Dear Friend of Liberty:

The most important factor in determining a high school student’s academic success is the support and guidance received from parents. The next most important factor is the strength of the school’s curriculum.

On behalf of our Board of Directors, our school’s faculty, staff, and administration, thank you for your interest in Liberty Common High School’s robust curriculum. We have carefully aligned our course offerings with the school’s college-preparatory undertaking to equip each LCHS graduate with the knowledge, skills, and study habits required for post-secondary success.

Liberty’s sustained track record of extraordinary academic achievement is predicated upon a rich curriculum expertly delivered by truly professional-class instructors. The coursework at LCHS is ambitious. The pacing, exhaustiveness, and precision of Liberty’s curriculum is informed and guided by the exacting specifications of America’s most selective universities. Course content at Liberty also reflects our institutional philosophy toward character education, leadership, informed citizenship, and freedom.

Again, thank you for your interest in the subjects and organizational delivery of the most apposite academic content taught at Liberty Common High School. Should you have any comments or questions about any of the materials described in this Curriculum Guide, please do not hesitate to contact me.

Very truly yours,

Bob Schaffer, Headmaster
Liberty Common School
Academic Philosophy of LCHS (grades 9–12)
Understanding Liberal Education at LCHS

Liberty Common High School is a classical, liberal arts, college-preparatory institution accentuating the humanities and developing unique strength in math, science, and engineering. We believe a high-quality, rigorous education is the “great equalizer” among individuals allowing all students to achieve mature literacy and obtain the ability to thrive in college.

One’s economic and social status, race, physical attributes, and other conditions become less relevant in the pursuit of happiness when armed with superb intellectual aptitude oriented toward true freedom.

The founders and leaders of Liberty Common High School share a genuine concern for the general decline in the quality of American public education and the preparation of American students to live free and compete well in a dynamic economy. Our remedy is Liberty Common High School and the philosophy described herein.

We reject the anti-intellectual traditions that have become so prevalent in American schools and colleges, particularly colleges of education. We find fault with the progressive, romantic theories of education that have come to dominate American education systems.

Instead, we advocate the systemic acquisition of broad knowledge, superior language, and active, engaged minds consistent with the idea of “intellectual capital” described by Core Knowledge Foundation founder E.D. Hirsch, Jr.

Our students are expected to excel in history, literature, English, fine arts, math, science, and engineering. They are expected to be familiar with at least one foreign language and to maintain physical fitness.

Instructional strategies at Liberty Common High School build upon the standards-based instruction delivered through Liberty Common Elementary School, Liberty Common Junior High School, and the Core Knowledge Sequence.

Liberty Common High School believes in placing higher emphasis on academic rigor than what is the norm in mainstream American high schools Minimum requirements for core subjects at LCHS are significantly higher than those of the local Poudre School District (one of the state’s top-performing school districts). Additionally, LCHS requires 20 hours of Foreign Language, where the district has no minimum requirement.

As a classical-liberal academic institution, Liberty Common High School endeavors to cultivate the minds of its scholars in preparation for authentic liberty. While all citizens enjoy unalienable and civil rights, the responsible exercise of all fundamental individual rights is a direct function of a well-prepared mind and internalized virtue.

A high school diploma should warrant the graduate is capable of independent thinking and understanding of what is required to “live the good life”. A graduate must have acquired accurate familiarity with essential concepts rooted in literature and philosophy—joy and despair, happiness and tragedy, dignity and corruption, and other indispensable juxtapositions.

All high school graduates should possess the ability to objectively evaluate the nation’s place in the world through a deep appreciation of history, the intensive study of civilizations including their rising and falling. They should grasp nuances of relevant cultures including their languages, religions, governments, and economies.

Graduates must know well the background of America’s allies and adversaries. A survey-level treatment of economics further promotes a solid understanding of America’s imprint on human civilization and its future.

