-negotiable consequences that students and parents are informed about at parent orientation and open houses.

Purdue Polytechnic High School in partnership with IndyGo will host a Bus Orientation during Rookie Camp to review policy and strategies for de-escalation.

Indygo has outlined the following rider guidelines:

- Conduct & Noise Riders are prohibited from disruptive behavior including talking loudly on cell phones, playing excessively loud ringtones, listening to loud music or electronic devices with or without earphones, shouting profanity or insults, soliciting services or favors, and making threatening or hostile remarks. Riders are prohibited from throwing objects from the bus. Body limbs must stay inside the bus at all times. Spitting inside the Transit Center, on buses, or around areas where there will be heavy foot traffic is prohibited. Appropriate attire of a shirt, pants, and shoes are

required for service on and around all IndyGo properties and facilities. Rollerblades/skates/ skateboards must be removed and carried onto the bus or into the Transit Center. Skating, skateboarding, and rollerblading are not allowed in or around the Transit Center property.

- Eating and drinking is not allowed on IndyGo buses or in or around the Transit Center with the exception of areas where vendors sell and serve food and offer seating for consumption. If you have a medical condition, please inform the Operator or IndyGo staff for an exclusion. Food purchased inside the Transit Center will not be allowed for consumption on buses. Sealed and wrapped food and beverages may be transported, but not consumed on buses
- Prohibited Items on IndyGo Property:
    - Explosives
    - Knives (Cutting tools required for work are permitted)
    - Car Batteries (ADA-approved equipment is allowed)
    - Compressed Gas Bottles (ADA-approved equipment is permitted)
    - Fuel Storage Containers
    - Guns are not permitted in the Transit Center

Removal of Riders IndyGo Supervisors, security staff, or any responding Law Enforcement Agency may remove riders and/or their animals for not adhering to IndyGo policies. You may be removed from the property or facility if you are taking part in lewd or illegal activity, if your behavior is loud, boisterous, or otherwise detrimental or disruptive to other riders.

We ask that parents never confront bus drivers for any reason. All concerns should be addressed with our school administration. This will ensure all matters are handled appropriately.

Purdue Polytechnic High School will provide transportation services via IndyGo to all students. To ensure safety of our students, we follow the below protocols:

- PPHS students will arrive on time to the IndyGo bus stop nearest their home address
- If a student reports an incident to his or her parent or guardian that needs to be addressed, the parent or guardian of that student should contact the school within 24 hours to report the incident.

Change in Transportation

Your child's safety is our first priority. Thus, we ensure your child takes the correct form of transportation home each day. If your child is not to take their typical transportation home, please send a note for them to turn into the front office. In case of a last minute notification, please call the front office before 3:30pm Monday through Friday. The office will then notify your child of the different transportation arrangements.

Extra Curricular Activities

PPHS extends the privilege of extracurricular activities and athletics to students who recognize their obligation to themselves, their co-participants and their school community while striving for academic excellence.

Extracurricular activities are defined as any school activity that is non-credit bearing including athletics. Extracurricular programs help provide valuable experiences and are considered an integral part of the total educational program. Involvement in extracurricular activities can have a positive influence on the academic achievement of students.

Parent/Guardian Support

Attendance and punctuality
Helping your student get to school on time and make sure that he or she is there every day. This is your student's job and they have an important responsibility to their School Community, their Personal Learning Community and to their own education. Being on time shows respect and responsibility.

Talk with your student about his/her work
Know what your student is working on. What's on his or her Learning Plan? When are the next showcases? Ask to see your student's Super calendar. You can also view examples of work online. Contact your student's Personal Learning Coach to learn how. Keep in contact with your student's Personal Learning Coach for updates on your student's progress.

Attend Learning Plan meetings and Showcases
Support the learning process by meeting with the team to create your student's Learning Plan and attend showcases and help evaluate the work and learning.

Encourage at home project work
Look at your student's project timeline and encourage project work at home. Help your student establish an organized workspace at your home. Doing work at home is a valuable skill and habit for high school and for college.

Find summer opportunities
Help your student pursue a learning rich summer opportunity that will ignite their excitement and passion.

Find learning opportunities
Help your student find and take advantage of learning opportunities in your community. There may be an after school arts workshop or a church trip. Help expose your student to different activities and interests. If you find a program but can't afford it, talk to your student's Personal Learning Coach to see about fundraising opportunities in the school.

Enrolling Families
Families play an important role in a student's education. From helping the student plan his or her Learning Plan to participating in events, we rely on parents as an integral part of our community.

Policies

Title IX and Section 504 Anti-Discrimination Policy

Inquiries regarding compliance with Title IX, Section 504, or the Americans with Disabilities Act should be directed to Purdue Polytechnic High School (PPHS) administrative staff. PPHS does not discriminate on the basis of race, color, religion, gender, sexual orientation, national origin, age, or individuals with disabilities, including limited English proficiency, in its programs or employment policies as required by the Indiana Civil Rights Act (I.C. 22-9.1), Title VI and VII (Civil Rights Act of 1964), the Equal Pay Act of 1973, Title IX (Educational Amendments), and Section 504 (Rehabilitation Act of 1973).

Office for Civil Rights regarding an alleged violation of Title IX and/or Section 504 can be reached by visiting: the U.S. Department of Education's website or calling 1-800-421-3481.

If you have experienced discrimination in any education programs or activities, complaints should be directed to:

Title IV and Section 504 Coordinator:

Tonya Taylor

Director of Student Services

Immunization

PPHS requires that all students under age 18 be properly immunized against communicable diseases designated by the Indiana State Health Department.

The principal shall require parents to furnish to their child's school, no later than the first day of school after enrollment, a written statement of the child's immunization accompanied by a physician's certificate or other documentation. Students whose parents do not provide the required documentation by the opening day of school may be admitted to school provided the documentation is received within twenty (20) days. If the student remains unimmunized at the close of the twenty (20) day period, the Principal shall commence exclusion proceedings, unless the parents have filed a religious objection or submitted a physician's statement that the needed immunizations are contraindicated.

Exemptions to the immunization requirements shall be granted, in accordance with State law, only for medical, religious, or other reasons allowed by the State.

Tobacco

Purdue Polytechnic High School is a tobacco free campus. PPHS recognizes that the use of tobacco presents a health hazard that can have serious consequences for both the user and the nonuser.

For purposes of this policy, use of tobacco shall mean all uses of tobacco, including cigar, cigarette, pipe, snuff, or any other matter of substance that contains tobacco, as well as electronic, "vapor," or other substitute forms of cigarettes.

In order to protect students who choose to use tobacco from an environment that might be harmful to them, PPHS prohibits the use and/or possession of tobacco by students at all times within any facility owned or contracted for by PPHS.

Drugs and Alcohol

PPHS recognizes the hardship created by drugs and alcohol at the individual and community levels. In so doing we unite to provide a drug free environment, safe for student growth and learning.

While we recognize the need for compassionate treatment of those addicted and seeking help, we also uphold the policy of not using drugs/alcohol any time while on campus or at any off-campus PPHS event. In accordance with this, we will maintain a NO TOLERANCE policy toward drug and alcohol use.

Anti-Bullying

PPHS is committed to a safe and civil educational environment for all students, employees, volunteers, and patrons, free from harassment, intimidation or bullying. "Harassment, intimidation or bullying" means any intentional written, electronic, verbal, photographic or physical act, when the intentional written, verbal, or physical act:

- Physically harms a student or damages the student's property; or
- Has the effect of interfering with a student's education; or
- Is severe, persistent, or pervasive so that it creates an intimidating or threatening educational environment; or
- Has the effect of disrupting the orderly operation of the school. Harassment, intimidation or bullying can take many forms including, but not limited to: cyberbullying, tweeting, texting, Facebook, emails, snapshots, slurs, rumors, jokes, innuendos, demeaning comments, drawing of cartoons, pranks, gestures, physical attacks, threats, or other written, electronic, online, verbal, or physical actions. "Intentional acts" refers to the individual's choice to engage in the act rather than the ultimate impact of the action(s).

Many actions that do not rise to the level of harassment, intimidation, or bullying may still be prohibited by other school policies or building, classroom, or program rules. Violations of this policy may include any social media postings.

Consequences and appropriate remedial action for a student could range from positive behavioral interventions up to and including suspension or expulsion. Counseling, corrective discipline, dismissal from school, and/or referral to law enforcement may be employed to change the behavior of the perpetrator and remediate the impact on the victim.

Crisis Prevention

Only trained staff members use Crisis Prevention Intervention (CPI) when students are in danger of seriously endangering themselves and/or others. Physical intervention is used only as a last resort by a team of trained staff members while awaiting additional support. Staff documents all incidences of physical restraint and a copy is given to the student's family and administration.

If an incident of restraint or seclusion occurs, the student's parent or guardian must be notified immediately. An incident report must be completed, copied, and mailed to the parent or guardian within two (2) school days of the incident. Copies of the incident report will be kept on file at the student's school and sent to PPHS school administration within two (2) days of the incident.

Definition of Crisis Prevention: The methods, techniques, or services used to offer immediate support to students who are experiencing behavior distress or problems. This includes intervention from trained staff who understand how to address aggressive, violent, or out-of- control behaviors.

In accordance with school-wide discipline plans, <u>all</u> classrooms should implement classroom behavior plans that enforce a positive learning environment. These plans should include behavior expectations, de-escalation strategies, and positive reinforcements.

1. PPHS will have staff certified in the instructor program through the Crisis Prevention Institute in Nonviolent Crisis Intervention Training.
2. PPHS will provide all staff members with Nonviolent Crisis intervention Training.
3. This training will be recurrent and provided to all staff.
4. Any staff involved in an incident (seclusion/restraint) must engage in a debrief session and complete appropriate documentation.
5. A program review will be completed at the end of each year.

Seclusion
The confinement of a student alone in a room or area from which the student physically is prevented from leaving. The term does not include a supervised time-out or scheduled break, as described in a student's individualized education program, in which an adult is continuously present in the room with the student.

1. Seclusion should not be used as a form of punishment or consequence. Seclusion should only be used with a student who is displaying physical behaviors that pose a threat to themselves or others.
2. The door to the seclusion room or space should remain unlocked at all times.
3. Seclusion should only be used as long as necessary to de-escalate the situation or in accordance with a student's BIP or IEP.
4. Adult supervision is required. Students should never be left unattended.
5. Seclusion shall only be used by staff members who are certified in Nonviolent Crisis Intervention.
6. Appropriate documentation must be completed and parent/guardian informed.

Restraints
The physical contact between a school employee and a student in which the student unwillingly participates and that involves the use of a manual hold to restrict freedom of movement of all or a part of a student's body or to restrict normal access to the student's body. The term does not include (1) briefly holding a student without undue force in order to calm or comfort the student, or to prevent unsafe behavior, such as running into traffic or engaging in a physical altercation, (2) physical escort, or (3) physical contact intended to gently assist or prompt a student in performing a task or to guide or assist a student from one area to another. Restraints include any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of an individual to move their body freely.

Physical restraints may **ONLY** be used as a last resort. Physical restraints should only be used when a student poses a threat to themselves or others. It should never be used as a form of discipline or punishment to the student.

If it is deemed necessary to use physical restraints, the following guidelines must be followed:

1. Restraints should be used ONLY by staff who have a current certification in Crisis Prevention Intervention (CPI).
2. Any restraint used should be an approved CPI restraint.
3. Restraints should ONLY last as long as necessary for the student to gain control of their behavior and no longer pose a threat to themselves or others
4. Appropriate documentation must be completed and parent/guardian informed.

No student will be restrained and/or placed in seclusion by school staff unless the student's

behavior poses an imminent risk of injury to him/herself or others. However, significant violations of the law including assaults on students and staff will be reported to the police. As soon as possible after any such use of restraint and/or seclusion, the parents or guardian will be informed and will be provided with a detailed account of the incident including the circumstances that led to the use of restraint and or seclusion.

Suspension & Expulsion Policy

The following procedure is followed if suspension of a student is required.

1. Prior to any suspension, the school principal or his/her designee will advise the student in question of the particular misconduct of which he/she is accused and will state the basis for the accusation.
2. The student will be given an opportunity at the time to explain his/her version of the facts to the school principal or his/her designee. Any student whose presence poses a continued danger to persons or property or represents an ongoing threat of disruption may be removed immediately from the school premises without benefit of the above –described procedure. (IC 20-33-8-18)
3. The school principal or his/her designee, shall contact the parent by telephone, contact the parent in person, or send a certified letter to the address of the pupil to the parent or guardian of the student, giving notice of the suspension, the reason (s) for the suspension and establishing a date and time for a conference with the school administration or his/her designee as a requirement of re-admitting the student. The school is required to provide written notice of the suspension to the parent(s) via electronic communication (email, text) or mail that includes the reason for the suspension to the parent or parents of the suspended student. (IC 20-33-8-18)
4. During a suspension, student is forbidden to come on school grounds or to attend or participate in any school-sponsored events. (IC 20-33-8-14)

A student whose presence in school poses a continued danger to any person or property or any ongoing threat of disruption to the academic process shall be immediately removed from the school without the benefit of the prior procedures; however, the necessary procedure shall follow as soon as is practical.

The school is required to provide written notice of the suspension and the reasons to the parent or parents of the suspended student. Any parent or legal guardian of a suspended student has the right to appeal the suspension to the Head of School or designee of Purdue Polytechnic High School. The Head of School or designee will conduct a hearing on the merits of the case. The decision of the Head of School on the merit of the case, as well as the term of suspension, is final. Parents have five days to appeal the suspension in writing.

If the offense warrants a recommendation for expulsion, the school administration makes the recommendation. In the network offices of Purdue Polytechnic, a hearing office conducts a hearing. A determination of whether to expel the student is made by the hearing office; at the hearing, a third party can represent the student. (IC 20-33-8-19)

Until the hearing takes place, the student shall remain on suspension. (IC 20-33-8-23)

Complaints, Concerns, and Appeals

We share the commitment to accountability that we ask of all our parents, guardians, and students, and will address any concerns expeditiously and judiciously. Any parent may bring a complaint to the school principal for any reason, including the request to appeal a disciplinary decision. The below process has been established so that students and parents may bring concerns, appeals, and complaints to the attention of the appropriate party:

Step One

- If a concern arises from a school situation, students or parents should first set a time outside instructional time to discuss it with the Personal Learning Coach or PPHS staff that is directly involved.

Step Two

- If the students or parents concerned believe that the discussion has not led to a satisfactory conclusion, they may proceed to set up time prior or after school hours to discuss the matter with PPHS administration in an attempt to reach a solution.

Step Three

- If the students or parents believe that the situation still has not been resolved, concerns should be taken to the Chief of Staff. The Chief of Staff will first investigate the matter to ensure that Step 1 and Step 2 have been appropriately documented and completed, then record the complaint and/or appeal and will address any concerns regarding appeal of a disciplinary decision, or action or inaction taken by the school administration, within 7 school days of the appeal and within 10 days from the time the complaint is introduced.

Weapons

PPHS will not tolerate the possession of weapons, devices, instruments, materials, or substances animate or inanimate, that are used for, or are readily capable of, causing death or serious bodily injury by anyone while on PPHS property, at a school-related event, or while enroute to or from school on a school vehicle.

This policy shall also encompass such actions as false fire alarms, bomb threats, or intentional calls to falsely report a dangerous condition.

PPHS requires students to report to the building principal knowledge of dangerous weapons and threats of violence by students. Failure to report such knowledge may subject the student to immediate suspension and potential expulsion from school.

Anyone found possessing a firearm on PPHS premises, a school vehicle, or on property being used by PPHS for school purposes may be charged with a felony. This restriction applies to those licensed to possess firearms other than law enforcement and authorized security officers as well as any employees who were previously allowed to possess a firearm. [I.C. 35-47-9]

Indoor Air Quality

The Environmental Protection Agency states the following: In recent years, comparative risk studies performed by EPA and its Science Advisory Board (SAB) have consistently ranked indoor air pollution among the top five environmental risks to public health. Good IAQ is an important component of a healthy indoor environment, and can help schools reach their primary goal of educating children. PPHS is committed .....

The IAQ coordinator for PPHS is: Deanna Powell

410 IAC 33-3-1 Contact information
Authority: IC 16-19-3-5; IC 16-41-37.5
Affected: IC 16-41-37.5
Sec. 1. (a) Schools and state agencies shall provide the IAQ coordinator's contact information to the following:
(1) The state inspector during an inspection and upon request.
(2) All:
(A) students;
(B) parents;
(C) employees; and
(D) visitors
during orientation, such as new hire, school, or visitor orientations.

(b) The IAQ coordinator's contact information shall also be published:
(1) on the school or state agency's website; and
(2) in the school or state agency's handbook.
(Indiana State Department of Health; 410 IAC 33-3-1)

Attachment K: Staffing Plan/Job Descriptions

PPHS INSTRUCTIONAL PERSONNEL

Freshmen	# of Positions	2017-18	2018-19	2019-20	2020-21	2021-22
Humanities	1	1	1	1	1	1
Science	1	1	1	1	1	1
Humanities	2	1	1	1	1	1
Science/ Maker-Space	5	1	1	1	1	1
Math	1	1	1	1	1	1
Math	2	1	1	1	1	1
CTE-Technology	1	1	1	1	1	1
SPED- Coordinator	1	1	1	1	1	1
Science	2	1	1	1	1	1
CTE- Engineer	2	1	1	1	1	1
Sophmore						
Humanities	3		1	1	1	1
Science	3		1	1	1	1
Humanities	4		1	1	1	1
Facilitator/Support	1		1	1	1	1
Math	3		1	1	1	1
Facilitator/Support	2		1	1	1	1
Facilitator/Support	3		1	1	1	1
SPED - Coordinator	2		1	1	1	1
Facilitator/Support	4		1	1	1	1
CTE- Aviation	3		1	1	1	1
Junior						
Humanities	5			1	1	1
Science	4			1	1	1
Facilitator/Support	5			1	1	1
Facilitator/Support	6			1	1	1
Math	4			1	1	1
Facilitator/Support	7			1	1	1
Senior						
CTE- Agriculture	4				1	1
CTE- Health Science	5				1	1
CTE- Technology	6				1	1
Facilitator/Support	8				1	1
Facilitator/Support	9				1	1
Facilitator/Support	10				1	1
Facilitator/Support	11				1	1

Instructional Model	
Math	4
Humanities	5
Science	5
SPED	2
CTE	6
Facilitators/ Support/ DE	11
Total	**33**

TOTAL INSTRUCTIONAL		**10**	**20**	**26**	**33**	**33**
School Principal		1	1	1	1	1
Lead Teacher		1	1	1	1	1
Community Outreach Coordinator		1	1	1	1	1
Innovation & Learning Strategist		1	1	1	1	1
Director of School Culture				1	1	1
College & Career Coordinator		1	1	1	1	1
Office Manager		1	1	1	1	1
Receptionist				1	1	1
Guidance				1	1	1
Total Admin Personnel		**6**	**6**	**9**	**9**	**9**
TOTAL PPHS PERSONNEL		**16**	**26**	**35**	**42**	**42**

Purdue Polytechnic Indianapolis High School

Head of School – Job Description

Reports to: Board of Directors **FLSA Status:** Exempt

Position Summary

The Head of School serves as the chief innovator and school developer, leads collaboration with Purdue University and the Purdue Polytechnic Institute, and is the lead liaison within the community. The Head of School for Purdue Polytechnic Indianapolis High School is responsible for advancing a culture and environment which promotes analysis, communication, innovation and professionalism among staff and students. The mission of the Purdue Polytechnic Indianapolis High School is to create a new generation of skilled talent by developing innovative practices and new ways of engaging young people by learning in context through project and design based curriculum. The Head of School will ensure a seamless transition of students from high school to post-secondary education and high-wage, high demand jobs and implement the school's mission to develop students' lifetime success by preparing them with the skills needed to succeed in today's workplace through a STEM-focused education and experiential learning. The position is responsible for managing the day-to-day affairs of the school and for implementing and refining policies, programs, and curricular activities in a manner that promotes the educational development and advancement of each student and the professional development of each staff member.

Education

Bachelor's degree in relevant field required, Master's degree or PhD preferred

Qualifications

- Current Indiana Administrator's license preferred, but not required
- 5+ years in a school-related leadership role
- Prior experience successfully managing professionals
- Familiarity with experiential learning and educating students in a STEM-focused environment
- Experience in urban education preferred
- Strong communicator at a variety of levels

Essential Duties and Responsibilities

Innovation

- Works closely with the Board of Directors and school staff to develop a high school paradigm for world-class education in the 21st Century
- Collaborates on education innovation with Purdue University and the Purdue Polytechnic Institute
- Facilitates development of a creative learning environment that challenges students through experiences and projects

Relationships

- Promotes and maintains open communications, positive student attitudes, and worth of staff
- Maintains and develops strong relationships with community partners, including industry partners
- Develops plans for interpreting the school program to the community
- Represents the school in all public forums
- Leads the school's students recruitment and retention efforts

Management

- Implements broad school goals and plans accordingly to ensure that procedures and schedules are implemented to carry out the school program
- Manages and directs the materials, supplies, and equipment which are necessary to carry out the school program and daily school routine
- Ensure the school is meeting all educational and organizational goals
- Supervises all school personnel, directly or indirectly and provides leadership to all school staff
- Provides daily oversight of all functions of the school

Operations

- Ensures that all activities of the school are conducted in accordance with all applicable state and federal laws
- Ensures compliance with all reporting due to the State and the school's authorizer
- Works closely with the Board of Directors to ensure effective management of the school
- Attends all meetings of the Board of Directors and provides the routine and non-routine updates
- Assists the Board of Directors to contract with and manage vendors

Attachment L: Letters of Support

- Purdue University
- EmployIndy
- Indiana Manufacturers Association
- Conexus Indiana
- Eli Lilly and Company
- Ports of Indiana
- Eleven Fifty Academy
- General Electric Company

PURDUE
UNIVERSITY

OFFICE OF THE PRESIDENT
September 9, 2015

Ms. Kristin Hines
Charter Schools Director
Office of Education Innovation
Office of the Mayor of Indianapolis
200 East Washington Street
Indianapolis, IN 46204

Dear Ms. Hines,

I am pleased to endorse the enclosed prospectus of the Purdue Polytechnic Indianapolis High School. The establishment of a STEM-based charter school in downtown Indianapolis has raised great excitement among the university's faculty and trustees, not to mention our community supporters.

Among public research universities, Purdue is third in the percentage of students earning STEM degrees and second in engineering graduates. Data show that Purdue is the destination of choice among Indiana's top high school graduates and a world leader in preparing graduates for technology-based careers.

Recognizing that far too few urban Indianapolis high school graduates are academically prepared for the rigors of postsecondary education in scientific and technological disciplines, Purdue is leading in the creation of the Purdue Polytechnic Indianapolis High School. Through its "grow our own" curriculum, the school will prepare students to succeed in college, hopefully at Purdue, or in satisfying technical careers.

The university has already invested heavily in the planning for the high school through the Purdue Polytechnic Institute. As the attached budget model and fiscal statements show, we anticipate the Purdue Polytechnic Indianapolis High School will reach full budgetary sustainability in year three of its operations. Purdue University alumni, Indiana's leading employers, and philanthropic organizations have all expressed support for the school and a willingness to provide financial backing. The university and its research foundation commit to providing financial support to the school in order to fill any remaining operational gaps or budget shortfalls that might occur.

We look forward to ongoing collaboration with the Indianapolis Charter School Board and the Office of Education Innovation as the Purdue Polytechnic Indianapolis High School gets underway.

Sincerely,

Mitch Daniels

Mitchell E. Daniels, Jr.
President

Hovde Hall, Room 200 • 610 Purdue Mall • West Lafayette, IN 47907-2040 • (765) 494-9708 • Fax: (765) 494-7875

EmployIndy

Defining Success. Driving Growth.

August 19, 2015

Ms. Kristin Hines
Director of Charter Schools
Office of Education Innovation
Office of Mayor Greg Ballard
City of Indianapolis

Dear Ms. Hines:

EmployIndy is pleased to support the Purdue Polytechnic Indianapolis High School. As an organization focused on developing skilled talent for Marion County, EmployIndy couldn't be more encouraged by Purdue's leadership and commitment to Indianapolis students who will benefit from a new approach to learning in order to succeed in an increasingly technical workforce.

Purdue's Polytechnic Indianapolis High School will help close the educational gap for many Indianapolis students. Now, more than ever, the need is great to deliver more innovative learning experiences and provide opportunities to high school students who have STEM (science, technology, engineering and mathematics) capabilities but might not have access to tailored programs to ensure their success. Polytechnic is a unique solution that will cater specifically to these students and help them emerge with the skills needed for personal, professional and community success.

As a region and as a nation, we are at a critical junction. We need to expand our intellectual capital and we need new approaches for doing so. We know that in Central Indiana alone, by 2025 we will have 51,500 net new jobs that will require technical skills. Without some dramatic changes in how we prepared tomorrow's talent, we will be short 24,500 workers. This shortage has direct consequences for our businesses, residents and region's economic vitality.

EmployIndy has long been focused on aligning education with industry needs and bringing industry into the fold as we develop and deliver programs and training to our residents. The need for alignment is perhaps most pronounced in STEM fields, where technology changes almost as fast as it's introduced. With open and constant dialogue and partnerships with industry, EmployIndy has successfully developed talent to drive our region's economy.

The Purdue Polytechnic Indianapolis High School is yet another example of how the region is coming together to prepare students for success in an evolving workforce. It will be unlike any educational experience offered in Indiana and potentially, the nation. The Purdue Polytechnic Indianapolis High School is specifically designed to develop a new generation of skilled talent by seamlessly transitioning students from high school and postsecondary education to high-wage, high-demand jobs.

PNC Center South | 115 West Washington Street, Suite 450 South | Indianapolis, IN 46204
Phone: 317.639.4441 | Fax: 317.639.0103
www.EmployIndy.org

The rigorous curricula and learning environment are built on strong industry relationships, an innovative partnership with Purdue University and a goal to ensure a diverse student body succeeds in the 21st Century economy.

It's been an honor to participate in the early stages of the Purdue Polytechnic Indianapolis High School's early development as the planning grant's fiscal agent. Over the past year, EmployIndy has led planning grant activities and provided labor market data and analysis to align the curriculum with employer needs. This effort has been a true demonstration of what can happen when you bring industry, academia and the community together to tackle one of our most pressing needs.

Please accept this letter of support for the Purdue Polytechnic Indianapolis High School. EmployIndy remains committed to partnering with Purdue and the community to deliver this innovative learning model to Indianapolis students in August 2017 and ensure its success in the Indianapolis K-12 education landscape.

Sincerely,

Nicole Thompson

Nicole Thompson
Interim President & CEO
EmployIndy

Indiana Manufacturers Association, Inc.

101 West Washington St., Suite 1050 East ● Indianapolis, IN 46204
317-632-2474 ● 800-462-7762 ● Fax: 317-231-2320 ● www.imaweb.com

August 10, 2015

Ms. Kristin Hines
Director of Charter Schools
Office of Education Innovation
Office of Mayor Greg Ballard
City of Indianapolis

Dear Ms. Hines:

The Indiana Manufacturers Association (IMA) and its member companies are pleased to support the Purdue Polytechnic Indianapolis High School's request for a charter from the Indianapolis Mayor's Office. Supporting this school fits squarely within IMA's focus on workforce development to enhance the ability of Indiana's manufacturers to compete effectively and profitably in a local, national and global economy.

The success of our region, our students and our industry heavily depends on how well we've prepared talent to succeed in the 21st-Century economy. We have great potential to build this talent pipeline and reach future workers now as they progress through high school and prepare for post-secondary education and the workforce.

The Purdue Polytechnic Indianapolis High School provides an answer, targeting IPS students who have STEM capabilities but may not have the opportunities to excel. The school focuses on learning-by-doing and will graduate students who have deep knowledge, applied skills, and experiences in STEM fields. These students will be ready to work in high-demand, high-paying jobs that will fuel our businesses and our economy.

This is an exciting learning opportunity that finds its strength in industry participation and collaboration. The IMA is pleased to be one of those partners. We realize the cornerstone to this charter school's success is industry partnership. The IMA and its member companies are committed to working with Purdue and its organizing partners, EmployIndy and USA Funds, as they continue development activities toward an August 2017 opening. Some of the partnership opportunities our member companies are exploring include:

- Participating in an industry advisory board to help develop the academic model and define and refine the competencies students must master to succeed in the 21st Century economy.
- Hosting internships to provide hands-on experience so students will get an early glimpse into career opportunities and master concepts they learn in the classroom.
- Serving as mentors to help students decide their field of study and understand the opportunities and challenges ahead. As mentors, we will support the student's transition from high school to post-secondary education or the workforce.

Please accept this letter of support for the Purdue Polytechnic Indianapolis High School. We look forward to a meaningful partnership with Purdue and the community to deliver this innovative learning model to Indianapolis students.

Sincerely,

Brian Burton
President and CEO

CONEXUS
INDIANA

August 10, 2015

Ms. Kristin Hines
Director of Charter Schools
Office of Education Innovation
Office of Mayor Greg Ballard
City of Indianapolis

Dear Ms. Hines:

Conexus Indiana and its Board of Directors is pleased to support the Purdue Polytechnic Indianapolis High School's request for a charter from the Indianapolis Mayor's Office. Supporting this school fits squarely within Conexus Indiana's focus on workforce development to explore new opportunities to grow Indiana's advanced manufacturing and logistics (AML) industries and create an emerging pool of skilled STEM workers.

The success of our region, our students and our businesses heavily depends on how well we've prepared talent to succeed in the 21st-century economy. We have great potential to build this talent pipeline and reach future workers now as they progress through high school and prepare for post-secondary education and the workforce.

The Purdue Polytechnic Indianapolis High School provides an answer, targeting IPS students who have STEM capabilities but may not have the opportunities to excel. The school focuses on learning-by-doing and will graduate students who have deep knowledge, applied skills, and experiences in STEM fields. These students will be ready to work in high-demand, high-paying jobs that will fuel our businesses and our economy.

This is an exciting learning opportunity that finds its strength in industry participation and collaboration. We're pleased to be one of those partners. Our innovative Conexus Interns program immerses high school students in a manufacturing or logistics environment where they serve as employees of a local AML company. Similar to the mission of the Purdue Polytechnic High Indianapolis School, Conexus Interns serves as a bridge to help students prepare for opportunties post graduation and seamless transition into the workforce.

We realize the cornerstone to this charter school's success is industry partnership. Conexus Indiana and its member companies plan to be at the table as Purdue develops curricula with industry input and builds in hands-on learning opportunities through in-the-field working experience. We are committed to working with Purdue and its organizing partners, EmployIndy and USA Funds, as they continue development activities toward an August 2017 opening.

Please accept this letter of support for the Purdue Polytechnic Indianapolis High School. We look forward to a meaningful partnership with Purdue and the community to deliver this innovative learning model to Indianapolis students.

Sincerely,

Steven F. Dwyer
President and CEO
Conexus Indiana

111 Monument Circle, Suite 1800 • Indianapolis, IN 46204 • 317-638-2107

www.lilly.com

Eli Lilly and Company
Lilly Corporate Center
Indianapolis, Indiana 46285
U.S.A.

Phone 317 276 2000

September 8, 2015

Ms. Kristin Hines
Director of Charter Schools
Office of Education Innovation
Office of Mayor Greg Ballard
City of Indianapolis

Dear Kristin,

The success of our company is linked to the success of our home city of Indianapolis. That is why we are so deeply engaged in efforts to help move our city forward. As we think about the key drivers of our community's future success, we are convinced that we have no more important priority than to improve the educational outcomes of all of our children.

As a result, Lilly has, among other things, been a strong supporter of innovative new models and for dramatically improved public school options in underserved, low-income neighborhoods. In addition, we have also been a passionate advocate of efforts that prepare and motivate students to study and excel in STEM subjects. Not only are these subjects intrinsically worthy of study, they are also critical to propel our economy forward. Economic growth and prosperity will be fueled by entrepreneurs and employees who leverage the power of science and technology. As a result, it is essential that we have a larger share of adults with proficiencies in STEM disciplines.

The Purdue Polytechnic High School has the potential to be at the intersection of our primary interests in education: an innovative STEM-based model that will provide another compelling option for students, many of whom will be from low-income families.

We appreciate the fact that Purdue has recognized the need to deliver more innovative learning experiences and provide opportunities to students who may have STEM capabilities, but lack access to tailored programs. Purdue Polytechnic can help close this gap for many children. This unique educational experience will blend classroom instruction with real-world opportunities, and challenge students outside of the classroom. It will infuse liberal arts into the curriculum and integrate teaching across the STEM disciplines. If successfully executed, this school has the potential to develop a new generation of graduates ready to transition to a career or college. Among the benefits, these students will be on a path to high-wage, high-demand jobs.

We believe Purdue Polytechnic High School has the potential to be an outstanding addition to the mayor's portfolio of charter schools. Please accept this letter of support for their application.

Sincerely,

Robert L. Smith
Senior Director – Corporate Responsibility, Eli Lilly and Company
President – Eli Lilly and Company Foundation

Dean Gary Bertoline
Purdue University
Purdue Polytechnic Institute
401 N. Grant Street, Knoy 467
West Lafayette, Indiana 47907-2021

RE: Letter of Support for Purdue Polytechnic Indianapolis High School

August 24, 2015

Dr. Bertoline,

The Ports of Indiana is the statewide port authority operating three ports on the Ohio River and Lake Michigan. Our ports contribute over $6 billion in annual economic impact to our region and support more than 50,000 jobs throughout the state of Indiana. The success of our region, our workers, our students and our business heavily depends on how well we've prepared talent to succeed in the 21st-century economy. We have great potential to build this talent pipeline and reach future workers as they progress through high school and prepare for post-secondary education and the workforce.

We have long partnered with Purdue Univeristy in various ways and see great value in continuing this partnership long into the future. We are supportive of Purdue University 's efforts to develop the Purdue Polytechnic Indianapolis High School, targeting IPS students who have STEM capabilities but may not have the opportunities to excel. We see tremendous value for our various industries in having a school that focuses on learning-by-doing and will graduate students who have deep knowledge, applied skills and experiences in STEM fields. These students will be ready to work in high-demand, high-paying jobs in logistics fields that will fuel our businesses and our economy.

This is an exciting learning opportunity that finds its strength in industry, community participation and collaboration. We're pleased to be one of those partners and would be happy to facilitate additional connections to many of our industrial partners.

We realize the cornerstone to this charter school's success is industry partnership. We understand that Purdue is developing curricula with industry input and, in turn, industry will offer hands-on learning opportunities through in-the-field working experience. We are committed to working with Purdue and its organizing partners, EmployIndy and USA Funds, as they continue development activities toward an August 2017 opening. Some of the partnership opportunities we are exploring include:

- Participating in an industry advisory board to help develop the academic model and define and refine the competencies students must master to succeed in the 21st Century economy.
- Hosting internships to provide hands-on experience so students will get an early glimpse into career opportunities and will master concepts they learn in the classroom.
- Participation of students in our annual Indiana Logistics Summit as part of the Logistics U session, a high school workshop focused on introducing students to the logistics industry.

Please accept this letter of support for the Purdue Polytechnic Indianapolis High School. We are committed to partnering with Purdue and the community to deliver this innovative learning model to Indianapolis students.

Sincerely,

Rich Cooper

Rich Cooper, CEO
Ports of Indiana

ELEVEN FIFTY
ACADEMY

October 25, 2015

To who it concerns:

The success of our region, our students and our business heavily depends on how well we've prepared talent to succeed in the 21st-century economy. We have great potential to build this talent pipeline and reach future workers now as they progress through high school and prepare for post-secondary education and the workforce.

The Purdue Polytechnic Indianapolis High School provides an answer, targeting IPS students who have STEM capabilities but may not have the opportunities to excel. The school focuses on learning-by-doing and will graduate students who have deep knowledge, applied skills, and experiences in STEM fields. These students will be ready to work in high-demand, high-paying jobs that will fuel our businesses and our economy.

This is an exciting learning opportunity that finds its strength in industry participation and collaboration. We're pleased to be one of those partners.

We realize the cornerstone to this charter school's success is industry partnership. Purdue is developing curricula with industry input. In turn, industry will offer hands-on learning opportunities through in-the-field working experience. Industry also will work with students in one-on-one mentoring sessions to help them through career exploration and the rigors of the curriculum.

We are committed to working with Purdue and its organizing partners, EmployIndy and USA Funds, as they continue development activities toward an August 2017 opening. Some of the partnership opportunities we are exploring include:

- Participating in an industry advisory board to help develop the academic model and define and refine the competencies students must master to succeed in the 21st Century economy.
- Hosting internships to provide hands-on experience so students will get an early glimpse into career opportunities and will master concepts they learn in the classroom.
- Assessments specific to the coding profession and outcome based gamification programs enabling students to earn subsidized immersive training.
- Serving as mentors to help students decide their field of study and understand the opportunities and challenges ahead. As mentors, we will support the student's transition from high school to post-secondary education or the workforce.

Please accept this letter of support for the Purdue Polytechnic Indianapolis High School. We are committed to partnering with Purdue and the community to deliver this innovative learning model to Indianapolis students.

Sincerely,

John Qualls
President
Eleven Fifty Academy

GE

Anthony H Denhart
Region Manager
Campus Relations

12722 Hamilton Crossing
Carmel, IN 46032
USA

Ms. Kristin Hines
Director of Charter Schools
Office of Education Innovation
Office of Mayor Greg Ballard
City of Indianapolis

Dear Ms. Hines:

GE is pleased to support the Purdue Polytechnic Indianapolis High School's request for a charter from the Indianapolis Mayor's Office. Supporting this school aligns with GE's strategy to compete in a global economy.

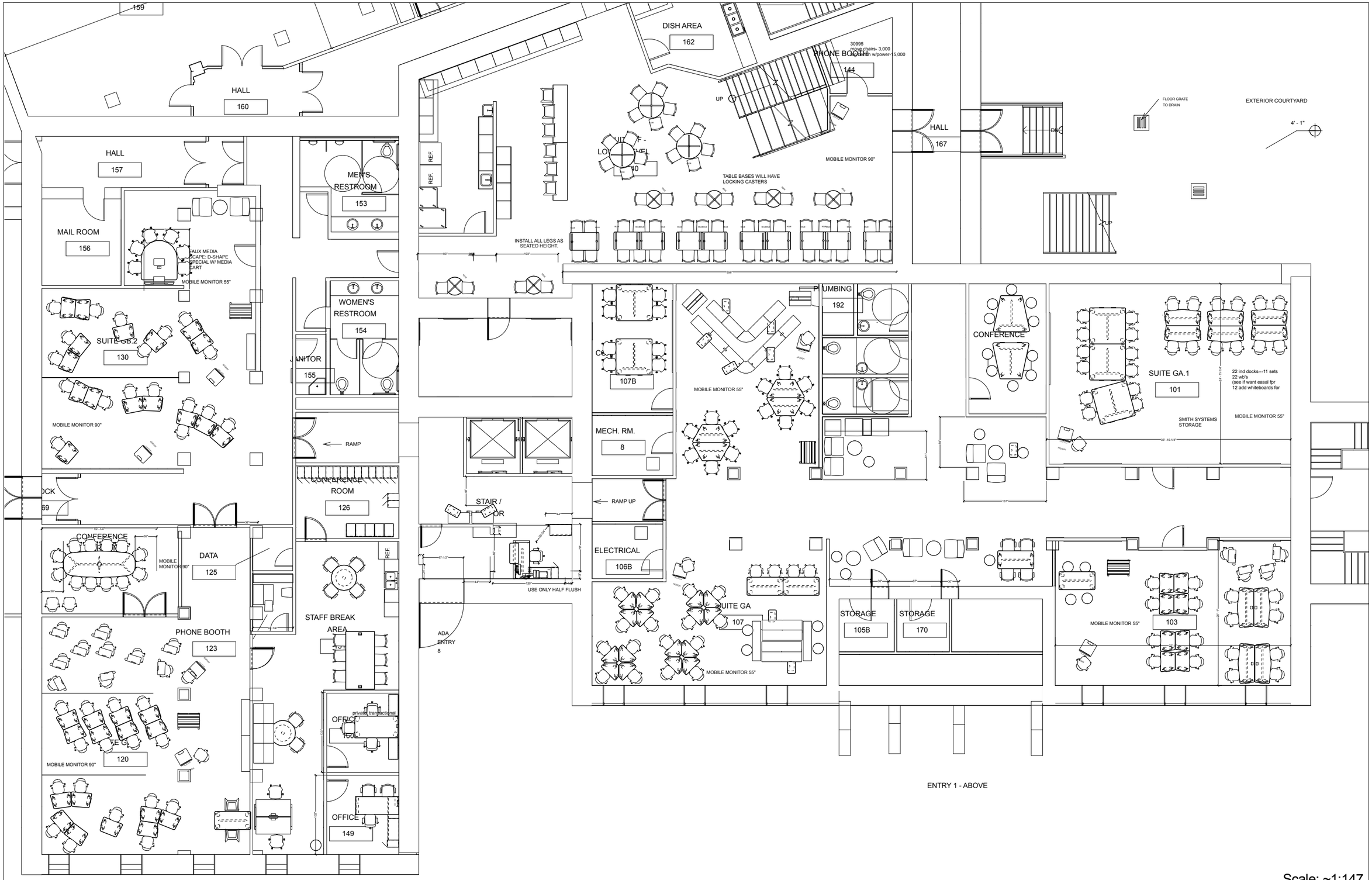
I have been on the Purdue Bound, formally Purdue Science Bound, advisory board since it's inception. I have seen, first hand, the impact that we have made. These students hold the skills that companies like GE need and are looking for. Unfortunatelly many students are not provided an opportunity to excel. The Purdue Polytechnic Indianapolis High School will provide the opportunity for these students to position themselves for success.

Please accept this letter of support for the Purdue Polytechnic Indianapolis High School. GE looks forward to continuing it's 120 plus year partnership with Purdue University.

