Minimum Core Curriculum of High School Courses Recommended for Preparation for Higher Education

In 1989, the Arkansas Higher Education Coordinating Board adopted the Minimum Core of High School Courses Recommended for Higher Education as mandated by A.C.A. § 6-61-217. The Board has since revised the list of high school courses, as allowed by A.C.A. § 6-61-217.

The intent of this agenda item is to align the minimum core of high school courses recommended for preparation for college with current college mathematics pathways. Changes in both higher education and high school mathematics course options merit this revision.

In 2015, the Arkansas Math Pathways Task Force was created with membership comprising representatives of the mathematics departments from every public two-year and four-year higher education institution in the state. The Task Force's goal was to increase student success in higher education and establish multiple mathematics pathways for students by defining default mathematics courses aligned to programs of study. As provided by A.C.A. § 6-61-218, the Department of Higher Education then convened an ACTS Mathematics Review Committee to comprehensively consider the issues of alignment and applicability in the State regarding Mathematics Pathways and appropriate competencies for degree programs. In 2018, following extensive review and faculty debate, the Department of Higher Education endorsed the Committee's recommendations to establish a Quantitative Literacy/Mathematical Reasoning (ACTS Course Math 1113) pathway for non-STEM degree programs alongside the College Algebra (ACTS Course Math 1103) pathway for STEM-related degree programs. Additionally, the Arkansas State Board of Education approved a high school Quantitative Literacy course in 2017 (renamed Quantitative Reasoning for the 2023-2024 school year).

The current minimum core curriculum of high school courses recommended for preparation for higher education was established when College Algebra was the default general education mathematics requirement for all majors, including those considered non-STEM. The high school Algebra II course was a logical requirement to prepare students for College Algebra. Given that non-STEM majors now have the option of the Quantitative Literacy/Mathematical Reasoning course to meet the general education mathematics requirement rather than College Algebra, the preparatory high school course options must reflect this alternate pathway.

To better align high school coursework with students' postsecondary pursuits, the Arkansas Department of Education Division of Higher Education along with the Division of Elementary and Secondary Education recommend the following revision to the mathematics requirements of the minimum core curriculum of high school courses recommended for preparation for higher education:

Four units

- Algebra I
- Geometry
- Algebra II or Quantitative Reasoning
- An advanced math course or equivalent (may include Algebra II or Quantitative Reasoning)

It is strongly recommended that students take a math course during their senior vear.

Moreover, the revised minimum core curriculum of high school courses recommended for preparation for higher education shall apply to the career pathway to a diploma as outlined in A.C.A. 6-61-217.

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MINIMUM CORE CURRICULUM OF HIGH SCHOOL COURSES RECOMMENDED FOR PREPARATION FOR HIGHER EDUCATION

The recommended core of courses is designed to be a standards-based set of rigorous courses for students preparing themselves for success in college. The core curriculum designates the core courses designed for unconditional admission to any public two-year or four-year institution of higher education in Arkansas.

Core Curriculum for Unconditional Admission

English Four units with emphasis on writing skills, not to include courses in

oral communications, journalism, drama or debate.

Natural Science Three units, with laboratories

- Biology
- A physical science (chosen from Physical Science, Chemistry, or Physics)
- Additional life or physical science course or equivalent (may include Physical Science, Chemistry, or Physics)

Mathematics Four units

- Algebra I
- Geometry
- Algebra II or Quantitative Reasoning
- An advanced math course or equivalent (may include Algebra II or Quantitative Reasoning)

It is strongly recommended that students take a math course during their senior year.

Social Studies Three units, ir

Three units, including one of American History (does not include Contemporary American History), one of World History (not to include World Cultures, World Geography, or Global Studies), and at least one-half unit of Civics or American Government (not to include courses in practical arts).