Liberty Common High School believes all scholars must fully appreciate art, truth, beauty, goodness, and perfection. Robust exposure to these values renders specific genius marking creativity, imagination, inventiveness, and moral seriousness.
Developing practical leadership qualities and supporting skills in students is a proven strategy toward applying comprehensive knowledge in constructive ways. Lessons learned in the classroom should be deployed by students through organization, advocacy, persuasion, implementation of supporting projects, and wholesome community leadership.

A proper liberal education gives honored stature to science. Key scientific contributions and the scientific method should be taught to all students throughout high school. Scholars should be cognizant of significant scientific achievements in biology, chemistry, and physics, especially those that elevate the human condition, promote prosperity, and enhance freedom. Students should also be taught to understand the limits of science.

Liberty Common High School believes all students should be exposed to the fundamentals of engineering. The synthesis of applying scientific and mathematic principles to meritorious social and economic situations draws upon the multiple disciplines taught at Liberty to solve important problems.

Competition and choice in public education result in schooling of a higher quality. Teachers should be treated like real professionals. Parents should play the most influential role in the management and maintenance of the school.

It is the right and responsibility of parents to direct the education and upbringing of their children. Liberty Common High School exists to assist conscientious parents in this fundamental duty. The school exists because of parental leadership and parental oversight of the institution.

A Liberty Common High School graduate is intellectually awake, able to engage in meaningful, mature conversations about any academic and philosophical topic. They are vigilant, active, and brave.

Our goal is to educate for freedom, to achieve excellence in all we do, and to become the best high school in America.

**LCHS Capstones**

Prudence—Predicated upon practical reason, prudence entails discernment of the true good surrounding every situation and the moral means of achieving it.

Temperance—Restraint in passions of ambition and pleasure. Temperance places intellect, balance, and reason above impulsiveness setting limits in order to attain that which is honorable.

Justice—Balance between self-interest and the rights of others. Justice entails a mature appreciation of what is due another whether among equals, superiors, or subordinates.

Fortitude—Includes forbearance, endurance and ability to withstand fear, uncertainty, or intimidation.

Gratitude—An inclination to express thankfulness and gratefulness to others for their gifts and gestures of kindness.

Patriotism—Devotion and dedication to the country—allegiance to the Flag of the United States of America, and to the Republic for which it stands, one nation under God, indivisible, with liberty and justice for all.

With regard to Prudence, Temperance, Justice, and Fortitude, Plato identified these virtues with the classes of the city described in *The Republic*, and with the faculties of man. They are also known as the “cardinal virtues,” indicating “the hinges upon which the door of the moral life swings.”
# Liberty Common High School
## 2019–20 Curriculum Guide

---

### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation Requirements (Class of 2020)</td>
<td>8</td>
</tr>
<tr>
<td>High School Curriculum Progression (Class of 2020)</td>
<td>9</td>
</tr>
<tr>
<td>Graduation Requirements (Class of 2021 and beyond)</td>
<td>10</td>
</tr>
<tr>
<td>High School Curriculum Progression (2021 and beyond)</td>
<td>11</td>
</tr>
<tr>
<td>College Admission Requirements</td>
<td>12</td>
</tr>
<tr>
<td>College and Course Selection Resources</td>
<td>13</td>
</tr>
<tr>
<td>NCAA Eligibility</td>
<td>14</td>
</tr>
<tr>
<td>Advanced Placement</td>
<td>15</td>
</tr>
<tr>
<td>Concurrent Enrollment</td>
<td>16</td>
</tr>
<tr>
<td>Academic Policies</td>
<td>17</td>
</tr>
<tr>
<td>LCHS House System</td>
<td>19</td>
</tr>
<tr>
<td>LCHS Activities</td>
<td>21</td>
</tr>
<tr>
<td><strong>Course Descriptions</strong></td>
<td>23</td>
</tr>
<tr>
<td>English</td>
<td>24</td>
</tr>
<tr>
<td>History</td>
<td>28</td>
</tr>
<tr>
<td>Mathematics</td>
<td>31</td>
</tr>
<tr>
<td>Science</td>
<td>35</td>
</tr>
<tr>
<td>Engineering</td>
<td>39</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>43</td>
</tr>
<tr>
<td>Art</td>
<td>50</td>
</tr>
<tr>
<td>Computer</td>
<td>54</td>
</tr>
<tr>
<td>Music</td>
<td>56</td>
</tr>
<tr>
<td>Physical Education/Health</td>
<td>58</td>
</tr>
<tr>
<td>Miscellaneous Courses</td>
<td>60</td>
</tr>
</tbody>
</table>