Sincerely,

Anthony H. Denhart

Attachment M: Floor Plan



Scale: ~1:147

OVERALL BASEMENT

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_9.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

DATE: XX/XX/XXXX

DRAWN BY: and last name]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

PROJECT NAME: [Order entry, Project name]

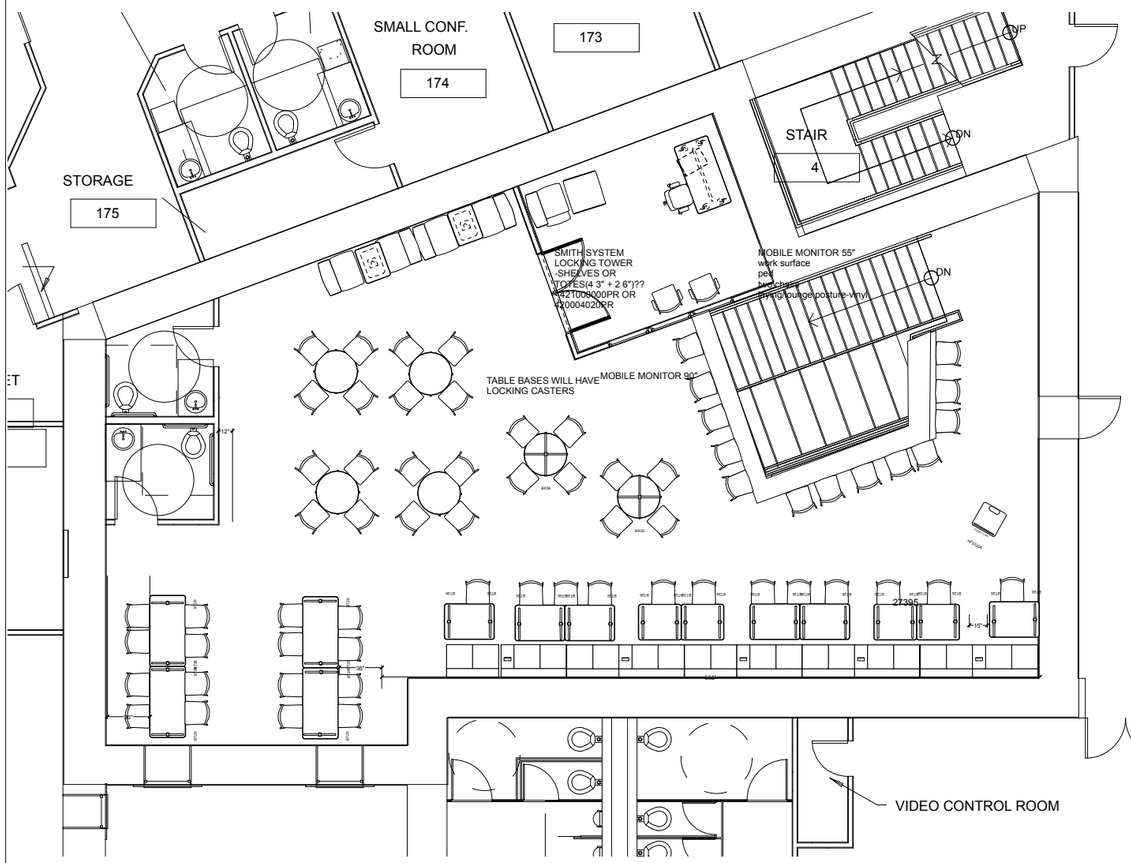
ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

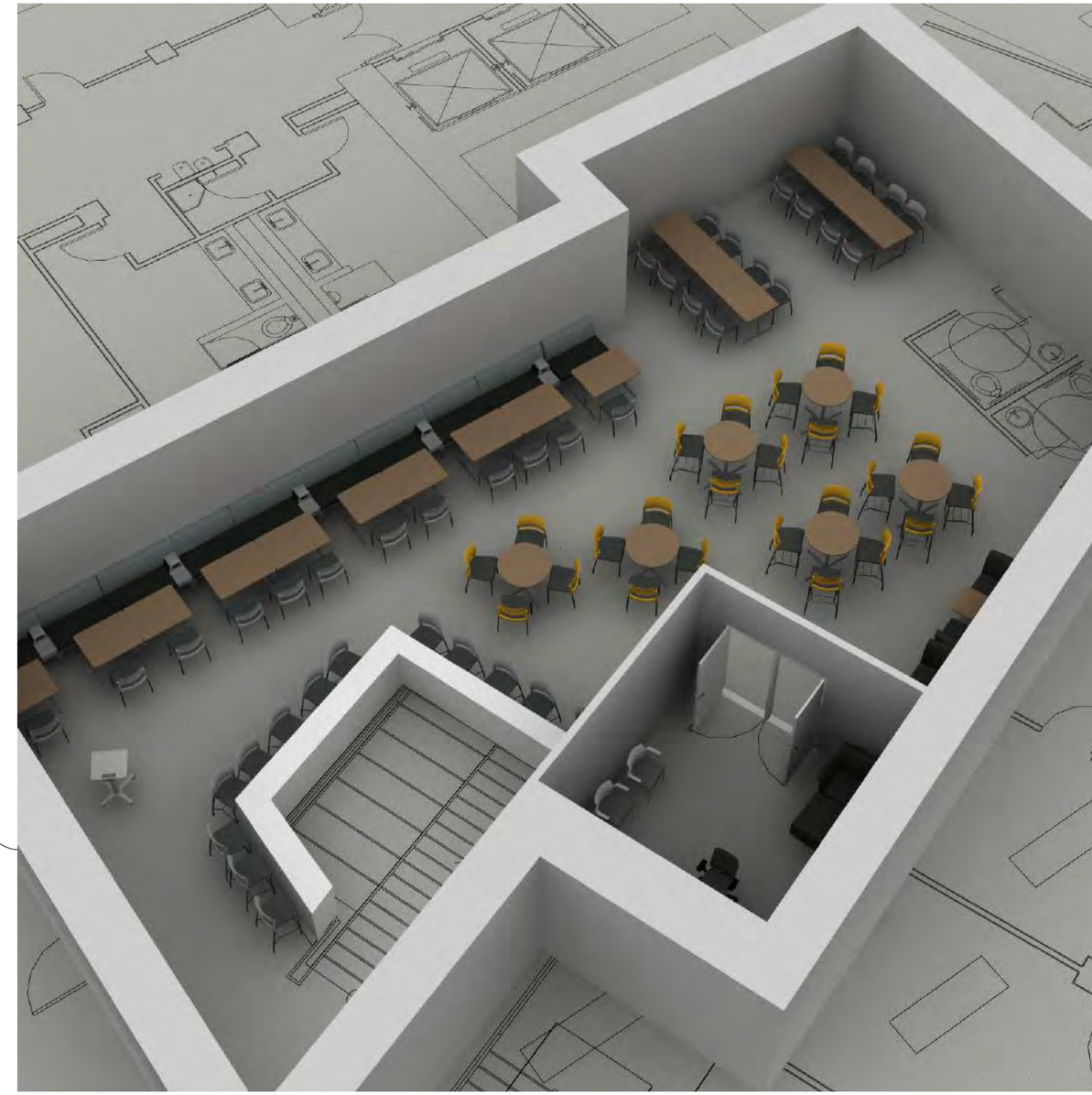
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER





FIRST FLOOR WORK CAFE/MESS HALL

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

DATE: XX/XX/XXXX

DRAWN BY: and last name]

PROJECT NAME: [Order entry, Project name]

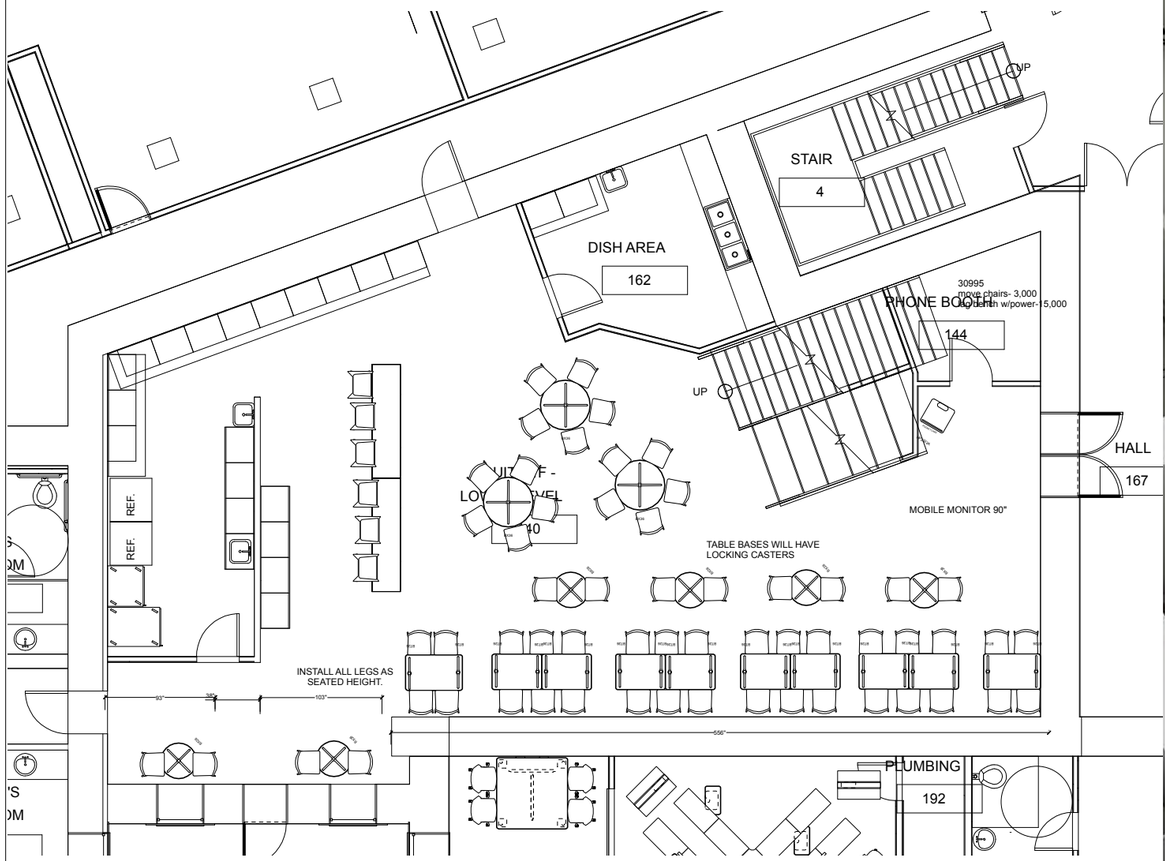
ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

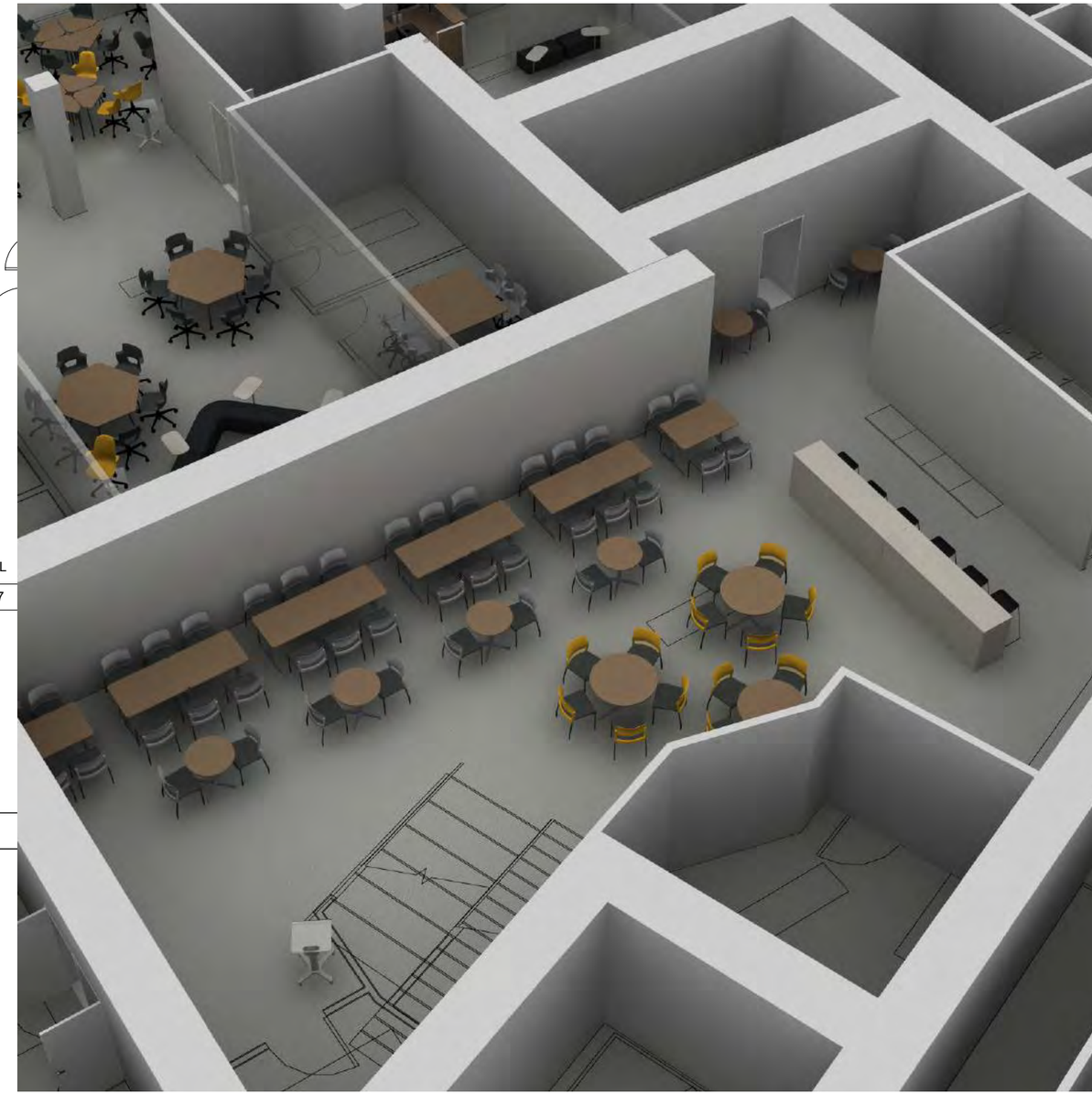
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER





BASEMENT WORK CAFE/MESS HALL

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

DATE: XX/XX/XXXX

DRAWN BY: and last name]

PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

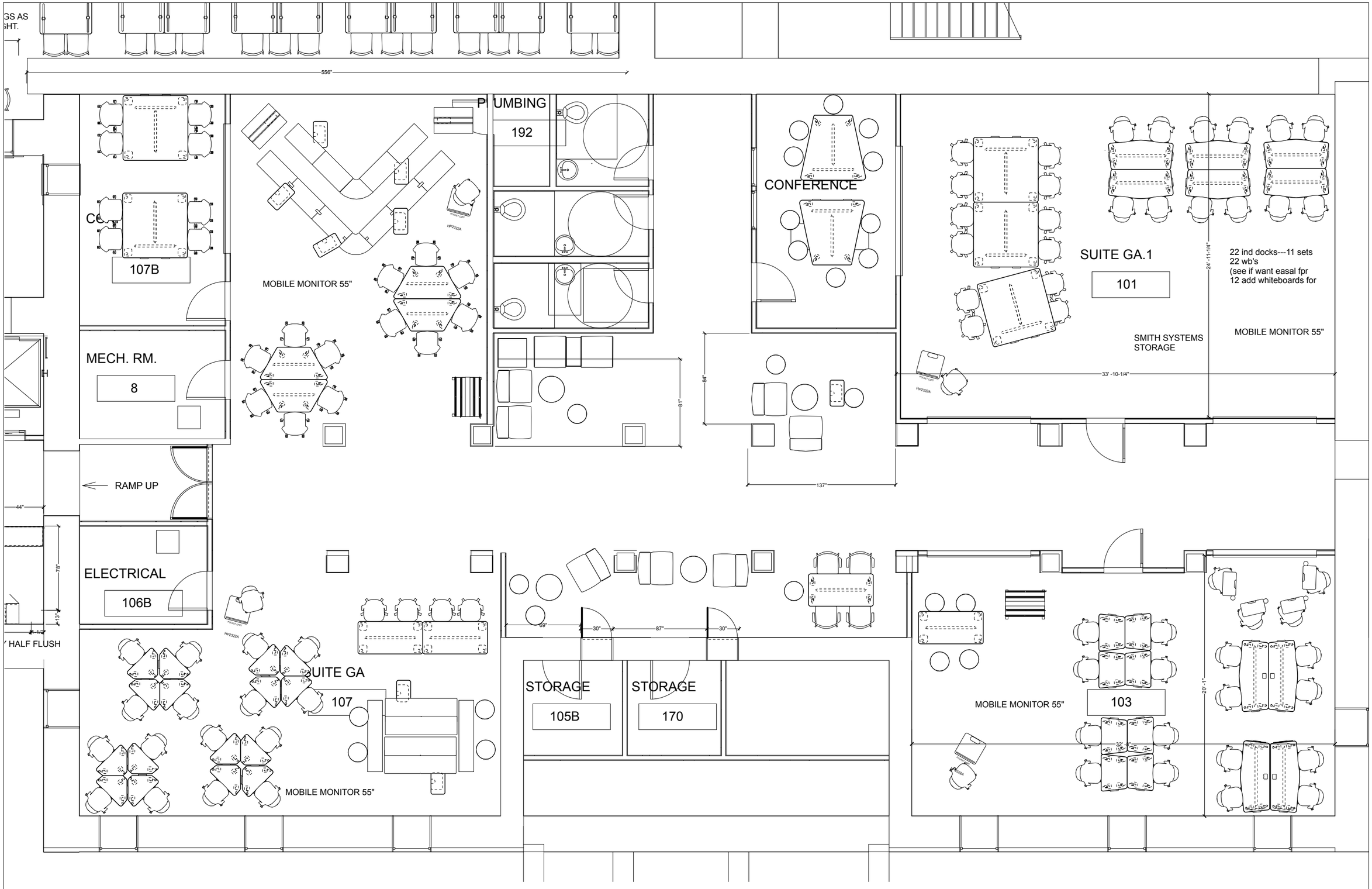
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER

PAGE: 3/15



THINK, SHARE, MAKE- CORE OVERALL

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: [Order number]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

DATE: XX/XX/XXXX

DRAWN BY: [Order entry, First and last name]

PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Address, Line #1] [Sold to, Address, Address, Zip

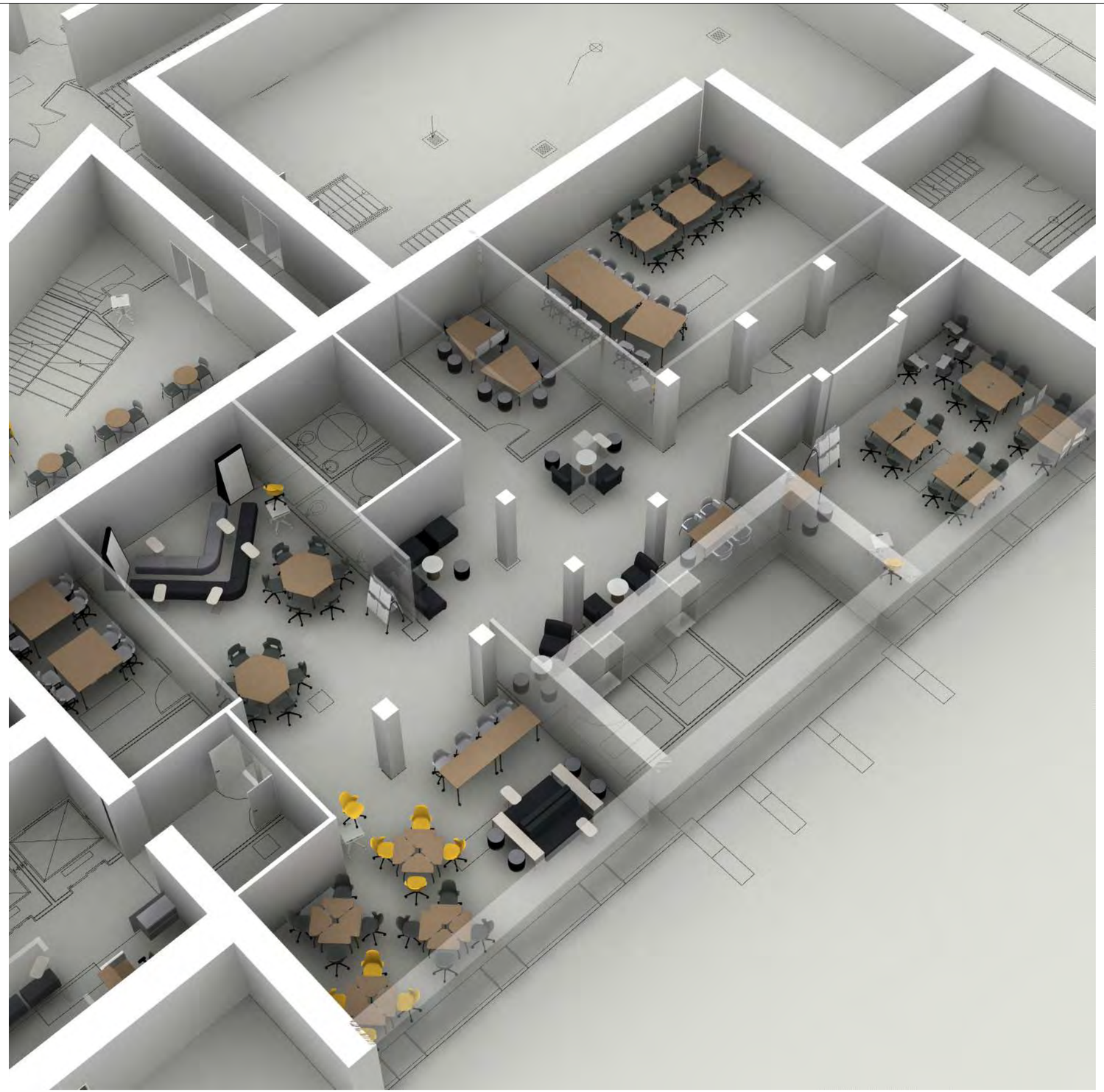
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC. All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER

PAGE: 4/15



THINK, SHARE, MAKE- CORE OVERALL

BUSINESS FURNITURE

BUSINESSFURNITURE.NET

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

DATE: XX/XX/XXXX

DRAWN BY: and last name]

PROJECT NAME: [Order entry, Project name]

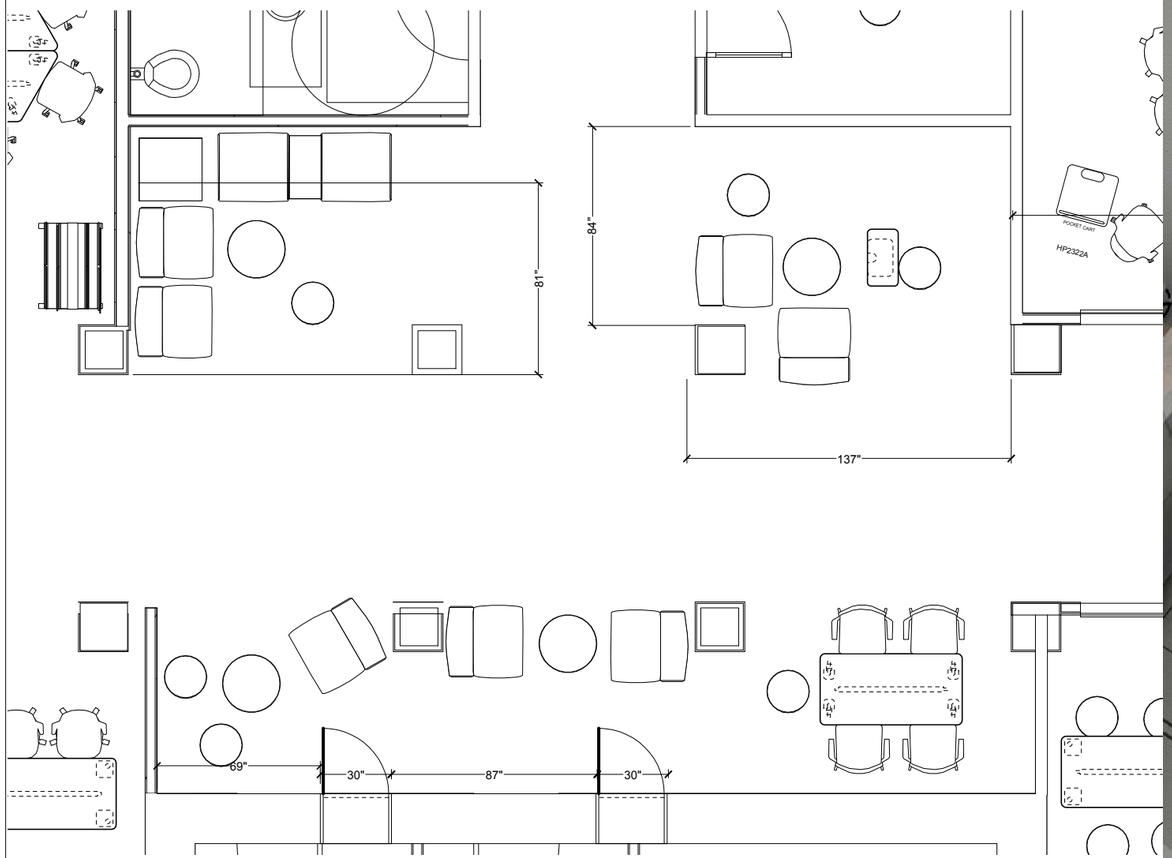
ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER



HANGOUT/COLLECT AREA

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: [Order number]

DATE: XX/XX/XXXX

DRAWN BY: [First and last name]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

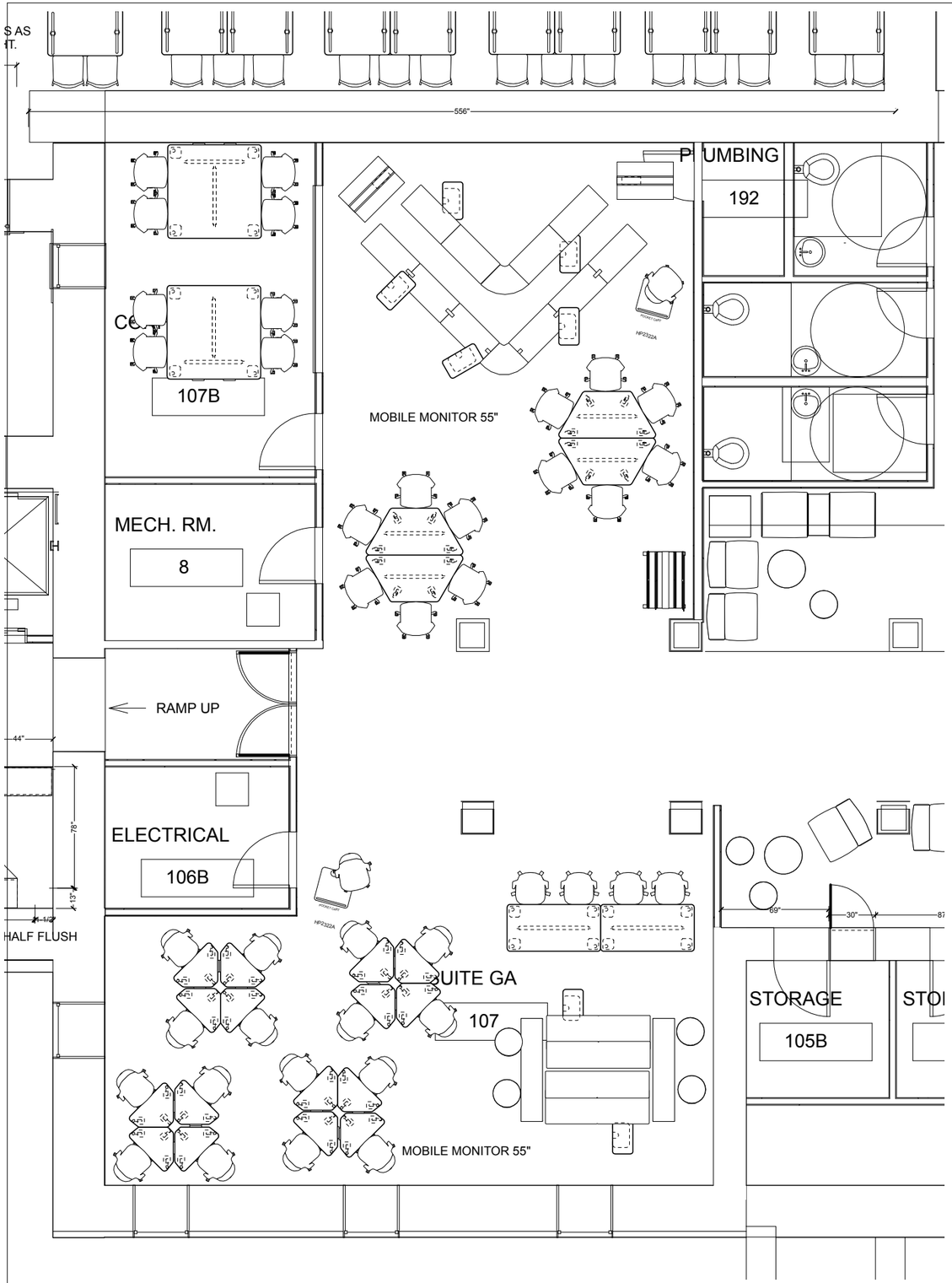
PROJECT NAME: [Order entry, Project name]

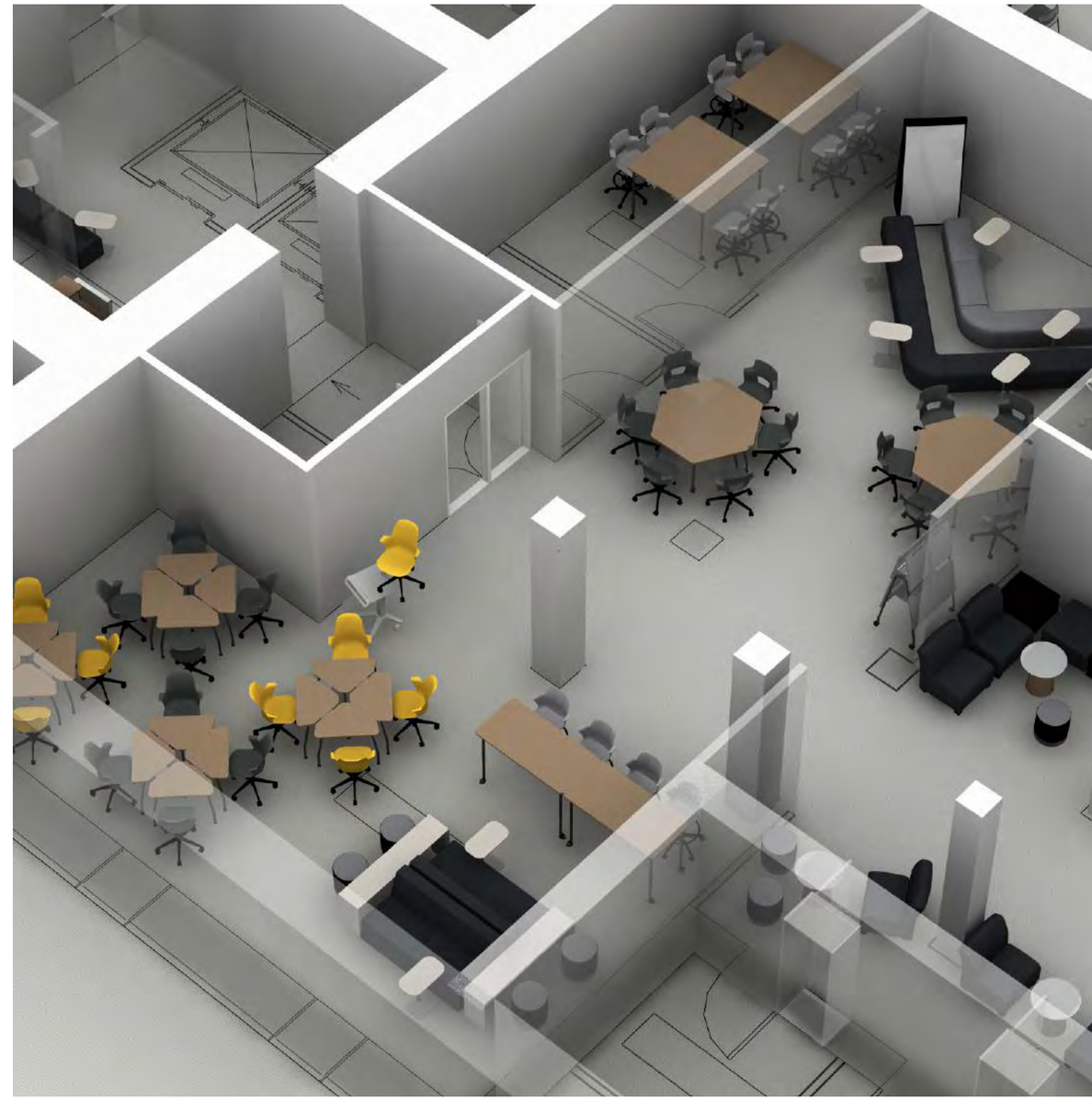
ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER
2016 PLATINUM PARTNER





BIG AND SMALL GROUP SHARE

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

DATE: XX/XX/XXXX

DRAWN BY: and last name]

REVISIONS:	
1.	---
2.	---
3.	---
4.	---
5.	---

PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

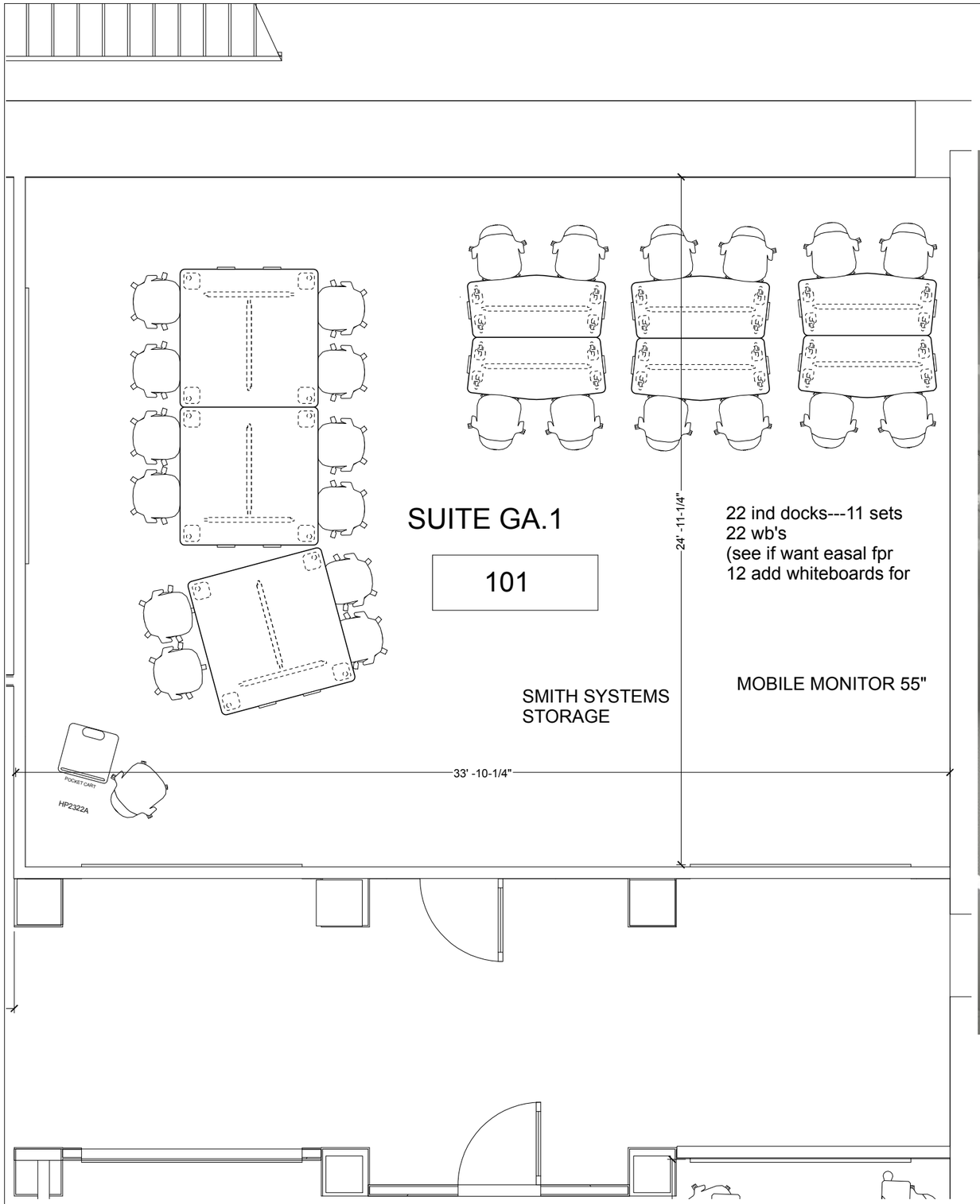
APPROVED BY:

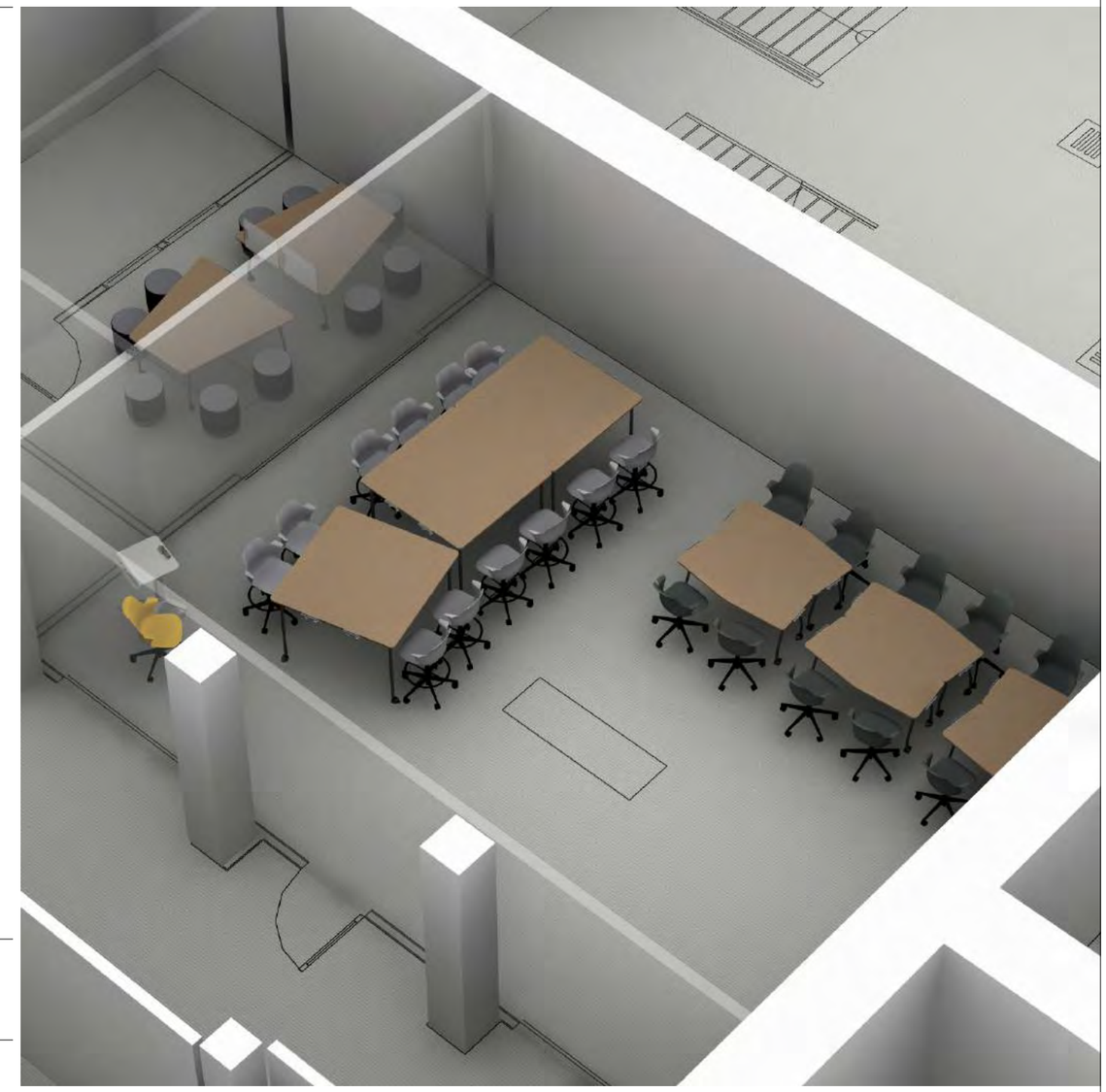
Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER

PAGE: 7/15





MAKE

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_9.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL
PROJECT NO: number]
DATE: XX/XX/XXXX
DRAWN BY: and last name]

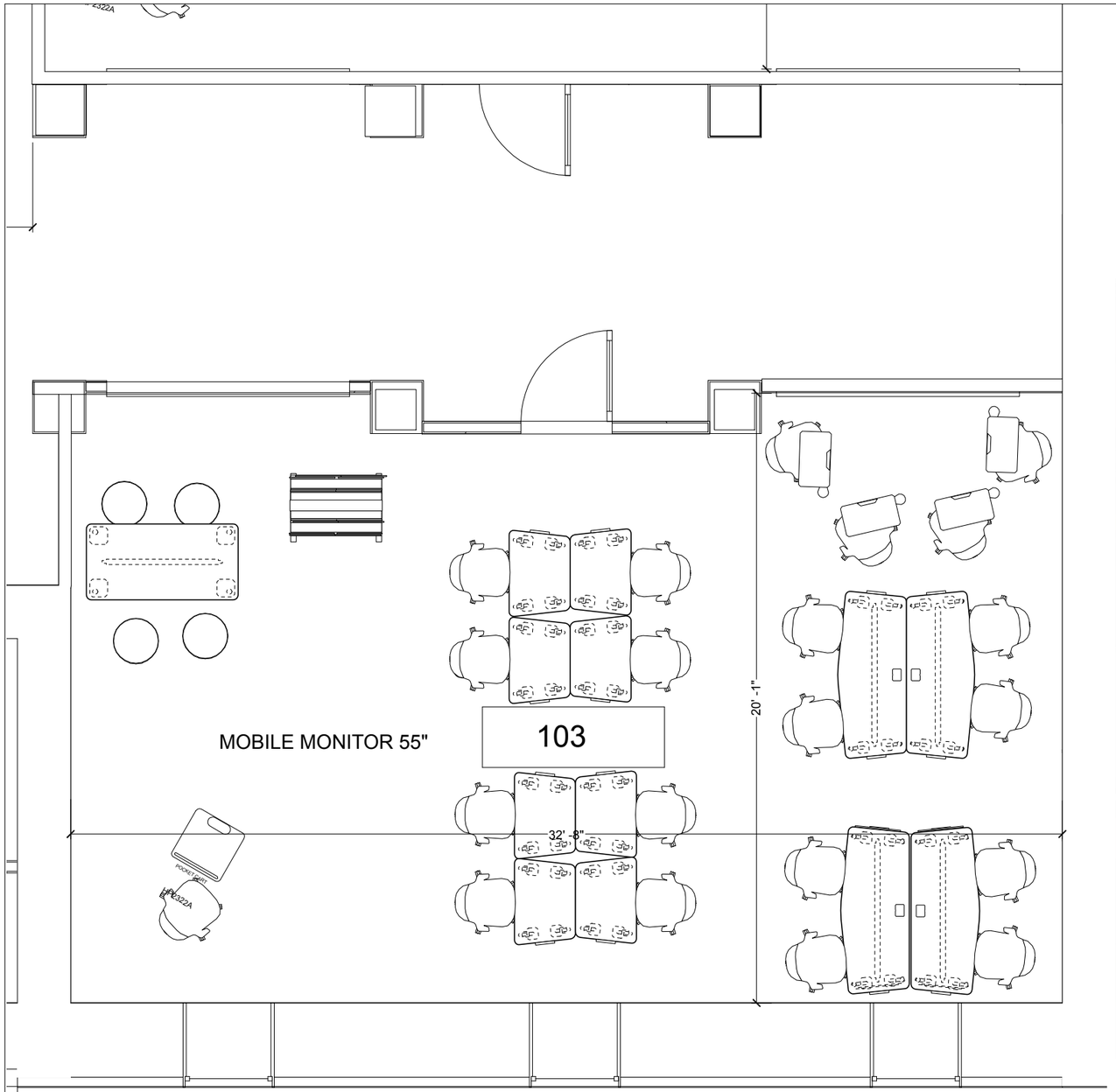
REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

PROJECT NAME: [Order entry, Project name]
ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER
2016 PLATINUM PARTNER

PAGE: 8/15



THINK/SHARE

CUSTOMER:

PROJECT NO: number]

DATE: XX/XX/XXXX

DRAWN BY: and last name]

REVISIONS:
1. --
2. --
3. --
4. --
5. --

JRE

BUSINESSFURNITURE.NET

SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

TH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

t:\PURPHS\17-234144\CET\PURPHS BASEMENT FLOOR_9.15.2017_3.01.01.rvt

PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Addi
[Sold to, Address, to,

