



## Advanced Placement (AP) and CTE Course Sequence Exemplar

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The Office of Career and Technical Education and Student Transition, working with the College Board, has developed example course sequences that incorporate both Career and Technical Education (CTE) courses and Advanced Placement (AP) courses. In planning secondary to postsecondary programs of study, local school districts, College Board and partnering postsecondary institutions shall work together to ensure programs of study are aligned and implemented to meet the specialized needs of business and industry and meet the goals of the student's individual learning plan.

Special Note:

\***AP courses may not be aligned to Kentucky Academic Standards (KAS).** AP, International Baccalaureate (IB) and Cambridge International (CAI) courses are considered college level courses that exceed the minimum KAS and therefore are not aligned.

\*In order for a district to determine if an AP course can be substituted for a high school graduation requirement, identified by [704 KAR 3:305](#), a local board of education can examine the possibility of substituting an integrated, applied, interdisciplinary, occupational, technical, or higher level course for a required course if the alternative course provides rigorous content and addresses the same applicable components of [703 KAR 4:060](#).

\*The following course sequences were built based on a seven-period day.

\*The Kentucky Department of Education is covering the cost of AP exams for disadvantaged students who qualify for free/reduced lunch for the 2019-2020 school year.

\*The Computer Science/Information Technology (CS/IT) Academy at the Kentucky Department of Education is covering the cost of AP Computer Science Principles and AP Computer Science A exams.

\* Students who entered high school in or after the 2019-2020 school year are required to meet these minimum high school graduation requirements. In addition, students will be required to pass a 100 question civics exam, receive instruction in financial literacy (2020-2021) and demonstrate competency in essential skills and technology.

**Pathway: Accounting (Business and Marketing Education)**

Grade	Academic Core	Career & Technical Education
9	<ul style="list-style-type: none"> <li>○ Honors English I (1)</li> <li>○ Honors Algebra 1(1)</li> <li>○ Biology with Lab (1)</li> <li>○ Geography (1)</li> <li>○ Health (.5)</li> <li>○ Physical Education (.5)</li> <li>○ Introduction to Theatre (1)</li> </ul>	Business and Marketing Essentials (1)
10	<ul style="list-style-type: none"> <li>○ Honors English II (1)</li> <li>○ Honors Geometry (1)</li> <li>○ Chemistry with Lab (1)</li> <li>○ World History (1)</li> <li>○ World Language (1)</li> <li>○ <b>AP Computer Science Principles (1)</b></li> </ul>	Financial Management (1) <p style="text-align: center;"><b>or</b></p> Accounting and Finance Foundations (1)
11	<ul style="list-style-type: none"> <li>● <b>AP Language and Composition (1)</b></li> <li>● Personal Finance (Math Credit; must include <i>KAS for Mathematics- 1</i>)</li> <li>● Principles of Technology with Earth/Space Science (must include <i>KAS for Science</i>) (1)</li> <li>● Business Economics (must include <i>KAS for Social Studies- 1</i>)</li> <li>● World Language (1)</li> <li>● <b>AP Macroeconomics (1)</b></li> </ul>	Financial Management (1) <p style="text-align: center;"><b>or</b></p> Accounting and Finance Foundations (1)
12	<ul style="list-style-type: none"> <li>○ <b>AP Literature and Composition (1)</b></li> <li>○ <b>AP Statistics (1)</b></li> <li>○ <b>AP World Languages and Cultures (1)</b></li> <li>○ <b>AP Capstone (1)</b></li> <li>○ <b>AP Microeconomics (1)</b></li> </ul>	Business Education Internship <p style="text-align: center;"><b>or</b></p> Business Education Co-op

**Pathway: Flight and Aeronautics**

Grade	Academic Core	Career & Technical Education
8	Algebra 1 (1)	
9	<ul style="list-style-type: none"> <li>○ English 1 (1)</li> <li>○ Adv. Geometry (1)</li> <li>○ AP Physics with Lab (1)</li> <li>○ Civics (1)</li> <li>○ Health (.5)</li> <li>○ Physical Education (.5)</li> <li>○ Visual Arts- Introduction to Creative Media Arts (must contain <i>KAS for Visual and Performing Arts</i>) (1)</li> </ul>	Intro to Aerospace (1)
10	<ul style="list-style-type: none"> <li>○ English II (1)</li> <li>○ Adv. Alg. 2 (1)</li> <li>○ <b>AP Chemistry with Lab (1)</b></li> <li>○ World History (1)</li> <li>○ World Language (1)</li> <li>○ Visual Arts- Creative Game Design (must contain <i>KAS for Visual and Performing Arts</i>) (1)</li> </ul>	Fundamentals of Aviation Science (1)
11	<ul style="list-style-type: none"> <li>○ English III (1)</li> <li>○ <b>AP Calculus AB (1)</b></li> <li>○ <b>AP Physics 1 (1)</b></li> <li>○ US History (1)</li> <li>○ World Language (1)</li> <li>○ AP Studio Art: 2-D Design (1) (must contain <i>KAS for Visual and Performing Arts</i>) (1)</li> </ul>	EKU AVN 150 (1)
12	<ul style="list-style-type: none"> <li>● English IV (1)</li> <li>● <b>AP Calculus BC (1)</b></li> <li>● <b>AP Physics 2 (1)</b></li> <li>● Peer Tutoring (1)</li> <li>● AP Studio Art: 3-D Design (must contain <i>KAS for Visual and Performing Arts</i>) (1)</li> </ul>	<ul style="list-style-type: none"> <li>● Aviation Capstone (not required for pathway) (1)</li> </ul> EKU AVN 170 (1)  <p style="text-align: center;"><b>and/or</b></p> Engineering Co-op or Engineering Internship (1)