---
# Liberty Common High School Graduation Requirements

**Class of 2020***

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>REQUIRED CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td></td>
</tr>
<tr>
<td>Western Literature</td>
<td>10</td>
</tr>
<tr>
<td>British Literature</td>
<td>10</td>
</tr>
<tr>
<td>American Literature</td>
<td>10</td>
</tr>
<tr>
<td>Composition 2</td>
<td>5</td>
</tr>
<tr>
<td>English Elective</td>
<td>10</td>
</tr>
<tr>
<td><strong>History</strong></td>
<td></td>
</tr>
<tr>
<td>Western Civilization</td>
<td>10</td>
</tr>
<tr>
<td>World History</td>
<td>10</td>
</tr>
<tr>
<td>US History</td>
<td>10</td>
</tr>
<tr>
<td>American Government</td>
<td>5</td>
</tr>
<tr>
<td>Economics</td>
<td>10</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td></td>
</tr>
<tr>
<td>Algebra 1 and above</td>
<td>40</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>10</td>
</tr>
<tr>
<td>Chemistry</td>
<td>10</td>
</tr>
<tr>
<td>Physics</td>
<td>10</td>
</tr>
<tr>
<td>Science Elective</td>
<td>10</td>
</tr>
<tr>
<td><strong>Foreign Language</strong></td>
<td>30</td>
</tr>
<tr>
<td>Spanish, French, or Latin</td>
<td>30</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>5</td>
</tr>
<tr>
<td>Introduction to Engineering</td>
<td>5</td>
</tr>
<tr>
<td>Health/PE</td>
<td>5</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>215</td>
</tr>
<tr>
<td>Elective Credit</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>240</td>
</tr>
</tbody>
</table>

**Credit Enrollment Minimums:**
- Freshman= 70 credits
- Sophomore= 70 credits
- Junior= 70 credits**
- Senior= 70 credits**

**must have administrator approval to take fewer than 70 credits**

**Credit Benchmarks:**
- Sophomore= 60 credits
- Junior= 120 credits
- Senior= 180 credits

**Transfer Credit**
All credit earned in grades 9–12 at another institution prior to enrolling in LCHS will be considered as credit that can be put toward the completion of Liberty Common High School graduation requirements. Only courses taken at Liberty Common High School (9–12th grades) will count toward a student’s GPA.

**Valedictorian and Salutatorian**
In order to qualify for Valedictorian or Salutatorian consideration, a student must have completed at least 120 credits at Liberty Common High School.