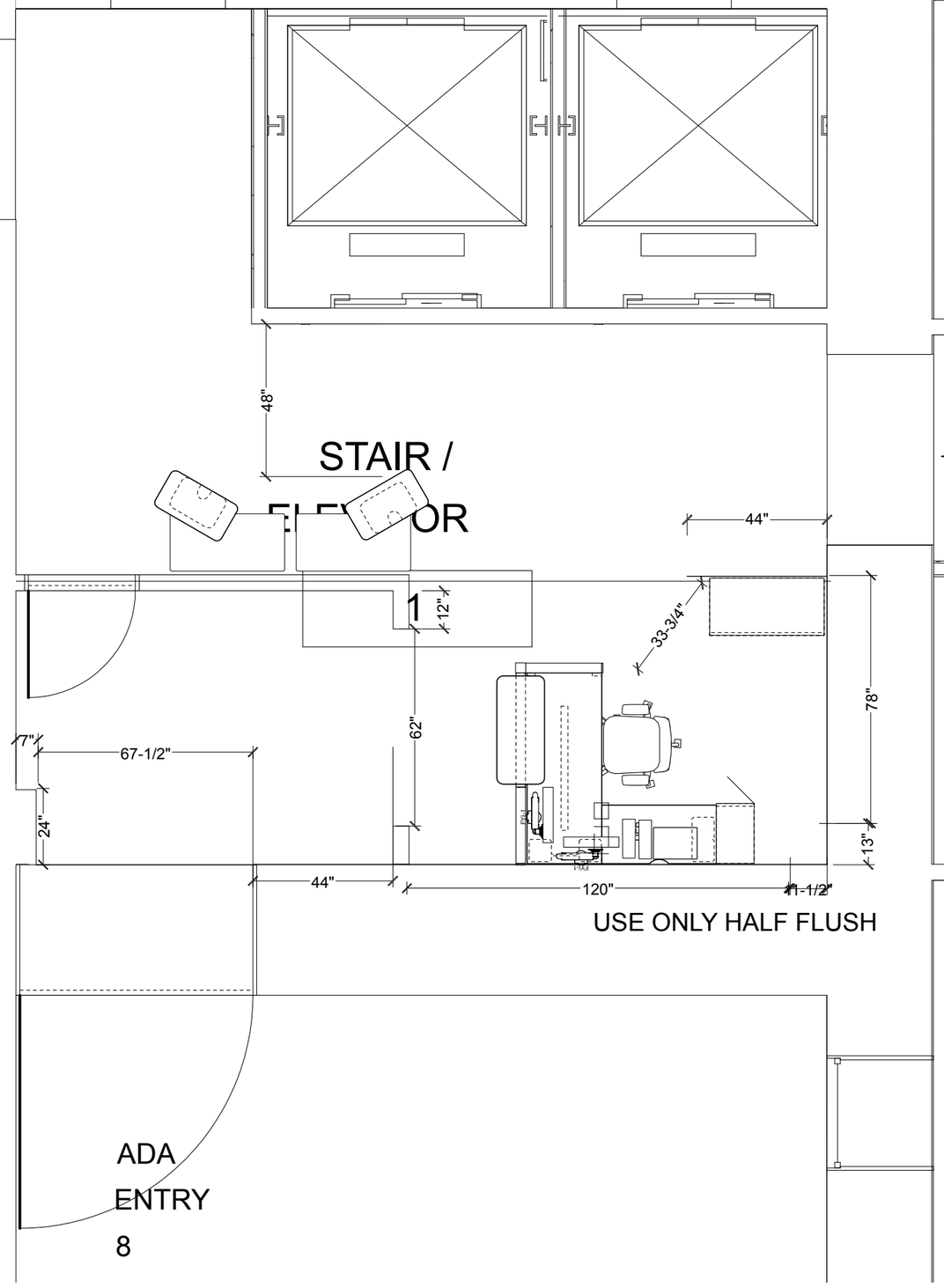
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER

PAGE: 9/15



RECEPTION

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_9.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

DATE: XX/XX/XXXX

DRAWN BY: and last name]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

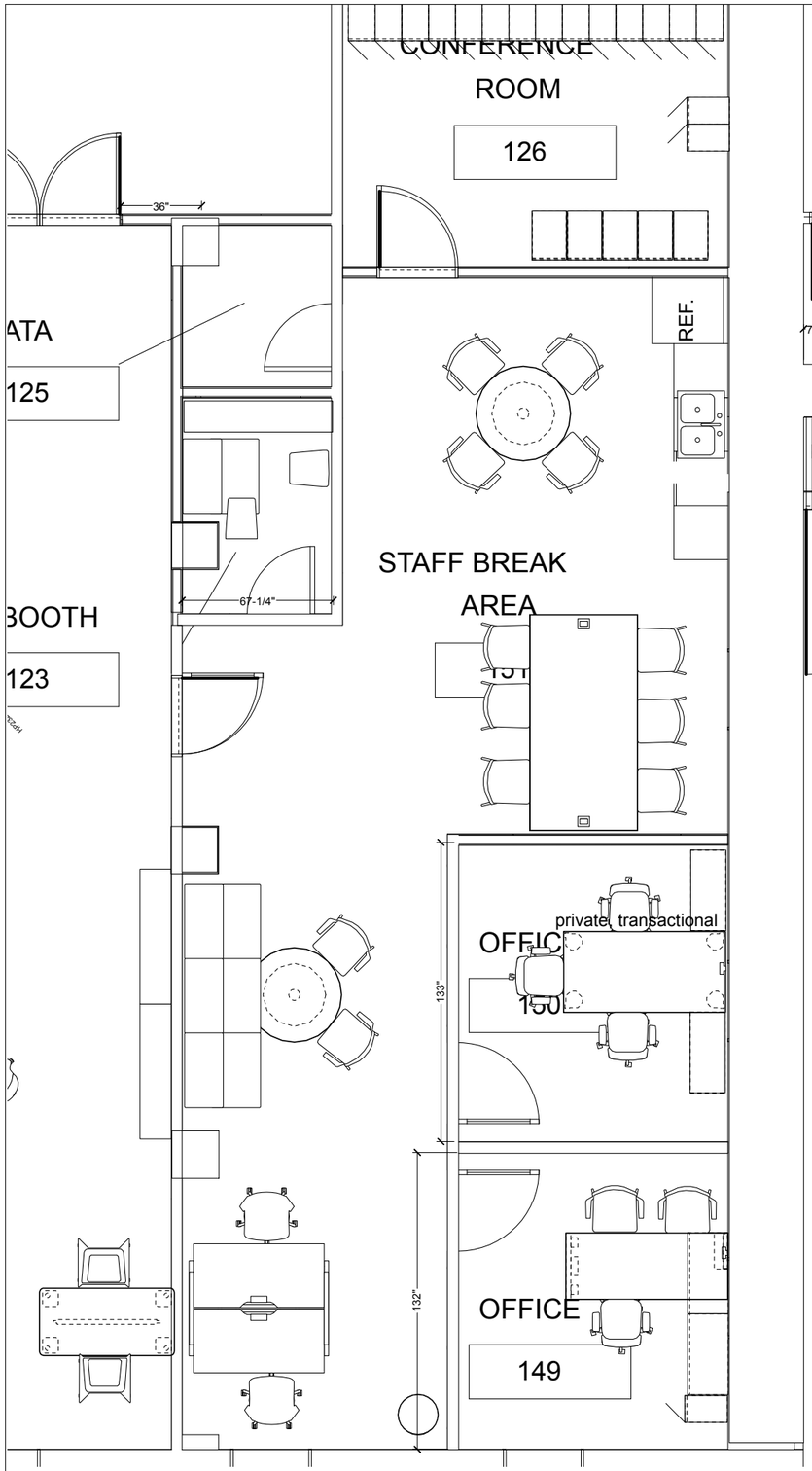
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER

PAGE: 10/15



STAFF BREAK ROOM

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL
PROJECT NO: number]
DATE: XX/XX/XXXX
DRAWN BY: and last name]

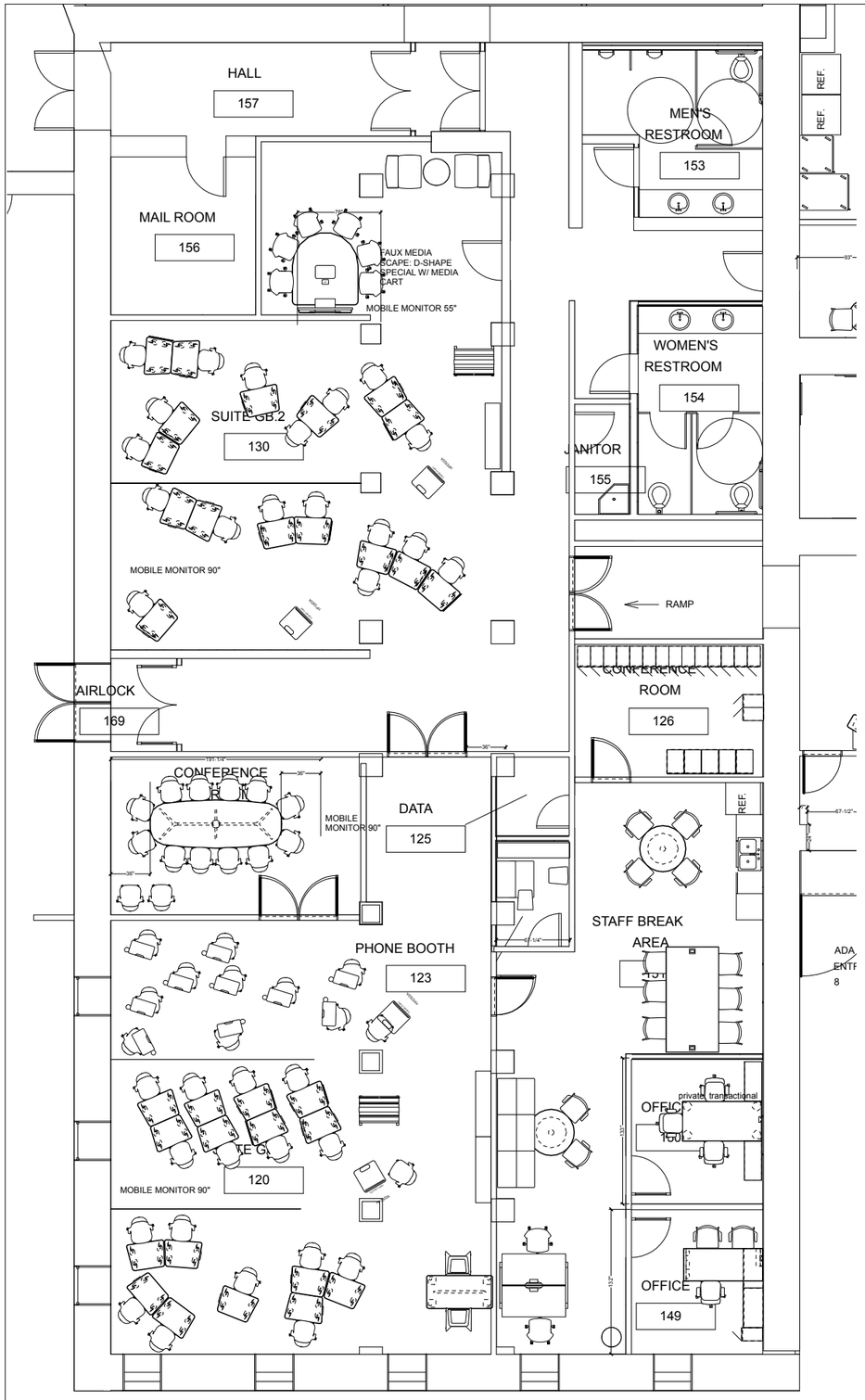
REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

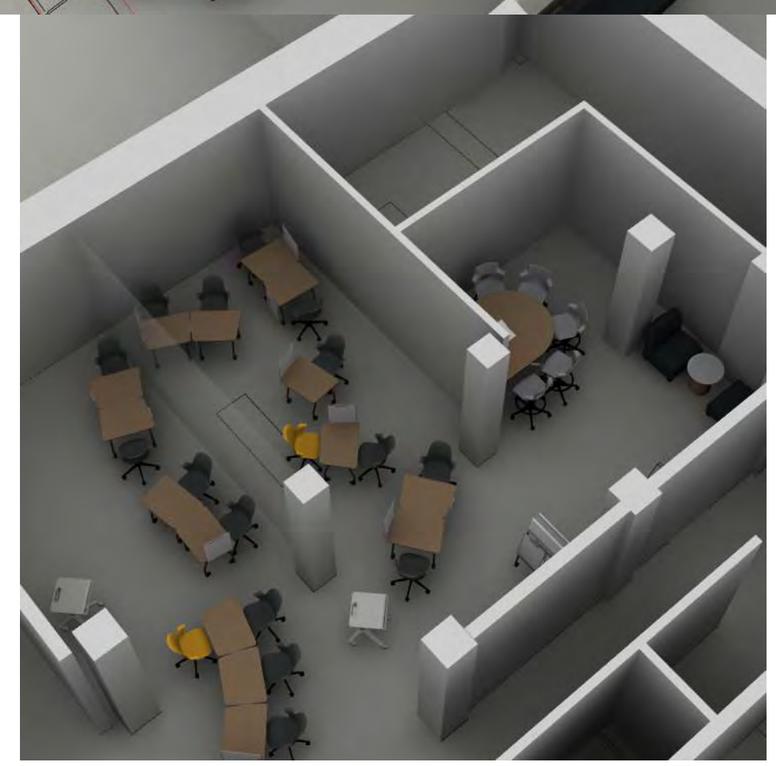
PROJECT NAME: [Order entry, Project name]
ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip
APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER
2016 PLATINUM PARTNER

PAGE: 11/15





RECONFIGURABLE SMALL GROUP AREAS

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_3.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

DATE: XX/XX/XXXX

DRAWN BY: and last name]

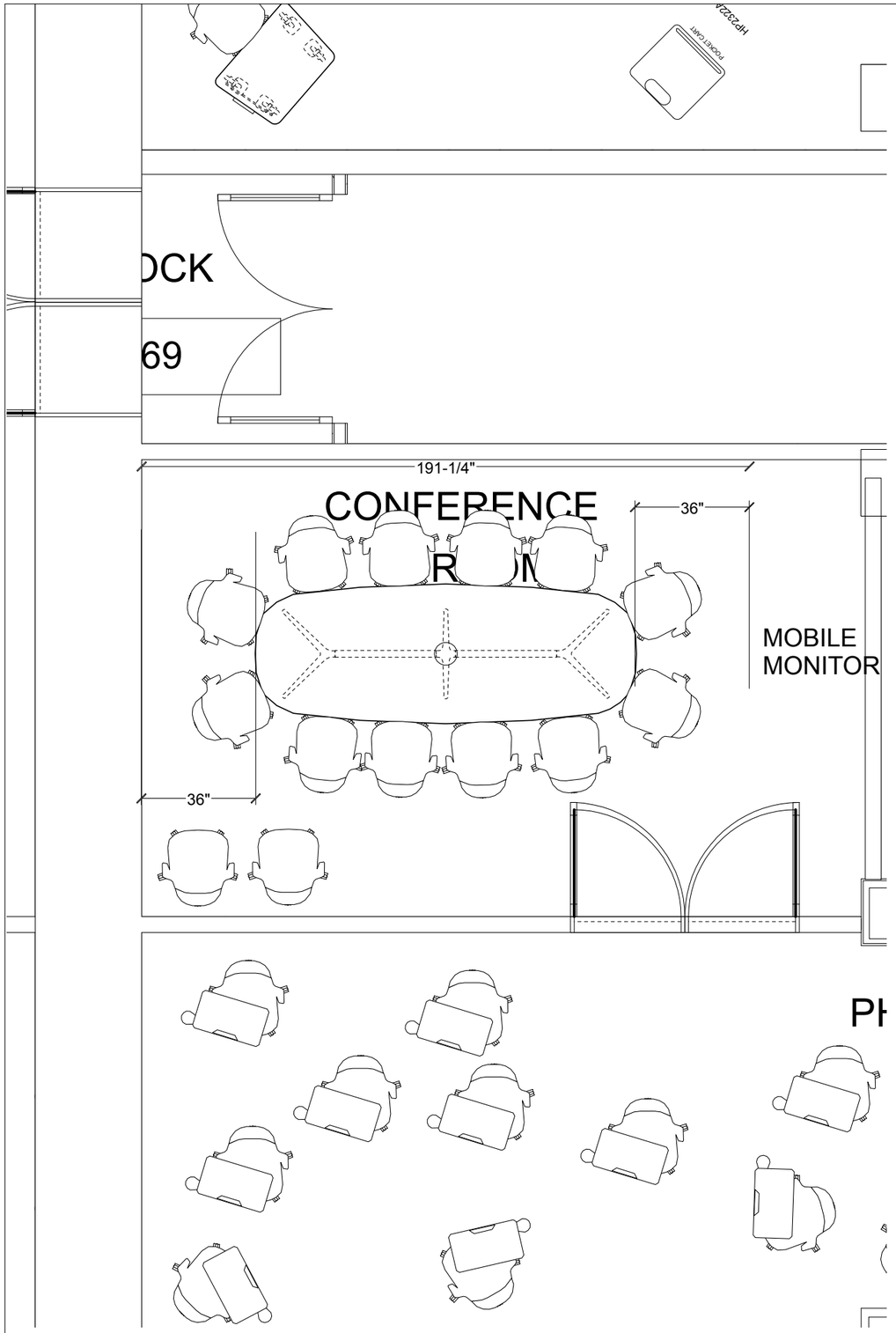
PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER
2016 PLATINUM PARTNER



CONFERENCE

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

t:\PURPHS\17-234141\CET\PURPHS BASEMENT FLOOR_9.15.2017_3.01.01.rvt

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: number]

DATE: XX/XX/XXXX

DRAWN BY: and last name]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

PROJECT NAME: [Order entry, Project name]

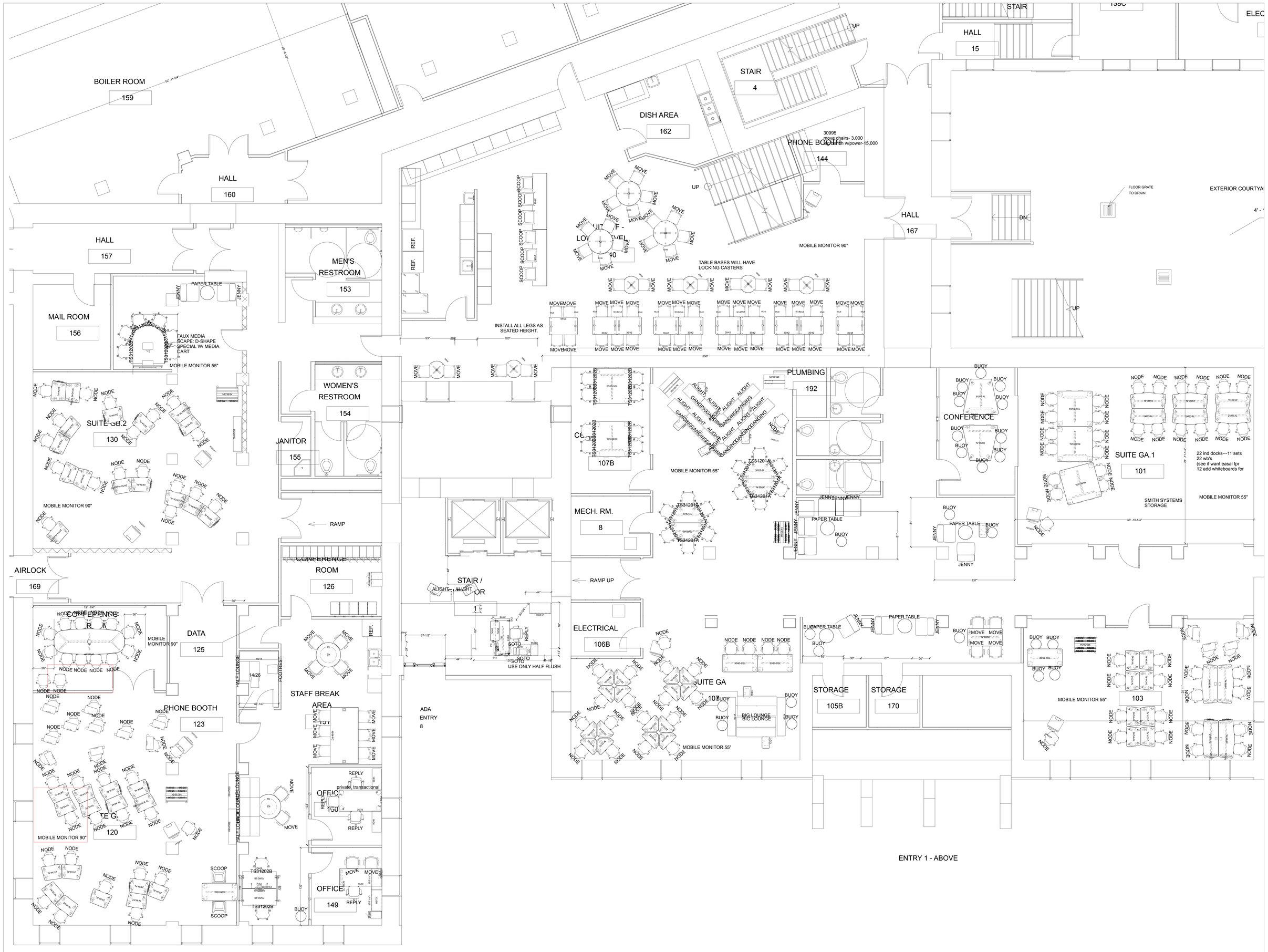
ADDRESS: [Sold to, Address, Line #1]
[Sold to, Address, to, Address, Zip

APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC.
All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER



Scale: 1/4" = 1'

BASEMENT OVERALL

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

PROJECT NO: [Order entry, Contract number]

DATE: XX/XX/XXXX

DRAWN BY: [last name]

PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Address, Line #1] [Sold to, Address, City] [Sold to, [Sold to, Address,

APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC. All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER

FIRST FLOOR WORK CAFE/MESSHALL

Scale: ~1:21

BUSINESS FURNITURE
BUSINESSFURNITURE.NET

8 NORTH MAIN ST.
SUITE 100
DAYTON, OH 45402
937.293.1010

8421 BEARING DR.
SUITE 200
INDIANAPOLIS, IN 46278
317.216.1600

CUSTOMER: PURDUE POLYTECHNIC HIGH SCHOOL

PROJECT NO: [Order entry, Contract number]

DATE: XX/XX/XXXX

DRAWN BY: [last name]

REVISIONS:
1. ---
2. ---
3. ---
4. ---
5. ---

PROJECT NAME: [Order entry, Project name]

ADDRESS: [Sold to, Address, Line #1] [Sold to, Address, City] [Sold to, Address, [Sold to,

APPROVED BY:

Information included on this drawing is solely the property of Business Furniture, LLC. All rights reserved, except for uses expressly permitted in writing.

Steelcase AUTHORIZED DEALER

2016 PLATINUM PARTNER

PAGE: 15/15

Attachment N: Certificates of Insurance

The Hanover Insurance Group

NEW BUSINESS POLICY

COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

THESE DECLARATIONS, TOGETHER WITH THE COVERAGE FORM(S) AND ANY ENDORSEMENT(S), COMPLETE THE BELOW NUMBERED POLICY.

POLICY NUMBER: UHW D257856 00
COMPANY: Hanover Insurance Company

DECLARATIONS

Item 1. Named Insured and Address (No., Street, Town, County, State)	**Agent**
PURDUE POLYTECHNIC HIGH SCHOOL 101 W OHIO ST STE 1250 INDIANAPOLIS IN 46204	6604055 GREGORY & APPEL, INC. 1402 N CAPITOL STE 400 INDIANAPOLIS IN 46202

Item 2. Policy Period: (Month, Day, Year)

From 05/04/2017 To 04/01/2018
12:01 A. M., standard time at the address of the Named Insured as stated herein.

Form of Business:

☐ Individual ☐ Partnership ☐ Corporation ☐ Limited Liability Company

☒ Organization (Other than Partnership, Joint Venture or Limited Liability Company)

Business Description: Educational Institution

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY. THIS PREMIUM MAY BE SUBJECT TO AUDIT.

Item 3. Limit of Insurance

Each Occurrence or Each Claim Limit:	$5,000,000
Products – Completed Operations Aggregate Limit:	$5,000,000
General Aggregate Limit	$5,000,000
Retained Limit:	$0

Item 4. Premium Computation:

Estimated Annual Premium	$5,572.00
Premium Surcharges	$
(Premium Surcharges NOT APPLICABLE in New York)	
Annual Minimum Premium	$5,070.00
Advance Premium	$5,070.00

Endorsements:

See next page

Includes copyrighted materials of Insurance Services Office, Inc., with its permission.

☒ PREPAID - the total annual premium is due at inception.

☐ HANOCASH - the annual premium is payable according to the term of the Hanocash endorsement attached.

☐ ACCOUNT BILL ☐ DIRECT BILL ☐ Annual ☐ Semi-Annual ☐ Other

Audit period: Non Auditable Unless indicated by ☐ Annual ☐ Semi-Annual ☐ Other

If you cancel this policy, we shall receive and retain not less than NIL as a policy minimum premium.

Includes copyrighted materials of Insurance Services Office, Inc., with its permission.

The Hanover Insurance Group

Forms Applicable To This Policy:

Form Number	Form Edition	Description
401-1127	01/15	Notice - Acceptance Of Terrorism Coverage and Disclosure Of Premium
401-1273	03/13	Indiana Changes - Amendment of Definition of Pollutants
401-1274	03/13	Notice to Indiana Insureds Indiana Changes - Amendment of Definition of Pollutants
401-1337	02/16	Trade Or Economic Sanctions Endorsement
401-1374	01/15	Offer Disclosure Pursuant To Terrorism Risk Insurance Act
401-1377	12/14	Company Address Listing
475-0001	12/14	Hanover Commercial Follow Form Excess And Umbrella Policy
475-0027	12/14	Exclusion - Total Pollution (Coverage A)
475-0057	12/14	Exclusion - Lead (Coverage A and B)
475-0058	12/14	Other Coverage Endorsement (Coverage A and B)
475-0066	01/15	Cap on Losses From Certified Acts of Terrorism
475-0070	01/15	Exclusion of Punitive Damages Related To A Certified Act Of Terrorism
475-0084	12/14	Exclusion - Silica (Coverage A and B)
475-0118	12/14	Indiana Changes
475-0182	12/14	Non-Concurrency Of Policy Periods - Retained Limit
475-0216	12/14	Exclusion - Discrimination (Coverage B)
475-0220	12/14	Indiana Amendment of Definition of Pollutants
475-0238	12/14	Exclusion - Abuse and Molestation (Coverage B)
475-0245	12/14	Exclusion - Eminent Domain, Inverse Condemnation, Adverse Possession (Coverage B)
475-0246	12/14	Exclusion - Tax Assessment (Coverage B)
475-0257	12/14	Exclusion - Corporal Punishment (Coverage B)
475-0298	12/14	Exclusion - Innocent Party Defense (Coverage A and B)
475-0317	12/14	Exclusion - Fungi or Bacteria with Food and Pool Exceptions (Coverage A and B)
475-0351	12/14	Exclusion - Employee Benefits Liability (Coverage B)
475-0375	12/14	Exclusion - Limited Trampoline or Rebounding Device Coverage A and B

Includes copyrighted materials of Insurance Services Office, Inc., with its permission.

Forms Applicable To This Policy:

Form Number	Form Edition	Description
SIG 11 00	08/16	Signature Page

Includes copyrighted materials of Insurance Services Office, Inc., with its permission.

The Hanover Insurance Group

SCHEDULE OF UNDERLYING POLICIES

Insured: PURDUE POLYTECHNIC HIGH SCHOOL
Effective on and after 05/04/2017 **12:01 A.M. Standard Time**
This Schedule is part of Policy Number: UHW D257856 00

CARRIER, POLICY NUMBER & PERIOD	TYPE OF POLICY	APPLICABLE LIMITS OR AMOUNT OF INSURANCE	
(a) Carrier: CITIZENS INSURANCE COMPANY OF AMERICA Policy Number: Z7W D215076 00 Policy Period: 04/01/2017 TO 04/01/2018	Commercial General Liability ☐ Owned Autos ☐ Non-owned & Hired Autos	$1,000,000 $1,000,000 $1,000,000 $2,000,000 Incl in Gen Agg	Occurrence/ Each Claim Personal Injury Advertising Injury General Aggregate Product/Completed Operations Aggregate
(b) Carrier: CITIZENS INSURANCE COMPANY OF AMERICA Policy Number: Z7W D215076 00 Policy Period: 04/01/2017 TO 04/01/2018	Comprehensive Automobile Liability including ☐ Owned Autos ☒ Non-Owned & Hired Autos	Bodily Injury and Property Damage Liability Combined: $1,000,000 Bodily Injury $ $ Property Damage: $	 Each Accident Each Person Each Accident Each Accident
(c) Carrier: Policy Number: Policy Period:	Garage Liability ☐ Dealers ☐ Service	Bodily Injury and Property Damage Liability Combined: Garage Operations $ $ $ Garage Operations $	 Each Accident Auto Only Other than Auto Only Aggregate Other than Auto Only
(d) Carrier: ACCIDENT FUND INSURANCE CO OF AMERICA Policy Number: WCV6142909 Policy Period: 04/14/2017 TO 04/14/2018	Standard Workers' Compensation & Employers' Liability **NEW YORK ONLY:** The Umbrella Coverage for Workers' Compensation and Employers Liability is not applicable in situations where an employee is subject to the New York Workers' Compensation Law.	**Coverage B – Employers Liability** Bodily Injury by Accident $1,000,000 Bodily Injury by Disease $1,000,000 $1,000,000	 Each Accident Each Employee Aggregate

An "X" marked in the box provided indicates these broadening or optional coverage are provided in the Underlying Insurance

Includes copyrighted material of Insurance Services Office, Inc. with its permission

(e) Carrier: Policy Number: Policy Period:	Liquor Liability	$ $ $ $	Each Common Cause Other Aggregate Other
(f) Carrier: CITIZENS INSURANCE COMPANY OF AMERICA Policy Number: Z7W D215076 00 Policy Period: 04/01/2017 TO 04/01/2018	Professional Liability School Board	$ $1,000,000 $ $1,000,000 $	Each Occurrence Each Claim Other Aggregate Other
(f) Carrier: CITIZENS INSURANCE COMPANY OF AMERICA Policy Number: Z7W D215076 00 Policy Period: 04/01/2017 TO 04/01/2018	Professional Liability Schools and Educators (EPLI)	$ $1,000,000 $ $1,000,000 $	Each Occurrence Each Claim Other Aggregate Other
(g) Carrier: Policy Number: Policy Period:	Directors & Officers Liability	$ $ $ $ $	Each Occurrence Each Claim Other Aggregate Other
(h) Carrier: Policy Number: Policy Period:	Stop Gap Liability	Bodily Injury by Accident $ Bodily Injury by Disease $ $	 Each Accident Each Employee Aggregate
(i) Carrier: CITIZENS INSURANCE COMPANY OF AMERICA Policy Number: Z7W D215076 00 Policy Period: 04/01/2017 TO 04/01/2018	Abuse and Molestation Schools	$1,000,000 $ $ $1,000,000	Each Occurrence Each Claim Other Aggregate
(j) Carrier: Policy Number: Policy Period:	Foreign	$ $ $ $	Each Occurrence Each Claim Other Aggregate
(k) Carrier: CITIZENS INSURANCE COMPANY OF AMERICA Policy Number: Z7W D215076 00 Policy Period: 04/01/2017 TO 04/01/2018	Employee Benefits Liability	$ $1,000,000 $ $3,000,000	Each Occurence Each Claim Other Aggregate
(l) Carrier: Policy Number: Policy Period:	Other	$ $ $ $	Each Occurrence Each Claim Other Aggregate

Includes copyrighted material of Insurance Services Office, Inc. with its permission

An "X" marked in the box provided indicates these broadening or optional coverage are provided in the Underlying Insurance

Countersigned By:_____ **Date:**_____

Authorized Representative of the Company

Includes copyrighted material of Insurance Services Office, Inc. with its permission
Original Insured

THE ONLY SIGNATURES APPLICABLE TO THIS POLICY ARE THOSE REPRESENTING THE COMPANY NAMED ON THE FIRST PAGE OF THE DECLARATIONS.

In Witness Whereof, this company has caused this policy to be signed by its President and Secretary and countersigned on the declarations page, where required, by a duly authorized agent of the company.

Joseph M. Zubretsky
President

Charles Frederick Cronin
Secretary

The following substances and materials are added to the SCHEDULE on the endorsement

INDIANA CHANGES – AMENDMENT OF DEFINITION OF POLLUTANTS:

Pollutants" include but are not limited to: diesel fuel, kerosene, gasoline, aviation fuel, jet fuel, heating oil, bunker fuel, grease, tar, lubricating oil, Stoddard solvent, mineral spirits, naphtha, naphthalene, benzene, toluene, xylene, ethylbenzene, polycyclic aromatic hydrocarbons, creosote, phenol and phenol compounds, petroleum distillates, and other refined and crude petroleum and coal tar products; brake fluid, transmission fluid, and other hydraulic fluids; ethylene glycol, methanol, ethanol, isopropyl alcohol, propylene glycol, and other antifreeze additives; butane; propane; natural gas; carbon dioxide, carbon monoxide and other exhaust gases; fly-ash, bottom ash, coal slag and other coal combustion residues; methyl tertiary butyl ether (MTBE); methyl isobutyl ketone; methyl ethyl ketone; n-butyl acetate, 2-butoxyethanol; hexylene glycol; peroxides; chromium and its compounds, cadmium and its compounds, lead and its compounds, mercury and its compounds, beryllium and its compounds, cobalt and its compounds, nickel and its compounds, uranium and its compounds, and other toxic metals and their compounds; arsenic and its compounds; cyanide and cyanide compounds; perchloroethylene (perc), trichloroethylene (TCE), trichloroethylene, tetrachloroethylene, selenium and its compounds, sulfates, CFC113, chlorofluorocarbons, chlorinated hydrocarbons, carbon disulfide, chloroform, methyl chloroform, methylene chloride, carbon tetrachloride, dichloroethane, dichloroethene, freon, polychlorinated biphenyls (PCBs), and other halogenated hydrocarbons and dry cleaning chemicals; detergents; adhesives; barium and its compounds, DDT, chlordane, imprelis, malathion, parathion, atrazine and other insecticides, herbicides, fungicides, algaecides, rodenticides, and pesticides; acetone; dioctyl phthalate (DOP) and other plasticizers; phthalates; bisphenol A (BPA); vinyl chloride monomer; formaldehyde, glutaraldehyde, acetaldehyde and other aldehydes; chlorine; ammonia; hydrogen sulfide; radon; radium; erionite; diacetyl; fracking fluids; perchlorate; dioxins; asbestos; silica; aspergillus, stachybotrys, and other molds; sewage; and industrial waste materials; and all substances specifically listed, identified, or described by one or more of the following references: **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Priority List Hazardous Substances** (1997 and all subsequent editions), **U.S. National Library of Medicine TOXNET** (all databases), **U.S. Environmental Protection Agency EMCI Chemical References Complete Index**, and/or **U.S. Environmental Protection Agency Substances and Disease Registry TOXFAQs**. Substances identified as examples above or by the referenced lists also include materials or substances to be discarded, recycled, reconditioned or reclaimed.

NOTICE TO INDIANA INSUREDS

INDIANA CHANGES – AMENDMENT OF DEFINITION OF POLLUTANTS

THIS DISCLOSURE FORM IS NOT YOUR POLICY. READ YOUR ENTIRE POLICY CAREFULLY TO DETERMINE RIGHTS, DUTIES, AND WHAT IS AND IS NOT COVERED. ONLY THE PROVISIONS OF YOUR POLICY DETERMINE THE SCOPE OF YOUR INSURANCE PROTECTION.

Your policy includes the mandatory endorsement **INDIANA CHANGES – AMENDMENT OF DEFINITION OF POLLUTANTS.** This endorsement replaces the definition of "pollutants" to include substances or materials identified in a Schedule. This is a potential reduction in coverage.

Includes copyrighted material of ISO Insurance Services Office, Inc.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

TRADE OR ECONOMIC SANCTIONS ENDORSEMENT

This insurance does not apply to the extent that trade or economic sanctions or other laws or regulations prohibit us from providing insurance, including, but not limited to, the payment of claims.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted materials of Insurance Services Offices, Inc., with its permission.

IMPORTANT INFORMATION ABOUT YOUR INSURANCE COMPANY

The Home Office address for the Insurance Company shown on the policy Declarations page is:

Allmerica Financial Alliance Insurance Company
(*A Stock Company*)
440 Lincoln Street
Worcester, MA 01653-0002

Allmerica Financial Benefit Insurance Company
(*A Stock Company*)
440 Lincoln Street
Worcester, MA 01653-0002

Campmed Casualty & Indemnity Company, Inc.
(*A Stock Company*)
12100 Sunset Hills Road, Suite 300
Reston, VA 20190-3295

Citizens Insurance Company of America
(*A Stock Company*)
808 North Highlander Way
Howell, MI 48843-1070

Citizens Insurance Company of Illinois
(*A Stock Company*)
333 West Pierce Road, Suite 300
Itasca, IL 60143-3114

Citizens Insurance Company of the Midwest
(*A Stock Company*)
9229 Delegates Row, Suite 100
Indianapolis, IN 46240-3824

Citizens Insurance Company of Ohio
(*A Stock Company*)
1300 East 9th Street, Suite 1010
Cleveland, OH 44114-1506

The Hanover American Insurance Company
(*A Stock Company*)
440 Lincoln Street
Worcester, MA 01653-0002

The Hanover Insurance Company
(*A Stock Company*)
440 Lincoln Street
Worcester, MA 01653-0002

Hanover Lloyds Insurance Company
(*A Texas Lloyd's Plan Company*)
440 Lincoln Street
Worcester, MA 01653-0002

Massachusetts Bay Insurance Company
(*A Stock Company*)
440 Lincoln Street
Worcester, MA 01653-0002

The Hanover New Jersey Insurance Company
(*A Stock Company*)
440 Lincoln Street
Worcester, MA 01653-0002

Verlan Fire Insurance Company
(*A Stock Company*)
440 Lincoln Street
Worcester, MA 01653-0002

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

TABLE OF REFERENCE

	Beginning on Page
I. INSURING AGREEMENTS	
1. Coverage A – Follow Form Excess Liability Insuring Agreement	**2**
2. Coverage B – Umbrella Liability Insuring Agreement	**2**
II. DEFENSE AND SETTLEMENT	
1. Coverage A – Follow Form Excess Liability Defense and Settlement	**3**
2. Coverage B – Umbrella Liability Defense and Settlement	**3**
III. WHO IS AN INSURED	
1. Coverage A – Follow Form Excess Liability Who Is An Insured	**4**
2. Coverage B – Umbrella Liability Who Is An Insured	**4**
IV. COVERAGE TERRITORY	
1. Coverage A – Follow Form Excess Liability	**5**
2. Coverage B – Umbrella Liability	**5**
V. SUPPLEMENTAL PAYMENTS	
Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**	**5**
VI. LIMITS OF INSURANCE	
Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**	**6**
VII. EXCLUSIONS	
1. Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**	**6**
2. Applicable to **Coverage A - Follow Form Excess Liability** Only	**8**
3. Applicable to **Coverage B - Umbrella Liability** Only	**10**
VIII. CONDITIONS	
Applicable to Both **Coverage A - Follow Form Excess Liability** and **Coverage B – Umbrella Liability**	**12**
IX. DEFINITIONS	
Applicable to Both **Coverage A. Follow Form Excess Liability** and **Coverage B. Umbrella**	**15**

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

Various provisions of this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

We will not pay sums or perform acts or services unless explicitly provided for in this policy.

Throughout this policy the words **you** and **your** refer to the Named Insured shown in the Declarations and any other person or organization qualifying as a Named Insured under this policy. The words **we**, **us** and **our** refer to the Company providing this insurance.

Other words and phrases that appear in quotation marks have special meaning. Refer to the Definitions Section of this policy.

I. INSURING AGREEMENTS

1. Coverage A – Follow Form Excess Liability Insuring Agreement

a. We will pay on behalf of the insured those sums in excess of the "underlying insurance" which the insured becomes legally obligated to pay as damages, provided:

(1) Such damages are covered by "underlying insurance";

(2) The event which triggers coverage on the "underlying insurance" takes place during the policy period of this insurance, and

(3) The applicable Limit of Insurance of the "underlying insurance" is exhausted by payment of judgments, settlements, related costs or expenses for damages also covered under this policy. We will not pay if the Limit of Insurance of "underlying insurance" is exhausted by payment for damages to which this insurance does not also apply.

b. We will not pay damages that the "underlying insurance" does not pay for any reason other than exhaustion of limits of the "underlying insurance" by payment of judgments, settlements, related costs or expenses.

c. The terms and conditions of the "underlying insurance" in effect at the inception of this policy apply unless they are inconsistent with the terms and conditions of this policy.

d. The amount we will pay for damages is limited as described in section **VI. LIMITS OF INSURANCE**.

e. We have no obligation under this insurance with respect to any claim or "suit" settled without our consent.

f. This policy does not apply to any part of loss within the Limit of Insurance of "underlying insurance", or any related costs or expenses.

g. No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under section **II. DEFENSE AND SETTLEMENT** and section **V. SUPPLEMENTAL PAYMENTS.**

2. Coverage B – Umbrella Liability Insuring Agreement

a. We will pay on behalf of the insured those sums in excess of the "retained limit" shown in the Declarations which the insured becomes legally obligated to pay as damages because of "bodily injury", "property damage", "personal injury" and "advertising injury" to which this coverage applies, provided:

(1) The:

(a) "Bodily injury" or "property damage" is caused by an "occurrence"; or

(b) "Personal injury" and "advertising injury" is caused by an offense arising out of your business;

Which took place within the coverage territory as described in section **IV. COVERAGE TERRITORY**;

(2) The "bodily injury" or "property damage" occurs during the policy period, and the offense causing "personal injury" or "advertising injury" is first committed during our policy period; and

(3) Prior to the policy period, no insured and no "employee" authorized by you to give or receive notice of an "occurrence", offense or claim, knew that the "bodily injury", "property damage", "personal injury" or

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

"advertising injury" had occurred, in whole or in part. If such an insured or authorized "employee" knew, prior to the policy period, that the "bodily injury", "property damage", "personal injury" or "advertising injury" occurred, then any continuation, change or resumption of such "bodily injury", "property damage, "personal injury" or "advertising injury" during or after the policy period will be deemed to have been known prior to the policy period.

However, "bodily injury", "property damage", "personal injury" or "advertising injury" which occurs during the policy period and was not, prior to the policy period, known to have occurred by any insured or by any "employee" authorized by you to give or receive notice of an "occurrence", offense or claim, includes any continuation, change or resumption of that "bodily injury", "property damage", "personal injury" or "advertising injury" after the end of the policy period.

b. "Bodily injury", "property damage", "personal injury" or "advertising injury" will be deemed to have been known to have occurred at the earliest time when any insured, or any "employee" authorized by you to give or receive notice of an "occurrence", offense or claim:

(1) Reports all or any part of the "bodily injury", "property damage", "personal injury" or "advertising injury" to us or any other insurer;

(2) Receives a written or verbal demand or claim for damages because of the "bodily injury", "property damage", "personal injury" or "advertising injury"; or

(3) Becomes aware by any other means that "bodily injury", "property damage", "personal injury" or "advertising injury" has occurred or has begun to occur.

c. Coverage B – Umbrella Liability Insuring Agreement does not apply to:

(1) Any claim or "suit" which is covered by "underlying insurance" regardless of whether or not the "underlying insurance" is available or the limits have been exhausted;

(2) Any claim or "suit" covered by **Coverage A – Follow Form Excess Liability Insurance** of this policy; or

(3) Any costs or expenses related to loss as described by **c.(1)** or **c.(2)** above.

d. The amount we will pay for damages is limited as described in section **VI. LIMITS OF INSURANCE**.

e. We have no obligation under this insurance with respect to any claim or "suit" settled without our consent.

f. No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under section **II. DEFENSE AND SETTLEMENT** and section **V. SUPPPLEMENTARY PAYMENTS**.

II. DEFENSE AND SETTLEMENT

1. Coverage A – Follow Form Excess Liability Defense and Settlement:

a. We have the right and duty to defend the insured against any "suit" seeking damages to which this insurance applies. If the "underlying insurer" defends a "suit" even if such "suit" is groundless, false or fraudulent, we will also defend such a "suit". We have no duty to defend any person or organization against any claim or "suit":

(1) To which this insurance does not apply; or

(2) If any other insurer has a duty to defend.

b. Where we have the duty to defend, we may, at our discretion, investigate any occurrence or offense and settle any claim or "suit".

c. Where we have no duty to defend, we have the right to participate in the investigation and settlement of any claim, and defense of any "suit", that we feel may create liability on our part under the terms and conditions of this policy. If we exercise this right, we will do so at our own expense.

d. Our duty to defend ends when we have used up the applicable Limit of Insurance in the payment of judgments, settlements, related costs or expenses.

2. Coverage B – Umbrella Liability Defense and Settlement:

a. We have the right and duty to defend the insured against any "suit' because of "bodily injury", "property damage", "personal injury" or "advertising injury" to which this insurance applies, even if such "suit" is groundless, false or fraudulent.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

We have no duty to defend any person or organization against any claim or "suit":

(1) To which this insurance does not apply; or

(2) If any other insurer has a duty to defend.

b. Where we have the duty to defend, we may, at our discretion, investigate any "occurrence" or offense and settle any claim or "suit".

c. Where we have no duty to defend, we have the right to participate in the investigation and settlement of any claim, and defense of any "suit", that we feel may create liability on our part under the terms and conditions of this policy. If we exercise this right, we will do so at our own expense.

d. Our duty to defend ends when we have used up the applicable Limit of Insurance in the payment of judgments, settlements, related costs or expenses.

