

COLLEGE-ENTRANCE PREPARATION (Col-Ent Prep)

0532

College-Entrance Preparation utilizes individual student score reports from the PSAT and/or the PLAN to prepare students for the SAT, ACT, the Accuplacer and Compass assessments. Based on these score reports, students will receive targeted instruction to strengthen their foundations in critical reading, writing, mathematics, and science (all sections of college admission and placement exams). As appropriate, the course will also encompass test taking strategies to prepare students for success on a high-stakes assessment. Teachers are encouraged to use a curriculum with longitudinal, successful results. Course may also include college selection and application units, to best prepare students for overall college-readiness.

Being “college ready” means being prepared for any postsecondary education or training experience, including study at two- and four-year institutions leading to a postsecondary credential (i.e., a certificate, license, Associate’s or Bachelor’s degree). Being ready for college means that a high school graduate has the English and mathematics knowledge and skills necessary to qualify for and succeed in entry-level, credit-bearing college courses without the need for remedial coursework.

- * Recommended Grade Level: semester 1 – grade 11; semester 2 – grade 10
- * Recommended Prerequisite: Algebra II (or concurrent enrollment in Algebra II)
- * Credits: a 1 semester course; 1 credit
- * Counts as an Elective credit for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

CONTENT STANDARDS:

Standard 1: Students know how to plan for success through an understanding of the format, content, expectations and grading of the SAT and ACT as well as how to register for and receive and report scores as part of the college-entrance process.

- CEP 1.1: Know the number of questions per test(s) section in order to develop personal time-frame to spend on test questions.
- CEP 1.2: Understand the minimum and maximum number of points to be earned per section on the test(s). Students understand how each test is scored and award of points per test including rubric practices on the essay sections.
- CEP 1.3: Register for tests electronically and understand the process for receiving scores from the testing organization as well as how to release score reports to selected colleges/universities. Students understand when to take each assessment and the value of re-testing when appropriate.
- CEP 1.4: Review various test taking strategies for each assessment. Some strategies may include: answer the easy questions first; make educated guesses; skip questions that you really can’t answer; limit your time on any one question; and keep track of time. Other strategies may be found through the College Board and ACT for specific content.

Standard 2: Students understand how to analyze and solve problems which require conceptual understanding, procedural fluency, and application of mathematical tools and reasoning in preparation for the Math portion of the SAT and ACT.

- CEP 2.1: Number and operations – Understand types of numbers (integers, fractions, decimals), their properties and the correct order of operations. Students perform computations correctly. (CB)

- CEP 2.2: Algebra and functions – Solve problems using algebraic expressions and symbols to represent relationships, patterns and functions of different types including basic operations using whole numbers, decimals, fractions, and integers; place value; square roots and approximations; the concept of exponents; scientific notation; factors; ratio, proportion, and percent; linear equations in one variable; absolute value and ordering numbers by value; elementary counting techniques and simple probability;. understanding and solving quadratic equations and inequalities (including the use of the quadratic formula), rational and radical expressions, absolute value equations and inequalities, sequences and patterns, systems of equations, functions, modeling, matrices, roots of polynomials, and complex numbers. (CB, ACT, CCSS)
- CEP 2.3: Geometry and measurement – Solve problems based on understanding the properties of shapes and the spatial relationships between angles and lines. Students understand graphing and the relations between equations and graphs, including points, lines, polynomials, circles, and other curves; graphing inequalities; slope; parallel and perpendicular lines; distance; midpoints; and conics; properties and relations of plane figures, including angles and relations among perpendicular and parallel lines; properties of circles, triangles, rectangles, parallelograms, and trapezoids; transformations; the concept of proof and proof techniques; volume; and applications of geometry to three dimensions. (CB, ACT, CCSS)
- CEP 2.4: Data, statistics and probability – Analyze and collect data, apply statistical methods, make inferences and determine the likelihood that certain events will occur and understand simple descriptive statistics. (CB, ACT)
- CEP 2.5: Representation – Use and translate among representations including verbal, numerical, symbolic and graphical to communicate mathematical ideas and solve problems. (CB)
- CEP 2.6: Reasoning – Develop and use mathematical arguments and proofs to explore the truth of conjectures and justify conclusions. (CB)
- CEP 2.7: Connections – Connect ideas from different areas of mathematics to state or solve abstract or applied problems. (CB)
- CEP 2.8: Communication – Express mathematical ideas precisely and communicate them coherently and clearly in the language and notation of mathematics. (CB)
- CEP 2.9: Trigonometry – Understand trigonometric relations in right triangles; values and properties of trigonometric functions; graphing trigonometric functions; modeling using trigonometric functions; use of trigonometric identities; and solving trigonometric equations. (CB, ACT, CCSS)

Standard 3: Students read literary and informational text critically using skills to make meaning of words and analyze text using author’s craft and structure, reasoning and inferencing, organization, and literary elements in preparation for the Critical Reading section of the SAT and ACT.

