

College Preparatory Curriculum Common Definition

College Preparatory Subject Areas

The following are brief descriptions of the recommended areas of college preparatory course work as endorsed by the Council of Admission Officers of the state-assisted universities in Ohio.

College Preparatory English

English course work should allow the student to develop a basic command of language, sentence, paragraph, and essay skills through reading and writing.

Any writing experience should allow for logical development and organization and should be recursive in nature. Practice should be stressed to achieve competency. Key writing characteristics should be covered, including language and diction, grammar and mechanics, sentence structure, paragraph structure and writing organization.

Course work should provide students with substantial opportunity to develop strong communication skills in expository writing using Edited American English.

The development of reading skills is also important. Analysis of literature might encompass thesis recognition, use of paraphrasing, analyzing and evaluating ideas, and relating personal viewpoints through discussion. Any study of literature would probably also involve the analysis of character, plot, image, symbolism, theme, point of view and structure.

In addition, students should study significant works of American and world literature, become proficient readers, and learn basic library research processes and strategies.

College Preparatory Mathematics

The minimum core of mathematics, required for general admission by state-assisted institutions of higher education in Ohio and endorsed by the Ohio Section of the Mathematics Association of America, essentially consists of three units, based upon (a) the traditional sequence of Algebra I, Geometry and Algebra II, or (b) an alternative curriculum for college-intending students as recommended by the National Council of Teachers of Mathematics (NCTM) in its Curriculum and Evaluation Standards and interpreted by the Ohio Department of Education in its Model Competency-Based Mathematics Program.

Any combination of three units that develop the same concepts, skills and understandings found in the traditional sequence or the alternative curricula would be fully acceptable. However, college-preparatory mathematics courses in "experimental," "integrated," "technical," or "unified" curricula are not always recognized by admissions counselors. Therefore, high schools must be willing to certify that such courses include the necessary concepts, skills and understandings among their educational goals. It is the responsibility of the principal and/or guidance counselors of each high school

to confer with their mathematics faculty and confirm which three-course mathematics sequences meet the above criteria. Alternative sequences that constitute a minimum core of college preparatory mathematics should be indicated on a student's transcript.

All college-intending students, regardless of their perceived interests or prospective majors, should experience mathematics in their senior year so that they may be ready for the competitive challenges that lie ahead. A fourth unit of college-preparatory mathematics is recommended.

Each institution of higher education will determine appropriate procedures whereby students admitted without the minimum core of mathematics described above can remove their deficiencies. These procedures will be described in the undergraduate bulletins of the respective institutions.

Algebra I: Basic topics including linear equations and systems of equations, integer exponents, polynomial products, factoring, together with the analysis and solution of word problems.

Geometry: Basic properties of geometric figures in two and three dimensions, applications of geometric formulas, right triangle, trigonometry, basic postulates of Euclidean geometry, and construction of proofs of geometric theorems. Experience in visualizing and drawing in two and three dimensions is important.

Algebra II: Extensions of Algebra I including quadratic equations (and the method of completing the square), complex numbers, polynomials, rational expressions, graphs of functions, fractional exponents, radicals, linear and quadratic inequalities, absolute value inequalities, arithmetic and geometric sequences, the binomial theorem, together with the analysis and solution of word problems.

Fourth-Year Recommendations:

Some high schools also are able to offer a course in probability and statistics, or in computer programming, or in precalculus or calculus. These courses are valuable college preparatory courses for students who can take them in addition to the courses described above.

College Preparatory Science

Science course work should stress an inquiry method of learning that will allow the student to synthesize scientific ideas through problem-solving. Utilization of facts is most important. Courses should strive for an analytical approach that is objective and logical.

Course content should cover identifying and defining scientific problems, suggesting hypotheses, interpreting data, doing quantitative and symbolic reasoning, making comparisons, distinguishing facts from hypotheses and opinions, and applying scientific principles and laws. Significant student laboratory experiences should be part of each course to reinforce concepts. Such exploratory and investigative activities should employ observation, measurement, quantification and estimation skills.

Finally, it is essential that course work allow the student to become familiar with scientific vocabulary through the reading of magazines and books in the field and through the writing of reports.

College Preparatory Social Studies

Social Studies course work should enable students to develop an idea of how their cultural heritage evolved. It should provide a knowledge of how they can participate in our democratic process and how our democratic institutions interact with our free enterprise system.

Such course work should facilitate the development of problem-solving learning skills, objective analysis, historical research and writing, inquiry techniques, discussion skills, tolerance of conflicting viewpoints, notetaking and essay composition. In addition, courses should also provide in-depth study, incorporate significant library usage and emphasize extensive report writing.

Foreign Language

Foreign language course work should focus on listening, speaking, reading and writing skills. A fundamental grounding in grammar and syntax is desired. Conversational experience with a firm understanding of such discourse is important. In addition, students should be able to express their thoughts in written form in the chosen foreign language.

The Arts

Appropriate fine arts experiences for high school students preparing for college should include essential content in the following:

- creating or performing works of art,
- understanding the history of the arts and/or
- responding to the aesthetic features of works of art.

All of the Ohio state-assisted institutions with an arts requirement will accept the following courses:

- Visual arts, including drawing and painting, printmaking, sculpture and other three-dimensional media, photography, cinema.
- Music, including vocal, instrumental, theory, composition.
- Theatre and drama, including performance, production.
- Multidisciplinary arts, including courses with two or more arts areas, aesthetic education, humanities, arts appreciation.