III. WHO IS AN INSURED

1. Coverage A – Follow Form Excess Liability Who Is An Insured:

The following persons or organizations qualify as an insured:

a. The named insured stated in Item 1 of the Declarations; and

b. Any other person or organization qualifying as an insured under the "underlying insurance" but not beyond the extent of any limitation imposed under any contract or agreement.

2. Coverage B – Umbrella Liability Who Is An Insured:

a. If you are designated in the Declarations as:

(1) An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.

(2) A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.

(3) A limited liability company, you are an insured. Your members are also insured's, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.

(4) An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.

(5) A trust, you are an insured. Your trustees are also insureds, but only with respect their duties as trustees.

b. Each of the following is also an insured:

(1) Your "volunteer workers" only while performing duties related to the conduct of your business, or your "employees", other than your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business. However, none of these "employees" or "volunteer workers" is an insured for:

(a) "Bodily injury", "personal injury" or "advertising injury":

(i) To you, to your partners or members (if you are a partnership or joint venture), to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your business, or to your other "volunteer workers" while performing duties related to the conduct of your business;

(ii) To the spouse, child, parent, brother or sister of the "employee" or "volunteer worker" as a consequence of paragraph **(a)(1)** above;

(iii) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in paragraphs **(a)(1)** or **(a)(2)** above; or

(iv) Arising out of his or her providing or failing to provide

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

professional health care services.

(b) "Property Damage" to property:

(i) Owned, occupied or used by;

(ii) Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by;

you, any of your "employees", "volunteer workers", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).

(2) Any person (other than your "employee" or "volunteer worker"), or any organization while acting as your real estate manager.

(3) Any person or organization having proper temporary custody of your property if you die, but only:

(a) With respect to liability arising out of the maintenance or use of that property; and

(b) Until your legal representative has been appointed.

(4) Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this Coverage Part.

c. Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain ownership or a majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However,

(1) Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the policy period, whichever is earlier.

(2) Coverage does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and

(3) Coverage does not apply to "personal injury" and "advertising injury" arising out of an offense committed before you acquired or formed the organization.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

IV. COVERAGE TERRITORY

1. Coverage A – Follow Form Excess Liability:

With respect to **Coverage A – Follow Form Excess Liability**, this insurance applies anywhere that the applicable "underlying insurance" applies.

2. Coverage B – Umbrella Liability:

With respect to **Coverage B – Umbrella Liability**, this insurance applies anywhere in the world, with the exception of any country or jurisdiction subject to sanctions or embargo by the United States of America.

V. SUPPLEMENTAL PAYMENTS

Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**

1. We will pay the following expenses in addition to the Limit of Insurance with respect to any claim we investigate or settle, or any "suit" against an insured we defend, to the extent such expenses are not covered by "underlying insurance" or "other insurance":

a. All expenses we incur.

b. Up to $2,000 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which this coverage applies. We do not have to furnish these bonds.

c. The premium costs of appellate bonds or bonds to release attachments, but only for bond amounts within the applicable Limit of Insurance. We do not have to furnish these bonds.

d. Reasonable expenses incurred by an insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to $1000 a day because of time off from work.

e. All costs taxed against an insured in the "suit", except any:

(1) Attorneys' fees or litigation expenses; or

(2) Other loss, cost or expense in connection with any injunction or equitable relief.

f. Pre-judgment interest awarded against the insured on that part of the judgment we

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

pay. If we make an offer to pay the applicable Limit of Insurance, we will not pay any pre-judgment interest based on that period of time after the offer.

g. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court that part of the judgment that is within our applicable limit of insurance.

2. Our obligation to make these payments ends when we have used up the applicable Limit of Insurance.

3. If the Limits of Insurance of any "underlying insurance" are reduced by defense expenses under the terms of that policy, then any Supplemental Payments we make to defend any insured will reduce our applicable Limits of Insurance in the same manner.

4. If the law of a country or jurisdiction prohibits us from paying a Supplementary Payment, we will reimburse you for a Supplementary Payment you have incurred with our consent.

VI. LIMITS OF INSURANCE

Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**

1. The limits of insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:

   a. Insureds;

   b. Claims made or "suits" brought;

   c. Persons or organizations making claims or bringing "suits"; or

   d. Coverages provided by this policy.

2. Subject to the Each Occurrence Limit, the Products-Completed Operations Aggregate Limit shown in the Declarations is the most we will pay for the sum of damages included in the "products - completed operations hazard".

3. Subject to the Each Occurrence Limit, the General Aggregate Limit shown in the Declarations is the most we will pay for the sum of all damages, except:

   a. Damages Included in the "products - completed operations hazard"; or

   b. Otherwise covered by "underlying insurance", but to which no aggregate limit in such "underlying insurance" applies.

4. The Each Occurrence Limit shown in the Declarations is the most we will pay for damages arising out of any one "occurrence" or offense under **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability** combined, even if such loss is or otherwise would be covered in whole or part under more than one "underlying insurance".

5. Any amount paid for loss will reduce the amount of the applicable aggregate limit available for any other payments.

6. If the applicable aggregate limit has been reduced to any amount that is less that the Each Occurrence Limit, the remaining amount of such applicable aggregate is the most that will be available for any other payments.

7. If the Limits of Insurance of any "underlying insurance" are reduced by defense expenses under the terms of that policy, then any defense expense payments we make to defend any insured will reduce our applicable Limits of Insurance in the same manner.

8. The Aggregate Limits of this policy apply separately to each consecutive annual period. If our policy period is extended to a period greater than twelve (12) months, the extended period will be considered part of the original policy period for determining the Limits of Insurance.

VII. EXCLUSIONS

1. Applicable to both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**

   This insurance does not apply to:

   a. **Access Or Disclosure Of Confidential Or Personal Information And Data-Related Liability**

      Any liability or expense arising out of:

      (1) Any access to or disclosure of any person's or organization's confidential or personal information, including patents, trade secrets, processing methods, customer lists, financial information, credit card information, health information or any other type of nonpublic information; or

      (2) The loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data.

      This exclusion applies even if claims are made or "suits" brought for notification costs, credit monitoring expenses, forensic expenses, public relations expenses or any other loss, cost or expense incurred by you or others arising out of that which is described in Paragraph **(1)** or **(2)** above.

      However, unless Paragraph **(1)** above applies, this exclusion does not apply to

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

liability or expense because of "bodily injury".

As used in this exclusion, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

b. Asbestos

"Bodily injury", "property damage", "personal injury" or "advertising injury" or any other injury, damage, loss cost or expense arising out of any actual or alleged:

(1) Inhaling, ingesting or prolonged physical exposure by any person to asbestos or asbestos fibers or goods or products containing asbestos;

(2) Use of asbestos in constructing or manufacturing any good, product or structure;

(3) Intentional or accidental removal including encapsulation, dispersal, sealing or disposal of asbestos or asbestos fibers from any good, product or structure;

(4) Manufacture, transportation, storage or disposal of asbestos or goods or products containing asbestos;

(5) Products manufactured, sold, handled or distributed by or on behalf of the insured which contain asbestos; or

(6) Acts or omissions of the insured in connection with the general supervision of any job involving the removal, enclosure, encapsulation, dispersal, sealing or disposal of asbestos, asbestos fibers or products containing asbestos. General supervision includes the rendering of or failure to render any instructions, recommendations, warnings or advice.

c. Damage to Property

"Property damage" or related expenses arising from damage to or loss of use of:

(1) Real property owned, leased, occupied or in the care, custody or control of any insured;

(2) Real property loaned to any insured;

(3) That particular part of real property on which you or any contractors or subcontractors working directly on your behalf are performing operations, if the "property damage" arises out of those operations.

(4) That particular part of any property that must be restored repaired or replaced because "your work" was incorrectly performed on it.

(5) Personal property in the care, custody or control of the insured.

(6) Paragraphs **(2)** and **(3)** above do not apply to liability assumed under a sidetrack agreement.

(7) Paragraph **(4)** above does not apply to "property damage" included in the "Products Completed Operations Hazard".

d. Employment Related Practices

Any claim by or on behalf of:

(1) A person arising out of any:

(a) Refusal to employ that person;

(b) Termination of that person's employment; or

(c) Employment-related practices, policies, acts or omissions, such as coercion, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation, discrimination or malicious prosecution directed at that person; or

(2) Any person as a consequence of "bodily injury" to that person at whom any of the employment-related practices described in Paragraph **(1)** above is directed.

This exclusion applies:

(3) Whether you may be liable as an employer or in any other capacity; and

(4) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

e. Miscellaneous Laws

Any liability or expense under any of the following:

(1) Any obligation of the insured under a workers' compensation, disability, benefits or unemployment compensation law or any similar law;

(2) Any breach of fiduciary duty, responsibility, or obligation in connection with any employee benefit or pension plan, including violations of

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

the responsibilities, obligations or duties imposed upon fiduciaries by the Employee Retirement Income Security Act of 1974 (ERISA), as amended, or any similar local, state, federal or foreign law or regulations; or

(3) Any uninsured or underinsured motorist, no-fault, medical payments, first party personal injury or similar law.

f. Nuclear Liability

"Nuclear Energy Hazards".

g. Recall of Products, Work or Impaired Property

Damages claimed for any loss of use, cost, or expense related to recall, withdrawal, disposal or removal of, inspection, repair or replacement of:

(1) "Your product"

(2) "Your work", or

(3) "Impaired property";

if such product, work or property is withdrawn or recalled from the market or from use by any person or organization because of a known or suspected defect, deficiency, inadequacy or dangerous condition in it.

h. Recording and Distribution of Material in Violation of Law

Any liability or expense arising out of any action or omission that violates or is alleged to violate:

(1) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law; or

(2) The CAN-SPAM Act of 2003, including any amendment of or addition to such law; or

(3) The Fair Credit Reporting Act (FCRA) and any amendment of or addition to such law, including the Fair and Accurate Credit Transaction Act (FACTA); or

(4) Any federal, state or local statute, ordinance or regulation, other than the TCPA, CAN-SPAM Act of 2003 or FCRA and their amendments and additions, that addresses, prohibits or limits the printing, dissemination, disposal, collecting, recording, sending, transmitting, communicating or distribution of material or information.

i. War

Any liability or expense arising out of "war".

2. Applicable to **Coverage A – Follow Form Excess Liability** only:

This insurance does not apply to:

a. Pollution

(1) Any "bodily injury", "property damage", "personal injury" or "advertising injury" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":

(a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any insured. However, this subparagraph does not apply to:

(i) "Bodily injury" if sustained within a building and caused by smoke, fumes, vapor or soot originating from equipment that is used to heat, cool, or dehumidify the building, or equipment that is used to heat water for personal use by the building's occupants or their guests;

(ii) "Bodily injury" or "property damage" for which you may be held liable, if you are a contractor and the owner or lessee of such premises, site or location has been added to your policy as an additional insured with respect to your ongoing operations performed for that additional insured at that premises, site, or location and such premises, site or location is not and never was owned or occupied by, or rented or loaned to, any insured other than the additional insured; or

(iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a hostile fire.; or

(b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;

(c) Which are or were at any time transported, handled, stored,

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

treated, disposed of, or processed as waste by or for any insured or any person or organization for whom you may be legally responsible; or

(d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the premises, site or location in connection with such operations by such insured, contractor or subcontractor. However, this subparagraph does not apply to:

(i) "Bodily injury" or "property damage" arising out of the escape of fuels, lubricants or other operating fluids which are needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, if such fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them. This exception does not apply if the "bodily injury" or "property damage" arises out of the intentional discharge, dispersal or release of the fuels, lubricants or other operating fluids, or if such fuels, lubricants or other operating fluids are brought on or to the premises, site or location with the intent that they be discharged, dispersed or released as part of the operations being performed by such insured, contractor or subcontractor;

(ii) "Bodily injury" or "property damage" sustained within a building and caused by the release of gases, fumes or vapors from materials brought into that building in connection with operations being performed by you or on your behalf by a contractor or subcontractor; or

(iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a hostile fire.

(e) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants".

(2) Any loss, cost or expense arising out of any:

(a) Request, demand, order, statutory, or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify, or neutralize, or in any way respond to, or assess the effects of "pollutants"; or

(b) Claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of "pollutants".

However, paragraphs **(2)(a)** and **(2)(b)** above do not apply to liability for damages because of "property damage" that an insured would have in the absence of such request, demand, order or statutory or regulatory requirement or such claim or "suit" by or on behalf of a governmental authority.

(3) As used in this exclusion, a hostile fire is one which becomes uncontrollable or breaks out from where it was intended to be

3. Applicable to **Coverage B – Umbrella Liability** only:

This insurance does not apply to:

a. Aircraft, "Autos" or Watercraft:

Any liability or expense arising out of the ownership, maintenance, operation, use, entrustment to others, or loading or unloading of any:

(1) Aircraft owned by you or rented, loaned or chartered by or on behalf of you without crew;

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

(2) "Auto"; or

(3) Watercraft owned by you except watercraft while ashore on premises you own or rent.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured.

b. Contractual Liability

Any liability for which any insured is obligated to pay damages by reason of the assumption of liability in any contract or agreement. This exclusion does not apply to liability for damages:

(1) Assumed in a contract or agreement that is an "insured contract", provided the "bodily injury", "personal injury", "advertising injury" or "property damage" occurs after the execution of the contract or agreement; or

(2) That any insured would have in the absence of the contract or agreement.

c. Damage to "Your Product", "Your Work" or "Impaired Property"

"Property damage" to:

(1) "Your product" arising out of it or any part of it; and

(2) "Your work" arising out of it or any part of it and included in the "products-completed operations hazard".

Paragraphs **(1)** and **(2)** above do not apply if the damaged work or the work out of which the damage arises was performed on your behalf by a subcontractor.

(3) "Impaired Property" or property that has not been physically injured, arising out of:

(a) A defect, deficiency, inadequacy or dangerous condition in "your product" or "your work"; or

(b) A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "your product" or "your work" after it has been put to its intended use.

d. Directors and Officers

Any liability or expense for a wrongful act, error, omission or breach of duty by an insured in the performance of the office of director, officer or trustee of an organization.

e. Employers Liability

Any injury to:

(1) Any "employee" of an insured arising out of and in the course of:

(a) Employment by an insured; or

(b) Performing duties related to the conduct of an insured's business; or

(2) Any person as a consequence of paragraph **(1)** above.

This exclusion applies:

(3) Whether an insured may be liable as an employer or in any other capacity; and

(4) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by an insured under an "insured contract".

f. Expected or Intended Injury

"Bodily injury", "property damage", "personal injury" or "advertising injury" expected or intended from the standpoint of the insured.

This exclusion does not apply to "bodily injury" resulting from the use of reasonable force to protect persons or property.

g. Liquor Liability

Any liability or expense for which any insured may be held liable by reason of:

(1) Causing or contributing to the intoxication of any person; or

(2) The furnishing of alcoholic beverages to a person under the legal drinking age or under the influence of alcohol; or

(3) Any statute, ordinance or regulation relating to the sale, gift, distribution or use of alcoholic beverages.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in:

(4) The supervision, hiring, employment, training or monitoring of others by that insured; or

(5) Providing or failing to provide transportation with respect to any

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

person that may be under the influence of alcohol;

h. Maintenance, Prevention or Enhancement

To any liability or expense incurred by an insured or any others for any:

(1) maintenance or enhancement of any property; or

(2) prevention of any injury or damage to any:

(a) person or organization; or

(b) property you own, rent or occupy.

i. "Personal Injury" and "Advertising Injury"

Any liability or expense for "personal injury" and "advertising injury":

(1) Caused by or at the direction of the insured with the knowledge that the act would violate the rights or another and would inflict "personal injury" or "advertising injury";

(2) Arising out of oral or written publication, in any manner, of material, if done by or at the direction of the insured with knowledge of its falsity;

(3) Arising out of oral or written publication, in any manner, of material whose first publication took place before the beginning of the policy period;

(4) Arising out of a criminal act committed by or at the direction of the insured;

(5) For which the insured has assumed liability in a contract or agreement. This exclusion does not apply to liability for damages that the insured would have in the absence of the contract or agreement;

(6) Arising out of a breach of contract, except an implied contract to use another's advertising idea in your "advertisement";

(7) Arising out of the failure of goods, products or services to conform with any statement of quality or performance made in your "advertisement";

(8) Arising out of the wrong description of the price of goods, products or services stated in your "advertisement";

(9) Arising out of the infringement of copyright, patent, trademark, trade secret or other intellectual property rights. Under this exclusion, such other intellectual property rights do not include the use of another's advertising idea in your "advertisement".

However, this exclusion does not apply to infringement, in your "advertisement" of copyright or slogan.

(10) Arising out of:

(a) The controlling, creating, designing or developing of another's internet site;

(b) The controlling, creating, designing, developing, determining or providing content or material of another's internet site;

(c) The controlling, facilitating or providing, or failing to control, facilitate or provide, access to the internet or another's internet site; or

(d) Publication of content or material on or from the internet, other than material developed by you or at your direction.

(11) Arising out of an electronic chat room or bulletin board the insured hosts, owns, or over which the insured exercises control;

(12) Arising out of the unauthorized use of another's name or product in your email address, domain name or metatag, or any other similar tactics to mislead another's potential customers.

j. Pollution

(1) "Bodily injury", "property damage", "personal injury" or "advertising injury" part but for the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants" at any time.

(2) Any loss, cost or expense arising out of any:

(a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

(b) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

k. **Professional Liability**

Any liability or expense arising out of the rendering of or failure to render any professional service, advice or instruction by you or on your behalf, or from whom any of you assumed liability by reason of a contract or agreement, regardless of whether any such service, advice or instruction is ordinary to any insured's profession.

l. **Punitive Damages**

Any sum awarded for punitive damages, exemplary damages, multiplied damages, taxes, fines, or penalties.

VIII. CONDITIONS

Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**

1. **Appeals**

We may elect to initiate or participate in an appeal of a judgment if such judgment could result in a payment under this insurance.

If we so elect, we shall be liable for all expenses we incur incidental to such appeal, but in no case will the amount we pay for loss exceed the Limits of Insurance.

2. **Bankruptcy**

The bankruptcy of any insured or insured's estate will not relieve us of our obligations under this policy.

In the event of bankruptcy or insolvency of the provider of any "underlying insurance", the insurance provided by this policy will not replace such "underlying insurance" and applies as though such "underlying insurance" was available and collectible.

3. **Cancellation and Non-Renewal**

a. The first Named Insured may cancel this policy by mailing or delivering to us, our authorized agent or broker, advance written notice of cancellation stating when the cancellation is to take effect.

b. We may cancel this policy or any of its individual coverages by mailing to the first Named Insured a written notice of cancellation at least:

(1) 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or

(2) 60 days before the effective date of cancellation if we cancel for any other reason.

c. We will mail our notice to the first Named Insured's last mailing address known to us.

d. Notice of cancellation will state the effective date of cancellation. The policy period will end on that date.

e. If this policy is canceled, we will send the first Named Insured any premium refund due. If we cancel, the refund will be pro rata.

f. If we decide not to renew, we will mail to the first Named Insured written notice of non-renewal not less than sixty (60) days before the expiration date.

g. Proof of mailing will be sufficient proof of notice.

4. **Changes**

This policy contains all the agreements between you and us concerning the insurance afforded. The first Named Insured is authorized to make changes with our consent. This policy's terms can be amended or waived only by endorsement issued by us or made a part of this policy.

5. **Currency**

All payments or reimbursements we make for damages because of judgments or settlements will be made in United States currency at the prevailing exchange rate at the time the insured became legally obligated to pay such sums.

6. **Duties in the Event of "Occurrence", Offense, Claim or "Suit"**

a. You must see to it that we are notified as soon as practicable of any "occurrence" or offense to which this insurance may apply. Notice should include:

(1) How, when and where the "occurrence" or offense took place;

(2) The names and addresses of any injured persons and witnesses; and

(3) The nature of any injury or damage arising out of the "occurrence" or offense.

b. You will cooperate with the "underlying insurer" as required by the terms of their

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

policies and comply with all terms and conditions of those policies.

c. If a claim is made or "suit" is brought against any insured to which this insurance may apply, you must see to it that we receive written notice of the claim or "suit" as soon as practicable.

d. You and any other involved insured must:

(1) Send us copies as soon as practicable of any demands, notices, summonses or legal papers received in connection with the claim or "suit" to which this insurance may apply;

(2) Authorize us to obtain records and other information;

(3) Cooperate with us in the investigation, settlement or defense of the claim or "suit";

(4) Assist us, upon our request, in the enforcement of any right against any person or organization which in our opinion may be liable to an insured because of injury or damage to which this insurance applies;

(5) Notify us as soon as practicable of any judgment or settlement of any claim or "suit" brought against any insured; and

(6) Not voluntarily make a payment, assume any obligation or incur any expense without our consent, except at that insured's own cost.

7. Examination of Your Books and Records

We may examine and audit your books and records as they relate to this policy at any time during the policy period and up to three years afterward. We have the right to make copies of those books and records.

8. First Named Insured

The person or organization first named in Item **1.** of the Declarations is responsible for the payment of all premiums, the receiving of return premiums, the receipt and acceptance of this policy and any endorsements, and will act on behalf of all other insureds for the giving and receiving of notice of cancellation or any other notice required under this policy or by statute or regulation.

9. Inspections and Surveys

a. We have the right but not the duty to:

(1) Make inspections and surveys at any time;

(2) Give you reports on the conditions we find; and

(3) Recommend changes.

b. Any inspections, surveys, reports or recommendations relate only to insurability and the premiums to be charged. We do not make safety inspections. We do not undertake to perform the duty of any person or organization to provide for the health or safety of workers or the public. We do not warrant that conditions:

(1) Are safe or healthful; or

(2) Comply with laws, regulations, codes or standards.

This condition applies not only to us, but also to any rating, advisory, rate service or similar organization which makes insurance inspections, surveys, reports or recommendations.

10. Joint Duties in Non-Admitted Jurisdictions

With respect to an "occurrence", offense, claim or "suit" that arises in a non-admitted jurisdiction and to which this insurance applies:

a. If we are prevented by law in any country or jurisdiction from fulfilling our duty to defend you or to investigate claims, you will be responsible for arranging for the defense or investigation under our supervision. We will reimburse you for all reasonable and necessary expense incurred which we would have paid if we had defended the "suit" or investigated the claim; and

b. If we are prevented by law in any country or jurisdiction from paying damages to which this insurance applies, you may pay the damages with our consent. Upon proof of the payments, we will reimburse you for such damages subject to the applicable Limit of Insurance.

11. Legal Action Against Us

No person or organization has a right under this policy:

a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or

b. To sue us on this policy unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured obtained after an actual trial, but we will not be liable for damages that are not payable under the terms of this policy or that are in excess of the Limits of Insurance.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

An agreed settlement means a settlement and release of liability signed by us, an insured and the claimant or the claimant's legal representative.

12. Maintenance of "underlying insurance

a. You agree to maintain the "underlying insurance" in full force and effect during the term of this policy. "underlying insurance" will not be cancelled, non-renewed or rescinded without replacement coverage to which we agree. You must notify us as soon as practicable if any "underlying insurance" is no longer valid or in full force and effect.

b. The terms and conditions of "underlying insurance" will not materially change, unless we agree otherwise. The terms and conditions or renewals or replacements of "underlying insurance" will be materially the same as prior coverage unless we agree otherwise.

c. The total applicable limits of "underlying insurance" shall not decrease, except for any reduction or exhaustion of aggregate limits by payment of loss. Reduction or exhaustion of any aggregate limit of liability or limit of insurance in any "underlying insurance" by payments for judgments, settlements or expense will not be a failure to maintain "underlying insurance" in full force and effect.

d. No statement contained in this Condition limits our right to cancel or not renew this policy.

e. Your failure to comply will not invalidate this policy, but this policy will apply as if the "underlying insurance" was so maintained.

13. Other Insurance

a. This insurance is excess over any "other insurance", whether primary, excess, contingent or on any other basis. This condition will not apply to insurance specifically purchased as excess over this policy.

b. We have no duty to defend the insured against any claim or "suit" if any other insurer has a duty to defend such insured against that claim or "suit".

c. This insurance is not subject to the terms or conditions of any "other insurance".

d. We will pay only our share of the amount of loss, if any, that exceeds the sum of the total:

(1) Amount that all "other insurance" would pay for loss in the absence of this insurance; and

(2) Of all deductible and self-insurance amounts under all "other insurance".

14. Premium Audit

a. We will compute all premiums for this policy in accordance with our rules, rates, rating plans, premiums and minimum premiums applicable to this insurance.

b. If the premium for this policy is stated in the Declarations as being subject to adjustment, at the close of each audit period, we will compute the earned premium for that period using the rates and rating basis shown on the Declarations or as stated in an endorsement issued by us. Audit premiums are due and payable on notice to the first Named insured. If the sum of the advance and audit premiums paid for the policy term is greater than the earned premium, we will return the excess to the first Named Insured, but not if such audit premium is less than the minimum premium shown in the Declarations.

c. The first Named Insured must keep records of the information we need for premium computation and send us copies as we may request.

15. Representations

By accepting this policy, you agree:

a. The statements in the Declarations are accurate and complete;

b. Those statements are based upon representations you made to us; and

c. We have issued this policy in reliance upon your representations.

If unintentionally you should fail to disclose all hazards at the inception of this policy, we shall not deny coverage under this policy because of such failure.

16. Separation of Insureds

Except with respect to the Limits of Insurance and any rights or duties specifically assigned to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom claim is made or "suit" brought.

17. Titles of Paragraphs

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

The titles of paragraphs in this policy are inserted solely for convenience or reference. Such titles do not limit, define or affect the provisions to which they relate.

18. Transfer of Rights of Recovery Against Others to Us

If an insured has rights to recover all or part of any payment we have made under this policy, those rights are transferred to us. An insured must do nothing after loss to impair such rights. At our request, an insured will bring "suit" or transfer those rights to use and help us enforce them.

Any recoveries will be apportioned in the inverse order of payment of loss to the extent of actual payment. The expenses of all such recovery proceedings shall be apportioned in the ratio of their respective recoveries.

19. Transfer of Your Rights and Duties Under This Policy

Your rights and duties under this policy may not be transferred without our written consent.

If you die, your rights and duties are transferred to your legal representative, but only while that legal representative is acting within the scope of their duties as such. Until your legal representative is appointed, anyone with proper temporary custody of your property will have your rights and duties but only with respect to that property.

IX. DEFINITIONS

Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella**

1. **"Advertisement"** means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purpose of this definition:
   a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and
   b. Regarding web sites, only that part of a web site that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.
2. **"Advertising Injury"** means injury, including consequential "bodily injury", arising out of one or more of the following offenses:
   a. The use of another's advertising idea in your "advertisement"; or
   b. Infringing upon another's copyright or slogan in your "advertisement".
3. **"Auto"** means:
   a. A land motor vehicle, trailer or semi-trailer designed for travel on public roads, including any attached machinery or equipment; or
   b. Any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged.

   However, "auto" does not include "mobile equipment".
4. **"Bodily injury"** means bodily injury, sickness or disease sustained by a person including death resulting from any of these at any time. "Bodily injury" includes mental anguish or other mental injury resulting from "bodily injury".
5. **"Employee"** includes a "leased worker". "Employee" does not include a "temporary worker".
6. **"Executive Officer"** means a person holding any of the officer positions created by your charter, constitution, by-laws or any other similar governing document.
7. **"Impaired property"** means tangible property, other than "your product" or "your work", that cannot be used or is less useful because:
   a. It incorporates "your product" or "your work" that is known or thought to be defective, deficient, inadequate or dangerous; or
   b. You have failed to fulfill the terms of the contract or agreement;

   if such property can be restored to use by the repair, replacement, adjustment or removal of "your product" or "your work" or your fulfilling the terms of the contract or agreement.
8. **"Insured contract"** means:
   a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
   b. A sidetrack agreement;
   c. Any easement or license agreement, except in connection with construction or demolition operations on or within 50 feet of a railroad;
   d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

e. An elevator maintenance agreement;

f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume, the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph **f.** does not include that part of any contract or agreement:

(1) That indemnifies a railroad for "bodily injury" or "property damage" arising out of construction or demolition operations, within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing;

(2) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:

(a) Preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

(b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage;

(3) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in paragraph **(2)** above and supervisory, inspection or engineering activities.

9. **"Leased Worker"** means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".

10. **"Loading or Unloading"** means the handling of property:

a. After it is moved from the place where it is accepted for movement into or onto an aircraft, watercraft or "auto";

b. While it is in or on an aircraft, watercraft or "auto"; or

c. While it is being moved from an aircraft, watercraft or "auto" to the place where it is finally delivered;

but "loading or unloading" does not include the movement of property by means of a mechanical device, other than a hand truck, that is not attached to the aircraft, watercraft or "auto".

11. **"Mobile Equipment"** means any of the following types of land vehicles, including any attached machinery or equipment:

a. Bulldozers, farm machinery, fork-lifts and other vehicles designed by use principally off public roads;

b. Vehicles maintained for use solely on or next to premises you own or rent;

c. Vehicles that travel on crawler treads;

d. Vehicles, whether self-propelled or not, maintained primarily to provide mobility to permanently mounted:

(1) Power cranes, shoves, loaders, diggers or drills; or

(2) Road construction or resurfacing equipment such as graders, scrapers or rollers;

e. Vehicles not described in **a., b., c.,** or **d.** above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:

(1) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or

(2) Cherry pickers and similar devices used to raise or lower workers;

f. Vehicles not described in **a., b., c.,** or **d.** above maintained primarily for purposes other than the transportation of persons or cargo.

However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos".

(1) Equipment designed primarily for:

(a) Snow removal;

(b) Road maintenance, but not construction or resurfacing; or

(c) Street cleaning;

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

(2) Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and

(3) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.

However, "mobile equipment" does not include any land vehicles that are subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged. Land vehicles subject to a compulsory or financial responsibility law or other motor vehicle insurance law are considered "autos".

12. "Nuclear Energy Hazard"

Any liability or expense:

a. With respect to which an insured under this policy is also an insured under a nuclear energy policy issued by Nuclear Energy Liability Insurance Association, Mutual Atomic Energy Liability Underwriters, Nuclear Insurance Association of Canada, or any other similar foreign or domestic authority of any jurisdiction, or their successors, or would be an insured under any such policy of their successors, or would be an insured under any such policy but for its termination upon exhaustion of its limit of liability; or

b. Resulting from the hazardous properties of nuclear material and with respect to which:

(1) Any person or entity is required to maintain financial protection pursuant to the Atomic Energy Act of 1954, of any law amendatory thereof or of any similar law or regulation of any other foreign or domestic authority or jurisdiction; or

(2) Any insured is, or had this policy not been issued would be, entitled to indemnity from the United States of America or any other foreign or domestic governmental entity or any agency thereof, under any agreement entered into by the United States of America, any other foreign or domestic governmental body or any agency thereof, with any person or organization.

c. To "bodily injury" or "property damage" resulting from the hazardous properties of nuclear material, if:

(1) The nuclear material:

(a) Is at any nuclear facility owned by or operated by or on behalf of an insured or,

(b) Has been discharged or dispersed there from.

(2) The nuclear material is contained in spent fuel or waste at any time possessed, handled, used, processed, stored, transported or disposed of by or on behalf of an insured; or

(3) The "bodily injury" or "property damage" arises out of the furnishing by an insured of services, materials, parts or equipment in connection with the planning, construction maintenance, operation or use of any nuclear facility, but if such facility is located within the United States of America, its territories or possessions or Canada, this paragraph **c.** applies only to "Property Damage" to such nuclear facility and any property thereat.

As used in this definition:

"Hazardous properties" include radioactive, toxic or explosive properties.

"Nuclear material" means source material, special nuclear material, or by-products material.

"Source material", "special nuclear material", and "by-product material" have the meanings given them in the Atomic Energy Act of 1954 or in any law amendatory thereof.

"Spent fuel" means any fuel element or fuel component, solid or liquid, which has been used or exposed to radiation in a nuclear reactor.

"Waste" means any waste material:

(1) Containing by-product material other than the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

(2) Resulting from the operation by any person or organization of any nuclear facility included under the first two paragraphs of the definition of nuclear facility.

"Nuclear facility" means:

(1) Any nuclear reactor; or

(2) Any equipment or device designated or used for:

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

(a) Separating the isotopes of uranium or plutonium; or

(b) Processing or utilizing spent fuel; or

(c) Handling, processing or packaging nuclear waste; or

(3) Any equipment or device used for processing, fabricating or alloying of special nuclear material if at any time the total amount of such material in the custody of an insured at the premises where such equipment or device is located consists of or contains more than 25 grams of plutonium or uranium 233 or any combination thereof, or more than 250 grams of uranium 235; or

(4) Any structure, basin, excavation, premises or place prepared or used for the storage or disposal of waste; and includes the site on which any of the foregoing is located, all operations conducted on such site and all premises used for such operations.

"Nuclear reactor" means any apparatus designed or used to sustain nuclear fission in a self-supporting chain reaction or to contain a critical mass of fissionable material.

"Property damage" includes all forms of radioactive contamination of property.

13. **"Occurrence"** means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.

14. **"Other Insurance"** means any insurance that may provide coverage to any insured which this policy would also provide, and includes any type of self-insurance or other mechanism arranged for funding of loss. "Other insurance" does not include "underlying insurance" or insurance specifically purchased as excess over this policy.

15. **"Personal Injury"** means injury, including consequential "bodily injury", arising out of one or more of the following offenses:

    a. False arrest, detention or imprisonment;

    b. Malicious prosecution;

    c. The wrongful eviction from, wrongful entry into, or invasion of the right of private occupancy of a room, dwelling or premises that a person occupies, committed by or on behalf of its owner, landlord or lessor;

    d. Oral or written publication, in any manner, of material that slanders or libels a person or organization or disparages a person's or organization's goods, products or services;

    e. Oral or written publication, in any manner, of material that violates a person's right of privacy;

16. **"Pollutants"** mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

17. **"Products-Completed Operations Hazard"**

    a. Includes all "bodily injury" and "property damage" occurring away from premises you own or rent and arising out of "your product" or "your work" except:

        (1) Products that are still in your physical possession; or

        (2) Work that has not yet been completed or abandoned. However, "your work" will be deemed completed at the earliest of the following times:

            (a) When all of the work called for in your contract has been completed.

            (b) When all of the work to be done at the job site has been completed if your contract calls for work at more than one job site.

            (c) When that part of the work done at a job site has been put to its intended use by any person or organization other than another contractor or subcontractor working on the same project.

        Work that may need service, maintenance, correction, repair or replacement, but which is otherwise complete, will be treated as completed.

    b. Does not include "bodily injury" or "property damage" arising out of:

        (1) The transportation of property, unless the injury or damage arises out of a condition in or on a vehicle not owned or operated by you, and that condition was created by the "loading or unloading" of that vehicle by any insured;

        (2) The existence of tools, uninstalled equipment or abandoned or unused materials; or

        (3) Products or operations for which the classification, listed in the Declarations or in a policy Schedule, states that products-completed operations are subject to the General Aggregate Limit.

 Includes copyrighted material of Insurance Services Office, Inc., with its permission.

18. **"Property Damage"** means:
    a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or
    b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the "occurrence" that caused it.

    For the purposes of this insurance, electronic data is not tangible property.
19. **"Retained Limit"** means the amount stated as such in the Declarations for which the insured is responsible with respect to each "occurrence" under **Coverage B – Umbrella Liability**.
20. **"Suit"** means a civil proceeding in which damages because of "bodily injury", "property damage", "personal injury" or "advertising injury" to which this insurance applies are alleged. "Suit" also includes:
    a. An arbitration proceeding in which such damages are claimed and to which you must submit or do submit with our consent; or
    b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which you submit with our consent.
21. **"Temporary Worker"** means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.
22. **"Underlying insurance"** means the liability insurance coverage provided under policies shown in the Schedule of Underlying Insurance for the limits and policy periods indicated. It includes any policies issued to replace those policies during the term of this insurance that provide:
    a. At least the same limits of liability or limits of insurance; and
    b. The same hazards insured against, except as modified by general program revisions or as agreed to by us in writing.
23. **"Underlying Insurer"** means any insurer who issues a policy of "underlying insurance".
24. **"War"** means:
    a. War, including undeclared or civil war;
    b. Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
    c. Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.
25. **"Your Product"**
    a. Means:
        (1) Any goods or products, other than real property, manufactured, sold, handled, distributed or disposed of by:
            (a) You;
            (b) Others trading under your name; or
            (c) A person or organization whose business or assets you have acquired; and
        (2) Containers (other than vehicles), materials, parts or equipment furnished in connection with such goods or products.
    b. Includes:
        (1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your product"; and
        (2) The providing of or failure to provide warnings or instructions.
    c. Does not include vending machines or other property rented to or located for the use of others but not sold.
26. **"Your Work"**
    a. Means:
        (1) Work or operations performed by you or on your behalf; and
        (2) Materials, parts or equipment furnished in connection with such work or operations.
    b. Includes:
        (1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your work"; and
        (2) The providing of or failure to provide warnings or instructions.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – TOTAL POLLUTION (COVERAGE A)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

Section **VII. EXCLUSIONS,** paragraph **2.** Applicable to **Coverage A – Follow Form Excess Liability** only, subparagraph **a.** is replaced by the following:

a. Pollution

(1) "Bodily injury", "property damage", "personal injury" or "advertising injury" which would not have occurred in whole or part but for the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants" at any time.

(2) Any loss, cost or expense arising out of any:

(a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or

(b) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – LEAD (COVERAGE A AND B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS**, paragraph **1.** Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**:

This insurance does not apply to:

Lead

Any liability or expense arising out of any actual or alleged presence of or exposure to lead including but not limited to:

(1) Inhaling, ingesting or prolonged physical exposure by any person to any premises, structure, goods or products containing lead;

(2) The use of lead in constructing or manufacturing any good, product or structure;

(3) Intentional or accidental removal including encapsulation, dispersal, sealing or disposal of any good, product or structure containing lead;

(4) The manufacturing, transportation, storage or disposal of goods or products containing lead;

(5) Any product manufactured, sold, handled or distributed by or on behalf of the insured which contains lead; or

(6) Acts or omissions of the insured in connection with the general supervision of any job involving the removal, enclosure, encapsulation, dispersal, sealing, or disposal of products or materials containing lead.

General supervision includes the rendering of or failure to render any instructions, recommendations, warnings, or advice.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

OTHER COVERAGE ENDORSEMENT (COVERAGE A AND B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VI. LIMITS OF INSURANCE**:

With respect to the named insured under this policy, regardless of the Limits specified in the Declarations, if any "bodily injury", "property damage", "personal injury" or "advertising injury" covered by this policy is also available to the same named insured under any other umbrella or excess liability policy issued by us or any company affiliated with us, then:

1. The maximum that we will pay for all such "bodily injury" or "property damage" will be the highest applicable Each Occurrence Limit under any one of those policies; and
2. The maximum that we will pay for all such "personal injury" or "advertising injury" will be the highest applicable Personal and Advertising Injury Limit under any one of those policies; and
3. If this policy does not represent the highest applicable Each Occurrence Limit or Personal and Advertising Injury Limit, then the insurance provided by this policy does not apply to such "bodily injury", "property damage", "personal injury" or "advertising injury".

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

If aggregate insured losses attributable to terrorist acts certified under the federal Terrorism Risk Insurance Act exceed $100 billion in a calendar year and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds $100 billion, and in such case insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

"Certified act of terrorism" means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Risk Insurance Act, to be an act of terrorism pursuant to such Act. The criteria contained in the Terrorism Risk Insurance Act for a "certified act of terrorism" include the following:

1. The act resulted in insured losses in excess of $5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION OF PUNITIVE DAMAGES RELATED TO A CERTIFIED ACT OF TERRORISM

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

A. The following exclusion is added to section **VII. EXCLUSIONS**, paragraph **1.** Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**:

This insurance does not apply to:

Terrorism Punitive Damages

Damages arising, directly or indirectly, out of a "certified act of terrorism" which are awarded as punitive damages.

B. For the purpose of this endorsement, the following definition is added to section **IX. DEFINITIONS**:

"Certified act of terrorism" means an act that is certified by the Secretary of the Treasury, in accordance with the provisions of the federal Terrorism Insurance Act, to be an act of terrorism pursuant such Act. The criteria contained in the Terrorism Risk Insurance Act for a "certified act of terrorism" include the following:

a. The act resulted in insured losses in excess of $5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and

b. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

C. The terms and limitations of any terrorism exclusion, or the inapplicability or omission of a terrorism exclusion, do not serve to create coverage for injury or damage that is otherwise excluded under this Coverage Part.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – SILICA (COVERAGE A AND B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS**, paragraph **1.** Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**:

This insurance does not apply to:

"Silica" or "Silica-Related Dust"

Any liability or expense arising out of any actual, alleged, threatened or suspected:

(1) Inhalation of, or ingestion of, "silica" or "silica-related dust";

(2) Threatened or suspected contact with, exposure to, existence of, or presence of, "silica" or "silica-related dust"; or

(3) Any loss cost or expense arising, in whole or in part, out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to or assessing the effects of, "silica" or "silica-related dust", by any insured or by any other person or entity.

For the purpose of this exclusion, the following definitions are added:

"Silica" means silicon dioxide (occurring in crystalline, amorphous and impure forms), silica particles, silica dust or silica compounds.

"Silica-related dust" means a mixture or combination of silica and other dust or particles.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INDIANA CHANGES

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

A. Section **VIII. CONDITIONS,** paragraph **3. Cancellation and Non-Renewal,** subparagraph **b.** is replaced by the following:

b. Cancellation Of Policies In Effect:

(1) 90 Days Or Less

If this policy has been in effect for 90 days or less, we may cancel this policy by mailing or delivering to the first Named Insured written notice of cancellation at least:

(a) 10 days before the effective date of cancellation if we cancel for nonpayment of premium;

(b) 20 days before the effective date of cancellation if you have perpetrated a fraud or material misrepresentation on us; or

(c) 30 days before the effective date of cancellation if we cancel for any other reason.

(2) More Than 90 Days

If this policy has been in effect for more than 90 days, or is a renewal of a policy we issued, we may cancel this policy, only for one or more of the reasons listed below, by mailing or delivering to the first Named Insured written notice of cancellation at least:

(a) 10 days before the effective date of cancellation if we cancel for nonpayment of premium;

(b) 20 days before the effective date of cancellation if you have perpetrated a fraud or material misrepresentation on us; or

(c) 45 days before the effective date of cancellation if:

(i) There has been a substantial change in the scale of risk covered by this policy;

(ii) Reinsurance of the risk associated with this policy has been cancelled; or

(iii) You have failed to comply with reasonable safety recommendations.

B. Section **VIII. CONDITIONS,** paragraph **3. Cancellation and Non-Renewal,** subparagraphs **f.** and **g.** are replaced by the following:.

f. If we elect not to renew this policy, we will mail or deliver to the first Named Insured written notice of nonrenewal at least 45 days before:

(1) The expiration date of this policy, if the policy is written for a term of one year or less; or

(2) The anniversary date of this policy, if the policy is written for a term of more than one year.

g. We will mail or deliver our notice to the first Named Insured's last mailing address known to us. If notice is mailed, proof of mailing will be sufficient proof of notice.

C. The following is added to section **VIII. CONDITIONS,** paragraph **15. Representations**:

We will not pay for any loss or damage in any case of fraud committed by an insured at any time and relating to a claim under this policy.