- CEP 3.1: Determining the meaning of words – Use vocabulary skills, context, roots, prefixes and suffixes to determine the meaning of words. Students demonstrate an understanding of word relationships and nuances in word meanings, acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate

independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression. (CB, CCSS)

- CEP 3.2: Author's craft and structure – Understand how the author uses tone, style, organization and literary devices such as metaphors and symbolism. Students interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone. Students analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole. Students assess how point of view or purpose shapes the content and style of a text. (CB, CCSS)
- CEP 3.3: Reasoning and inference – Determine the implied meaning of a reading passage and draw informed conclusions. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. Students analyze how and why individuals, events, and ideas develop and interact over the course of a text. Students delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. (CB, CCSS)
- CEP 3.4: Organization and ideas – Understand the organization of a reading passage and identify the main and supporting ideas. (CB)
- CEP 3.5: Understanding literary elements – Determine meaning using literary elements such as plot, setting, dialogue and characterization. (CB)

Standard 4: Students develop essays using valid reasoning and sufficient evidence; communicating clearly and accurately through effective organization and analysis; and applying correct grammar, conventions, and word choice in preparation for the Writing section of the SAT and ACT:

- CEP 4.1: Manage word choice and grammatical relationships between words – use grammatical structures correctly, including subjects and verbs, nouns and pronouns, and the correct verb tense. (CB, ACT, CCSS)
- CEP 4.2: Select precise and appropriate words and images, maintain the level of style and tone in an essay, manage sentence elements for rhetorical effectiveness, and avoid ambiguous pronoun references, wordiness, and redundancy. (ACT, CB)
- CEP 4.3: Manage grammatical structures used to modify or compare – apply correct use of adjectives or adverbs, comparative structures, and phrases used to modify or compare. (CB, ACT, CCSS)
- CEP 4.4: Understand how to well-develop a given topic by choosing expressions appropriate to an essay's audience and purpose; judging the effect of adding, revising, or deleting supporting material; and judging the relevance of statements in context. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. (ACT, CCSS, CB)
- CEP 4.5: Manage phrases and clauses in a sentence – use parallel structure, connectives and relative clauses properly in a sentence. Students must demonstrate understanding of

relationships between and among clauses, placement of modifiers, and shifts in construction. (CB, ACT)

- CEP 4.6: Recognize correctly formed sentences – recognize and apply correct sentence structure. (CB, ACT, CCSS)
- CEP 4.7: Manage order and relationships of sentences and paragraphs – understand how to order the elements of a sentence or paragraph to improve clarity, meaning and the progression of ideas and apply this understanding in writing. (CB)

Standard 5: Students understand how to represent and interpret data; how to interpret experimental results; and analyze alternative viewpoints or hypotheses based on differing premises or incomplete data in preparation for the Science section of the ACT.

- CEP 5.1: Data Representation: Read graphs, interpret of scatter plots, and interpret information presented in tables, diagrams, and figures. (ACT)
- CEP 5.2: Research Summaries: Understand design of experiments and the interpretation of experimental results. (ACT)
- CEP 5.3 Conflicting Viewpoints: Understand, analyze and compare alternative viewpoints or hypotheses based on differing premises or on incomplete data, are inconsistent with one another. (ACT)

Standard 6: Students explore, analyze, and make informed decisions regarding college selection based on test competency and other variables.

- CEP 6.1: Use test scores as one variable to identify appropriate fit in college selection.
- CEP 6.2 Identify other variables in the college “fit” to include, but not limited to, academic preparation, financial aid, scholarships, tuition, career choice, location, size, student-faculty ratio, student activities, etc.
- CEP 6.3 Understand how each assessment is used by colleges and universities, and the role each assessment plays in admission and financial aid rewards.