*Students in the Class of 2020 had the opportunity to opt into the updated graduation requirements (see pages 10–11). Students in the class of 2020 may not change their graduation requirement path once selected.
<table>
<thead>
<tr>
<th>Period</th>
<th>Course Type</th>
<th>High School Credits</th>
<th>7th Grade</th>
<th>8th Grade</th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Math</td>
<td>40</td>
<td>See Flow Chart</td>
<td>See Flow Chart</td>
<td>See Flow Chart (Algebra 1 or higher)</td>
<td>See Flow Chart (Algebra 1 or higher)</td>
<td>See Flow Chart (Algebra 2 or higher)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Science</td>
<td>40</td>
<td>Core Science 7</td>
<td>Core Science 8</td>
<td>Biology</td>
<td>Chemistry or Conceptual Chemistry/Physics (CCP)</td>
<td>Physics or Chemistry</td>
<td>Science Elective or Physics</td>
</tr>
<tr>
<td>3</td>
<td>English</td>
<td>40</td>
<td>Core English 7</td>
<td>Core English 8</td>
<td>Western Literature</td>
<td>British Literature</td>
<td>American Literature</td>
<td>English Elective</td>
</tr>
<tr>
<td>4</td>
<td>History</td>
<td>40</td>
<td>Core History 7</td>
<td>Core History 8</td>
<td>Western Civilization</td>
<td>World History</td>
<td>AP US History or US History</td>
<td>American Government or Personal Finance</td>
</tr>
<tr>
<td>5</td>
<td>Foreign Language</td>
<td>30</td>
<td>Latin 1</td>
<td>Latin 2 Spanish 1 French 1</td>
<td>Latin 3 Spanish 1 or 2 French 1 or 2 Latin 1 Anc. Greek 1</td>
<td>Latin 4 Spanish 2 or 3 French 2 or 3 Latin 2 Anc. Greek 2</td>
<td>Latin 5 or AP Spanish 3 or 4 French 3 or 4</td>
<td>Latin 6 or AP Spanish 4 or AP French 4 or AP</td>
</tr>
<tr>
<td>6</td>
<td>1st Semester</td>
<td>Computer Essentials</td>
<td>Comp 1</td>
<td>Comp 1 Economics</td>
<td>Intro to Engineering</td>
<td>Comp. 2 or AP Lang. &amp; Composition</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td>Core Music 7</td>
<td>Core Music 8/ PE 8</td>
<td>Core Music 8/ PE 8</td>
<td>PE/Health</td>
<td>Elective</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1st Semester</td>
<td>Core Art 7</td>
<td>Core Art 8</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td>2nd Semester</td>
<td>PE 7</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1st Semester</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
</tr>
<tr>
<td>2nd Semester</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Junior High</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Credits</td>
<td>60</td>
<td>55</td>
</tr>
<tr>
<td>Elective Credits</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>
Liberty Common High School Graduation Requirements
Class of 2021 and beyond

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>REQUIRED CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td></td>
</tr>
<tr>
<td>Western Literature</td>
<td>10</td>
</tr>
<tr>
<td>British Literature</td>
<td>10</td>
</tr>
<tr>
<td>American Literature</td>
<td>10</td>
</tr>
<tr>
<td>Composition 2</td>
<td>5</td>
</tr>
<tr>
<td>English Elective</td>
<td>10</td>
</tr>
<tr>
<td><strong>History</strong></td>
<td></td>
</tr>
<tr>
<td>Western Civilization</td>
<td>10</td>
</tr>
<tr>
<td>World History</td>
<td>10</td>
</tr>
<tr>
<td>US History</td>
<td>10</td>
</tr>
<tr>
<td>American Government</td>
<td>5</td>
</tr>
<tr>
<td>Economics</td>
<td>10</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td></td>
</tr>
<tr>
<td>Algebra 1 and above</td>
<td>40</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>10</td>
</tr>
<tr>
<td>Chemistry</td>
<td>10</td>
</tr>
<tr>
<td>Physics</td>
<td>10</td>
</tr>
<tr>
<td>Science Elective</td>
<td>10</td>
</tr>
<tr>
<td><strong>Foreign Language</strong></td>
<td></td>
</tr>
<tr>
<td>Must complete Latin 2* AND Two consecutive courses in same language</td>
<td>20</td>
</tr>
<tr>
<td><strong>Personal Finance</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Introduction to Engineering</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Health/PE</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>215</td>
</tr>
<tr>
<td><strong>Elective Credit</strong></td>
<td>35</td>
</tr>
<tr>
<td><strong>Total Credit</strong></td>
<td>240</td>
</tr>
</tbody>
</table>

Credit Enrollment Minimums:
- Freshman = 70 credits
- Sophomore = 70 credits
- Junior = 70 credits**
- Senior = 70 credits**
**must have administrator approval to take fewer than 70 credits

Credit Benchmarks:
- Sophomore = 60 credits
- Junior = 120 credits
- Senior = 180 credits

Transfer Credit
All credit earned in grades 9–12 at another institution prior to enrolling in LCHS will be considered as credit that can be put toward the completion of Liberty Common High School graduation requirements. Only courses taken at Liberty Common High School (9–12th grades) will count toward a student’s GPA.