Notice given by or on behalf of the insured to any of our authorized agents in Indiana, with particulars sufficient to identify the insured, shall be considered to be notice to us.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted materials of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NON-CONCURRENCY OF POLICY PERIODS – RETAINED LIMIT

This endorsement modifies the insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VI. LIMITS OF INSURANCE**:

If the policy period of any "underlying insurance" is not concurrent with the policy period of this policy, and if any aggregate limit of such "underlying insurance" is reduced or exhausted by payment for losses or expenses taking place prior to the effective date of this policy, then insurance provided by this policy will apply only as if such reduction or exhaustion of aggregate limit has not taken place.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – DISCRIMINATION (COVERAGE B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS,** paragraph **3.** Applicable **Coverage B – Umbrella Liability** Only:

This insurance does not apply to:

Discrimination

Any liability or expense arising out of discrimination or humiliation based upon, but not limited to:

(1) Age;

(2) Gender;

(3) Sexual orientation;

(4) Marital Status;

(5) Race;

(6) Nationality;

(7) National origin;

(8) Religion;

(9) Creed;

(10) Mental capabilities or condition;

(11) Physical capabilities, characteristics or condition; or

(12) Any violation of a local, state, federal or foreign law or regulation relating to discrimination.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INDIANA AMENDMENT OF DEFINITION OF POLLUTANTS

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA LIABILITY POLICY

SCHEDULE

Specifically identified substances or materials	See 401-1273 for information required to complete this SCHEDULE.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

Throughout this Policy, including any endorsements thereto, the term "pollutants" means the following:

Any substance or material that is a solid, liquid, gaseous or thermal irritant or contaminant including but not limited to, smoke, vapor, soot, fumes, acids, alkalis, chemicals, waste and any substances or materials identified in the Schedule. Waste includes materials to be recycled, reconditioned or reclaimed.

The definition of "pollutants" applies whether or not such irritant or contaminant has any function in your business, operations, premises, site or location.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of the Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – ABUSE AND MOLESTATION (COVERAGE B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS**, paragraph **3.** Applicable to **Coverage B – Umbrella Liability** only:

This insurance does not apply to:

Abuse and Molestation

Any liability or expense arising out of:

(1) The actual or threatened abuse or molestation by anyone of any person regardless whether the abuse or molestation was specifically intended or resulted from negligent conduct and regardless whether any insured subjectively intended the injury or damage for which a claim is made, or

(2) The negligent:

(a) Employment;

(b) Investigation;

(c) Supervision;

(d) Reporting to the proper authorities, or failure to so report; or

(e) Retention;

of a person for whom any insured is or ever was legally responsible and whose conduct would be excluded by Paragraph **(1)** above.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – EMINENT DOMAIN, INVERSE CONDEMNATION, ADVERSE POSSESSION (COVERAGE B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS,** paragraph **3.** Applicable to **Coverage B – Umbrella Liability** only:

This insurance does not apply to:

Eminent Domain, Inverse Condemnation, Adverse Possession

Any liability or expense arising out of eminent domain, inverse condemnation, or condemnation proceedings, adverse possession or dedication by adverse use, or by whatever name called, whether such liability accrues directly against any insured or by virtue of any agreement entered into by or on behalf of any insured.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – TAX ASSESSMENT (COVERAGE B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS,** paragraph **3.** Applicable to **Coverage B – Umbrella Liability** only:

This insurance does not apply to:

Tax Assessment

Any liability or expense arising out of:

(1) Any tax assessment or adjustment;

(2) The collection, refund, disbursement or application of any taxes;

(3) Failure to anticipate tax revenue shortfalls; or

(4) Guarantee on bond issues.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – CORPORAL PUNISHMENT (COVERAGE B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS,** paragraph **3.** Applicable **Coverage B – Umbrella Liability** Only:

This insurance does not apply to:

Corporal Punishment

Any liability or expense arising out of any actual or alleged "bodily injury", "property damage", "personal injury" or "advertising injury" to your student arising out of any corporal punishment administered by or at the direction of any insured.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – INNOCENT PARTY DEFENSE (COVERAGE A AND B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

A. The following is added to section **I. INSURING AGREEMENTS,** paragraph **1. Coverage A – Follow Form Excess Liability Insuring Agreement** and paragraph **2. Coverage B – Umbrella Liability Insuring Agreement**:

We have no duty to defend any insured against any "suit" seeking damages for participating in, knowingly allowing or directing any "sexual misconduct or sexual molestation incident" or any "physical abuse, sexual misconduct or sexual molestation incident".

B. The following is added to section **VII. EXCLUSIONS,** paragraph **1.** Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**:

This insurance does not apply to:

Innocent Party Defense

Any liability or expense relating to the defense of any insured against any "suit" seeking damages for participating in, knowingly allowing or directing any sexual misconduct or sexual molestation incident or any physical abuse, sexual misconduct or sexual molestation incident.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc. with its permission

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – FUNGI OR BACTERIA WITH FOOD AND POOL EXCEPTIONS (COVERAGE A AND B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS,** paragraph **1.** Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**:

This insurance does not apply to:

Fungi or Bacteria

Any liability or expense arising out of "fungi" or bacteria which would not have occurred, in whole or in part, but for the actual, alleged or threatened inhalation of, ingestion of, contact with, exposure to, existence of, or presence of, any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material or product contributed concurrently or in any sequence to such injury or damage.

(1) This exclusion also applies to any loss, cost or expenses arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to or assessing the effects of, "fungi" or bacteria, by you or by any other person or entity.

(2) For the purposes of this exclusion, "fungi" means any type or form of fungus, including mold or mildew and any mycotoxins, spores, scents or byproducts produced or released by "fungi".

This exclusion does not apply to:

(3) Any "fungi" or bacteria that are, are on, or are contained in, a good or product intended for bodily consumption; or

(4) Damages caused by direct physical contact with any "fungi" that are contained in swimming pools, spa pools, jacuzzis, or hot tubs.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – EMPLOYEE BENEFITS LIABLITY (COVERAGE B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

A. The following is added to section **VII. EXCLUSIONS,** paragraph **3.** Applicable to **Coverage B – Umbrella Liability** only:

This insurance does not apply to:

Employee Benefits Liability

Any liability or expense arising out of the "administration" of an "insured's employee benefit program".

B. For the purposes of this endorsement, the following definitions are added to section **IX. DEFINITIONS:**

"Administration" means:

a. Giving counsel to employees with respect to "employee benefit programs";

b. Interpreting "employee benefit programs";

c. Handling of records in connection with "employee benefits programs"; and

d. Effecting enrollment of employees under "employee benefit programs".

"Employee benefit program" means life insurance, accident or health insurance, pension plans, workers' compensation, unemployment insurance, social security and disability benefits, investment programs, loan or financial assistance programs, and any other similar benefit program.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

EXCLUSION – LIMITED TRAMPOLINE OR REBOUNDING DEVICE (COVERAGE A AND B)

This endorsement modifies insurance provided under the following:

HANOVER COMMERCIAL FOLLOW FORM EXCESS AND UMBRELLA POLICY

The following is added to section **VII. EXCLUSIONS,** paragraph **1.** Applicable to Both **Coverage A – Follow Form Excess Liability** and **Coverage B – Umbrella Liability**:

This insurance does not apply to:

Trampoline or Rebounding Device

Any liability or expense arising out of the ownership, operation, maintenance or use by any person of any "rebounding device".

For the purposes of this endorsement, "rebounding device" includes but is not limited to trampolines, mini trampolines, slingshot trampolines, pitch backs, and bungee cord jumping. A "rebounding device" does not include any rebounding device that is four feet or less diameter or width and whose surface is no more than two feet above floor level.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS NOTICE IS ATTACHED TO AND MADE PART OF YOUR POLICY IN RESPONSE TO THE DISCLOSURE REQUIREMENTS OF THE TERRORISM RISK INSURANCE ACT, AS AMENDED. THIS NOTICE DOES NOT GRANT ANY COVERAGE OR CHANGE THE TERMS AND CONDITIONS OF ANY COVERAGE UNDER THIS POLICY. IF THERE IS A CONFLICT BETWEEN THIS NOTICE AND THE POLICY, THE PROVISIONS OF THE POLICY SHALL APPLY.

NOTICE – ACCEPTANCE OF TERRORISM COVERAGE AND DISCLOSURE OF PREMIUM

Schedule

Disclosure of Premium:	
Total Terrorism Premium	$ 68
Fire Following Premium	$
Other than Fire Following Premium	$

Coverage for "acts of terrorism," as defined in Section 102(1) of the Terrorism Risk Insurance Act ("Act") is included in your policy. You are hereby notified that under the Act, as amended in 2015, the definition of "act of terrorism" is:

> Any act or acts that are certified by the Secretary of the Treasury, in consultation with the Secretary of Homeland Security and the Attorney General of the United States, to be an act of terrorism; to be a violent act or an act that is dangerous to human life, property, or infrastructure; to have resulted in damage within the United States, or outside the United States in the case of certain air carriers or vessels or the premises of a United States mission; and to have been committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States' government by coercion.

Disclosure of Federal Participation in Payment of Terrorism Losses

The United States government through the Department of the Treasury may pay a share of terrorism losses insured under the federal program under a formula set forth in the Act. Under this formula, the United States government generally reimburses the following percentage of covered terrorism loss which exceeds the statutorily established deductible paid by the insurance company providing the coverage: 85% through 2015; 84% beginning on January 1, 2016; 83% beginning on January 1, 2017; 82% beginning on January 1, 2018; 81% beginning on January 1, 2019; and 80% beginning on January 1, 2020.

Cap on Insurer Participation in Payment of Terrorism Losses

The Act contains a $100 billion cap that limits the reimbursement by the United States government as well as insurers' liability for losses resulting from certified acts of terrorism. If the aggregate of insured losses attributable to terrorist acts certified under the Terrorism Risk Insurance Act exceed $100 billion in a calendar year and we have met our insurer deductible under the Act, we will not be liable for the payment of any portion of the amount of such losses that exceeds $100 billion. In such case, insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS NOTICE IS ATTACHED TO AND MADE PART OF YOUR POLICY IN RESPONSE TO THE DISCLOSURE REQUIREMENTS OF THE TERRORISM RISK INSURANCE ACT, AS AMENDED. THIS NOTICE DOES NOT GRANT ANY COVERAGE OR CHANGE THE TERMS AND CONDITIONS OF ANY COVERAGE UNDER THIS POLICY. IF THERE IS A CONFLICT BETWEEN THIS NOTICE AND THE POLICY, THE PROVISIONS OF THE POLICY SHALL APPLY.

NOTICE – ACCEPTANCE OF TERRORISM COVERAGE AND DISCLOSURE OF PREMIUM

Schedule

Disclosure of Premium:	
Total Terrorism Premium	$ 68
Fire Following Premium	$
Other than Fire Following Premium	$

Coverage for "acts of terrorism," as defined in Section 102(1) of the Terrorism Risk Insurance Act ("Act") is included in your policy. You are hereby notified that under the Act, as amended in 2015, the definition of "act of terrorism" is:

> Any act or acts that are certified by the Secretary of the Treasury, in consultation with the Secretary of Homeland Security and the Attorney General of the United States, to be an act of terrorism; to be a violent act or an act that is dangerous to human life, property, or infrastructure; to have resulted in damage within the United States, or outside the United States in the case of certain air carriers or vessels or the premises of a United States mission; and to have been committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States' government by coercion.

Disclosure of Federal Participation in Payment of Terrorism Losses

The United States government through the Department of the Treasury may pay a share of terrorism losses insured under the federal program under a formula set forth in the Act. Under this formula, the United States government generally reimburses the following percentage of covered terrorism loss which exceeds the statutorily established deductible paid by the insurance company providing the coverage: 85% through 2015; 84% beginning on January 1, 2016; 83% beginning on January 1, 2017; 82% beginning on January 1, 2018; 81% beginning on January 1, 2019; and 80% beginning on January 1, 2020.

Cap on Insurer Participation in Payment of Terrorism Losses

The Act contains a $100 billion cap that limits the reimbursement by the United States government as well as insurers' liability for losses resulting from certified acts of terrorism. If the aggregate of insured losses attributable to terrorist acts certified under the Terrorism Risk Insurance Act exceed $100 billion in a calendar year and we have met our insurer deductible under the Act, we will not be liable for the payment of any portion of the amount of such losses that exceeds $100 billion. In such case, insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS NOTICE IS PROVIDED IN RESPONSE TO THE DISCLOSURE REQUIREMENTS OF THE TERRORISM RISK INSURANCE ACT. THIS NOTICE DOES NOT GRANT COVERAGE OR CHANGE THE TERMS AND CONDITIONS OF COVERAGE UNDER THE POLICY. IF THERE IS A CONFLICT BETWEEN THIS NOTICE AND THE POLICY, THE PROVISIONS OF THE POLICY SHALL APPLY.

DISCLOSURE PURSUANT TO TERRORISM RISK INSURANCE ACT

Schedule

Disclosure of Premium:	
Total Terrorism Premium	$ 68
Fire Following Premium	$
Other than Fire Following Premium	$

Disclosure of Terrorism Coverage Available

You are hereby notified that under the Terrorism Risk Insurance Act, as amended, you have a right to purchase insurance coverage for losses resulting from "acts of terrorism" defined in Section 102(1) of the Act as follows:

> Any act or acts that are certified by the Secretary of the Treasury, in consultation with the Secretary of Homeland Security and the Attorney General of the United States, to be an act of terrorism; to be a violent act or an act that is dangerous to human life, property, or infrastructure; to have resulted in damage within the United States, or outside the United States in the case of certain air carriers or vessels or the premises of a United States mission; and to have been committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States government by coercion.

The premium charged for this coverage is provided in the Schedule above and does not include any charges for the portion of loss that may be covered by the Federal Government as described below.

Your policy may contain other exclusions which could affect your coverage, such as an exclusion for Nuclear Events or Pollution. **Please read your policy carefully**.

Note for Commercial Property or Commercial Inland Marine Policyholders in Standard Fire States:

In your state, a terrorism exclusion makes an exception for (and therefore provides coverage for) fire losses resulting from an act of terrorism. If you reject the offer of terrorism coverage, therefore, that rejection does not apply to fire losses resulting from an act of terrorism. Coverage for such fire losses will be provided in your policy. The additional premium just for such fire coverage is shown in the Schedule above.

Disclosure of Federal Participation in Payment of Terrorism Losses

The United States government through the Department of the Treasury may pay a share of terrorism losses insured under the federal program under a formula set forth in the Act. Under this formula, the United States government generally reimburses the following percentage of covered terrorism loss which exceeds the statutorily established deductible paid by the insurance company providing the coverage: 85% through 2015; 84% beginning on January 1, 2016; 83% beginning on January 1, 2017; 82% beginning on January 1, 2018; 81% beginning on January 1, 2019; and 80% beginning on January 1, 2020.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

Cap on Insurer Participation in Payment of Terrorism Losses

The Act contains a $100 billion cap that limits the reimbursement by the United States government as well as insurers' liability for losses resulting from certified acts of terrorism. If the aggregate of insured losses attributable to terrorist acts certified under the Terrorism Risk Insurance Act exceed $100 billion in a calendar year and we have met our insurer deductible under the Act, we will not be liable for the payment of any portion of the amount of such losses that exceeds $100 billion. In such case, insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

Rejection of Terrorism Insurance Coverage

☐ I decline to purchase terrorism coverage for certified acts of terrorism. I understand that I will have no coverage for losses resulting from certified acts of terrorism.

	Hanover Insurance Company
Applicant/Policyholder Signature	**Insurance Company**
	UHW D257856 00
Print Name	**Quote or Policy Number**
Date	

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

PURDPOL-01 MKILEY

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 04/04/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Gregory & Appel Insurance
1402 N Capitol Suite 400
Indianapolis, IN 46202

CONTACT NAME:
PHONE (A/C, No, Ext): (317) 634-7491 FAX (A/C, No): (317) 634-6629
E-MAIL ADDRESS: corp@gregoryappel.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Hanover Insurance Company	36064
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Purdue Polytechnic High School
101 W. Ohio St., Suite 1250
Indianapolis, IN 46204

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE / X OCCUR	X		Z7WD21507600	04/01/2017	04/01/2018	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	X POLICY / PRO-JECT / LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$ Included
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB / OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	$
	DED / RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH)	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

525 Meridian, LLC
P O Box 1313
Lafayette, IN 47902

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Scott McGinnes

© 1988-2015 ACORD CORPORATION. All rights reserved.
The ACORD name and logo are registered marks of ACORD

PURDPOL-01 MKILEY

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 04/04/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Gregory & Appel Insurance
1402 N Capitol Suite 400
Indianapolis, IN 46202

CONTACT NAME:
PHONE (A/C, No, Ext): (317) 634-7491 FAX (A/C, No): (317) 634-6629
E-MAIL ADDRESS: corp@gregoryappel.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Hanover Insurance Company	36064
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Purdue Polytechnic High School
101 W. Ohio St., Suite 1250
Indianapolis, IN 46204

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE / X OCCUR	X		Z7WD21507600	04/01/2017	04/01/2018	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	X POLICY / PRO-JECT / LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$ Included
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB / OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	$
	DED / RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH)	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

525 Meridian, LLC
P O Box 1313
Lafayette, IN 47902

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Scott McGinnes

© 1988-2015 ACORD CORPORATION. All rights reserved.
The ACORD name and logo are registered marks of ACORD

Attachment O: Timeline of Start-Up Activities

The following pages provide a timeline of start-up activities that Purdue Polytechnic Indianapolis High School will complete from charter approval to opening day. Phase I includes some activities that have or will have taken place prior to charter approval.

Activity		Due Date
Phase I: PLANNING		
Governance	Form School's Founding Board of Directors	August 2015
Governance	Fully develop governance structure	August 2015
Governance	Develop long-term fiscal plans and goals	September 2015
Finance	Fully develop school budget	September 2015
Finance	Identify sources for short-term loans to cover any unexpected expenditures that may negatively impact the school's operating budget	September – December 2015
Finance	Identify sources for start-up funding or loans	December 2015
Finance	Establish budget oversight policies	January 2016
Finance	Establish internal controls and fiscal policies	January 2016
Finance	Research and recommend auditing options	January 2016
Facility	Research viable facilities	August – December 2015
Instruction & Assessment	Develop academic model and school curriculum plan	August – November 2015 (and ongoing)
Outreach	Develop school marketing plan (plan for community presentations, door-to-door, brochures, direct mailing, open houses, and answering inquiry phone calls)	January 2015
Staffing	Fully develop school staffing structure	November 2015
Staffing	Hire School Leader	January 2016
	Receive Charter Approval	December 2015
Phase II: PREPARATION FOR OPENING		
Governance	Recruit additional Board members to represent local community	February 2016
Facility	Select school facility	February 2016
Facility	Work with landlord and architect to plan building renovations, if needed	February 2016
Facility	Begin facility renovation/construction	April 2016
Facility	Set-up network infrastructure	July 2016
Facility	Purchase furniture	July 2016
Finance	Apply for CSP Funds, if available	*as soon as available*
Finance	Apply for Walton Family Foundation grant	*as soon as available*
Finance	Determine payroll provider	January 2016
Finance	Implement accounting system	January 2016
Organizational	Continue community partnership development	November 2015 – July 2017
Instruction & Assessment	Further develop and refine curriculum	January – December 2016
Instruction & Assessment	Purchase curricular materials, as needed	January 2017
Instruction & Assessment	Purchase technology	July 2016

Instruction & Assessment	Arrange for all mandatory testing	June 2017
Instruction & Assessment	Revise and finalize student schedules	August 2017
Organizational	Plan for school support services (i.e. accounting, HR, marketing, facilities management and janitorial cleaning, security, ongoing IT support, fund development)	January – July 2016
Organizational	Purchase Student Information System	July 2016
Organizational	Develop School Emergency Plan	February 2017
Organizational	Formalize Weather Notification Plan	February 2017
Organizational	Finalize Student Discipline Plan (to be revised to include student input)	July 2017
Organizational	Finalize Student Handbook (including attendance, promotion and grading policies)	February 2016
Organizational	Receive Board approval for all school policies and plans	March 2016
Outreach	Host parent advisory board	March 2016
Outreach	Conduct community outreach and develop community partnerships for wrap-around services and student referrals	July 2016
Outreach	Identify industry partners related to career clusters	July 2016
Staffing	School leader start date	February 2016
Staffing	Plan staff recruitment strategy	March 2016
Staffing	Formalize staff professional development plans	April 2017
Staffing	Select Office Manager and issue offer letter	March 2016
Staffing	Office Manager Begins	March 2016
Staffing	Select Lead Teacher and issue offer letters	April 2016
Staffing	Select all other staff and issue offer letters	May 2016
Students	Students complete initial paperwork, indicating desire to enroll in the school	January – April 2017
Students	A student lottery is held, if needed (all remaining students are placed on a waiting list)	April 2017
Phase III: START-UP		
Facility	Complete facility renovation/construction	May 2017
Facility	Arrange classrooms and instructional and work environments	June 2017
Facility	Facility sign off by all necessary parties (i.e., health inspectors, fire marshal, etc.)	April 2017
Instruction & Assessment	Set-up technology hardware with all necessary software and programming	July 2016
Instruction & Assessment	Review and assess needs of students who have or have previously had IEPs or Section 501 plans	July – August 2017
Instruction & Assessment	Develop plans for serving students with special needs	April – May 2017
Instruction &	Work with students/parents to develop or	August 2017

Assessment	review IEPs or Section 504 plans, as necessary	
Instruction & Assessment	Coordinate schedule for students with special needs	August 2017
Instruction & Assessment	Develop student schedules	August 2017
Organizational	Data entry into SIS, including student demographics, schedules, etc.	March – August 2017
Staffing	Start date for all remaining employees	July 24, 2017
Staffing	Provide orientation for all new staff and faculty	July 24 – August 4, 2016
Staffing	Advise staff on all legal and regulatory compliance	July 24 – August 4, 2016
Staffing	Implement immediate staff development plans	July 24 – August 4, 2016
Students	Host pre-enrollment camps for students	July 2017
Students	Conduct student orientation	August 2016
School Begins		
	First Day of School	August 7, 2016

Attachment O: Financial Management Services Contract

Indigo 43 Accounting Solutions

Indigo 43
Accounting Solutions

PROPOSAL for ACCOUNTING SERVICES and SERVICE AGREEMENT prepared for

PURDUE POLYTECHNIC HIGH SCHOOL of INDIANAPOLIS, INC

January 5, 2017

6343 N Britton Road • Solsberry, IN • 47459
E: Lori.Indigo43@gmail.com • P: 317.938.4857

PROPOSAL FOR ACCOUNTING SERVICES

Indigo 43, Inc. specializes in providing accounting services to not-for-profit organizations, including charter schools. Owner Lori Thompson has over 25 years of experience in providing fund accounting to a variety of organizations. The last 13 years have been dedicated specifically to working with charter schools across the state of Indiana.

Purdue Polytechnic High School of Indianapolis, Inc. (PPHSI) is a new charter school scheduled to open in the Indianapolis area in Fall 2017. PPHSI has expressed an interest in outsourcing the school's accounting functions and has requested a proposal for services from Indigo 43. Of utmost importance to PPHSI is selecting a vendor that is familiar with Indiana State Board of Account requirements for charter school accounting and has familiarity with the requirements made by the school's Authorizer, the Mayor of Indianapolis' Office of Education Innovation (OEI).

SCOPE OF SERVICES

Indigo 43, Inc. ("Indigo 43") proposes to provide the following services:

- Selection and implementation of accounting software
  - Assistance with selection of an appropriate accounting software package. Indigo 43 recommends Blackbaud's Financial Edge hosted fund accounting software. The school will be expected to purchase a minimum of 2 user licenses directly from Blackbaud. Blackbaud requires a 3-year commitment to their hosted services. Indigo 43 will assist the school in receiving the best pricing available for modules necessary to provide accurate financial reporting.
  - Implementation of the accounting software package. Indigo 43 will be responsible for appropriately setting up the software to meet the needs of the school's reporting requirements to both internal and external stakeholders. This will include development of an appropriate Chart of Accounts that adheres to Indiana State Board of Accounts (SBOA) standards.
  - Setup and maintenance of accounting system users with appropriate security levels as defined by the school.
  - Regularly scheduled meetings/communications with the school in order to get input regarding variable settings that will enhance reporting capabilities as well as to provide progress reports on the project.
  - Training of appropriate school staff in accessing pertinent information and reports within the accounting system.
  - Assisting school with the development of accounting policies and procedures.
- Assistance with meeting the financial reporting requirements and deadlines as outlined in the startup checklist from OEI.
- Accounting Services
  - Assistance with data entry of accounting transactions

        - Accounts Payable – recording all incoming bills and invoices in the accounting system; preparation of AP Vouchers; providing regularly scheduled reporting of outstanding payables; maintaining vendor records for 1099 reporting; and recommendation of payment schedules for vendor payments
        - Cash Receipts – recording deposits in the accounting system; preparation of receipts for EFT receipts
        - Payroll – recording payroll and benefit transactions in the accounting system
    - Cash management
        - Assistance with projecting cash needs on an ongoing basis
        - Reconciliation of bank statements
    - Maintaining the General Ledger
        - Preparation of monthly journal entries
        - Monthly review of General Ledger activity for accuracy
    - Grant management
        - Assistance with preparation of grant budgets
        - Reconciliation of General Ledger items to appropriate grant codes for tracking income and expenses
        - Preparation of grant reimbursement claims
        - Preparation of any required final grant reports
    - Financial reporting
        - Monthly preparation of financial statements for School Leadership and the Board of Directors
        - Quarterly preparation of financial statements for OEI
        - Quarterly preparation of financial statements for lenders, if required
        - Semi-annual preparation of Form 9 required by DOE
        - Quarterly preparation of Interest Earned Reports required by DOE
        - Annual reporting of the Annual Financial Report required by SBOA
        - Other reporting requirements can be discussed as situations arise
    - Other responsibilities:
        - Assistance with the preparation of the annual budget
        - Assistance with preparation for the annual audit
        - Assistance with preparation of information for the IRS Form 990 tax return
        - Assistance with preparation of information for property tax returns
        - Management of fixed asset listings and depreciation schedules, including Form 369 required by SBOA
        - Annual preparation of IRS Form 1099 and 1096
        - Bi-weekly preparation of PERF and TRF reports, if necessary
    - Regularly scheduled meetings:
        - Monthly meetings with School Leaders to review the school's financial status
        - Attendance at Board meetings, if requested
        - Available for additional meetings via phone or in person as needed

PPHSI will be responsible for, but not limited to, the following:

- Acquisition of the accounting software directly from Blackbaud or other software vendor that is mutually agreed upon.

- Providing information requested by Indigo 43 in a timely manner in order to meet reporting deadlines.
- Contracting with a payroll vendor to process the school's payroll, including processing of all payroll tax reports and payments to the appropriate agencies. This also includes assigning an appropriate staff member to report payroll directly to the payroll company.
- Engaging a CPA firm to perform the annual audit, prepare the IRS Form 990 tax return, and prepare the annual property tax returns and exemptions.
- Providing a staff member that will be trained to print vendor checks from the accounting system. This includes collecting appropriate signatures and mailing payments to vendors.
- Providing a staff member that will be responsible for preparing bank deposits and delivering deposits to the bank.
- Identification of expenses that are related to all active grant awards.
- Leadership will be responsible for reviewing all grant claims, grant reports, financial statements, and other financial reports for accuracy.

If there are additional financial reporting needs of the school, they can be discussed as the situation arises. Discussions will include whether additional fees will be charged to complete the additional tasks

CLIENT COSTS

Client will be responsible for the following costs:

- Fees for the acquisition of the accounting software will be paid directly to the software vendor. Estimated pricing for Blackbaud's Financial Edge is currently $5,500 per year, however that is subject to change at the vendor's discretion.
- Fees for implementation of the accounting software will be $3,500. 50% is due at the time of software acquisition and 50% due after the preparation of the first set of monthly financial statements.
- Fees for accounting services outlined in this proposal during the startup period (from Effective Date – June 30, 2017) will be $70 per hour to be billed on a monthly basis.
- Fees for accounting services outlined in this proposal during the school's first year of operation (July 1, 2017 – June 30, 2018) will be $27,000 and will be billed in equal amounts on a monthly basis beginning July 1, 2017 at a rate of $2,250 per month.
- Fees for any work requested outside of this scope of services will be provided at a rate of $70 per hour with prior consent from PPHSI.
- Fees for future years will be determined by April 1 preceding the new school year. As PPHSI's student enrollment and staffing increase each year, it should be anticipated that there will be an increase in the amount of financial transactions that are processed. This will result in a modest annual increase in accounting fees during the school's growth.

SERVICE AGREEMENT

This Service Agreement ("Agreement") is made and entered into this 25th day of January, 20 17 ("the Effective date"), by and between Indigo 43, Inc. d/b/a Indigo 43 Accounting Solutions ("Indigo 43"), an Indiana corporation, with the registered address of 6343 N. Britton Road, Solsberry, Indiana 47459, and Purdue Polytechnic High School of Indianapolis, Inc. ("Client"), with the registered address of 3029 E. Washington Street, Indianapolis, Indiana 46201.

SECTION 1. SCOPE OF WORK.
Indigo 43 has been hired and retained by the Client, as an independent contractor, to provide the accounting services as described in the Proposal for Accounting Services.

SECTION 2. COSTS.
As compensation for all accounting services to be rendered pursuant to this Agreement to or at the request of the Client, Client agrees to pay Indigo 43 as stated in Exhibit A. Indigo 43 will invoice the Client on a monthly basis for services rendered for the prior month. Client agrees that payment for services rendered by Indigo 43 shall be due and payable within ten (10) days of its receipt of an invoice.

SECTION 3. TERM.
This Agreement will commence on the Effective Date and will remain in effect according to the terms and conditions of this Agreement, unless otherwise terminated pursuant to Section 4 below.

SECTION 4. TERMINATION.
Either party may terminate this Agreement with or without cause upon giving the other sixty (60) days written notice of the party's intent to terminate. Notice of termination shall not affect Client's obligation to pay Indigo 43 for any outstanding costs for services rendered pursuant to this Agreement.

SECTION 5. RELATIONSHIP OF THE PARTIES.
The relationship of Indigo 43 and the Client shall be that of an independent contractor, and not as an employee, a partner, or joint venture of the Client for any purpose. Indigo 43 shall be responsible for any and all social security, unemployment, worker's compensation, and other withholding taxes for Indigo 43 and any and all of its employees, if any.

SECTION 6. NECESSARY INFORMATION AND MATERIAL.
Client will be solely responsible for supplying Indigo 43 with all information, materials, data, and documents necessary to perform the Services described in Exhibit A. Client acknowledges and agrees that the accuracy of financial information supplied to Indigo 43 is the sole responsibility of Client. Indigo 43 shall not be held responsible for the production of inaccurate financial statements or any other financial documents if the financial data provided by Client is inaccurate.

SECTION 7. CONFIDENTIALITY.
Indigo 43, in the course of performing the Services outlined in this Agreement, may gain access to certain confidential or proprietary information of Client. Such "Confidential Information" includes, but is not limited to, all information concerning the business, affairs, marketing, systems, technology,

employees, students and families, financial affairs, and accounting statistical data belonging to Client and any data, documents, discussion, or other information developed by Indigo 43 in the course of providing services pursuant to this Agreement, and any other proprietary information of Client whether in oral, graphic, written, or electronic form ("Confidential Information"). Indigo 43 agrees to hold all such Confidential Information in strict confidence and will not, without the express prior permission of Client share such Confidential Information to third parties, or use such Confidential Information for any purposes whatsoever, other than the performance of its obligations within this Agreement. This obligation will survive termination or expiration of this Agreement.

SECTION 8. DEFAULT.
In the event any action at law or in equity is brought by either Indigo 43 or the Client to enforce or interpret the terms of this Agreement, the prevailing party in any such action shall be entitled to recover from the non-prevailing party the prevailing party's damages suffered by it as a result of the breach, as well as its reasonable attorneys' fees, and costs incurred in seeking to enforce the terms and/or conditions of this Agreement.

SECTION 9. NO CONFLICT.
Client acknowledges and agrees that its entrance into and execution of this Agreement, and the performance of any obligations under the terms of this Agreement, shall not violate any applicable local, state, national, or international law or regulation, or any right of any third part, including, without limitation, contractual rights, and/or legal rights.

SECTION 10. NOTICE.
Any notice required to be given pursuant to this Agreement must be given in writing and shall be deemed received: (a) when hand-delivered to the party, (b) when delivered via email to current email address on record or (c) when delivered to the address of the party by courier, overnight courier, or certified mail return receipt requested; and shall be addressed to the individual signing this Agreement at the registered address set forth above or to such other person or address to which the party hereto shall have notified the other in writing.

SECTION 11. GOVERNING LAW.
In the event of any dispute hereunder, the laws of the State of Indiana shall govern the validity, performance, enforcement, interpretation and any other aspect of this Agreement. Both parties agree that any and all actions concerning any dispute arising under this Agreement will be filed and maintained only in a state or federal court of competent jurisdiction within the State of Indiana. The parties consent to the personal jurisdiction of and venue in such courts and waive any right to object to personal jurisdiction or venue in the future.

SECTION 12. SEVERABILITY.
Each section of this Agreement constitutes a separate and distinct undertaking, covenant, or provision hereof. In the event any provision of this Agreement shall be determined to be invalid or unenforceable such provisions shall be deemed limited by construction in scope and effect to the minimum extent necessary to render the same valid and enforceable, and, in the event such a limiting construction is impossible, such invalid or unenforceable provision shall be deemed severed by this Agreement, but every other provision of this Agreement shall remain in full force and effect.

SECTION 13. LIMIT OF LIABILITY.
Each party agrees to indemnify and hold the other party and each of the other party's affiliates, and their officers, directors and employees (an "Indemnified Party" or the "Indemnified Parties") harmless from and against any and all liability, damages, loss, costs and expenses incurred by an Indemnified Party (including, without limitation, fines, penalties, and reasonable attorneys' fees or costs, and expenses incurred by the Indemnified Party) based upon the other party's violation of the Agreement. In addition to the foregoing, each party also agrees to indemnify and hold the other party and its Indemnified Parties harmless from and against any and all liability, damages, loss, costs, and expenses (including, but not limited to, fines penalties, and reasonable attorneys' fees or costs and expenses) resulting from or connected with performance of the obligations under this Agreement.

SECTION 14. WAIVER.
Failure at any time of either Indigo 43 or the Client to require the performance of any of the provisions of this Agreement shall in no way affect the respective rights of Indigo 43 or the Client to enforce the same; nor shall it be construed as a waiver of any succeeding breach or as a waiver or modification of the provision itself. No waiver shall be valid unless in writing and signed by the waiving party.

SECTION 15. ASSIGNABILITY.
This Agreement and the rights and duties created hereunder shall not be assignable or delegable by either Indigo 43 or the Client without first obtaining the prior written consent of the other party; provided, however, Indigo 43 may assign this Agreement and delegate its obligations hereunder to any affiliates or to a successor by way of merger or consolidation or the acquisition of substantially all of the business relating to the subject matter of this Agreement. Except as otherwise provided herein, any such purported assignment or delegation shall be null and void.

SECTION 16. GOVERNING LAW
This Agreement, and any subsequent modifications, shall be governed and enforced by and interpreted in accordance with the laws of the State of Indiana without giving effect to its conflicts of laws rules and principles. Indigo 43 and the Client irrevocably agree to the exclusive jurisdiction of the courts located within the State of Indiana for any claim, dispute, or matter arising out of, in connection with, or concerning this Agreement. Indigo 43 and the Client waive any objections to proceedings in such courts on the grounds of venue or inconvenient forum.

SECTION 17. WAIVER OF JURY TRIAL.
Both Indigo 43 and the Client waive the right of jury trial if litigation arises out of a breach or threatened breach of this Agreement.

SECTION 18. ENTIRE AGREEMENT; MODIFICATION
This Agreement constitutes the entire agreement of Indigo 43 and Client with respect to the subject matter hereof and shall be deemed to supersede all prior agreements, whether written or oral, and the terms and provisions of any such prior agreement shall be deemed to have been merged into this Agreement. No section, obligation, term, or provision of or under this Agreement may be amended or modified unless such amendment or modification is agreed to in writing and signed by Indigo 43 and the Client (or any authorized representative of each party).

SECTION 19. COUNTERPARTS.
This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement.

SECTION 20. BINDING EFFECT.
This Agreement shall be binding upon, and shall inure to the benefit of, the parties hereto and their respective legal representatives, and the parties' respective successors, heirs, or assigns, as the case may be.

IN WITNESS WHEREOF, Indigo 43 and the Client, each with the intent to be legally bound, entered into this Agreement, effective as of the Effective Date.

Indigo 43 Accounting Solutions

Signature

Owner
Title

1/26/17
Date

Purdue Polytechnic High School of Indianapolis, Inc

Signature

Head of School
Title

1/25/17
Date

Governance Documentation

This section contains the following documents:

- Articles of Incorporation
- Bylaws
- Letter of Engagement with Faegre Baker Daniels (501(c)(3) tax exemption)

State of Indiana
Office of the Secretary of State

CERTIFICATE OF INCORPORATION

of

PURDUE POLYTECHNIC HIGH SCHOOL OF INDIANAPOLIS, INC.

I, CONNIE LAWSON, Secretary of State of Indiana, hereby certify that Articles of Incorporation of the above Non-Profit Domestic Corporation have been presented to me at my office, accompanied by the fees prescribed by law and that the documentation presented conforms to law as prescribed by the provisions of the Indiana Nonprofit Corporation Act of 1991.

NOW, THEREFORE, with this document I certify that said transaction will become effective Friday, August 14, 2015.

In Witness Whereof, I have caused to be affixed my signature and the seal of the State of Indiana, at the City of Indianapolis, August 14, 2015.

Connie Lawson

CONNIE LAWSON,
SECRETARY OF STATE

2015081700400 / 2015081768789

APPROVED AND FILED
IND. SECRETARY OF STATE

2015 AUG 14 AM 11:31

ARTICLES OF INCORPORATION

OF

PURDUE POLYTECHNIC HIGH SCHOOL OF INDIANAPOLIS, INC.

The undersigned Incorporator, desiring to form a corporation (the "Corporation") pursuant to the provisions of the Indiana Nonprofit Corporation Act of 1991, as amended (the "Act"), hereby executes the following Articles of Incorporation:

ARTICLE I

Name

The name of the Corporation is Purdue Polytechnic High School of Indianapolis, Inc.

ARTICLE II

Purposes

This Corporation is a public benefit corporation that shall be organized and operated exclusively to operate a charter school in the State of Indiana and to conduct, support, encourage, and assist such educational, charitable, scientific, and other programs and projects as are described in Sections 170(c)(2)(B), 501(c)(3), 2055(a)(2), and 2522(a)(2) of the Internal Revenue Code of 1986, as amended, or corresponding provisions of any subsequent federal tax laws (the "Code").

ARTICLE III

Powers

Notwithstanding any other provision of these Articles of Incorporation, neither the Board of Directors nor the Corporation shall have the power or authority to do any act that will prevent the Corporation from being an organization described in Code sections

170(c)(2)(B), 501(c)(3), 2055(a)(2), and 2522(a)(2). Subject to the foregoing statement, and subject to and in furtherance of the purposes for which it is organized, the Corporation shall possess, in addition to the general rights, privileges, and powers conferred by the Act or by other law, the following rights, privileges, and powers:

Section 1. To indemnify any person against liability and expenses, and to advance the expenses incurred by such person, in connection with the defense of any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, investigative, or otherwise, and whether formal or informal, to the fullest extent permitted by applicable law, or, if not permitted, then to any extent not prohibited by such law.

Section 2. To cease its activities and to dissolve and surrender its corporate franchise.

ARTICLE IV

Period of Existence

The period during which the Corporation shall continue is perpetual.

ARTICLE V

Initial Registered Agent and Initial Registered Office

Section 1. The name and address of the initial registered agent in charge of the Corporation's initial registered office are Susie Howard, 115 W. Washington Street, Suite 450 South, Indianapolis, Indiana 46204.

Section 2. The street address of the initial registered office of the Corporation is 115 W. Washington Street, Suite 450 South, Indianapolis, Indiana 46204.

Section 3. The undersigned hereby represents that the registered agent named in this Article has consented to the appointment of registered agent.

ARTICLE VI

Incorporator

The name and address of the Incorporator of the Corporation are Susie Howard, 115 W. Washington Street, Suite 450 South, Indianapolis, Indiana 46204.

ARTICLE VII

Members

The Corporation shall not have "members" as that term is defined in the Act. The Corporation may, upon the resolution of the Board of Directors, designate as "members" certain individuals, corporations, or other associations and organizations who satisfy certain criteria established by the Board of Directors and who support the purposes and programs of the Corporation. Such designation shall carry no legal significance under the Act and shall not entitle such "members" to any vote on Corporation matters or to attendance at Corporation meetings.

ARTICLE VIII

Directors

The exact number of directors of the Corporation shall be specified in or fixed in accordance with the Bylaws of the Corporation at a number no smaller than three (3).

ARTICLE IX

Election or Appointment of Directors

The directors of the Corporation, other than the members of the initial Board of Directors, shall be elected and appointed in the manner and for terms as specified in or fixed in accordance with the Bylaws of the Corporation.

ARTICLE X

Initial Board of Directors

The members of the initial Board of Directors of the Corporation shall be elected by the Incorporator. The names and addresses of the members of the initial Board of Directors are as follows:

Dr. Gary Bertoline
Knoy Hall of Technology, Room 469
401 North Grant Street
West Lafayette, Indiana 47907

Julie Griffith
Hovde Hall, Room 233
610 Purdue Mall
West Lafayette, Indiana 47907

Jamal Smith
100 North Senate Avenue
Indiana Government Center North, Room N103
Indianapolis, Indiana 46204

Maureen Weber
3939 Priority Way South Drive, Suite 400
Indianapolis, Indiana 46240

ARTICLE XI

No Private Inurement

None of the Corporation's net earnings shall inure to the benefit of any private individual.

ARTICLE XII

Regulation of Corporate Affairs

The affairs of the Corporation shall be subject to the following provisions:

Section 1. The Corporation shall admit to the charter school that it operates (the "School") students of any race, color, gender, sexual orientation, gender identity, disability,

national or ethnic origin, religion, and ancestry to all the rights, privileges, programs, and activities generally accorded or made available to students at the School. The Corporation shall not discriminate on the basis of race, color, gender, sexual orientation, gender identity, disability, national or ethnic origin, religion, or ancestry (or any other characteristics or categories prohibited under federal, state, or local law) in the administration of its educational policies, admissions policies, scholarship and loan programs, and athletic or other School-administered programs.

Section 2. The Corporation shall comply with all Indiana laws applicable to charter schools, including (but not limited to) the following provisions of the Indiana Code ("IC"), or corresponding provisions of subsequent Indiana law:

(a) IC 5-14-1.5, et seq. (Indiana's Open Door Law);

(b) IC 5-14-3-1, et seq. (Indiana's Access to Public Records Act); and

(c) IC 20-24-8-5 and all IC provisions referenced therein.

Section 3. Notwithstanding any other provision of these Articles of Incorporation, if for any taxable year the Corporation is deemed a "private foundation" described in Code section 509(a), the Corporation's income shall be distributed at such time and in such manner as not to subject the Corporation to the tax imposed by Code section 4942.

Section 4. Notwithstanding any other provision of these Articles of Incorporation, if at any time the Corporation is deemed a "private foundation" described in Code section 509(a), the Corporation shall not:

(a) Engage in any act of self-dealing as defined in Code section 4941(d);

(b) Retain any excess business holdings as defined in Code section 4943(c);

(c) Make any investment in such manner as to subject the Corporation to tax under Code section 4944; or

(d) Make any taxable expenditure as defined in Code section 4945(d).

Section 5. Neither the Board of Directors nor the Corporation shall have power or authority to do any act that will prevent the Corporation from being an organization described in Code section 501(c)(3).

Section 6. Except as otherwise permitted by Code section 501(h), no substantial part of the activities of the Corporation shall be or consist of carrying on propaganda, or otherwise attempting, to influence legislation.

Section 7. The Corporation shall not participate or intervene in (including the publishing or distributing of any statements) any political campaign on behalf of or in opposition to any candidate for public office.

Section 8. Subject to the provisions of these Articles of Incorporation and applicable law, the Board of Directors shall have complete and plenary power to manage, control, and conduct all the affairs of the Corporation.

Section 9. The power to make, alter, amend, and repeal the Corporation's Bylaws shall be vested in the Board of Directors.

Section 10. No director of the Corporation shall be liable for any of its obligations.

Section 11. Meetings of the Board of Directors may be held at any location, either inside the State of Indiana or elsewhere.

Section 12. All parties dealing with the Corporation shall have the right to rely upon any action taken by the Corporation pursuant to authorization by the Board of Directors by

resolution duly adopted in accordance with the Corporation's Articles of Incorporation, Bylaws, and applicable law.

Section 13. The Board of Directors may from time to time, in the Bylaws of the Corporation or by resolution, designate such committees as the Board of Directors may deem desirable for the furtherance of the purposes of the Corporation.