**Pathway: Early Childhood Education (Family & Consumer Science)**

Grade	Academic Core	Career & Technical Education
9	<ul style="list-style-type: none"> <li>○ English I (1)</li> <li>○ Algebra 1 (1)</li> <li>○ Conceptual Science I with Lab (1)</li> <li>○ Global Issues (1)</li> <li>○ Physical Education (.5)</li> <li>○ Health (.5)</li> <li>○ Visual Art- Multimedia (1)</li> </ul>	Early Lifespan Development (1) <p style="text-align: center;"><b>or</b></p> IEC 130 Early Childhood Development (Dual Credit with KCTCS- 1)
10	<ul style="list-style-type: none"> <li>○ English 2 (1)</li> <li>○ Geometry (1)</li> <li>○ Conceptual Science II with Lab (1)</li> <li>○ World History (1)</li> <li>○ World Language (1)</li> <li>○ Creative Writing (1)</li> </ul>	FACS Essentials (1) <p style="text-align: center;"><b>or</b></p> Parenting (1) <p style="text-align: center;"><b>or</b></p> Principles of Teaching (1)
11	<ul style="list-style-type: none"> <li>○ AP Language and Composition (1)</li> <li>○ Algebra 2 (1)</li> <li>○ Conceptual Science III (1)</li> <li>○ <b>AP Psychology (1)</b></li> <li>○ World Language (1)</li> <li>○ Global Issues (must include <i>KAS for Social Studies- 1</i>)</li> </ul>	Child Development Services I (1)
12	<ul style="list-style-type: none"> <li>○ Public Speaking (must include <i>KAS for Reading and Writing- 1</i>)</li> <li>○ <b>AP Capstone (1)</b></li> <li>○ <b>AP Statistics (1)</b></li> <li>○ <b>AP World Languages and Culture (1)</b></li> <li>○ <b>AP Computer Science Principles (1)</b></li> </ul>	Child Development Services II (2)

**Pathway: Horticulture and Plant Science Systems (Agricultural Education)**

Grade	Academic Core	Career & Technical Education
9	<ul style="list-style-type: none"> <li>○ English I (1)</li> <li>○ Algebra 1 (1)</li> <li>○ Ecology (must include <i>KAS for Science-1</i>)</li> <li>○ <b>AP Human Geography (1)</b></li> <li>○ Physical Education (.5)</li> <li>○ Health (.5)</li> <li>○ World Language (1)</li> </ul>	Principles of Agricultural Science and Technology (1)
10	<ul style="list-style-type: none"> <li>○ English II (1)</li> <li>○ Geometry (1)</li> <li>○ AP Biology with Lab (1)</li> <li>○ <b>AP World History (1)</b></li> <li>○ World Language (1)</li> <li>○ Digital Literacy (1)</li> </ul>	Greenhouse Technology (1)
11	<ul style="list-style-type: none"> <li>○ <b>AP English Language (1)</b></li> <li>○ <b>AP Statistics (1)</b></li> <li>○ AP U.S. Gov. &amp; Politics (1)</li> <li>○ <b>AP Environmental Science</b></li> <li>○ <b>World Language (1)</b></li> </ul>	Landscape and Turf Management (1) and Floriculture and Floral Design (count as VPA credit as long as all <i>Kentucky Academic Standards for Visual and Performing Arts</i> are embedded-1)
12	<ul style="list-style-type: none"> <li>○ <b>AP English Literature (1)</b></li> <li>○ Agricultural Math for Math Credit (1)</li> <li>○ <b>AP Capstone (1)</b></li> <li>○ AP US History (1)</li> <li>○ Public Speaking (1)</li> </ul>	Agriculture Education Co-op or Agricultural Education Internship

**Pathway: Pre-Nursing (Health Sciences)**

Grade	Academic Core	Career & Technical Education
9	<ul style="list-style-type: none"> <li>○ Honors English I (1)</li> <li>○ Honors Algebra 1(1)</li> <li>○ Biology with Lab (1)</li> <li>○ Physical Geography (1)</li> <li>○ Health (.5)</li> <li>○ Physical Education (.5)</li> <li>○ Visual Art (1)</li> </ul>	Principals of Health Science (1)
10	<ul style="list-style-type: none"> <li>○ Honors English II (1)</li> <li>○ Honors Geometry (1)</li> <li>○ <b>AP Chemistry with Lab (1)</b></li> <li>○ Government and Civics (1)</li> <li>○ World Language (1)</li> <li>○ Anatomy (1)</li> </ul>	Emergency Procedures (.5) <b>and</b> Medical Terminology (.5)
11	<ul style="list-style-type: none"> <li>● English 3 (1)</li> <li>● Medical Science (must contain <i>KAS for Science</i>) (1)</li> <li>● <b>AP Statistics</b></li> <li>● <b>AP Psychology (1)</b></li> <li>● World Language (1)</li> <li>● Human Physiology (1)</li> </ul>	Medicaid Nurse Aid (1)
12	<ul style="list-style-type: none"> <li>○ Technical English (1)</li> <li>○ Technical Mathematics (1)</li> <li>○ <b>AP Biology (1)</b></li> <li>○ African American Studies (1)</li> <li>○ <b>AP World Languages and Cultures (1)</b></li> <li>○ <b>AP Capstone (1)</b></li> </ul>	Nursing Co-op <b>or</b> Allied Health Internship