Valedictorian and Salutatorian
In order to qualify for Valedictorian or Salutatorian consideration, a student must have completed at least 120 credits at Liberty Common High School.

*Foreign Language
Students who complete Latin 2 in 8th grade will receive Latin 2 high school credit. They will have the option to have the grade recorded on their high school transcript, but the grade will not count toward their high school GPAs. Those students will still need to earn a minimum of 20 foreign language credits in the same language during high school (grades 9–12)
**Liberty Common High School Curriculum Progression**  
*Class of 2021 and beyond*

<table>
<thead>
<tr>
<th>Period</th>
<th>Course Type</th>
<th>High School Credits</th>
<th>7th Grade</th>
<th>8th Grade</th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Math</strong></td>
<td>40</td>
<td>See Flow Chart</td>
<td>See Flow Chart</td>
<td>See Flow Chart (Algebra I or higher)</td>
<td>See Flow Chart (Algebra I or higher)</td>
<td>See Flow Chart (Algebra I or higher)</td>
<td>See Flow Chart (Algebra II or higher)</td>
</tr>
<tr>
<td>2</td>
<td><strong>Science</strong></td>
<td>40</td>
<td>Core Science 7</td>
<td>Core Science 8</td>
<td>Biology</td>
<td>Chemistry or Conceptual Chemistry/Physics (CCP)</td>
<td>Physics or Chemistry</td>
<td>Science Elective or Physics</td>
</tr>
<tr>
<td>3</td>
<td><strong>English</strong></td>
<td>40</td>
<td>Core English 7</td>
<td>Core English 8</td>
<td>Western Literature</td>
<td>British Literature</td>
<td>American Literature</td>
<td>English Elective</td>
</tr>
<tr>
<td>4</td>
<td><strong>History</strong></td>
<td>40</td>
<td>Core History 7</td>
<td>Core History 8</td>
<td>Western Civilization</td>
<td>World History</td>
<td>AP US History or US History</td>
<td>American Government or Personal Finance</td>
</tr>
<tr>
<td>5</td>
<td><strong>Foreign Language</strong></td>
<td>20</td>
<td>Latin 1</td>
<td>Latin 2</td>
<td>Latin 3 Spanish 1 or 2 French 1 or 2 Latin 1 Anc. Greek 1</td>
<td>Latin 4 Spanish 2 or 3 French 3 or 3 Latin 2 Anc. Greek 2</td>
<td>Latin 5 or AP Spanish 3 or 4 French 3 or 4</td>
<td>Latin 6 or AP Spanish 4 or AP French 4 or AP</td>
</tr>
<tr>
<td>6</td>
<td>1st Semester</td>
<td>Computer Essentials</td>
<td>Comp. I Economics</td>
<td>Intro to Engineering</td>
<td>Comp. II or AP Lang. &amp; Composition</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td>Core Music 7</td>
<td>Core Music 8/ PE 8</td>
<td>PE/Health Elective</td>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1st Semester</td>
<td>Core Art 7</td>
<td>Core Art 8</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td>PE 7</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1st Semester</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
</tr>
<tr>
<td>2nd Semester</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td>Elective/SH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Core Credits | 60 | 55 | 55 | 45 |
| Elective Credits | 20 | 25 | 25 | 35 |
College Admission Requirements

Liberty Common High School is a classical, liberal arts, college-preparatory institution accentuating the humanities and developing unique strength in math, science, and engineering. We believe a high-quality, rigorous education is the “great equalizer” among individuals allowing all students to achieve mature literacy and obtain the ability to thrive in college. The Liberty Common High School curriculum helps graduates be competitive in admission to selective colleges.