ARTICLE XIII

Dissolution of the Corporation

Upon the dissolution of the Corporation, the Corporation's assets and funds shall be disposed in the following order of priority:

(a) First, to satisfy outstanding payroll obligations to employees of the Corporation;

(b) Second, to creditors of the Corporation for outstanding liabilities;

(c) Third, to satisfy any outstanding debt to the Indiana common school fund;

(d) Fourth, to return any remaining funds received from the Indiana Department of Education (the "Department") to the Department not more than thirty (30) days after dissolution; and

(e) Fifth, to one (1) or more organizations that have been selected by the Board of Directors, that are organized and operated for educational purposes substantially the same as those of the Corporation, and that are described in Code sections 170(c)(2)(B), 501(c)(3), 2055(a)(2), and 2522(a)(2).

If the assets of the Corporation are insufficient to pay all parties to whom the Corporation owes compensation under provisions (a) through (c) in this Article XIII, the priority of the distribution of assets may be determined by a Judge of the Circuit or Superior Court of Marion County, Indiana (the "Court"). If any assets remain after distribution as outlined above,

they shall be disposed of by the Court exclusively for such purposes and to such organization(s) as the Court shall determine, which are organized and operated exclusively for such purposes.

The undersigned Incorporator hereby adopts these Articles of Incorporation and presents them to the Secretary of State of the State of Indiana for filing.

IN WITNESS WHEREOF, the undersigned Incorporator hereby verifies and affirms, subject to penalties of perjury, that the representations contained herein are true, this 12th day of August, 2015.

Susie Howard

Susie Howard, Incorporator

INDIANA SECRETARY OF STATE

RECEIPT

Receipt Number : 1947052

Payment Entry Number : 855698

INDIANA SECRETARY OF STATE
BUSINESS SERVICES DIVISION
302 West Washington Street, Room E018
Indianapolis, IN 46204
(317) 232-6576

FAEGRE BAKER DANIELS LLP
300 N MERIDIAN ST
STE 2700
INDIANAPOLIS, IN 46204-1782

Receipt Date: 08/17/2015
Receipt Status: Closed

The following details your transaction(s) with the Secretary of State's Office :

Payment Submitted:

Payor	Payment Type	Reference	Comment	Amount
FAEGRE BAKER DANIELS LLP	Check/ MO	502962		$30.00
			Total Amount :	**$30.00**

Transactions posted to this receipt:

Entity Name	Type of Filing	Amount
PURDUE POLYTECHNIC HIGH SCHOOL OF INDIANAPOLIS, INC.	Non-Profit Domestic Corporation : Articles of Incorporation	$30.00
	Total Amount :	**$30.00**

Secretary of State
State of Indiana

Connie Lawson
Indiana Secretary of State

Business Services Division

Hoosier Business Owners,

I would like to take this opportunity to remind you to file your business entity report with my office.

For-Profit Corporations and Limited Liability Companies (domestic and foreign) are required to file biennial reports. The filing fee is $30.00 and the report is due during the month the entity was formed. Your first business entity report is due two years after your entity's creation date.

Nonprofit Corporations (domestic and foreign) are required to file annual reports. The filing fee is $10.00 and the report is due during the month the entity was formed. Your first business entity report is due one year after your entity's creation date.

If you maintain a current email with my office, a reminder to pay your business entity report will be emailed to you. Paying your business entity reports in a timely manner will ensure that your business will remain in good standing with the State of Indiana.

My office has launched the Email Manager application in order to assist you with maintaining a current email address. This application will allow you to update your email address at any time. It is available now at: https://myweb.in.gov/SOS/EmailAddressManager/Home/Index

According to Indiana statute, failure to pay business entity reports will result in your business being **Administratively Dissolved** or **Revoked**. See Indiana Code 23-1-46-2; 23-1-51-2; 23-18-10-2; 23-18-11-16; 23-17-23-2 or 23-17-26-13.

All business entity reports may be filed online at www.in.gov/sos/business/3672.htm
By filing online you will receive a discounted filing fee.

Thank you for doing business in Indiana.

Connie Lawson

Connie Lawson
Indiana Secretary of State

The State House, Indianapolis, Indiana 46204, (317) 232-6576, Fax (317) 233-3283

BYLAWS

OF

PURDUE POLYTECHNIC HIGH SCHOOL OF INDIANAPOLIS, INC.

ARTICLE I

General

Section 1. Name. The name of the corporation is Purdue Polytechnic High School of Indianapolis, Inc. (the "Corporation").

Section 2. Address. The street address of the Corporation's initial registered office is 115 W. Washington Street, Suite 450 South, Indianapolis, Indiana 46204. The initial registered agent in charge of the initial registered office is Susie Howard.

Section 2. Fiscal Year. The fiscal year of the Corporation shall begin on the first day of July and end on the last day of June next succeeding.

ARTICLE II

Board of Directors

Section 1. Directors. The affairs of the Corporation shall be managed, controlled, and conducted by, and under the supervision of, the Board of Directors, subject to the provisions of the Articles of Incorporation (the "Articles") and these Bylaws (the "Bylaws"). The Board of Directors shall have the number of members, no less than three (3) and no greater than fifteen (15), as designated by resolution of the Board of Directors from time to time. The Board of Directors shall have the following composition:

(a) A duly authorized representative of Purdue University shall appoint a number of Directors as follows: if the Board of Directors has seven (7) or fewer members, then two (2) of the members shall be appointed by a duly authorized

representative of Purdue University ("Purdue Directors"); if the Board of Directors has eight (8) to ten (10) members, then three (3) of the members shall be Purdue Directors; if the Board of Directors has eleven (11) to thirteen (13) members, then four (4) of the members shall be Purdue Directors; if the Board of Directors has fourteen (14) or fifteen (15) members, then five (5) of the members shall be Purdue Directors.

(b) The remaining directors of the Corporation (the "Elected Directors") shall be elected by the Board of Directors in the manner and for terms described in Article II, Section 2.

Section 2. Election and Terms. The term of each member of the Board of Directors, other than the initial directors of the Corporation, shall extend for a period of three (3) years and until his or her successor is appointed or elected and qualified. At the regular meeting of the Board of Directors immediately preceding the expiration of the term of any Elected Director, or at a special meeting, the directors of the Corporation may elect a new director to replace the Elected Director whose term will expire, or has expired. Each such newly Elected Director shall serve for a term of three (3) years, or such other period as is prescribed by the directors at the time of such election, and until his or her successor is elected and qualified. Elected Directors and Purdue Directors may serve any number of consecutive or nonconsecutive terms. Notwithstanding the foregoing, the Incorporator shall name and fix the initial terms of the initial Elected Directors of the Corporation.

Section 3. Quorum and Voting. A majority of the directors in office immediately before a meeting begins shall constitute a quorum for the transaction of any business properly to come before the Board of Directors. Unless otherwise provided in the Articles or these Bylaws,

the approval of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors. Notwithstanding the foregoing, the following actions shall require the approval of eighty percent (80%) of the directors then in office: a name change of the Corporation, a merger involving the Corporation or the sale of substantially all of its assets, the hiring and/or firing of the school's principal, and expenditures or obligations by the Corporation equal to or exceeding one hundred thousand dollars ($100,000.00).

Section 4. Special Meetings. The Board of Directors may hold special meetings for any lawful purpose upon not less than two (2) days' notice, as described in Section 7 of this Article II, upon call by the Chair or by two (2) or more members of the Board of Directors. A special meeting shall be held at such date, time, and place inside the State of Indiana or elsewhere as specified in the call of the meeting.

Section 5. Compliance with Indiana Open Door Law. Notwithstanding any other provision of these Bylaws, the Corporation shall comply in all respects with the Indiana Open Door Law (currently codified at Indiana Code ("IC") section 5-14-1.5-1, et seq.), and any corresponding provision of subsequent Indiana law, in connection with all regular or special meetings of the Board of Directors.

Section 6. Notice of Special Meetings. Oral or written notice of the date, time, and place of each special meeting of the Board of Directors shall be communicated, delivered, or mailed by the Secretary of the Corporation, or by the person or persons calling the meeting, to each member of the Board of Directors so that such notice is effective at least two (2) days before the date of the meeting and complies with the Indiana Open Door Law. The notice need not describe the purpose of the special meeting.

Oral notice shall be effective when communicated. Written, electronic, or telefaxed notice, where applicable, shall be effective at the earliest of the following:

(a) When received;

(b) Five (5) days after the notice is mailed, as evidenced by the postmark or private carrier receipt, if mailed correctly to the address listed in the most current records of the Corporation;

(c) On the date shown on the return receipt, if sent by registered or certified United States mail, return receipt requested, and the receipt is signed by or on behalf of the addressee; or

(d) Thirty (30) days after the notice is deposited with another method of the United States Postal Service other than first class, registered, or certified mail, as evidenced by the postmark, if mailed correctly addressed to the address listed in the most current records of the Corporation.

Section 7. Waiver of Notice. Notice of a meeting may be waived in a writing signed by the director entitled to notice and filed with the minutes or the corporate records. Attendance at or participation in any meeting of the Board of Directors shall constitute a waiver of lack of notice or defective notice of such meeting unless the director shall, at the beginning of the meeting or promptly upon the director's arrival, object to holding the meeting and not vote for or assent to any action taken at the meeting.

Section 8. Means of Communication. The Board of Directors, or a committee thereof, may permit a director or a committee member to participate in a meeting through the use of any means of communication by which all participating directors or committee members, and all members of the public physically present at the place where the meeting is conducted, may

simultaneously hear each other during the meeting, provided that (i) such meeting complies in all respects with the provisions of the Indiana Open Door Law in IC 5-14-1.5-3.6, and (ii) the Board of Directors has adopted a policy to govern participation in meetings by electronic communication pursuant to IC 5-14-1.5-3.6. A director or committee member participating in a meeting by such means shall be considered present in person at the meeting.

Section 9. Resignation, Removal, and Vacancies. A director may resign at any time by giving written notice of such resignation to the Board of Directors, the Chair, or the Secretary of the Corporation. The acceptance of a resignation shall not be necessary to make it effective. Such resignation shall take effect at the time specified therein, or if no time is specified, at the time of its receipt by the Board of Directors, the Chair, or the Secretary.

A Purdue Director may be removed from office at any time, with or without cause, only by a duly authorized representative of Purdue University. An Elected Director may be removed from office at any time, with or without cause, by two-thirds of the directors then in office.

Any vacancy on the Board of Directors created by the resignation or removal of a Purdue Director shall be filled by a duly authorized representative of Purdue University for the remainder of the applicable term. Any vacancy on the Board of Directors created by the resignation or removal of an Elected Director shall be filled by the Board of Directors, and the person elected to fill such vacancy shall serve until the expiration of the term vacated and until his or her successor is elected and qualified.

ARTICLE III

Officers

Section 1. In General. The officers of the Corporation shall consist of a Chair, a Secretary, a Treasurer, and such other officers as the Board of Directors may otherwise elect. All officers may, but need not, be members of the Board of Directors. An officer may simultaneously hold more than one (1) office. Each officer shall be elected by the Board of Directors and shall serve for one (1) year, or such other period as prescribed by the directors at the time of such election, and until the officer's successor is elected and qualified. Any officer may be removed by the Board of Directors with or without cause. Any vacancy in any office shall be filled by the Board of Directors, and any person elected to fill such vacancy shall serve until the expiration of the term vacated and until his or her successor is elected and qualified.

Section 2. Chair. The Chair shall preside at all meetings of the Board of Directors of the Corporation and shall be responsible for implementing policies established by the Board of Directors. The Chair shall perform such other duties as the Board of Directors may prescribe.

Section 3. Secretary. The Secretary shall be the custodian of all papers, books, and records of the Corporation other than books of account and financial records. The Secretary shall prepare and enter in the minute book the minutes of all meetings of the Board of Directors. The Secretary shall authenticate records of the Corporation as necessary. The Secretary shall perform the duties usual to such position and such other duties as the Board of Directors or the Chair may prescribe.

Section 4. Treasurer. The Treasurer shall prepare and maintain correct and complete records of account showing accurately the financial condition of the Corporation. All notes, securities, and other assets coming into the possession of the Corporation shall be received, accounted for, and placed in safekeeping as the Treasurer may from time to time prescribe. The Treasurer shall furnish, whenever requested by the Board of Directors or the

Chair, a statement of the financial condition of the Corporation and shall perform the duties usual to such position and such other duties as the Board of Directors or the Chair may prescribe.

Section 5. Other Officers. Each other officer of the Corporation shall perform such duties as the Board of Directors or the Chair may prescribe.

ARTICLE IV

Committees

Section 1. Executive Committee. The Board of Directors may, by resolution adopted by a majority of the directors then in office, designate two (2) or more directors of the Corporation to constitute an Executive Committee which, to the extent provided in such resolution and consistent with applicable law, shall have and exercise all of the authority of the Board of Directors in the management of the Corporation's affairs during intervals between the meetings of the Board of Directors. The Executive Committee shall be subject to the authority and supervision of the Board of Directors.

Section 2. Nominating and Governance Committee. There shall be a Nominating and Governance Committee comprising three (3) directors of the Corporation, appointed by the Board of Directors. At all times, a Purdue Director shall chair the Nominating and Governance Committee. The Nominating and Governance Committee shall submit nominations to the Board of Directors in connection with the Board's election of Elected Directors. The Nominating and Governance Committee may from time to time submit reports or recommendations regarding the governance of the Corporation to the Board of Directors or the Executive Committee.

Section 3. Other Committees. The Board of Directors may establish other committees, in addition to the Executive Committee and the Nominating and Governance Committee, to accomplish the goals and execute the programs of the Corporation. Such

committees shall have such responsibilities and powers as the Board of Directors shall specify. Members of such committees may, but need not, be members of the Board of Directors. A committee member appointed by the Board of Directors may be removed by the Board of Directors with or without cause.

ARTICLE V

Conflicts of Interest

Section 1. General Policy. It is the policy of the Corporation and its Board of Directors that the Corporation's directors, officers, and employees carry out their respective duties in a fashion that avoids actual, potential, or perceived conflicts of interest. The Corporation's directors, officers, and employees shall have the continuing, affirmative duty to report any personal ownership, interest, or other relationship that might affect their ability to exercise impartial, ethical, and business-based judgments in fulfilling their responsibilities to the Corporation. This policy shall be further subject to the following principles:

(a) Directors, officers, and employees of the Corporation shall conduct their duties with respect to potential and actual grantees, contractors, suppliers, agencies, and other persons transacting or seeking to transact business with the Corporation in a completely impartial manner, without favor or preference based upon any consideration other than the best interests of the Corporation.

(b) Directors, officers, and employees of the Corporation shall not seek or accept for themselves or any of their relatives (including spouses, ancestors, and descendants, whether by whole or half blood), from any person or business entity that transacts or seeks to transact business with the Corporation, any gifts, entertainment, or other favors relating to their positions with the

Corporation that exceed common courtesies consistent with ethical and accepted business practices.

(c) If a director, or a director's relative, directly or indirectly owns a significant financial interest in, or is employed by, any business entity that transacts or seeks to transact business with the Corporation, the director shall disclose that interest or position and shall refrain from voting on any issue pertaining to the transaction.

(d) Officers and employees of the Corporation shall not conduct business on behalf of the Corporation with a relative or a business entity in which the officer, employee, or his or her relative owns a significant financial interest or by which such officer, employee, or relative is employed, except where such dealings have been disclosed to, and specifically approved and authorized by, the Board of Directors of the Corporation.

(e) The Board of Directors may require the Corporation's directors, officers, or employees to complete annually (or as otherwise scheduled by the Board) a disclosure statement regarding any actual or potential conflict of interest described in these Bylaws. The disclosure statement shall be in such form as may be prescribed by the Board and may include information regarding a person's participation as a director, trustee, officer, or employee of any other nonprofit organization. The Board of Directors shall be responsible for oversight of all disclosures or failures to disclose and for taking appropriate action in the case of any actual or potential conflict of interest transaction.

Section 2. Effect of Conflict Provisions. The failure of the Corporation, its Board of Directors, or any or all of its directors, officers, or employees to comply with the conflict of interest provisions of these Bylaws shall not invalidate, cancel, void, or make voidable any contract, relationship, action, transaction, debt, commitment, or obligation of the Corporation that otherwise is valid and enforceable under applicable law.

ARTICLE VI

Indemnification

Section 1. Indemnification by the Corporation. To the extent not inconsistent with applicable law, every person (and the heirs and personal representatives of such person) who is or was a director, officer, employee, or agent of the Corporation shall be indemnified by the Corporation against all liability and reasonable expense that may be incurred by him or her in connection with or resulting from any claim, action, suit, or proceeding (a) if such person is wholly successful with respect thereto or (b) if not wholly successful, then if such person is determined (as provided in Section 3 of this Article VI) to have acted in good faith, in what he or she reasonably believed to be the best interests of the Corporation (or, in any case not involving the person's official capacity with the Corporation, in what he or she reasonably believed to be not opposed to the best interests of the Corporation), and, with respect to any criminal action or proceeding, is determined to have had reasonable cause to believe that his or her conduct was lawful (or no reasonable cause to believe that the conduct was unlawful). The termination of any claim, action, suit, or proceeding by judgment, settlement (whether with or without court approval), or conviction, or upon a plea of guilty or of nolo contendere or its equivalent, shall not create a presumption that a person did not meet the standards of conduct set forth in this Article VI.

Section 2. Definitions.

(a) As used in this Article VI, the phrase "claim, action, suit, or proceeding" shall include any threatened, pending, or completed claim, civil, criminal, administrative, or investigative action, suit, or proceeding and all appeals thereof (whether brought by or on behalf of the Corporation, any other corporation, or otherwise), whether formal or informal, in which a person (or his or her heirs or personal representatives) may become involved, as a party or otherwise:

(i) By reason of his or her being or having been a director, officer, employee, or agent of the Corporation or of any corporation where he or she served as such at the request of the Corporation;

(ii) By reason of his or her acting or having acted in any capacity in a corporation, partnership, joint venture, association, trust, or other organization or entity where he or she served as such at the request of the Corporation, or

(iii) By reason of any action taken or not taken by him or her in any such capacity, whether or not he or she continues in such capacity at the time such liability or expense shall have been incurred.

(b) As used in this Article VI, the terms "liability" and "expense" shall include, but shall not be limited to, counsel fees and disbursements and amounts of

judgments, fines, or penalties against, and amounts paid in settlement by or on behalf of, a person.

(c) As used in this Article VI, the term "wholly successful" shall mean (i) termination of any action, suit, or proceeding against the person in question without any finding of liability or guilt against him or her, (ii) approval by a court, with knowledge of the indemnity provided in this Article VI, of a settlement of any action, suit, or proceeding, or (iii) the expiration of a reasonable period of time after the making of any claim or threat of any action, suit, or proceeding without the institution of the same, without any payment or promise made to induce a settlement.

Section 3. Entitlement to Indemnification. Every person claiming indemnification under this Article VI (other than one who has been wholly successful with respect to any claim, action, suit, or proceeding) shall be entitled to indemnification if (a) special independent legal counsel, which may be regular counsel of the Corporation or any other disinterested person or persons, in either case selected by the Board of Directors, whether or not a disinterested quorum exists (such counsel or person or persons being hereinafter called the "referee"), shall deliver to the Corporation a written finding that such person has met the standards of conduct set forth in Section 1 of this Article VI and (b) the Board of Directors, acting upon such written finding, so determines. The person claiming indemnification shall, if requested, appear before the referee and answer questions that the referee deems relevant and shall be given ample opportunity to present to the referee evidence upon which he or she relies for indemnification. The Corporation shall, at the request of the referee, make available facts, opinions, or other evidence in any way relevant to the referee's findings that is within the possession or control of the Corporation.

Section 4. Relationship to Other Rights. The right of indemnification provided in this Article VI shall be in addition to any rights to which any person may otherwise be entitled.

Section 5. Extent of Indemnification. Irrespective of the provisions of this Article VI, the Board of Directors may, at any time and from time to time, approve indemnification of directors, officers, employees, agents, or other persons to the fullest extent permitted by applicable law, or, if not permitted, then to any extent not prohibited by such law, whether on account of past or future transactions.

Section 6. Advancement of Expenses. Expenses incurred with respect to any claim, action, suit, or proceeding may be advanced by the Corporation (by action of the Board of Directors, whether or not a disinterested quorum exists) prior to the final disposition thereof upon receipt of an undertaking by or on behalf of the recipient to repay such amount unless he or she is entitled to indemnification.

Section 7. Purchase of Insurance. The Board of Directors is authorized and empowered to purchase insurance covering the Corporation's liabilities and obligations under this Article VI and insurance protecting the Corporation's directors, officers, employees, agents, or other persons.

ARTICLE VII

Contracts, Checks, Loans, Deposits, and Gifts

Section 1. Contracts. The Board of Directors may authorize one (1) or more officers, agents, or employees of the Corporation to enter into any contract or execute any instrument on its behalf. Such authorization may be general or confined to specific instances. Unless so authorized by the Board of Directors, no officer, agent, or employee shall have any power to bind the Corporation or to render it liable for any purpose or amount.

Section 2. Checks. All checks, drafts, or other orders for payment of money by the Corporation shall be signed by such person or persons as the Board of Directors may from time to time designate by resolution. Such designation may be general or confined to specific instances.

Section 3. Loans. Unless authorized by the Board of Directors, no loan shall be made by or contracted for on behalf of the Corporation and no evidence of indebtedness shall be issued in its name. Such authorization may be general or confined to specific instances.

Section 4. Deposits. All funds of the Corporation shall be deposited to its credit in such bank, banks, or depositaries as the Board of Directors may designate. Such designation may be general or confined to specific instances.

Section 5. Gifts. The Board of Directors may accept on behalf of the Corporation any gift, grant, bequest, devise, or other contribution for the purposes of the Corporation on such terms and conditions as the Board of Directors shall determine.

ARTICLE VIII

Amendments

The power to make, alter, amend, or repeal the Bylaws is vested in the Board of Directors of the Corporation; provided, however, that any proposed substantive alteration, amendment, or repeal of these Bylaws must be approved in writing by the authorizer of the School (as the term "authorizer" is defined in IC 20-24-1-2.5) prior to the Board of Directors of the Corporation taking any action thereon.

Joseph E. Miller, Jr.
Partner
joseph.miller@FaegreBD.com
Direct **317.237.1415**

Faegre Baker Daniels LLP
300 North Meridian Street · Suite 2700
Indianapolis · Indiana 46204-1750
Phone +1 317 237 0300
Fax +1 317 237 1000

April 22, 2015

Brooke Huntington
President and CEO
EmployIndy
PNC Center South, 115 W. Washington Street
Suite 450 South
Indianapolis, Indiana 46204

RECEIVED
APR 2 8 2015
BY:

Re: Engagement of Faegre Baker Daniels

Dear Brooke:

We appreciate your retaining us to represent you. By this letter, we confirm various matters concerning our engagement.

1. As you requested, we will represent EmployIndy, with regard to assistance with incorporation and exemption-related work for a proposed new charter school, and other such matters we may accept at your request from time to time. None of your shareholders, owners, members, subsidiaries or other affiliated entities, nor any individual director, officer, manager or employee, will be our client.

2. From time to time, in the exercise of our professional judgment, we may conclude that it is desirable to share confidential information concerning your representation with professionals and other service providers outside the firm whom we have engaged to assist in representing you or with personnel of our consulting groups (some of whom may be designated as paralegals to directly assist in providing legal services to you). We will take appropriate steps to preserve the confidentiality of such information and this confirms your consent to our sharing such information.

3. Per our discussion, our fee will be a flat fee of $15,000.00, which will be billed once the draft incorporation and exemption application is complete. Please note that you will be responsible for the IRS filing fee of $850.00 in addition to these fees.

4. Various costs—for example, international long-distance telephone charges, certain copying and printing costs (at $0.15 per page), filing fees, and an allocation of our costs for

certain computerized research—will be billed to your account in addition to our fees for services. The amounts we charge generally reflect our actual direct and indirect costs, but some amounts may be more or less than our actual costs.

5. We will provide invoices to you on a monthly basis. Each will include a description of the services performed and a description of any disbursements incurred by us on your behalf for which we expect reimbursement. Our invoices are due on receipt. Please contact me if you have questions about any of them.

6. This confirms our agreement with you that either you or we may terminate this engagement at any time, with or without cause, and without further obligation by either you or us (other than our obligation to return to you any unused retainer balance and any of your documents or other property then in our possession and, if we are then representing you in any litigation, any obligation that may be imposed by rules of the court in which such litigation is then pending, and your obligation to pay us the unpaid balance of any billed or unbilled fees and costs that are then accrued). This engagement will also terminate upon completion of the matters for which we have been engaged.

7. Unless you request in writing that we deliver files for a matter to you (or transfer the files to other counsel) within ten years after our involvement in the matter has ended, we will have no obligation to retain the files, and we may destroy them without further notice to you.

8. As you may know, we have numerous existing and prospective client relationships, and it is possible that a situation could arise in which your interests might conflict with those of some other client. This confirms our agreement with you that we may (without further notice to you) represent any other present or future client in any matter that is not substantially related to our work for you, even if such client's interests are directly adverse to your interests or result in litigation against you.

If you have any questions about these arrangements, please contact me as soon as possible. Otherwise, we will assume they are satisfactory to you.

Thank you again for selecting us to represent you. We look forward to working with you.

Sincerely,

Joseph E. Miller, Jr.

JEM/lsr

Leadership Information

This section contains the resumes/curriculum vitae and memorandum for the following individuals:

- Dr. Gary R. Bertoline
- Julie Griffith
- George E. Pillow, Jr.
- Jamal Smith
- Maureen Weber

Curriculum Vitae

GARY R. BERTOLINE, PhD

Distinguished Professor of Computer Graphics Technology and Professor of Computer & Information Technology
Dean, Purdue Polytechnic Institute
Purdue University
West Lafayette, IN 47907
Phone: 765-494-2552
E-mail: bertoline@purdue.edu

EDUCATION

1987, Ph.D., **The Ohio State University**, Columbus, Ohio in Industrial Technology Education.

1979, M.Ed**., Miami University**, Oxford, Ohio in Technology Education.

1974, B.S., **Northern Michigan University**, Marquette, Michigan in Industrial Technology.

PROFESSIONAL ACADEMIC EXPERIENCE

Purdue University:

Dean, Purdue Polytechnic University (formally the College of Technology) 2011 to present

Interim Department Head for Industrial Technology and Organizational Leadership & Supervision, 2010 - 11.

Associate Dean for Graduate Programs College of Technology, 2009 to 2011.

Interim Associate Dean for Graduate Studies and Research, College of Technology, 2008

Professor of Computer & Information Technology , joint appointment, 2007 to present.

Assistant Dean for Graduate Studies College of Technology, 2006 – 2008.

Director of the Envision Center for Data Perceptualization, 2006 – 2008.

Courtesy Appointment Professor of Engineering Education , Department of Engineering Education, College of Engineering, 2006 to present.

ITaP Associate Vice President and Director of the Rosen Center for Advanced Computing and the Envision Center for Data Perceptualization, 2002 to 2006.

ITaP Senior Research Scientist, Visualization and Computer Graphics, and Director of the Envision Center for Data Perceptualization, 2001 – 2002.

Department Head of Computer Graphics Technology, 1995 to 2001.

Professor of Computer Graphics Technology 1995 to present.

Associate Professor, 1990 to 1994 Technical Graphics. Granted tenure in 1994 and promoted to professor in 1995.

The Ohio State University:

Assistant Professor, Department of Engineering Graphics, College of Engineering, 1987 to 1990. Held courtesy appointment in the College of Education, Educational Psychology Department.

Thomas E. French Research Fellowship , Department of Engineering Graphics, 1986 to 1987.

Wright State University, Lake Campus:

Instructor and coordinator of design technology, 1981 to 1985. Promoted to assistant professor and granted tenure January 1985.

AWARDS AND HONORS

2014 **Purdue Excellence in Research Award**, for having received a grant of $1 million or more in the last year.

2013 **Purdue University's Book of Great Teachers,** chosen by their students and their peers as Purdue's finest educators**.**

2012 **Career Achievement Award,** The Ohio State University, College of Education and Human Ecology.

2008 **Mira Award for Indiana Technology Leaders** , Serious Gaming Team Purdue University, Gary Bertoline, Christoff Hoffmann, and Beverly Sypher.

2007 **Distinguished Professor of Computer Graphics Technology** awarded at Purdue University in recognition of academic accomplishments.

2007 **College of Technology Faculty Convocation Research Poster Session** Best poster titled: A Visual Analytic Tool for Protein Biomarkers Cancer Detection.

2004 **Distinguished Service Award** for significant leadership in technology from Epsilon Pi Tau, the international honorary for professions in technology.

2003 **Honorary Doctorate of Technology** from Northern Michigan University and commencement speaker December 13, 2003.

2002 **Purdue Excellence in Research Award**, for having received a grant of $1 million or more in the last year.

1997 **Laureate Citation** for significant contributions in technology from Epsilon Pi Tau, the international honorary for professions in technology.

1995 The inaugural **Steve M. Slaby International Award for Outstanding Contributions to Graphics Education** by the International Society for Geometry and Graphics. Algarve, Portugal with paper presentation.

1993 Awarded **American Society for Engineering Education (ASEE) Centennial Certificate of Recognition** for providing exemplary support to the ASEE.

1993 **Certified Industrial Technologist** from the National Association for Industrial Technology (NAIT).

1992 Named **Orthogonal Award** winner, the youngest recipient ever given the award, by North Carolina State University's Department of Graphic Communications. This is an annual award given to a nationally prominent person in graphics for his/her teaching, leadership and significant contributions in the field of Graphic Communications.

1991 **Best Paper Award**: Received for The Best Paper Competition from the North Central Section of ASEE for presentation of paper on a modern engineering graphics curriculum.

1990 to 2006 **McGraw-Hill Publishing Company, Computer Graphics Series Advisor** to establish a series of modern texts in engineering and computer graphics. Established 7 textbooks and 7 workbooks in the series.

1989 **Best Paper Award**: Received the **Frank Oppenheimer Award of Excellence** from the Engineering Design Graphics Division of ASEE for presentation of paper on a computer-based visualization text.

1987 **Best Paper Award**: Received the **Frank Oppenheimer Award of Excellence** from the Engineering Design Graphics Division of ASEE for presentation of paper on the role of computers in the design process.

1986 **French Fellowship**: Awarded the **Thomas E. French Research Fellowship in Engineering Graphics** . The fellowship is awarded to a doctoral candidate who is pursuing research in engineering design graphics by the Department of Engineering Graphics at The Ohio State University.

1986 **TWICE Research Fellowship**: Received the **TWICE Research Fellowship** from T & W Systems, Inc., to integrate CAD into engineering graphics and to support research in CAD education.

1984 **Best Paper Award**: Received the **Frank Oppenheimer Award of Excellence** from the Engineering Design Graphics Division of ASEE for presentation of paper on the integration of CAD into the graphics curriculum.

1983 **Exemplary Initiate into Epsilon Pi Tau** . Epsilon Pi Tau is an international honors fraternity in technology education. An exemplary initiate is given to individuals who show potential or have demonstrated outstanding accomplishments in technology education.

SIGNIFICANT ADMINISTRATIVE ACCOMPLISHMENTS

Executive Director for the Purdue Polytechnic Institute 2012 to 2015

- Leading an unprecedented transformation that will offer extraordinary opportunities to Purdue students and faculty. Designated as a *Purdue Move* in 2013 by the University President and Board of Trustees, the transformation will touch all parts of the College – curricula, learning/teaching methods, learning spaces, student assessments, use-inspired research, industry and community engagement, and nearly every fiber of the college's culture. The breadth and depth of the transformation will be enormous, and the results will bring (1) more graduates who are not only more capable of meeting the evolving needs of industries and communities, but who have a thirst for life-long learning and recognize the opportunities and challenges that technology brings society, (2) a learning environment that is not only more student-centered with ground-breaking teaching/learning techniques, but one that includes faculty mentoring and competency-based and other learning approaches giving students greater flexibility and autonomy in pursuing their personal interests, and (3) expanded applied research and global engagement that is not only inspired by and more closely tied to the needs of industry and communities, but that also infuses innovation and entrepreneurship and integrates those skills into the learning environment. Indeed, the opportunity to make bold improvements is so great, and the support from the University is so strong, that the transformation may very well forge a path for others in higher education.
- Lilly Endowment gift of $18 million in support of the Polytechnic initiative of a $40 million gift to Purdue.

Dean College of Technology 2011 to present

- PI on one of Purdue's Moves for the creation of the Purdue Polytechnic Institute.
- Led the college in developing a strategic and tactical plan for the college.
- Increased college donations by 20% in first year as dean.
- Leading the effort to finalize negotiations with the Qatar Foundation on a $300 million branch campus for the College of Technology at Education City in Doha, Qatar.
- Co-lead with the Dean of Engineering the approval for an $18 million student projects building on campus.
- Co-lead with the Dean of Engineering $5 million in funding to start an advanced manufacturing competitiveness center (IN-MaC) at Purdue University.
- Lead the proposal for one of President Daniels' Purdue Moves initiative; The Purdue Polytechnic Institute, which will transform the undergraduate learning experience.

Associate Dean for Graduate Programs 2006 to 2011

- Increased MS degree students from 147 to 246
- Increased PhD degree students from 46 to 66
- Increased professional programs MS degree students from 76 to 130
- Increased total graduate degree enrollment from 269 to 442
- Led MS degree program approval for CIT, CGT, IT, and AT
- Involved in many strategic initiatives as assigned by the Dean for the College of Technology

Interim Department Head of OLS and IT 2010-11

- Led the ad hoc merger committee in finalizing the proposal as well as the new department name selection
- Leading the integration of the faculty, curricula, and budgets
- Leading efforts to revitalize, enhance, and update the curriculum

Executive Director of ProSTAR 2009-2011

- Created the Center for Professional Studies and Applied Research (ProSTAR)
- Focuses on delivering degree and non-degree educational programs for business and industry
- Administrative unit to coordinate and administer non-traditional graduate programs to business and industry
- Staff entirely funded from residuals generated from fee-based professional programs
- Professional programs supported include Weekend MS degree programs in IT and OLS, on-site programs at Rolls Royce in Indianapolis and Anderson University in Anderson, IN and distance delivered program in Aviation Technology

Technology Computer Network (TCN) 2006-2011

- Appointed by the Dean to direct the computer technology support for the College of Technology

- Worked with the leadership of Engineering Computer Network (ECN) to merge TCN into their operations to provide better and increased service for the college as well as meet the goals for Sustaining New Synergies efforts on campus

Director Envision Center for Data Perceptualization 2001 – 2008

- Created this nationally recognized scientific and information visualization facility in support of research and learning
- Significantly increased the visualization resources for faculty and students in support of research and learning on campus
- Created a strategic plan to move the center from conception to full implementation

Associate VP & Director Rosen Center for Advanced Computing (RCAC) ITaP 2002 – 2005

- Created RCAC to support computationally-based research at Purdue
- Created a strategic plan for the center
- Consolidated a staff of 50 in high performance computing, networking, high performance storage, programming, and scientific visualization
- Initiated an applied research program that led to approximately $15 million in funded research projects
- Significantly increased computational, storage, and visualization resources for faculty and students in support of research and learning on campus
- Led the implementation of Purdue as a NSF funded TeraGrid partner resource provider
- The genesis of the Discovery Park Cyber Center at Purdue was created through the efforts of RCAC

Department Head of Computer Graphics Technology 1995-2001

- Led the department in name change and curriculum update to include 4 degree options
- Enrollment growth from approximately 250 undergraduate students to over 500
- Started a graduate program, significantly increased industry donations and applied research
- Started CGT degree programs at 5 Statewide locations

Co-founder and Director Digital Enterprise Center 1998 – 2001

- Developed this center in the College of Technology through a series of Purdue Reinvestment Program grants through the Provost's Office as well as hardware and software gifts-in-kind from Dassault and IBM
- This center was the genesis for the creation of the PLM Center which eventually led to the creation of the Center for Advanced Manufacturing, an interdisciplinary center supported by industry

NSF TeraGrid Executive Steering Committee Member 2002 – 2007

- TeraGrid was a $110 million NSF-funded grant to create an open scientific discovery cyberinfrastructure across 11 university and national lab partner resource providers' sites with the Executive Steering Committee leading the administration and deployment.
- Led the efforts to create a governance model and strategic plan for the TeraGrid.

Elected and Named Chair of the Board of Education, St. Henry Local Schools 1982 – 1986

- Worked with the superintendent to manage of budget of $5 million and a school district of 1500 students.
- Successfully negotiated a new contract with teachers and staff
- Successfully funded a new middle school

NATIONAL AND INTERNATIONAL OFFICES AND LEADERSHIP POSITIONS

2010 **McGraw Hill Publishing Company** , Named to **K-12 Engineering & Technology STEM Education Advisory Board** .

2010 Appointed by the PI of the **NSF XD grant** to lead the nationwide campus bridging program for the 5-year $160 million grant

2010 Appointed **Co-Chair NSF Task Force for Cyberlearning & Workforce Development** . The task force was charged by NSF to develop a key component of NSF's agency-wide Cyberinfrastructure Framework for 21st Century Science and Engineering. This report will be a comprehensive plan for education and outreach efforts in computational and data intensive science and engineering and other CI-enabled fields

2009 Appointed to the **National Center for Engineering and Technology Education (NCETE)** focus group to create an alliance of PhD-granting universities in Engineering/Technology Education

2007 Appointed by the PI of the NSF Funded **TeraGrid** grant to lead the TeraGrid Forum on the writing of a Governance Model to manage this project that is spread across 10 university campuses and national labs

2007 Co-chair for the **2nd Annual TeraGrid '07 Conference**, Madison, WI

2007 to present Served on distinguished professor review committees in the Colleges of Technology, Engineering, Science, and Liberal Arts

2006 Nominated for **Chair of the ACM SIGGRAPH Education Committee**

2006 to 2008 Appointed to the **Open Science Grid (OSG)** Advisory Council

2006 Appointed to the **NSF TeraGrid Executive Steering Committee** for the NSF funded $130 million TeraGrid project.

2006 Appointed to the **Open Science Grid (OSG) Advisory Council**

2003 to 2005 **NSF-funded Visualization TeraGrid Group**

2004 to 2006 **SC05 Chair Education Program Planning Committee**

2004 **WACE (Workshop on Advanced Collaborative Environments) Program Committee** . Reviewed papers for workshop held in Nice, France, September 23, 2004

2003 to 2005 **Founder and Chair of Steering Committee** - International Visualization Consortium

2003 to 2004 **North American Chair –** International Steering Committee - 11th International Conference on Geometry and Graphics, Guangzhou, China, July 29-August 2, 2004

1998 to 2007 **ACM SIGGRAPH** Education Committee Member

1997 to 1998 **Conference Vice Chair** - Eighth International Conference on Engineering Computer Graphics and Descriptive Geometry

1996 **Chair** - Engineering Design Graphics Division of ASEE

1995 **Vice Chair** - Engineering Design Graphics Division of ASEE.

1995 **Program Committee** - Edugraphics '95, Alvor, Portugal.

1993 **CAD Society Planning Committee** - National Computer Graphics Association (NCGA). Appointed position by president of the NCGA to plan and organize start-up activities in the CAD Society of NCGA.

1993 **Program Chair –** Engineering Design Graphics Division of ASEE, Midyear Meeting and Conference.

1990 to 1993 **Technical and Professional Committees Chair** - Engineering Design Graphics Division of ASEE. Nationally elected office that includes responsibility for managing five other committees.

1990 to 1992 **Steering Committee -** International Society for Geometry & Graphics. One of 12 people appointed to a steering committee that formed an international professional society for engineering computer graphics.

1989 to 1990 **Vice-chair** - North Central Section of ASEE. Regionally elected office that includes responsibility for executive committee meetings in chair's absence and management of selection of regional ASEE awards.

1989 to 1990 **President –** Epsilon Pi Tau, Alpha Chapter, The Ohio State University.

1988 to 1989 **Vice President –** Epsilon Pi Tau, Alpha Chapter, The Ohio State University.

1987 **Chair, Industrial Liaison Committee** - Engineering Design Graphics Division of ASEE. This committee is responsible for developing a working relationship between the division and related industry.

RECENT SIGNIFICANT PURDUE COMMITTEES AND APPOINTMENTS

2014, IUPUI Chancellor Search Committee

2011, Purdue University Decadal Funding Committee, Professional Programs subcommittee member

2010, College of Technology Manufacturing Engineering Technology ad hoc review committee

2010, AGEP Student Scholar, Faculty Mentor

2009 Executive Director, Center for Professional Studies & Applied Research (ProSTAR), College of Technology.

2009, University Residence Halls, Faculty Fellow

2008 to present, served on named and distinguished professor selection committees for Technology, Engineering, Science, and Liberal Arts

2008 to present, STEM Goes Rural Affiliated Faculty

2008 to 2010, NCA Accreditation Steering Committee, Criterion 3 Task Force – Student Learning and Effective Teaching

2006 to 2009, University committee on Student Learning Outcome and Assessment Workgroup (SLOAW)

2007, College of Technology P&T Handbook Revision Committee

2007 to 2010, NCA Accreditation Task 1 planning committee

2005 Interim Managing Director, Discovery Park Cyber Center

2003 to 2007, Co-Director, PLM Center

2005, Cyber Center, Director Search Committee

2005 to 2009, Cyber Center, Executive Steering Committee

2005, Purdue Supercomputing Recompetition Planning Committee

2005 to present, Executive Steering Committee for Discovery Learning Center

2003 to 2008, Computer Research Institute (CRI) Faculty Advisory Committee

2003 to 2005, University Cyberinfrastructure Planning Committee

2003 to 2006, University Strategic Research Initiatives Committee

2002 to 2004, University Promotion and Tenure Committee

2002 to 2004, Libraries Promotion and Tenure Primary Committee

2002 to 2005, University Academic Computing Policy Committee, Chair

2003, University Promotion and Tenure Committee Panel B (for Regional and Statewide Campuses)

2002 to 2003, School of Technology Promotion and Tenure Handbook Committee, 4th Edition

2002 to 2003, University Honors Task Force

2001 to 2002, School of Technology PhD Degree Proposal Committee

2001 to 2002, School of Technology, Search and Screen Committee for Dean, served as co-chair with Dean Lechtenberg

2000 to 2001, Search committee for Vice President for Information Technology

2000 to 2001, School of Technology, Search and Screen Committee for Assistant Dean for Graduate Studies

1995 to 2002, Served on numerous School of Technology Department Promotion and Tenure Primary Committees including, EET, OLS, BCM, IT, and CPT

MEMBERSHIPS IN ACADEMIC, PROFESSIONAL, AND SCHOLARLY SOCIETIES

2008 to present, International Technology and Engineering Educators Association (**ITEEA**)

1993 to present, Association for Technology Management and Applied Engineering (**ATMAE** formally NAIT)

1990 to present, Special Interest Group in Graphics (**ACM SIGGRAPH**) division of the American Computing Machinery (ACM)

1985 to present, American Society for Engineering Education (**ASEE**)

1983 to present, Epsilon Pi Tau (**EPT**) a national honors fraternity in technology education

---

FUNDED GRANTS (*Indicates PI)

Garimella*, S. V., Deason, G. W., Bertoline, G. R., Contreni, M. L. Hummels, D. L., and Beaulieu, L. J. 2013. Transforming Indiana into a Magnet for High Technology Jobs. **Lilly Endowment. $5,000,000** .

Tan*, H. Z., Bertoline, G. R., and Jones, G. 2010. FIRE: Conceptualizing Non-Contact Forces: The Efficacy of Visuohaptic Simulations. **National Science Foundation.** ***$399,886***.

Bertoline*, G. R., Dyrenfurth, M., Herrick, R., and Newton, K. 2009. Dual MS/MSc degree program focused on technology, innovation, and sustainability. **US Department of Education**. ***$420,000***.

Bertoline*, G. R., Cayon, L., Arns, L., and Bennett, D. 2009. Stereo projection in the Astronomy and Technology classroom: An educational tool to navigate and improve learning of the 3D Universe and 3D Geometry. **Purdue Provost's Instructional Innovation Grant** . ***$70,000***.

Bertoline*, G. R. and Song, X. 2009. Grid Infrastructure Group (GIG) software and curriculum material development for TeraGrid. **National Science Foundation** . ***$344,280***. Grant to fund a one-year project to develop grid middleware and instructional materials for TeraGrid.

Bertoline*, G. R. 2009. NUE: Supplement to fund a graduate student. **National Science Foundation** . ***$35,244***.

Bertoline*, G. R. 2009. NUE: Supplement to fund a project with Happy Hollow School in West Lafayette, IN. **National Science Foundation**. ***$20,000***.

Bertoline*, G. R., Tan, H. Z., Reifenberger, R., and Bennett, D. 2008. NUE: Enhanced Undergraduate Nanotechnology Education with Haptics and Visualization Tools. **National Science Foundation** . ***$199,500***.

Bertoline*, G. R. and Song, X. 2008. Grid Infrastructure Group (GIG) software and curriculum material development for TeraGrid. **National Science Foundation** . ***$330,537***. Grant to fund a one-year project to develop grid middleware and instructional materials for TeraGrid.

Bertoline*, G. R. and Song, X. 2007. Grid Infrastructure Group (GIG) software and curriculum material development for TeraGrid. **National Science Foundation** . ***$243,000***. Grant to fund a one-year project to develop grid middleware and instructional materials for TeraGrid.

Bertoline*, G. R., Tan, H. Z., Cox, M., Brophy, S., and Enkhtuvshin, D. 2007. The impact of computer-simulated haptic force feedback on learning. **Purdue's Engineering Education's Young Engineer Studies (YES)**. ***$54,200***. Grant to evaluate the effectiveness of using haptic devices to teach abstract science and engineering principles.

Bertoline*, G. R. and Song, X. 2006. Grid Infrastructure Group (GIG) software development for TeraGrid. **National Science Foundation**. ***$320,000***. Grant to fund a one-year project to develop grid middleware.

Bertoline*, G. R. and Madhaven, K. P. 2006. Appointed as co-chair of the Education Program for the **IEEE/ACM Society** supercomputing conference called SC06 to deliver a 4-day long workshop for high school teachers, undergraduate faculty, and undergraduate students. ***$326,000***.

Bertoline*, G. R., et al. 2006. Northwest Indiana Computational Grid (NWICG). **Department of Energy**. Grant for phase 2 of a joint project between Purdue WL, Purdue Calumet, and Notre Dame for networking, storage, computation, and visualization to support research. **$4,500,000.**

Bottum*, J., Ibrahim, N. A., Hoffmann, C. M., and Bertoline, G. R.. 2005. Northwest Indiana Computational Grid (NWICG). **Department of Energy**. ***$876,600***. Grant for phase 1 of a joint project between Purdue WL, Purdue Calumet, and Notre Dame for networking, storage, computation, and visualization to support research through the creation of the Northwest Indiana Computational Grid (NWICG).

Hartman*, N., Bertoline, G. R., Gilger, J. W., and Mohler, J. L. (2005). Developing a spatial visualization assessment instrument. **Purdue Discovery Learning Center** grant. ***$18,000***.

Elmagarmid*, A., Bertoline, G. R., et al. 2005. Purdue Cyber Center. **Lilly Endowment.** ***$2,000,000***. Grant to fund a new Discovery Park center.

Bertoline, G. R. and Song, X. Collaborative Research: TeraGrid Smig. **National Science Foundation**. $1,389,585. Grant for application support for TeraGrid resource partners.

Goasguen*, S., Song, X., and Bertoline, G. R. 2005. SCI: Teragrid Resource Partner. **National Science Foundation**. ***$5,897,091.*** Grant to fund Purdue's Teragrid initiative including infrastructure and application support.

Bertoline*, G. R. and Madhaven, K. P. (2005). Appointed as chair of the Education Program for the **IEEE/ACM Society** supercomputing conference called SC05 to deliver a 4-day long workshop for high school teachers, undergraduate faculty, and undergraduate students. ***$320,000***.

Popescu*, V. (PI), Bertoline, G. R., et al. 2004. Effective Distance Learning Through Sustained Interactivity and Video Realism. **National Science Foundation, Computer and Information Science and Engineering** . ***$540,000***. This project combines research in vision, image processing, robotics, and computer graphics to create a novel distance learning system that enables instructors and remote learners to feel a "sense of presence" in the classroom.

Delgass*, N., Bertoline, G. R., et al. 2004. Improved Diesel Emission Reduction Catalysts by Discovery Informatics. **Indiana 21st Century Research & Technology Fund**. ***$1,744,014***. A research project between Cummins Inc. and Purdue University will focus on the development of catalytic systems for reduction of diesel emissions.

Venkatasubramanian*, V., Bertoline, G. R., et al. 2004. Center of Excellence: Institute for Advanced Pharmaceutical Technology. **Indiana 21st Century Research & Technology Fund**. ***$1,948,866***. Grant to develop a model-based informatics approach that will facilitate transfer of data, information and knowledge along the pharmaceuticals products pipeline to make it faster, more efficient and safe.

Caruthers*, J., Delgass, N. and Bertoline, G. R. 2003. **Purdue University New Recruitment Initiatives Awards Program** grant from the Graduate School, to fund the recruitment of graduate students to support the Catalysis research project. ***$12,500***.

Laxer*, C. and Bertoline, G. R. 2003. **ACM SIGGRAPH Education Committee**. Grant to conduct a curriculum development workshop titled: A Curriculum Development Workshop to Define a Computer Graphics Discipline. ***$2500***.

Miller*, C. L. and Bertoline, G. R. 2002. **Purdue University Discovery Park** curriculum development grant in PLM. ***$30,000***.

Field*, W. E., Tormoehlen, R.L. and Bertoline, G.R. 2002. Youth Farm Safety Education and Certification Program from the **United States Department of Agriculture**. Graphics-Based Youth Farm Safety Education and Certification Curriculum. ***$149,903***.

RESEARCH AND INSTRUCTIONAL GRANTS AND DONATIONS (*indicates principal author)

Bertoline, G. R., Contreni, M. L., Jamieson, L., and Mullins, J. 2015. Purdue Moves Indiana Forward **. Lilly Endowment. $40,000,000** (Largest cash gift ever received by Purdue University)

Bertoline, G. R. 2007. **Novint, Inc.** Grant for 5 Novint Falcon haptice devices and 10 Falcons at cost. Value of grant: ***$2200***.

Bertoline, G. R. 2003. **EON Reality, Inc.** Grant for virtual reality software for use in the Envision Center and labs for teaching in CGT and CS. Value of grant: ***$525,000***.

Bertoline, G. R*., Hoffmann, C., and Pekny, J. 2003. **IBM Corporation Shared University Resources (SUR)**. Grant for hardware to support the Product Lifecycle Management Center for Excellence. Value of grant: ***$362,000***.

Bertoline*, G. R. and Short, D. R. 2003. **Pixar Animation Studios**. Grant for 500 licenses of Renderman animation software. Value of grant: ***$702,500***.

Bertoline*, G. R., and Connolly, P. E. 2001. **General Motors/Powertrain Partners for the Advancement of CAD/CAM/CAE Education (PACE)**. Grant for 80 licenses of Unigraphics software. Value of grant: ***$4,000,000***.

Bertoline*, G. R., and Burton, T. L. 2001. **General Motors Foundation Inc**. Grant for rapid prototyping system. Value of grant: ***$15,000***.

Bertoline*, G. R., Connolly, P. E., and Miller, C. L. 2000. **Visionary Design Systems**. Grant for 300 licenses of IronCAD software. Value of grant: ***$1,893,250***.

Bertoline*, G. R., and Burton, T. L. 1999. **Purdue University Reinvestment Program**. Grant for Digital Enterprise Center director. Value of grant: ***$100,000***.

Bertoline, G. R. 1999. **Evans & Sutherland, Inc**. Grant for Tornado Graphics Boards. Value of Grant: ***$18,000***.

Bertoline*, G. R., and Burton, T. L. 1998. **Purdue University Reinvestment Program**. Grant for advanced computer graphics hardware and software for the Digital Enterprise Center. Value of grant: ***$150,000***.

Bertoline, G. R. 1998. **IBM Corporation HEAT Software Program**. Grant for CATIA software and hardware for the Digital Enterprise Center. Value of grant: ***$6,000,000***.

Bertoline, G. R. 1998. **Nortel Inc**. Grant for SuperScape Virtual Reality Software. Value of grant: ***$47,940***.

Bertoline, G. R. 1998. **Autodesk, Inc.** Grant for curriculum development and laboratory equipment in CGT. Value of grant: ***$30,000***.

Bertoline*, G. R., and Burton, T. L. 1997. **Purdue University Reinvestment Program**. Grant for computer graphics faculty position in PLM for the Digital Enterprise Center. Value of grant: ***$150,000***.

Bertoline*, G. R. and Mohler, J. L. 1996. Interactive Multimedia Instructional Material for Basic and Advanced Hydraulics, **Bethlehem Steel Corporation**. Value of award: ***$175,000***.

Bertoline, G. R. 1996. **Alias/Wavefront Varsity Partner Program**. Advanced modeling, rendering, and animation software. Value of grant: ***$1,130,000***.

Bertoline*, G. R., and Short D. R. 1995. **Purdue University Reinvestment Program**. Grant for advanced computer graphics hardware and software. Value of grant: ***$27,300***.

Bertoline*, G. R., Short, D. R., Harriger, B. C. 1994. **Autodesk (University Partners Program)**. The award consisted of over 100 AutoCAD Release 12 with AME licenses for the SOT and Statewide Sites. Value of grant: ***$450,000***.

Miller*, C. L., Shah, M. J., Bertoline, G. R., and Duff, J. M. 1994. **Hewlett Packard**. Hardware grant of two thermal wax color printers. Value of grant: ***$16,000***.

Short*, D. R., & Bertoline*, G. R., 1992. **Autodesk, Inc**. This grant was co-authored and resulted in a gift of 25 Autodesk Animator Pro and 3D Studio software. Value of grant: ***$94,750***.

Bertoline*, G. R., Short*, D. R., Miller, C. L., Duff, J. M., Ross, W. A., 1991. **Autodesk (University Partners Program)**. The award consisted of 24 AutoCAD Release 11 with AME licenses on the PC and 6 on the Macintosh. Value of grant: ***$118,000***.

Bertoline*, G. R., Ross, W. A., and Short, D. R., 1992. **Autodesk, Inc**. Software grant was expanded to include 18 additional AutoCAD Release 11 with AME, Macintosh version. Value of grant: ***$72,000***.

Bertoline*, G. R., & Short*, D. R., 1991. **CADKEY, Inc**. The grant was for CADKEY Version 5, CADKEY Light, and IGES Translator. Value of grant: ***$459,200***.

Bertoline*, G. R. & Miller, C. L., 1990. **Hewlett Packard**. Capital equipment gift of computer plotters and printers. Amount: ***$31,000***.

1991 **Purdue Summer PRF Grant**. Study funded by the Purdue Research Foundation to validate a hypercard-based visualization test. ***$5,000***.

McGrath, M. L. & Bertoline, G. R. (1989). **ACM SIGGRAPH Education Study Grant**. "Developing a curriculum model for engineering design graphics." ***$20,750***.

Prior to 1989 there were grants totaling **$965,000**.

REFEREED JOURNAL ARTICLES (*indicates principal author)

Chandramouli, M. & Bertoline, G. R. (2014). A genetic algorithm based optimization framework to visualize, evaluate, and modify 3D space configurations in Desktop VR. *International Journal for Simulation and Multidisciplinary Design Optimization, 5*, A01. http://www.ijsmdo.org/articles/smdo/full_html/2014/01/smdo130004/smdo130004.html

Chandramouli, M., & Bertoline, G. R. (2013). A Review of Multi-Objective Design Optimization and the Use of Genetic Algorithms Interior Design Optimization. International Journal of Engineering Research & Innovation. 5(1), 33-40. http://www.ijeri.org/issues/spring2013/spring2013.htm

Chandramouli, M., Narayanan, B., & Bertoline, G. R. (2013). A Graphics Design Framework to Visualize Multi-dimensional Economic Datasets. Engineering Design Graphics Journal, Volume 77(3), 1-14. http://www.edgj.org/index.php/EDGJ/article/view/382

Chandramouli*, M., Bertoline, G. R., Connolly, P. (2009). Generating Alternative Engineering Designs by Integrating Desktop VR with Generic Algorithms. *Engineering Design Graphics Journal*, 73(3):1-12.

Hartman*, N., Sarapin, M., Bertoline, G. R., & Sarapin, S. (2009). Examining the nature of technology graduate education. *Journal of Technology Studies, 35*(1), 76 – 82.

Madhavan*, K. P. C., Arns, L. L., & Bertoline, G. R. (June 2005). Inside Envision Center. *Campus Technology 18*(10), 38-41.

Madhavan*, K. P., Arns, L. L., Bertoline, G. R. (2005). A distributed rendering environment for teaching animation and scientific visualization, *Journal of Computer Graphics and Applications*, *25*(5), 32-38. .

Bertoline, G. R. (1998). Visual Science: An emerging discipline. *Journal for Geometry and Graphics, 2* (2), 181 - 187.

Bertoline, G. R. (1997). 50 plus 50 in jeopardy. *The Engineering Design Graphics Journal, 61*(1), 22 - 25.

Bertoline, G. R. (1993). A structure and rationale for engineering geometric modeling. *The Engineering Design Graphics Journal, 57*(3), 5 - 14.

Bertoline*, G. R., McGrath, M. B., Bowers, D., Pleck, M. H., & Sadowski, M. A. (1991). An engineering graphics curriculum model with multidisciplinary implications. *Computer Graphics, 25*(3), 191 - 195.

Miller*, C. L., & Bertoline, G. R. (1991). Spatial visualization research and theories. *The Engineering Design Graphics Journal, 55*(3), 5 – 14.

Wiley*, S. E., Miller, C. L., & Bertoline, G. R. (1991). Strategies for improving the Visualization Ability of Engineering Graphics Students. *Journal of Graphic Science of Japan, 53*, 39 - 45. **Note:** The editor of the journal translated this paper into Japanese. Originally appeared in the *Proceedings of the 4th International Conference on Engineering Computer Graphics & Descriptive Geometry*, O. Ural & L. D. Shen, Eds. Florida International University, Miami, Florida. 1990.

Bertoline*, G. R., & Gages, T. (1991). Input and output devices for engineering design. *Journal of Theoretical Graphics and Computing, 3*(2), 71 - 78.

Bertoline, G. R. (Winter 1991). Using 3D geometric models to teach spatial geometry concepts. *The Engineering Design Graphics Journal, 55*(1), 37 - 47.

Bertoline*, G. R., & Miller, D. (Winter, 1990). A visualization and orthographic drawing test using the Macintosh computer. *Engineering Design Graphics Journal, 54*(1), 1 - 7.

Bertoline, G. R. (December 1990). Has computer graphics rendered descriptive geometry obsolete? *Journal of Graphic Science of Japan, 51*, 33 - 39. **Note:** The editor of the journal translated this paper into Japanese. The paper originally appeared in *the Proceedings of the 4th International Conference on Engineering Computer Graphics & Descriptive Geometry*, O. Ural & L. D. Shen, Eds. Florida International University, Miami, Florida. 1990.

Bertoline, G. R. (Autumn 1989). Design for success. *Engineering Design Graphics Journal, 53*(3), 11-18.

Bertoline, G. R. (Spring 1988). The role of computer in the design process. *Engineering Design Graphics Journal, 52*(2), 18 - 22.

Bertoline, G. R. (Winter 1985). The basics of CAD. *Engineering Design Graphics Journal, 49*(1) 35 -39.

TEXTBOOKS AUTHORED

Since 1986, approximately 500,000 textbooks have been sold in the areas of CAD and engineering design graphics.

Bertoline*, G. R., Wiebe, E, Hartman, N. W., Ross, W. A. (2013). *Engineering Design.* McGraw Hill Publishing Company. 540 pages.

Bertoline*, G. R., Wiebe, E, Hartman, N. W., Ross, W. A. (2010). *Fundamentals of Engineering Graphics, 6th Edition*. McGraw-Hill Publishing Company. 640 pages. 1st edition 1996, 2nd edition 1998, 3rd edition 2002, 4th edition 2004, 5th edition 2006. This textbook has also been translated into Italian and Chinese.

Bertoline, G. R., Wiebe, E, Hartman, N. W., Ross, W. A. (2008). *Technical Graphics Communications, 4th Edition*. McGraw-Hill Publishing Company. 1120 pages. 1st edition 1995, 2nd edition 1997, 3rd edition 2002. This textbook has also been translated into Spanish.

Bertoline, G. R. (2008). *Introduction to Graphics Communications for Engineers, 4th Edition*. McGraw-Hill Publishing Company. 230 pages. 1st edition 1999, 2nd edition 2002, 3rd edition 2005.

Bertoline, G. R. (2008). *Graphics Drawing Workbook, 2nd Edition*. McGraw-Hill Publishing Company. 145 pages. 1st edition 2000.

Bertoline*, G. R., Wiebe, E., Miller, C. L., Nasman, L. (1995). *Engineering Graphics Communications.* Irwin Publishing Company. 1062 pages.

Bertoline*, G. R., Frampton, D. (1994). *The Essential AutoCAD*. Macmillan Publishing Company.

Bertoline, G. R. (1994). *AutoCAD for Engineering Graphics, 2nd Edition*. New York: Macmillan Publishing Co. 1st Edition, 1990.

Resetarits*, P. & Bertoline, G. R. (1994). *Using CADKEY, 4th Edition*. Albany, New York: Delmar Publishers. 1st Edition, 1987, 2nd Edition, 1991, 3rd Edition 1992.

Resetarits*, P. & Bertoline, G. R. (1992). *Using CADKEY Light*. Albany, New York: Delmar Publishers.

Bertoline, G. R. (1988). *Fundamentals of CAD, 2nd Edition*. Albany, New York: Delmar Publishers, First Edition, 1985.

Bertoline, G. R. (1986). *CAD Applications Mechanical*, Albany, New York: Delmar Publishers.

CHAPTERS IN BOOKS

Bertoline, G. R., Hartman, N., & Adamo-Villani, N. (2009). Computer-aided design, computer-aided engineering, and visualization. In S. Y. Nof (Ed.), *Springer handbook of automation* (pp. 639 – 651). Berlin: Springer-Verlag.

Catlett, C., ……Bertoline, G. R. (2008). TeraGrid: Analysis of organization, system architecture, and middleware enabling new types of applications. In L. Grandinett (Ed.), *HPC and Grids in Action*. Amsterdam: IOS Press Advanced in Parallel Computing Series.

Contributed two chapters to: Giesecke, et al. (1991). *Principles of Engineering Graphics*, New York: Macmillan Publishing.

REFEREED PUBLISHED PROCEEDINGS PAPERS (*indicates principal author)

Chandramouli, M., Bertoline, G., Elbadwi A.Q. I. (2014) Geometry and Graphics for Developing a Multimodal Multidimensional Desktop Virtual Reality framework, Proc. of the Annual Conf. of the International Association of Journals & Conferences, Orlando, FL.

Chandramouli, M., Takahashi, & Bertoline. G. R. (2014) Desktop VR Centered Project Based Learning in ET Courses Using a Low-cost Portable VR System, Proc. of the American Association of Engineering Education Conference, Indianapolis, IN.

Chandramouli, M., and Bertoline, G. (2013) Stimulating Interest in Technological and Engineering Literacy Using a Multidimensional Desktop Virtual Reality Framework. *Proceedings of the American Society of Engineering Education.*

Springer*, M. L., Bertoline, G. R., & Schuver, M. T. (2011). *Challenges of Building on Bedrock Programs in Professional Education.* ASEE/CIEC 2011 Conference. San Antonio, Texas.

Springer*, M. L., Bertoline, G. R. (2011). Building an academic center infrastructure for professional development. *Conference proceedings of the 2011 ASEE Conference, Vancouver, Canada.*

Springer*, M. L., Lybrook, D. L, & Bertoline, G. R. (2011). Building a distance learning hybrid program in organizational leadership. *Conference proceedings of the 2011 ASEE Conference, Vancouver, Canada.*

Dyrenfurth*, M., Murphy, M., Bertoline, G. R., Herrick, R., Newton, K., O'Donnell, G., Castell, N., Barcelo, M., Ribera-Sancho, M., & Garcia, J., Barnes, J. L., Kuder, M. (2011). Critical issues and lessons learned in establishing concurrent international MS degree programs in engineering technology. *Conference proceedings of the 2011 ASEE Conference, Vancouver, Canada.*

Dyrenfurth*, M., Murphy, M., Bertoline, G. R., Herrick, R., Newton, K., O'Donnell, G., McHale, D., Castell, N., Barcelo, M., Balas, D., Ribera-Sancho, M., & Garcia, J. (2010). Concurrent masters degrees across the Atlantic: Innovations, issues & Insights. *Conference proceedings of the 2010 ASEE Conference*, Louisville, KY.

Dyrenfurth*, M., Murphy, M., & Bertoline, G. R. (2010). Quality indicators for engineering & technology education. *Conference proceedings of the 2010 ASEE Conference*, Louisville, KY.

Park*, J., Kim, K., Tan, H. Z., Reifenberger, R., Bertoline, G. R., Hoberman, T., & Bennett, D. (2010). An initial study of visuohaptic simulation of point-charge interactions. *Proceedings of the Symposium on Haptic Interfaces for Virtual Environments and Teleoperator Systems 2010*, Waltham, MA, pp. 425-430, March 25-26, 2010.

Chandramouli*, M., Bertoline, G. R., Abe Harris, L. (2009). PC-based photorealistic virtual environments to facilitate construction design and nondestructive testing. *Conference proceedings of the 2009 ASEE Conference, Austin, TX.*

Chandramouli*, M., Bertoline, G. R., and Harris, L. V. (2009). Photo-realistic virtual environments to facilitate construction design and non-destructive testing. *Conference proceedings of the 2009 ASEE Conference, Austin, TX.*

Bertoline*, G. R., and Schuver, M. (2009). Center for professional studies in engineering technology. *Conference proceedings of the 2009 ASEE Conference, Austin, TX.*

Bertoline, G. R. (2009). Applied and use-insprired research for engineering technology: A rationale for defining a research domain. *Conference proceedings of the 2009 ASEE Conference, Austin, TX.*

Hacker*, T., Bertoline, G. R. (2008). A Curriculum for Petascale Computing. *Proceedings of the 3rd TeraGrid Conference,* June 2008, Las Vegas, NV.

V. Sundaram*, Y. Ru, B. Benes, L. Zhao, X. C. Song, T. Park, G. Bertoline, M. Huber. An Integrated System for Near Real-Time 3D Visualization of NEXRAD Level II Data Using TeraGrid. *Proceedings of TeraGrid 2008 Conference, Las Vegas, NV, June 9-13, 2008.*

Dorjgotov*, E., Bertoline, G. R., Arns, L., Pizlo, Z., & Dunlop, S. R. (2008). Force amplitude perception in six orthogonal directions. In *Proceedings of the 16th International IEEE Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems (HAPTICS)*, pp. 121–127, 2008.

Sarapin*, M., Hartman, N., and Bertoline, G. R. (2007). Advancing graduate education in a college of technology context. *Proceedings of the National Associate of Industrial Technology Conference, Panama City, FL.*

Keating*, D., Stanford, T., Bardo, J., Dunlap, D., DeLoatch, E., Tricamo, S., Depew, D., Bertoline, G. R., ….Purdy, C. (2007). Enabling a strong US engineering workforce for technological innovation: A national partnership in graduate professional education with industry to enhance US competitiveness and economic development. *Conference proceedings of the 2007 ASEE Conference, Honolulu, Hawaii.*

Olson*, R., Truesdal, S., Quick, D., Depew, D., Bertoline, G. R., Schuver, M.,….Stanford, T. (2007). Faculty reward system reform for advancement of professional engineering education for innovation: Looking at representative criteria for merit promotion in advanced engineering practice in industry. *Conference proceedings of the 2007 ASEE Conference, Honolulu, Hawaii.*

Keating*, D., Stanford, T., Bardo, J., Dunlap, D., Depew, D., Bertoline, G. R., …..Turesdale, S. (2007). Faculty reward system reform for advancement of professional engineering education for innovation: Rethinking a new model template for unit criteria of professionally oriented faculty. *Conference proceedings of the 2007 ASEE Conference, Honolulu, Hawaii.*

Depew*, D., Bertoline, G. R., Schuver, M., Keating, D., Stanford, T., Dunlap, D. (2007). Faculty reward system reform for advancement of professional engineering education for innovation: Revisiting the urgency of reform. *Conference proceedings of the 2007 ASEE Conference, Honolulu, Hawaii.*

Dorjgotov*, E., Choi,S., Dunlop, S., Bertoline,G. (2006). Portable haptic display for large immersive virtual environments, *Proceedings of the Symposium on Haptic Interfaces for Virtual Environments and Teleoperator Systems,the Institute of Electrical and Electronics Engineering, Inc* 2006, pp. 321-327, ISBN 1-4244- 0226-3.

Depew*, D., Latif, N., Bertoline, G. R., Keating, D., Stanford, T., Dunlap, D., …. Turesdale, S. (2006). Faculty reward system reform: Beginning phase II – revisiting the need for university change to advance professional graduate education for engineering practice and technology leadership. *Conference proceedings of the 2006 ASEE Conference, Chicago, IL.*

Keating*, D., Stanford, T., Bardo, J., Dunlap, D., Depew, D., Latif, N., Bertoline, G. R., …. Truesdale, S. (2006). Faculty reward system reform: Beginning phase II – Setting criteria for professionally oriented faculty in engineering and technology. *Conference proceedings of the 2006 ASEE Conference, Chicago, IL.*

Benes*, B., Dorjgotov, E., Arns,L., & Bertoline,G., (2006). Granular material interactive manipulation: Touching sand with haptic feedback. *Proceedings of the 14-th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision 2006* Joaquim Jorge and Vaclav Skala editors, 2006, pp. 295-304, ISBN 80-8643-03-8.

Madhavan*, K., Bertoline, G. R., Goasguen, S., & Vorvoreanu, M. (2006). Zecosystem – Cyberinfrastructure enabled learning ecosystems of 2020. *Proceedings of TeraGrid'06 Conference*, Indianapolis, IN, June 2006.

Rogers*, T.J., Benes, B., Bertoline,G., (2006). Towards a modular network-distributed mixed-reality learning space system. *International Symposium on Visual Computing*, Springer-Verlag.

Bertoline*, G. R., Depew, D. R., Dyrenfurth, M. J., McHenry, A. L., DeLoatch, E. M., Lee, P. Y., ….Stanford, T. G. (2005). A look at representative templates for professionally oriented faculty reward systems in other service professions. *Conference proceedings of the 2005 ASEE Conference, Portland, OR.*

Depew*, D. R., Bertoline, G. R., Dyrenfurth, M. J., McHenry, A. L. DeLoatch, E. M., Lee, P. Y., …. Stanford, T. G . (2005). Revisiting the urgency for reform of faculty reward systems to advance professional graduate education for engineering practice and technology leadership. *Conference proceedings of the 2005 ASEE Conference, Portland, OR.*

Keating*, D., Stanford, T., Dunlap, D., McHenry, A., DeLoatch, E., Lee, P., Y., Depew, D., Bertoline, G. R., ….Coulson, L. M. (2005). Framework for integrating project-based learning, experience and practice in professional graduate education for engineering leaders in industry leading to the professional engineering doctorate and fellows levels. *Conference proceedings of the 2005 ASEE Conference, Portland, OR.*

Madhaven*, K. and Bertoline, G. R. (2005). Challenges to incorporating high performance computational tools into 7 – 12 grade science and mathematics curricula. *Society for Information Technology (SITE) 16th annual conference proceedings*, Phoenix, AZ (pp. 3713 – 3717).

Field*, W. and Bullock, S., Bertoline, G., Tormoehlen, G. (2004). Research Review Related to the Utilization of Graphic-Based Material to Communicate Important Agricultural Safety Messages to Youth with Limited Literacy Skills. *Proceedings of the National Institute of Farm Safety Conference*. Keystone, Colorado.

Depew*, D. R., Bertoline, G. R., Dyrenfurth, M. J., McHenry, A. L., Dunlap, D. D., Bennett, R. J., ….. Stanford, T. G. (2004). Issues Driving Reform of Faculty Reward Systems to Advance Professional Graduate Education: The Need for Criteria that Support Engineering Practice and Technology Leadership, *Conference Proceedings of the 2004 ASEE annual conference and exhibition*, Salt Lake City, UT, CD ROM.

Arangarasan*, R., Arns, L., and Bertoline, G. R. (2003). A Portable Passive Stereoscopic System for Teaching Engineering Design Graphics. *58th Annual Engineering Design Graphics MidYear Meeting Proceedings*, November 16 to 19, 2003, Scottsdale, Arizona. Editor Mary Sadowski. (pp. 99 – 108).

Bertoline*, G. R., & Laxer C. (2002). A knowledge base for the computer graphics discipline. Forum presentation for the SIGGRAPH education program. *ACM SIGGRAPH 2002 Conference Proceedings*, 29th International Conference on Computer Graphics and Interactive Techniques, San Antonio, Texas.

Bertoline, G. R. (2000). The digital enterprise center at Purdue University. *COE 2000 Fall Conference Proceedings*, CD-ROM, G12, (pp. 1- 6).

Bertoline*, G. R., Miller, C. L., Mohler, J. L., Ross, W. A. (1999). A curriculum model for applied computer graphics. *Proceedings of the Engineering Design Graphics Division 53rd Mid-Year Meeting*, F. M. Croft, Ed., (pp. 51 - 57). Columbus, Ohio.

Wiebe*, E. N., and Bertoline, G. R. (1995). Mosaic instruction and the world wide web. *Proceedings of the Engineering Design Graphics Division 1995 Mid-Year Meeting*, C. Wayne White, Ed. (pp. 51-57). Houston, Texas.

Eggers*, D. C., Ross, W. A., and Bertoline, G. R. (1995). Mosaic: A primer for engineering design graphics instruction. *Proceedings of the Engineering Design Graphics Division 1995 Mid-Year Meeting*, C. Wayne White, Ed. (pp. 42-50). Houston, Texas.

Miller*, C. L., & Bertoline, G. R. (1991). Visual literacy for engineers. *Investigating Visual Literacy*. Selected readings from the 22nd Annual International Visual Literacy Association Book of Readings 1991. Edited by Darrell G. Beauchamp, Judy Clark Baca, & Roberts A. Braden. (pp. 327-332). Washington, D.C. *Refereed*.

Wiley*, S. E, & Bertoline, G. R. (1991). Fundamental communications skills for the contemporary engineer. *ASEE Illinois/Indiana Spring Conference Proceedings: Undergraduate Education* (pp. 56-61). Urbana, Illinois.

Bertoline, G. R. (1991). Graphics literacy in a modern engineering/engineering technology curriculum. *Proceedings Frontiers in Education 21st Annual Conference*. L. P. Grayson, Ed. (pp. 556 - 559). West Lafayette, Indiana.

Bertoline*, G. R. McGrath, M., Pleck, Bowers, D., & Sadowski, M. (1991). Developing a modern graphics curriculum for the year 2000 and beyond. *Proceedings of the North Central Section of ASEE annual conference* (pp. 7 - 13). Akron, Ohio.

Bertoline*, G. R., Miller, C. L., & Frampton, D. (1990). Strategies for articulation of CADD curriculum and technology into secondary schools. *Proceedings of the North Central Section of ASEE annual conference* (pp. 139 - 145). Akron, Ohio.

Bertoline, G. R. (1990). Has computer graphics rendered descriptive geometry obsolete? *Proceedings of the 4th International Conference on Engineering Computer Graphics & Descriptive Geometry*, O. Ural & L. D. Shen, Eds. (pp. 301 - 307). Miami, Florida.

Miller*, C. L., Wiley, S. E., & Bertoline, G. R., (1990). Strategies for improving the visualization ability of engineering graphics students. *Proceedings of the 4th International Conference on Engineering Computer Graphics & Descriptive Geometry*, O. Ural & L. D. Shen, Eds. Miami, Florida.

Pleck*, M. & Bertoline, G. R. (1990). A knowledge-based curriculum model for engineering design graphics. *Proceedings of the NSF Symposium on the Modernization of the Engineering Design Graphics Curriculum*, R. Barr & D. Juricic, Eds. (pp. 75 - 84). Austin, Texas.

Pleck*, M., McGrath, M., Bertoline, G. R., Bowers, D., & Sadowski, M. (1990). Factors affecting the engineering design graphics curriculum: Past, present, and future. *Proceedings of the NSF Symposium on the Modernization of the Engineering Design Graphics Curriculum.* R. Barr & D. Juricic, Eds. (pp. 43 - 52). Austin, Texas.

McGrath*, M., & Bertoline, G. R. (1990). Developing a modern graphics curriculum. With Michael McGrath. *Proceedings of the Frontiers in Education 19th Annual Conference*, L.P. Grayson and J.M. Biedenbach, Eds. (pp. 136 - 140). Vienna, Austria.

Bertoline*, G. R., Bowers, D., McGrath, M., Pleck, M., & Sadowski, M. (1990). A conceptual model for an engineering graphics curriculum for the year 2000. *Proceedings of the Engineering Design Graphics Division 1990 Mid-Year Meeting*, Deloss Bowers and Gary R. Bertoline, Eds. (pp. 241 -254). Tempe, Arizona.

Miller*, C. L. & Bertoline, G. R. (1990). Spatial visualization research and theories: Their importance in the development of an engineering & technical design graphics curriculum model. *Proceedings of the Engineering Design Graphics Division 1989 Mid-Year Meeting*, (pp. 95 - 103). Tuscaloosa, Alabama.

McGrath*, M., Pleck, M., Bertoline, G. R., Bowers, D., & Sadowski, M. (1989). A historical perspective of factors affecting the engineering design graphics curriculum. *Proceedings of the Engineering Design Graphics Division 1989 Mid-Year Meeting*, (pp. 154 - 161). Tuscaloosa, Alabama.

Bertoline, G. R. (1988). The implications of cognitive neuroscience research on spatial abilities and graphics instruction, Proceedings *of the 3rd International Conference on Engineering Graphics and Descriptive Geometry,* S.M. Slaby and H. Stachel, Eds. Vol. 1. (pp. 28 - 34). Vienna, Austria.

Boyer*, E. & Bertoline, G. R. (1987). The impact of computer technology on graphic communications, *Proceedings from an International Symposium on Technological Literacy,* E. K. Blankenbaker, Ed. (pp. 203- 206). Columbus, Ohio. *Refereed*

Bertoline, G. R. (1987). The class of 2001: Future directions for engineering design graphics, *Proceedings of the Frontiers in Education, 17th Annual Conference*, L. P. Grayson and J. M. Biedenbach, Eds., Vol. 2, (pp. 625 - 631). Terre Haute, Indiana.

Bertoline, G. R. (1984). Computer graphics in the undergraduate curriculum, *Proceedings of the National Computer Graphics Association Conference*, (pp. 234 - 239). Los Angeles, California.

ARTICLES IN PRACTITIONER JOURNALS

Madhavan*, K. P. C., Arns, L. L., and Bertoline, G. R. (June 2005). Inside Envision Center. *Campus Technology 18*(10), 38-41.

Bertoline*, G. R., and Zurschmiede, E. (July/August 2001). IBM and Purdue University team up to advance aircraft interior design. *Aircraft Interiors 3* (4), 20 - 24.

PAPERS PRESENTED AT NATIONAL AND INTERNATIONAL CONFERENCES (*indicates principal author)

Bertoline, G. R. (2014). *DISTINGUISHED LECTURE: Inspiring Change Agents to Transform Engineering Education: Challenges and Strategies of Pioneers in an Ever-evolving Social and Cultural Context.* Paper presented at the 121st ASEE Annual Conference, June 15 – 18, 2014, Indianapolis, IN.

Bertoline, G. R. and Mili, F. (2014). *The integration of liberal arts and technology.* Paper presented at the Seventh Symposium on Engineering and Liberal Education, June 6-7, 2014, Union College, Schenectady, New York.

Bertoline, G. R. (2013). *The Fatal Flaw in Engineering Higher Education.* Paper presented at the Automation Conference, Chicago, IL.

Tan, H., Bennett, D., Bertoline, G., Chevrier, J. & Jones, M. G. (2011). *The role of visuohaptic simulations in conceptualizing non-contact electrostatic forces*. Paper presented at the European Science Education Association annual meeting. Lyon, France.

Dyrenfurth*, M., Newton, K., & Bertoline, G. R. (2010). *Concurrent MS degrees across the Atlantic: Technology, innovation & sustainability.* 2010 ATMAE Conference, Panama City Beach, FL.

Donaldson*, S., Bertoline, G. R. (2010). *Utilization of a graduate advisory committee for supporting and retaining graduate students to improve the academic experience and increase graduation rates.* 2010 CIEC Conference, Engineering Technology Division, Feb. 3-5, 2010, Palm Springs, CA.

Chandramouli*, M., Bertoline, G. R., & Abe Harris, L. (2009). *PC-based photorealistic virtual environments to facilitate construction design and nondestructive testing.* 2009 ASEE Conference, Austin, TX.

Bertoline*, G. R., Schuver, M. (2009). *Center for professional studies in engineering technology.* 2009 ASEE Conference, Austin, TX.

Bertoline, G. R. (2009). *Applied and use-insprired researchfor engineering technology: A rationale for defining a research domain.* 2009 ASEE Conference, Austin, TX.

Hacker*, T., Bertoline, G. R. (2008). *A curriculum for petascale computing*. TeraGrid 2008 Conference, Las Vegas, NV.

Sundaram*, V., Ru, Y., Benes, B., Zhao, L., Song, X. C., Park, T., Bertoline, G. R., & Huber, M. (2008). *An integrated system for near real-time 3D visualization of NEXRAD level II data using TeraGrid.* TeraGrid 2008 Conference, Las Vegas, NV, June 9-13, 2008.

Sarapin*, M., Hartman, N., & Bertoline, G. R. (2007). *Advancing graduate education in a college of technology context.* National Associate of Industrial Technology Conference, Panama City, FL.

Bertoline, G. R. (2007). *A history of Computer-aided Design.* **Invited** presentation at the Catia Operators Exchange (COE) Annual PLM Conference Develop & Deploy Workshop, Las Vegas, NV.

Bertoline, G. R., (2006). *Cyberinfrastructure and Learning for Gen-Z.* **Invited** presentation to North Carolina State University's Friday Institute for Educational Innovation series; Voice of Innovation Research Series.

Bertoline, G. R. (2006). *Developing TeraGrid campus partnerships.* Fall 2006 Internet2 Member Meeting, Chicago, IL.

Bertoline, G. R. (2006). *Cyberinfrastructure learning environments for Gen-Z.* SC06 Conference, Education Program, Tampa, FL.

Bertoline*, G. R., Lathrop, S., & Catlett, C. E. (2006). *TeraGrid campus partnerships.* NCSA Workshop – Enabling Minority Serving Institutions to be Cyberinfrastructure Resource Providers. NCSA, University of Illinois, Urbana-Champaign, IL.

Rogers*, T. J., Benes, B., & Bertoline, G. R. (2006). *Towards a modular network-distributed mixed-reality learning space system.* International Symposium on Visual Computing, ISVC 2006.

Depew*, D. R., Latif, N., Bertoline, G. R., Keating, D., Stanford, T., Dunlap, D., Tricamo, S., McHenry, A., DeLoatch, E., Palmer, H., Bennett, R., Noori, M., Snellenberger, J., & Turesdale, S. (2006). *Faculty reward system reform: Beginning phase II – revisiting the need for university change to advance professional graduate education for engineering practice and technology leadership.* 2006 ASEE Conference, Chicago, IL.

Keating*, D., Stanford, T., Bardo, J., Dunlap, D., Depew, D., Latif, N., Bertoline, G. R., Tricamo, S., McHenry, A., DeLoatch, E., Palmer, H., Noori, Mohammad, Bennett, R;, Snellenberger, J., & Truesdale, S. (2006). *Faculty reward system reform: Beginning phase II – Setting criteria for professionally oriented faculty in engineering and technology*. 2006 ASEE Conference, Chicago, IL.

Hartman*, N., Connolly, P. E., Gilger, J. W., Bertoline, G. R., & Heisler, J. M. (2006). *Virtual reality-based spatial skills assessment and its role in computer graphics education.* ACM/SIGGRAPH 2006 Conference and Exhibition, Boston, MA.

Bertoline*, G. R., Hoffmann, C. M., Bohlmann, N., Sharp, D., & Latimer, D. (2006). *Northwest Indiana Computational Grid (NWICG)*. TeraGrid '06 Conference, Indianapolis, IN.

Madhavan*, K.P.C., Goasguen, S., Bertoline, G.R., & Klimeck, G. (May 2006). *Revolutionizing science and education through cyberinfrastructure.* Presentation at the Exploratorium Brown Bag Series, San Francisco, CA.

Dorjgotov*, E., Choi, S., Dunlop, S. R., & Bertoline, G. R. (2006). *Portable haptic display for large immersive virtual environments*, 14th Symposium on Haptic Interfaces for Virtual Environments and Teleoperator Systems, Arlington, VA.

Madhavan*, K.P.C., Bertoline, G.R. (2005). *Challenges to incorporating high performance computational tools into 7-12 grade science and mathematics curricula.* Society for Information Technology & Teacher Education 2005, Phoenix, AZ.

Bertoline*, G. R., Madhavan, K. (2005). *The role of HPC in learning and teaching*. SC05 Education Program, Seattle, WA.

Matei*, S., Arns, L., Bertoline, G. R., Davidson, D., & Ren, M. (2005). Socio-spatial congnition and community identification in the context of the next generation of location-aware information systems. *6th Annual Meeting of the Association of Internet Researchers,* Chicago, IL

Stewart, C. A., Bertoline, G. R. (2005). *I-Light: A network for collaboration between Purdue University and Indiana University.* 2005 I-Light Symposium, Indianapolis, IN.

Bertoline*, G. R., Depew, D. R., Dyrenfurth, M. J., McHenry, A. L., DeLoatch, E. M., Lee, P. Y., Dunlap, D. D., Tricamo, S. J., Keating, D. A., & Stanford, T. G. (2005). *A look at representative templates for professionally oriented faculty reward systems in other service professions.* 2005 ASEE Conference, Portland, OR.

Depew*, D. R., Bertoline, G. R., Dyrenfurth, M. J., McHenry, A. L. DeLoatch, E. M., Lee, P. Y., Palmer, H. J., Dunlap,D. D., Tricamo, S. J., Keating, D. A., & Stanford, T. G . (2005). *Revisiting the urgency for reform of faculty reward systems to advance professional graduate education for engineering practice and technology leadership.* 2005 ASEE Conference, Portland, OR.

Arns*, L., Bertoline, G. R., & Caruthers, J. (2005). *HCI issues in catalyst design by discovery informatics visualization*. 9th International Conference on Information Visualization. Las Vegas, NV.

Hartman*, N. W., Bertoline, G. R. (2005). *Spatial visualization tests and their relationship to contemporary CAD tools: Advocating more than just mental rotations tests.* 2005 ASEE Conference, Portland, OR.

Bertoline*, G. R. (2004). *Integration of the support of computational science within the larger mission of the University*. Super Computing 2004 (SC04) Annual Conference, CIO Workshop, Pittsburgh, PA.

Bertoline*, G. R, Bottum, J. (2004). *Reshaping the IT mission in research: Building a faculty-driven campus computational grid*. EDUCAUSE 2004 Annual Conference, Denver, CO.

Bullock*, M. S., Field, W. E., & Bertoline, G. R. (2004). *Research review related to the utilization of graphic-based material to communicate important agricultrural safety messages to youth with limited literacy skills.* 2004 Summer Conference of the National Institute for Farm Safety Inc. Keystone, Colorado, June 20, 2004.

Bertoline*, G. R., Miller, C. L., Hoffmann, C., & Pekny, J. (2004). *The product lifecycle management center at Purdue University*. The COE 2004 Annual Conference, Miami Beach, FL.

Dyrenfurth*, M. J., Bertoline, G. R., Keating, D. A., Depew, D. R., McHenry, A. L., Dunlap, D. D., Bennett, R. J., Tricamo, S. J., & Stanford, T. G. (2004). *Engineering & technology research: Myths, realities and recommendations*, Invited panel paper, 2004 ASEE conference, Salt Lake City, Utah.

Depew*, D. R, Bertoline, G. R., Dyrenfurth, M. J., McHenry, A. L., Dunlap, D. D., Bennett,J., Tricamo, S. J., Keating, D. A., & Stanford, T. G.. (2004). *Issues driving reform of faculty reward systems to advance professional graduate education: The need for criteria that support engineering practice and technology leadership*, Invited panel paper, 2004 ASEE conference, Salt Lake City, Utah.

Arangarasan*, R., Arns, L., & Bertoline, G. R. (2003). *A portable passive stereoscopic system for teaching engineering design graphics.* 58th Annual Engineering Design Graphics Midyear Meeting, Scottsdale, Arizona, November 16 to 18, 2003.