Students planning to attend a four-year college or university in Colorado will need to complete the following classes in order to fulfill the HEAR (Higher Education Admission Requirements). Colleges and universities may have additional requirements.

- English 4 years
- Mathematics (must include Algebra 1, Geometry, Algebra 2 or equivalents) 4 years
- Natural/Physical Sciences (two units must be lab-based) 3 years
- Social Sciences (at least one unit of U.S. or World History) 3 years
- World/Foreign Language 1 year
- Academic Electives 2 years

Suggested high school courses for admission to selective colleges (U Chicago, Yale, Colorado College, Stanford, Duke, Harvard)

- English 4 years, with AP English Language and/or AP Literature
- Mathematics 4 years, with Calculus in senior year
- Science Minimum 3 years, including biology, chemistry, and physics
- History Minimum 3 years, with at least one AP course
- World/Foreign Language Minimum 3 years of the same language
- AP courses preferred in core classes

NOTE: Admission requirements are unique at each college and university. Students need to become familiar with the admissions requirements for the colleges and universities that interest them by using Naviance, college websites, and/or college viewbooks. College-planning resources are available in the LCHS College Center and on the LCHS College Planning website.
College and Course Selection Resources

It is important to lay out your 4-year course plan in order to prepare for college admission requirements. All colleges have varying minimum admission requirements and may have additional requirements for specific majors.

Below are resources to help identify course and admission requirements for colleges/universities. These search sites will also help you explore colleges.

College Board Big Future [https://bigfuture.collegeboard.org/](https://bigfuture.collegeboard.org/)
College Data [www.collegedata.com](http://www.collegedata.com)
College Scorecard [https://collegescorecard.ed.gov/](https://collegescorecard.ed.gov/)

Family Connection from Naviance is a web-based service designed especially for college-bound students and their parents.

Family Connection is a comprehensive website that parents and students can use in partnership with Liberty Common High School to help make decisions about courses, colleges, and careers. Family Connection allows parents and students to get involved in the planning and advising process. Students can build a resume, complete online surveys, and manage timelines and deadlines for making decisions about colleges and careers. In addition, families can research colleges and careers to get valuable information about the options available to students after high school.

Family Connection allows us to share information with you about upcoming meetings and events, local scholarship opportunities, and other web resources for college and career information. You will be using this program extensively during your career at LCHS, so explore it and see what it has to offer.

High school students will receive their Naviance login information during the fall of their freshman year.

In order to sign on to Family Connection, go to the LCHS Website at [http://www.libertycommon.org/highschool/index.html](http://www.libertycommon.org/highschool/index.html) and click on Naviance. You will be connected to a login page.

Student Login Info
User Name = Web ID number
Password = Web ID password
National Collegiate Athletic Association (NCAA) Eligibility

To be certified by the NCAA Eligibility Center, you must

1. Graduate from high school. You should apply for certification during your junior year in high school if you are sure you wish to participate in intercollegiate athletics as a freshman at a Division I or II institution. The Eligibility Center will issue a preliminary certification report after you have had all required materials submitted (official six-semester transcript, ACT or SAT scores, student release form, and fee.) After you graduate, if your eligibility status is requested by a member institution, the Clearinghouse will review your final transcript and proof-of-graduation to make a final certification decision according to NCAA standards.

2. Earn a grade-point average of at least 2.00 (on a 4.00 scale) in a core curriculum of at least 14–16 academic courses which were successfully completed during grades 9 through 12. Only courses listed as approved on your high school’s “List of NCAA Approved Core Courses” can be used to calculate your NCAA GPA. No special values are allowed for “+” or “−” grades. The chart below indicates the number of years of NCAA core courses that must be completed.