Bertoline, G. R. (2002). *Virtual reality, computer graphics, and the design process.* Engineering Design Graphics Mid-Year Meeting, Indianapolis, Indiana, October 26 to 30, 2002.

Bertoline*, G. R., Laxer C. (2002). *A knowledge base for the computer graphics discipline*. Forum presentation for the ACM SIGGRAPH education program. ACM SIGGRAPH 2002 29th International Conference on Computer Graphics and Interactive Techniques, San Antonio, Texas.

Bertoline, G. R. (2001). *The emerging computer graphics discipline*. **Invited** forum presentation for the SIGGRAPH education program. ACM SIGGRAPH 2001 28th International Conference on Computer Graphics and Interactive Techniques, Los Angles, California.

Bertoline, G. R, Goldman, J., Herrick, R., & Whitten, J. (2000). *Emerging areas of technology and programmatic implications*. Plenary Session 1, 26th Annual Engineering Technology Leadership Institute, October 21 to 24, 2000, West Lafayette, Indiana.

Bertoline, G. R. (2000). *The digital enterprise center at Purdue University*. COE 2000 Fall Conference & Technology Fair, October 1 to 5, 2000, St. Louis, Missouri.

Mohler*, J. L., Bertoline, G. R. (2000). Interactive multimedia training materials for the steel industry. *The Proceedings of Intertech 2000*, Chicago, Illinois.

Bertoline*, G. R., Mohler, J. L. (1998). *Instructional delivery partnerships involving two and four-year institutions and industry*. 24th Annual Engineering Technology Leadership Institute, November 1 to 3, 1998, St. Louis, Missouri.

Bertoline, G. R. (1998). *Visual science: An emerging discipline*. **Invited** presentation Eight International Conference on Engineering Computer Graphics and Descriptive Geometry, July 31 to August 3, 1998, Austin, Texas.

Bertoline, G. R. (1996). *50 plus 50 in Jeopardy*. 50th EDGD Mid-year Meeting. Ames, Iowa.

Wiebe*, E. N., Bertoline, G. R. (1995). *Mosaic instruction and the world wide web*. 49th EDGD Mid-Year Meeting. Houston, Texas.

Miller*, C. L., Shah, M. J., & Bertoline, G. R. (1994). *A sketching and computer-based engineering design course*. ASEE annual meeting. Edmonton, Alberta, Canada.

Ross*, W. A., Bertoline, G. R., & Barr, R. E. (1994). *Improving student productivity in 3D solid modeling*. ASEE Southeastern Section Meeting, Greensboro, North Carolina.

Miller*, C. L., Bertoline, G. R. (1993). *A sketching and computer-based engineering design graphics course*. ASEE Annual Conference, Urbana, Illinois.

Bertoline, G. R. (1993). *A structure and rationale for engineering geometric modeling*. Annual mid-year Meeting of the EDGD of ASEE, San Francisco, California.

Bertoline, G. R. (1992). *Engineering modeling in engineering graphics*. **Invited** keynote paper presentation at the 5th International Conference on Engineering Computer Graphics & Descriptive Geometry, Melbourne, Australia.

Ross*, W. A., Bertoline, G. R. (1992). *Teaching solid modeling using sketches and computers*. ASEE Annual Conference, Toledo, Ohio.

Wiley*, S. E., Burton, T. L., & Bertoline, G. R. (1991). *Technical graphics as a catalyst for developing visual literacy within general education*. International Visual Literacy Association's 23rd Annual Conference, Washington, D.C.

Bertoline*, G. R., Wiley, S. E. (1991). *Developing a comprehensive taxonomy of graphics terms for engineering and technology*. Engineering Design Graphics Division of ASEE Annual Mid-year Meeting, Norfolk, Virginia.

Bertoline*, G. R., & Ross, W. A. (1991). *Teaching solid modeling: a workbook approach*. National Association of Industrial Technology, 24th Annual Conference, Dayton, Ohio.

Bertoline*, G. R. (1991). *Graphics literacy in a modern engineering/engineering technology curriculum*. Frontiers in Education 21st Annual Conference, Purdue University.

Bertoline*, G. R., Wiley, S. E. (1991). *Fundamental communications skills for the contemporary engineer*. Illinois/Indiana Section of ASEE Annual Spring Conference, Urbana, Illinois.

Bertoline, G. R. (1991). *A curriculum model for engineering and technical graphics*. Ohio Association for Engineering Graphics Annual Meeting, Wright State University-Lake Campus, Celina, Ohio.

Bertoline, G. R. (1991). *Graphics literacy in a modern engineering/engineering technology curriculum*. Frontiers in Education 21st Annual Conference, Purdue University.

Bertoline*, G. R., McGrath, M., Pleck, M., Bowers, D., & Sadowski, M. (1990). *Developing a modern graphics curriculum for the year 2000 and beyond*. North Central Section of ASEE Spring Conference, Akron, Ohio.

Bertoline*, G. R., Miller, C. L., & Frampton, D. (1990). *Strategies for articulation of CADD curriculum and technology into secondary schools*. North Central Section of ASEE Spring Conference, Akron, Ohio.

Bertoline, G. R. (1990). *Has computer graphics rendered descriptive geometry obsolete?* Fourth International Conference on Engineering Computer Graphics & Descriptive Geometry, Florida International University, Miami, Florida.

Bertoline, G. R. (1990). *Using computer graphics to solve descriptive geometry problems*. ASEE Annual Conference, Toronto, Canada.

Bertoline*, G. R., McGrath, M., Pleck, M., & Bowers, D. (1990). *A status report of the SIGGRAPH curriculum development project*. ASEE Annual Conference, Toronto, Canada.

Bertoline, G. R. (1990). *The role of technical graphics in a two- and four-year industrial technology degree*. National Association for Industrial Technology Annual Conference, Dearborn, Michigan.

Languis*, M. L., Bertoline, G. R., & Miller, D. C. (1990). *Improvement in spatial visualization.* American Educational Research Association (AERA) Annual Conference, Boston, Massachusetts.

Miller*, C. L., Bertoline, G. R. (1990). *Visual literacy for engineers* 22nd Annual Conference of the International Visual Literacy Association, Bloomington, Illinois.

Miller*, C. L., Bertoline, G. R., & Wiley, S. E. (1990). *Strategies for improving the visualization abilities of engineering students*. 4th Annual International Conference on Engineering Computer Graphics and Descriptive Geometry, Miami, Florida.

Bertoline*, G. R., Miller, C. L. & Beck, R. (1989). *Curriculum development in CADD, CAM, and robotics*. Ohio Industrial Technology Education Association Conference, Toledo, Ohio.

Bertoline, G. R. (1989). *Low cost CADD for industrial technology*. International Technology Education Association Annual Conference, Norfolk, Virginia.

Bertoline, G. R. (1989). *Developing a curriculum model for engineering graphics: a funded project of SIGGRAPH*. 5th International Forum on Micro-based CAD, Research Triangle Park, North Carolina.

Bertoline, G. R. (1989). *Computers in mechanical drawing.* Ohio Education Association/Catholic Conference, Columbus, Ohio.

Bertoline*, G. R., Miller, C. L. (1989). *Developing a curriculum model for engineering graphics: a funded project of SIGGRAPH*. National Association of Industrial Technology Conference, Indianapolis, Indiana.

Bertoline*, G. R., Miller, D. (1989). *A visualization and orthographic drawing test using the Macintosh computer*. Engineering Design Graphics Division of ASEE Mid-Year Meeting, Tuscaloosa, Alabama.

McGrath*, M., Pleck, M., Bertoline, G. R., Bowers, D., & Sadowski, M. (1989). *A historical perspective of factors affecting the engineering design graphics curriculum.* Engineering Design Graphics Division of ASEE Annual Mid-year Meeting, Tuscaloosa, Alabama.

Bertoline, G. R. (1988). *The implications of cognitive neuroscience research on spatial abilities and graphics instruction*. Third International Conference on Engineering Graphics and Descriptive Geometry, Vienna, Austria.

Bertoline, G. R. (1988). *The use of CADD in the drafting class*. Pennsylvania Vocational Education Conference, Champion, Pennsylvania.

Bertoline, G. R. (1988). *Design for success.* Engineering Design Graphics Division of ASEE, Annual Mid-year Meeting, New Harmony, Indiana.

Bertoline, G. R. (1988). *3D and intelligent input devices*. National Computer Graphics Association, Boston, Massachusetts.

Bertoline, G. R. (1987). *The class of 2001: Future directions for engineering design graphics*. Frontiers in Education Conference.

Bertoline, G. R. (1987). *Acquiring CADD hardware and software donations.* North Central Section of ASEE Spring Conference.

Boyer*, E., Bertoline, G. R. (1987). *Technological literacy: Graphic communications.* International Symposium on Technological Literacy.

Bertoline, G. R. (1987). *The role of computers in the design process*. Engineering Design Graphics Division of ASEE, Mid-year Meeting.

RECENT WORKSHOPS & PANELS

US News and World Report STEM Solutions National Conference 2015, invited panelist, San Diego, CA.

University Industry Demonstration Partnerships (UIDP) 2015 Conference, invited panelist for Contemporary Approaches for Industry-University Engagement, Purdue University, West Lafayette, IN.

T-Summit 2015, invited panel member Measuring the Competencies that Define the T, Michigan State Univesity, East Lansing, MI.

TechNexus Frontier Innovation Summit, invited panel member on Connecting the Campus, 2015 Chicago, IL.

Liberal Studies in Engineering – Broadening the Path to the Profession Worshop, served on the worrkshop advisory panel and invited panel member, 2015 Washington, DC.

US News and World Report STEM Solutions National Conference 2012 , invited panel member on STEM Education, Austin, TX.

ASEE 2010 Annual Conference, Panel on distance education, Engineering Design Graphics Division (EDGD) sponsored panel.

EDUCAUSE Education and Learning Innovation (ELI) 2008 Annual Meeting, Connecting and Reflecting: Preparing Learners for life 2.0. **Invited** presentation and workshop on haptics-based learning technology.

EDUCAUSE Education and Learning Innovation (ELI) 2007 Spring Focus Session, Immersive learning environments: New paths to interaction and engagement. **Invited** presention and workshop on haptics in learning.

EDUCAUSE Summit on Cyberinfrastructure. (2007). *Invited* participant. Denver, CO.

Madhavan, K. P. C., Bertoline, G. R., Goasguen, S., Lathrop, S. (2006). *Cyberinfrastructure for Immersive Learning Environments*. **Campus Technology** 2006 Conference, Boston, MA.

Bertoline, G. R. (2004). Integration of the support of computational science within the larger mission of the University. **Super Computing 2004** (SC04) Annual Conference, CIO Workshop, Pittsburgh, PA.

Bertoline, G. R. and Laxer, C. July 2003**. ACM SIGGRAPH** Curriculum development workshop. Funded by a grant from the ACM SIGGRAPH Education Committee.

2003 **Supercomputing Conference**, **Invited** panel presentation and discussion titled: Impacts of Public and Private Sector Collaborations for Advanced Cyberinfrastructure, Phoenix, AZ, November 19, 2003.

REVIEWER FOR JOURNALS & FOUNDATIONS

2011 International Journal for Science Education, **Reviewer**

2010 to present, **Co-Editor**, *The Journal of Technology Studies*, the flagship journal for Epsilon Pi Tau the leading international honor society for technology.

2006 to present National Science Foundation, proposal **reviewer**.

2004 **W. M. Keck Foundation,** reviewer for computer graphics curriculum related pre-proposal.

2003 to 2006 **Editorial Board**, *Journal of Terrestrial Observation*, a refereed journal for researchers addressing the theory, technology, and applications of satellite remote sensing.

2003 to 2006 **Editorial Board**, *CGEMS - Computer Graphics Educational Materials Source*, a refereed on-line resource for computer graphics instructional material sponsored by ACM SIGGRAPH.

1997 to present **Editorial Board**, *Journal of Geometry and Graphics*, a refereed international journal for scholars in the field of graphics and geometry.

1992 **Reviewer,** *Journal of Computing in Civil Engineering*, a refereed journal for students, researchers, and professionals in all civil engineering disciplines. Reviewed papers dealing with graphics instruction. Reviewed one article.

1989 to 1993 **Board of Review,** *The Journal of Theoretical Graphics and Computing*, a refereed journal for researchers and developers in theoretical graphics and computer graphics.

1987 to 1997 **Board of Review,** *The Engineering Design Graphics Journal*, refereed journal of the American Society for Engineering Education (ASEE) for Technical and Engineering Graphics.

1987 to 1992 **Reviewer,** *Engineering Education*, refereed journal of the American Society for Engineering Education. This journal has since been renamed *The Journal of Engineering Education*.

SIGNIFICANT COURSE AND CURRICULUM DEVELOPMENT AT PURDUE

Led 8 departments in the College of Technology in the development of their department-based MS degree programs.

Led a group of faculty in the College of Technology to create a PhD program in Technology Studies.

Assisted in securing funding for the High Performance Computing Lab in CIT

Co-developed a proposal for a MS degree Area of Specialization in Scientific and Information Visualization in the Department of Computer Graphics Technology. .

Developed 4 new CGT graduate courses in scientific visualization and virtual reality including: Introduction to Virtual Reality, Augmented Reality, Design Visualization, Design of Human Experiences for Virtual Environments, and Scientific and Information Visualization.

Led the CGT Department in changing its name from Technical Graphics to Computer Graphics Technology.

Led the CGT Department in development of 4 degree options from a single degree program.

Led the CGT Department in the development of an honors program.

Led the CGT Department in the development of a graduate area of specialization in computer graphics within the School of Technology's MS degree program.

Developed the Advanced Graphics and Visualization Lab in CGT.

CGT 110 Integrated computer graphics (CAD) into a course that used traditional tools.

CGT 411 Created a senior design course that required students to work in small teams to solve problems using computer graphics.

CGT 100 Created an introductory course for freshman CGT students to introduce them to the degree program, teach study skills, and give them an overview of the discipline.

CGT 163 Co-developed with Professor Craig Miller a required service course for the Colleges of Engineering.

CGT 207 Developed this advanced course teaching students advanced CAD procedures and practices commonly used in industry.

CGT 316M Led a team of CGT faculty in the development of the first multimedia course.

TECH 511 Developed the first approved graduate course for the CGT area of specialization.

Ms. Kristin Hines
Charter Schools Director
Office of Education Innovation
Office of the Mayor of Indianapolis

August 31, 2015

Re: Purdue Polytechnic Indianapolis High School

During my career, I have been involved in STEM and as the Dean and a distinguished professor of the Polytechnic Institute at Purdue University, I have led the transition of Purdue's College of Technology becoming the Purdue Polytechnic Institute. I oversee the Purdue Polytechnic Institute which offers extraordinary opportunities to students, faculty, and employers. The newly redesigned college incorporates innovative learning environments, integrates humanities with technical studies in a learn-by-doing atmosphere. Purdue Polytechnic Indianapolis High School is modeled after this innovation in higher education and, as a board member, I am fully committed to the success of Purdue Polytechnic Indianapolis High School.

I have not engaged in any business relationship with a company or employee that will provide direct or indirect financial or other benefits to me or my family members.

Gary R. Bertoline, Ph.D.

Julie K. Griffith
3552 Towne Drive
Carmel, IN 46032
317-876-7736 Home
317-501-6225 Cell

SUMMARY

- Extensive executive leadership experience in management, achieving quantifiable results in multiple facets of external affairs, legislative and regulatory initiatives
- Ability to lead large, complex initiatives with multiple stakeholders both internal and external to an organization
- Skilled at setting strategic vision, driving results and leading high performance organizations
- Excellent communication and relationship building skills
- Exceptional executive presence and counsel

PROFESSIONAL EXPERIENCE

Purdue University, West Lafayette, Indiana 2011-Present
Vice President, Public Affairs

- The Office of Public Affairs includes internal university resources such as State and Federal Governmental Relations, Community Relations, Engagement, and Marketing and Media. These departments work with an extensive network of external and internal partners to promote advocacy, build relationships, advance the University's land-grant mission, and tell the Purdue story.
- The Office of Public Affairs furthers the University's efforts to deliver higher education at the highest proven value, and to improve economic prosperity and quality of life for people in Indiana and around the globe.
- Lead large, multifaceted organization that serves as both the internal and external face and image of Purdue University.
- Developed strategies and directed execution of plans for each unit within the organization.
- Established programs and strategies that led to streamlined processes while improving service levels and customer satisfaction.

Duke Energy, Indianapolis, Indiana 1997-2011
Vice President, Government Affairs & Foundation Relations (January 2000 – Present)

- Provide leadership, strategic direction and counsel for the management and successful execution of all government, business and environmental issues for the Corporation in the state of Indiana.
- Manage the image of the Corporation in its interactions with the executive branch of Indiana state government, state legislative bodies, state agencies and other stack holder groups.

- Represent the Corporation's position on regulatory issues to Indiana regulatory agencies.
- Represent the Corporation's interests in dealings with trade, industry and/or professional organizations.
- Develop and strengthen long-term partnerships with community and business leaders.

General Manager, Indiana Government Affairs and Community and Economic Development (March 1997 – December 1999)

- Led a multi-faceted community and economic development organization and implemented programs in order to build and maintain positive long-term relationships with community and economic development groups, community leaders and customers with the goal of securing and growing service area.
- Actively promoted local, state, federal and international economic development programs and policies to assist Indiana businesses. Strategically impacted business expansion and modernization projects with existing customers.
- Worked closely with the Indiana Economic Development Corp. and other public entities to develop company's profile within domestic and international markets.
- Managed the implementation of community and economic development programs to enhance the quality of life in communities serve d, contributing to the company's strategic success.
- Served as advisor to President on community relations and economic development issues, including representing him at public meetings and other speaking engagements.
- Served as board member or loaned executive/advisor to community organizations, providing management expertise and input from a major employer and corporate contributor in Indiana.
- Managed 22 professionals and support staff whose own responsibilities required considerable exercise of judgment, technical knowledge and skills.
- Interacted with diverse internal departments and individuals to provide support of business unit objectives and shared goals and execute strategic plans.

PanEnergy Corp. (Duke Energy), Houston, Texas **1992-1997**

Account Manager, Texas Eastern Transmission Corporation (May 1994-1997)
Manager, State Regulatory Affairs (March 1992 – May 1994)

- Managed all activities associated with specific state regulatory commissioners in the Midwest, Northeast and Eastern Canada. Activities included developing and maintaining communications with key state regulatory officials, acting as liaison with state officials to assure company objectives were communicated and met, participating in meetings of state and national regulatory bodies, and monitoring relevant industry-related issues.
- Managed all activities associated with service to customers, requiring an in-depth knowledge of customers' unique business issues, market environment, and federal and state regulatory climate which may impact business strategies.

Other related Professional Positions **1980-1992**

Syntex Laboratories, Palo Alto, California

Pharmaceutical Representative

- Managed sales and promotion of pharmaceutical products to physicians and medical staff in Indianapolis metropolitan area.

- Established and maintained relationships with Health Maintenance Organizations on behalf of national management to secure and ensure approval for product use.

James Architects & Engineers, Inc., Indianapolis, Indiana
Marketing Coordinator
- Assisted the President and Chair of Board in implementing overall marketing strategies.
- Served as Director of Marketing for the Interior Design/Space Planning Department.

Indiana Department of Commerce, Indianapolis, Indiana
Program Manager, Division of Energy Policy
- Served as government liaison to utilities and lending institutions for select programs.
- Managed 10 staff and $11.4 million program budget.
- Managed three federally-mandated programs and administered the Community Development Block Grant Program.
- Planned national symposium on energy as member of the executive planning committee.

Public Service Indiana (Marble Hill Nuclear Plant), New Washington, Indiana
Administrative Specialist, Quality Assurance
- Managed 7 staff.
- Coordinated the review and release of documentation to on-site Nuclear Regulatory Commission staff.
- Coordinated the disposition, verification and close-out documents related to safety and non-safety equipment.

CIVIC AND PROFESSIONAL ACTIVITIES

Private Sector Co-Chair for Indiana, American Legislative Exchange Council
Advisory Board, St. Vincent Women's Hospital
Dean's Advisory Council, Ball State University's College of Sciences and Humanities
Board of Directors, Chair, American Lung Association in Indiana
Board of Directors, Conexus
Board of Directors, International Center of Indianapolis
Board of Directors, Richard G. Lugar Excellence in Public Service Series
Board of Directors, Connect2Help
Board of Directors, Indiana Society of Washington, DC
Trustee, Indiana Society of Chicago
Board of Directors, Chair, Community Action of Greater Indianapolis
Board Member, Community Council of Lafayette
Board Member, Greater Lafayette Chamber of Commerce
Board Member, Wabash Center
Board Member, Purdue Polytechnic High School Indianapolis
Board Member, Lafayette-West Lafayette Development Corporation
Board of Directors and Past Chair, Indianapolis Opera
Former Board Member, Big Brothers Big Sisters of Central Indiana
Former Board Member, the Ruth Lilly Health Education Center
Former Board Member, Dean's Council of Indiana University School of Medicine
Former Board Member, Indiana Economic Development Association
Former Board Member, Indiana Community Development Society

Former Board Member, Community Affairs Discussion Group.
Former Board Member, Young Voices of Indianapolis
Former Board Member, Rivers Institute of Hanover College
Former Board Member, Mentoring Women's Network

EDUCATIONAL EXPERIENCE

Ball State University, B.S., Political Science
Numerous Executive Leadership Development and Professional Development Programs

REFERENCES

Available upon request

Ms. Kristin Hines
Charter Schools Director
Office of Education Innovation
Office of the Mayor of Indianapolis

August 31, 2015

Re: Purdue Polytechnic Indianapolis High School

As the Vice President of Public Affairs at Purdue University, I am responsible for creating and fostering critical partnerships with local, state and federal governments as well as businesses and nonprofit organizations that work to advance the economic, social and cultural development of Indiana, the nation and the world. As a Board member, I will bring my experiences and network with me to provide Purdue Polytechnic Indianapolis High School and its students the best opportunity for success.

I have not engaged in any business relationship with a company or employee that will provide direct or indirect financial or other benefits to me or my family members.

Julie K. Griffith

Ms. Kristin Hines
Charter Schools Director
Office of Education Innovation
Office of the Mayor of Indianapolis

August 31, 2015

Re: Purdue Polytechnic Indianapolis High School

As President and Chief Executive Officer of one of Indiana's four largest independent courier companies, I am well aware of the challenges to find talented, young professionals in one of Central Indiana's key economic growth sectors. I have ample nonprofit governance experience, having served as a trustee of the Indianapolis Children's Museum, an Executive Director of the Indianapolis Chamber of Commerce Advisory Board, the Eiteljorg Museum, the City of Indianapolis Economic Development Commission, and Stanley K. Lacy Leadership Graduates. I have also provided community leadership and acted as a business advocate by serving with the Organizing Committee to bring the National Athletic Collegiate Association Headquarters from Missouri to Indianapolis, served on the Transition Team for Governor-Elect Mitch Daniels, as well as acted as a Committee member for the State of Indiana Interstate I-69 Project, acted as the Assistant Executive Coordinator for the Circle City Classic, and as a Trustee of the Board of Indiana State University. I will use these experiences to help successfully govern and provide oversight to Purdue Polytechnic Indianapolis High School.

I have not engaged in any business relationship with a company or employee that will provide direct or indirect financial or other benefits to me or my family members.

George E. Pillow, Jr.

GEORGE E. PILLOW, JR.

9451 Lafayette Road
Indianapolis, IN 46278
Home: (317) 329-6527 ⬩ Office: (317) 253-3220 ⬩ Cell: (317) 557-8876

EMPLOYMENT

President / Owner
Pillow Express Delivery, Inc.
5434 N. Keystone Ave
Indianapolis, Indiana 46202
1988 – Present

Executive Administrator
State of Indiana
Department of Health & Human Services
Indianapolis, Indiana
1986 – 1988

- Responsible for all federal programs, writing and reviewing of Department policies and procedures, supervising implementation, and preparing annual budget

Executive Director
State of Indiana
State Housing Board
Indianapolis, Indiana
1982 – 1986

- Responsible for administration of federally funded housing programs in the state

Senior Account Manager
Xerox Corporation
Indianapolis, Indiana
1974 – 1982

- Responsible for sales and marketing for all product lines as well as training and administrative functions

EDUCATION

- B.S. in Environmental Science
- Indiana State University, 1967-1971

- School of Public and Environmental Affairs
  Indiana University, 1973-1975

- Xerox Management Training, 1975
- Stanley K. Lacey Leadership Development Course, 1985
- National Alliance of Business Development Course, 1989
- Amos Truck School Business Development Course (Dartmouth College), 1994

GEORGE E. PILLOW, JR.

9451 Lafayette Road
Indianapolis, IN 46278
Home: (317) 329-6527 ⬩ Office: (317) 253-3220 ⬩ Cell: (317) 557-8876

HONORS

- Center for Leadership Development 1993 Entrepreneur of the Year
- William Henry Entrepreneur of the Year
- Indiana Basketball Hall of Fame, Silver Anniversary Team, 1992
- 1985 Sagamore of the Wabash
- 1982 Xerox President's Club Award for Top Sales Representative
- 1971 College All-American (Basketball)
- 1999 Recipient Governor Award for Community Leadership
- Links Organization Outstanding Entrepreneur for 1999
- Selected to All Century Team at Indiana State University
- Indiana Basketball Hall of Fame

ACCOMPLISHMENTS

- Executive Assistant to Governor Robert Orr
- President's Council Committee for new arena
- Raised $250,000 for Indianapolis Children's Museum "Life Stories" exhibit
- Co-chairman for Celebration, "A Cause for Education", raised $60,000 for inner-city youth to attend college of their choice
- Assistant Executive Coordinator, Circle City Classic
- Annual sponsor of the Cosmo Knight Social Club scholarship golf tournament
- Member of transition team, Governor Mitch Daniels

CO-CHAIRMAN OF THE FOLLOWING:

- Day of Caring, United Way; Opening Ceremonies, 1984 Pan Am Games, Indianapolis
- White River Park State Games
- Grand Opening Madam C.J. Walker Building
- United Negro College Fund
- Star Panel
- Hospitality Larry Bird All-Star Class Basketball Game

BOARD MEMBER OF THE FOLLOWING:

- National Messenger Courier Association
- Madam C.J. Walker
- Indiana Chamber of Commerce
- Indianapolis Chamber of Commerce
- Indiana Regional Minority Business Development Center
- Indianapolis Children's Museum
- Stanley K. Lacy Leadership Executive Committee
- McCoy Advisory Council

GEORGE E. PILLOW, JR.

9451 Lafayette Road
Indianapolis, IN 46278
Home: (317) 329-6527 ⬩ Office: (317) 253-3220 ⬩ Cell: (317) 557-8876

COMMITTEE MEMBER OF THE FOLLOWING:

- Finance Committee
- United Way of Central Indiana
- Advisory Council – Search Committee member
- Indiana State University
- Organizing Committee, 1991 NCAA Final Four Basketball Tournament
- Indiana Sports Corporation, 1996 Executive Member

Ms. Kristin Hines
Charter Schools Director
Office of Education Innovation
Office of the Mayor of Indianapolis

August 31, 2015

Re: Purdue Polytechnic Indianapolis High School

My professional experiences have included government affairs, marketing and business development, event management and community engagement. I have managed professionals and oversee budgets of more than $14 million. I have also developed and implemented organizational marketing plans and led recruitment campaigns resulting in more than 300%. In addition to my professional success, I have been engaged in many opportunities to help shape today's youth. In 2014, I was appointed by Mayor Ballard to Co-Chair the Youth Life Matters Taskforce Initiative – an initiative aimed at identifying impediments and making recommendations to eliminate barriers to success for young people. I have also coached over one hundred young men and personally mentored more than a dozen. I am fully committed to the lifelong success of our city's youth and will bring that commitment with me to serve on the Board of Directors of Purdue Polytechnic Indianapolis High School.

I have not engaged in any business relationship with a company or employee that will provide direct or indirect financial or other benefits to me or my family members.

Jamal Smith

Jamal L. Smith

5700 Scotland Street
Indianapolis, IN 46234
(765) 532-1986
jamalsmith25@yahoo.com

Executive Director | *Senior Advisor* | Chairman | *General Manager*

Offering 12+ years of progressive leadership within a multitude of both private and public organizations. Create winning cultures to drive break-through improvement. Emphasis on strategy, execution and leadership all through sustainable process development.

Specialties include Strategic Planning and Execution, Leadership and Talent Management, and Strategic Partnerships & Advisement

Highlights Include:

- State Executive managing a $14M budget
- Served as Senior Advisor to former governor Mitch Daniels
- Developed marketing & recruitment strategies that yielded increases of more than 300%
- Accomplished network base and strategic partnerships
- Facilitated the announcement of the 2008 Olympic Synchronized Swim Team
- Instrumental in generating $9 million in revenue and nearly $2 million in cost savings during career.
- Appointed by two consecutive governors (Mitch Daniels and Mike Pence) to serve the State of Indiana.

Areas of Expertise:

General Management	**Strategy Development**	**Multi-Million $ Budget Management**
Government Affairs	**Recruitment & Retention**	**Continuous Process Improvements**
Talent Management	**Project Management**	**Strategic Partnerships**
Team Building / Leadership	**Cost Saving Strategies**	**Customer Relationships**

PROFESSIONAL HISTORY

Executive Director — *June 2010 – Present*
Indiana Civil Rights Commission — Indianapolis, Indiana

Senior Advisor, Minority Affairs — *May 2008 – December 2012*
State of Indiana (Office of Governor Mitch Daniels) — Indianapolis, Indiana

Director, Marketing & Business Development — *May 2005 – April 2008*
United States Synchronized Swimming (USSS) — Indianapolis, Indiana

Director, Membership Services — *June 2001 – April 2005*
Black Coaches Association (BCA) — Indianapolis, Indiana

MANAGEMENT EXPERIENCE

Management:

- **Successfully manage agency budget of more than $14 million**
- **Oversee the implementation** of many of the State's programs and initiatives;
- **Develop and maintain relationships** with a diverse section of community leaders throughout the state of Indiana
- **Develop and cultivate relationships** with various legislature throughout the Indiana General Assembly
- **Developed strategic plan** to market and implement the goals of Governor's major initiatives
- **Developed long & short term recruitment strategies that yielded an increase in membership of more than 300%.**
- **Responsible for soliciting and securing sponsor support** in preparation for 2008 Olympic Games.
- **Maintained productive relationship with sponsors and business partners**
- **Manage Annual Marketing Budget of $950k+ plus** VIK in excess of $500k
- **Managed staff of more 50+ employees**
- **Coordinated collaboration between various agencies** resulting in a budget increase of more than $5mil
- **Managed USSS site committee responsible for RFPs**, bids, and awarding of elite level national and international sporting events
- **Coordinated activities between personnel of National Federation of State High School Association** and the Black Coaches Association.
- Maintain records reflecting progress, adverse trends, conclusions, and/or recommendations for the Black Coaches Association.
- **Oversee all matters concerning BCA membership** including the recruitment of coaches and administrators, fees and sponsorship, and maintenance of the Membership Database.
- **Lead Purdue University H&K recruitment efforts resulting in an increase of 200%** minority participation for the graduate school program

COMMUNITY RELATIONS, COMMISSIONS, & BOARDS

Commissions, Boards & Community Engagement:

- **Appointed by Indianapolis Mayor to Co-Chair the Your Life Matters (YLM) initiative –** an initiative aimed at identifying barriers and making recommendations to eliminate barriers to success for young people. Focus areas include: Health, Education, Employment, & Juvenile Justice
- **Serve as Chair of the Governor's Commission for Minority and Women Business Enterprises**
- **Serve on NCAA – NIT Site Supervisory Committee** in conjunction with IN Sports Corporation
- **Established working relationships** with private and public organizations, state agencies, as well as community and faith based organizations.
- **Represented the Governor on the Interagency Council for Black and Minority Health**
- **Serve as Governor's Representative on the IN Health Information Technology Board**
- **Serve on IN Cord Blood Bank Board of Directors**

MARKETING & SALES EXPERIENCE

Marketing:

- **Lead communication campaign/marketing efforts** that contributed to an increase in the gubernatorial minority vote from 4% (2004) 29% (2008)
- **Developed and Implemented organizational Marketing Plan**.
- **Composed marketing strategies generating an excess of $1.2 million in sponsorship dollars** for organizational development and operations.
- **Designed and lead BCA Membership marketing campaigns** increasing new membership by more than 300%
- **Developed and Cultivated relationships** with faith-based and community oriented organizations as well as private organizations in order to strategically position the organization within its target market.
- **Developed long & short term recruitment strategies that yielded an increase in membership of more than 300%.**
- **Headed national membership recruitment campaign** aimed at increasing and sustaining high school representation among BCA membership; campaign **resulted in 150% increase** in high school constituency.
- **Headed Minority Graduate Recruitment Program** for the Health & Kinesiology department at Purdue University. Worked with Department Chair to develop scholarship programs and marketing strategies to attract prospective graduate students, and to increase minority enrollment.
- **Researched, identified, and Recruited prospective companies** for sponsor and cross-promotion opportunities
- Part of a **sales team that generated an excess of $16M**.

TECHNICAL EXPERIENCE:

Financial Analysis:

- **Proficient in MS Excel spreadsheets to assist in analyzing individual/group productivity, growth** , and track market trends.
- Adept at reading and interpreting financial statements as well as utilizing Excel to create charts and reports used to assess company production.

Presentation:

- Proficient in using MS PowerPoint to assist with sales/marketing presentations.
- Proficient in using MS PowerPoint to produce charts and reports used to give an account of revenue and/or company growth.

Word Processing:

- Proficient with MS Word to develop letters, proposals, statements and other documents required to accomplish day-to-day work assignments.

Research:

- Proficient with the web and all search engines to conduct market research.
- **Adept at and familiar with research programs (NUD*IST, InFo GraPH, Marketing Plan Pro, etc.) used to collect, track, analyze, and report market trends and develop marketing strategies.**

EDUCATION:

Master of Science, Sports Marketing & Athletic Administration, MS ***December 2002***
Purdue University
West Lafayette, Indiana

Bachelor of Arts, History, BA ***May 1999***
Wright State University
Dayton, Ohio

REFERENCES: *Available upon request*

Maureen Weber, JD

SENIOR VICE PRESIDENT AND CHIEF STRATEGY OFFICER

Maureen Weber supports the successful growth of the organization, helping to provide the vision, leadership, and management necessary to execute day-to-day operations and implement high-impact company growth strategies.

Weber joined PLTW from Indiana University Health, the most comprehensive healthcare system in Indiana, where she served as the vice president of customer experience. In this capacity, she was responsible for building and executing strategies to drive service improvements across the care continuum and enhancing convenience of and access to system services. She also served in a number of operational and policymaking roles for the State of Indiana and was accountable for leading the transformational agenda for several state agencies.

Weber chairs the Indiana Charter School Board, is a member of the Executive Committee of EmployIndy, and serves on a variety of other boards and commissions in the Indianapolis community.

Weber earned a juris doctorate from the Georgetown University Law Center, where she served on the *Georgetown Journal of Law & Public Policy,* and a bachelor's degree from the Georgetown University School of Foreign Service, with a concentration in Science and Technology in International Affairs.

RESUME

KENNETH V. KOBE

4326 N. Washington Blvd.
Indianapolis, In 46205

317-923-8020
kenvkobe@gmail.com

WORK EXPERIENCE

Executive Director
Barnes & Thornburg LLP
1989 – 2014

Chief Operating Officer of one of the 100 largest law firms in the United States, with 550 attorneys in 12 offices throughout the country.

Indiana State Budget Director
Office of the Governor
1985 – 1989

Principal fiscal advisor to the Governor of Indiana; director of an agency responsible for the analysis of budget and revenue issues and the administration of state appropriations.

Deputy Executive Director
Indiana Department of Commerce
1985

Chief administrative officer (reporting to the Lt. Governor) of the state's economic development agency.

Director of Financial Services
Indiana Department of Commerce
1981-1985

Directed the department's economic development incentive programs.

Chief Fiscal Analyst
Indiana House Ways & Means Committee
1978-1981

Principal fiscal advisor to the House majority and Ways & Means Committee chairman.

Mental Health Analyst
State Budget Agency
1974-1978

Field Agent
U.S. Census Bureau
1973

Peace Corps Volunteer Teacher
Kenya, East Africa
1969-1970

EDUCATION

Bachelor of Arts
Denison University, 1968
Political Science

Master of Arts in Public Administration
Ohio State University, 1972
Public Finance, International Economic Development

CURRENT BOARD POSITIONS

Easter Seals Crossroads of Indianapolis - Treasurer of the Board of Directors

Indiana Institute for Global Health - Board Member and Financial Consultant
Partnership between Indiana University and Moi University Kenya providing medical research, training and clinical health services in western Kenya

Building Tomorrow - Board Member
Finances and builds primary schools in Uganda

School for Hope, Inc. - Board Member
Supports St Aloysius Gonzaga Secondary School, serving Nairobi's Kibera slum

PREVIOUS BOARD POSITIONS

Noble of Indiana, Inc., Past Chairperson

Indiana Local Government Tax Control Board

Tax & Fiscal Policy Committee, Indiana Manufacturers Association

Indianapolis License Control Board

Marion County Public Defender Board

PREVIOUS GOVERNMENTAL APPOINTMENTS

State Budget Committee

State Office Building Commission, Secretary and Chairman of Finance Committee

Indiana Transportation Finance Authority, Chairman of Finance Committee

Intelenet Commission

Human Services Coordinating Board

Data Processing Oversight Commission

Indiana Economic Development Council

National Association of State Budget Officers

Poor Relief Management Committee, Chairman

Commission on Interstate Cooperation

Michelle Carnahan Bio

Michelle L. Carnahan serves as vice president of strategy for Lilly Diabetes as well as global alliance leader for the Boerhinger Ingelheim/Lilly alliance.

She is responsible for the mid- and long-term business unit strategy for diabetes and integration across all functions in Lilly Diabetes. As global alliance leader, she is accountable for the strategy, operations and P&L of the Alliance with its 3 product families and the multiple brand formulations that will ultimately become a part of the Alliance.

Prior to her current position, Michelle was vice president for the Lilly USA musculoskeletal (MSK) business unit. In that role, she was responsible for the P&L as well as the overall marketing and sales strategy for Lilly USA's MSK franchise. Under her leadership and with her focus on delivering exceptional customer experience, the business unit regained Forteo sales growth after a period of decline post brand launch. And, Cymbalta significantly exceeded performance and growth expectations in the chronic musculoskeletal pain space.

Michelle earned her bachelor's degree in economics from DePauw University. She joined Lilly in 1992 as a sales representative. During her career, she has served in multiple marketing leadership roles for several of Lilly's brands. She's also held numerous cross-functional roles including national sales director, senior director of human resources for Lilly USA, global Six Sigma demand realization leader, and executive director for global marketing and sales.

Michelle has been a member of several executive teams including the Lilly Global Pharmaceuticals Sales and Marketing leadership team and the Lilly USA, LLC Board of Directors. She is currently a member of the Lilly Diabetes senior leadership team.

Michelle is married to Dr. James Ruiz. They have one son, Michael. She has a passion for early childhood education and has served as a member of the Advisory Council for St. Mary's Child Center, a leader in providing a full-range of services for children in need.

BOSE publicaffairs group

Maria M. Quintana

Email: mquintana@bosepublicaffairs.com

Phone: 317-684-5415

Fax: 317-223-0415

Profile

Maria M. Quintana is a senior policy advisor with Bose Public Affairs Group. Quintana has extensive commercial and public finance experience with more than 35 years at JPMorgan Chase. She helps advise and connect state and local government, corporations, universities, health care and non-profit institutions that seek capital strategies for growth. Quintana also serves as an executive branch lobbyist at the federal, state and local levels.

Quintana retired as the executive vice president and managing director for JPMorgan Chase in April 2015 after a career that began in 1979. She advised on many of the State of Indiana's most significant financial transactions throughout her career at JPMorgan Chase.

Education

Quintana earned her bachelor's degree from Indiana University Kelley School of Business and holds an MBA from Indiana Wesleyan University.

Honors / Awards

Quintana has been recognized on several occasions for both her professional and community service. In 2015, Quintana received one of the State of Indiana's highest honors, the Sagamore of the Wabash, presented by Governor Mike Pence. Also in 2015, she was a Girls Inc., Touchstone Honoree. In 2014, she received the NFL's Hispanic Heritage Leadership Award. Quintana was an inductee into the Indianapolis Public Schools Alumni Hall of Fame in 2012 and received the Lis Dailey Award by United Way of Central Indiana for outstanding board service. She was recognized in 2011 with the Center for Leadership Development Minority Business & Professional Achievers Award for Achievement in Financial Services. The Indianapolis Business Journal recognized her as one of Indianapolis' "Women of Influence" in 2010.

Appointments / Memberships

Active in the community, Quintana dedicates her time to advising and assisting numerous organizations. She currently serves as an advisory member of the Local Initiatives Support Corporation and co-chair of Great Places 2020. In addition, she is co-chair of the Indiana University Corporate Diversity Advisory Council, a board member of the Jefferson Awards, and member of the marketing committee for Christel House International.

Her previous community activities include Commissioner for Thriving Cities Thriving State, the Indiana Latino Institute, the United Way of Central Indiana, the Women's Fund of Central Indiana, the Children's Museum of Indianapolis, Independent Colleges of Indiana, the Indianapolis Marion County Building Authority, the Wishard Memorial Foundation, John Boner Community Center, Indiana CPA Society, Community Centers of Indianapolis, Habitat for Humanity, and the Directors Circle for St. Elizabeth Coleman.

Ms. Kristin Hines
Charter Schools Director
Office of Education Innovation
Office of the Mayor of Indianapolis

August 31, 2015

Re: Purdue Polytechnic Indianapolis High School

My career has provided me with a wide variety of experiences which I will employ to ensure the success of Purdue Polytechnic Indianapolis High School. I am a member of the Executive Committee of EmployIndy, and serves on a variety of other boards and commissions in the Indianapolis community. As the Chair of the Indiana Charter School Board, and former Chief Operating Officer of the Indiana Department of Education, I am keenly aware of the challenges and struggles that public schools, particularly, charter schools face and am knowledgeable of the best practices in helping start up charter schools achieve success.

I am eager to lend my skills to Purdue Polytechnic Indianapolis High School as well as employing my professional and community network to assist the school in its development and sustainability efforts.

I have not engaged in any business relationship with a company or employee that will provide direct or indirect financial or other benefits to me or my family members.

Maureen Weber

Maureen Weber

Assurances Form

As the authorized representative of the applicant, I hereby certify that the information submitted in this application for a charter **Purdue Polytechnic Indianapolis High School** to be located in **Indianapolis, Indiana** (location to be determined) is true to the best of my knowledge and belief; and further I understand that, if awarded a charter, the school:

1. Will submit attendance records, student performance data, financial information, any information necessary to comply with state and federal government requirements, and any other information specified in the charter to the Mayor's Office. IC 20-20-8-3 and relevant sections of IC 20-24

2. Will participate in the Indiana State Teachers' Retirement Fund in accordance with IC 21-6.1 and the Public Employees Retirement Fund in accordance with IC 5-10.3. IC 20-5.5-6-7, and/or another comparable and appropriate pension or retirement fund approved by the Mayor's Office.

3. Will at all times maintain all necessary and appropriate insurance coverage.

4. Will adhere to all provisions of federal law relating to students with disabilities, including the IDEA, section 504 of the Rehabilitation Act of 1974, and Title II of the Americans with Disabilities Act of 1990, that are applicable to it.

5. Will be non-religious in its programs, admissions policies, governance, employment practices and all other operations, and its curriculum will be completely secular.

6. Will adhere to all provisions of federal law relating to students who are limited English proficient (LEP), including Title VI of the Civil Rights Act of 1964 and the Equal Educational Opportunities Act of 1974, that are applicable to it.

7. Will follow any and all other federal, state, and local laws and regulations that pertain to the applicant or the operation of the charter school including Indiana Charter Schools Law as described in all relevant sections of IC 20-24

8. Will ensure that a student's records, and, if applicable, a student's individualized education program as defined at 20 U.S.C. 1401(14) of the *Individuals with Disabilities Education Act*, will follow the student, in accordance with applicable federal and state law.

9. Will understand that the Office of Education Innovation (OEI) may revoke the charter if OEI deems that the recipient is not fulfilling the academic, fiscal, and/or governance responsibilities outlined in the charter.

Authorized Representative's Signature

6/31/15

Date

OEI