<table>
<thead>
<tr>
<th>Core Units Required for NCAA Certification Class of 2013 and Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Units Required for NCAA Certification Class of 2013 and Beyond</td>
</tr>
<tr>
<td>Division I</td>
</tr>
<tr>
<td>English Core</td>
</tr>
<tr>
<td>Math Core (Algebra 1 or higher)</td>
</tr>
<tr>
<td>Science Core</td>
</tr>
<tr>
<td>Social Science Core</td>
</tr>
<tr>
<td>From English, Math, or Science</td>
</tr>
<tr>
<td>Additional Core (English, Math, Science, Social Science, Foreign Language, Computer Science, Philosophy, Nondoctrinal Religion)</td>
</tr>
<tr>
<td>TOTAL CORE UNITS REQUIRED</td>
</tr>
</tbody>
</table>

3. Earn a sum of scores of at least 68 on the ACT or a combined score of at least 820 on the SAT.

For Division I: The minimum GPA in the 16 core courses and required ACT or SAT score vary according to the Initial-Eligibility Index below.

<table>
<thead>
<tr>
<th>Core GPA</th>
<th>ACT Sum</th>
<th>SAT Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>above 2.500</td>
<td>68</td>
<td>820</td>
</tr>
<tr>
<td>2.500</td>
<td>68</td>
<td>820</td>
</tr>
<tr>
<td>2.475</td>
<td>69</td>
<td>830</td>
</tr>
<tr>
<td>2.450</td>
<td>70</td>
<td>840-850</td>
</tr>
<tr>
<td>2.425</td>
<td>70</td>
<td>860</td>
</tr>
<tr>
<td>2.400</td>
<td>71</td>
<td>860</td>
</tr>
<tr>
<td>2.375</td>
<td>72</td>
<td>870</td>
</tr>
<tr>
<td>2.350</td>
<td>73</td>
<td>880</td>
</tr>
<tr>
<td>2.325</td>
<td>74</td>
<td>890</td>
</tr>
<tr>
<td>2.3</td>
<td>75</td>
<td>900</td>
</tr>
<tr>
<td>2.275</td>
<td>76</td>
<td>910</td>
</tr>
<tr>
<td>2.250</td>
<td>77</td>
<td>920</td>
</tr>
<tr>
<td>2.225</td>
<td>78</td>
<td>930</td>
</tr>
<tr>
<td>2.200</td>
<td>79</td>
<td>940</td>
</tr>
<tr>
<td>2.175</td>
<td>80</td>
<td>950</td>
</tr>
<tr>
<td>2.150</td>
<td>80</td>
<td>960</td>
</tr>
<tr>
<td>2.125</td>
<td>81</td>
<td>960</td>
</tr>
<tr>
<td>2.100</td>
<td>82</td>
<td>970</td>
</tr>
<tr>
<td>2.075</td>
<td>83</td>
<td>980</td>
</tr>
<tr>
<td>2.050</td>
<td>84</td>
<td>990</td>
</tr>
<tr>
<td>2.025</td>
<td>85</td>
<td>1000</td>
</tr>
<tr>
<td>2.000</td>
<td>86</td>
<td>1010</td>
</tr>
</tbody>
</table>

For Division II: No sliding scale, minimum core GPA of 2.0 and minimum ACT sum score of 68 or SAT score of 820 (critical reading and math).

Be sure to review the NCAA Guide for the College Bound Athlete for the most current information at www.eligibilitycenter.com.
Advanced Placement Courses

From the AP Program Guide, College Board:

Advanced Placement (AP) enables students to pursue college-level studies while still in high school. Through college-level courses, each culminating in a rigorous exam, AP provides willing and academically prepared students with the opportunity to earn college credit, advanced placement, or both. Taking AP courses also demonstrates to college admissions officers that students have sought out the most rigorous curriculum available to them.

Talented and dedicated AP instructors help students in AP courses develop and apply the skills, abilities and content knowledge they will need later in college. Each AP course is modeled upon a comparable college course, and college and university faculty play a vital role in ensuring AP courses align with college-level standards.

Each AP course concludes with a college-level exam developed and scored by college and university faculty members as well as experienced AP teachers. AP Exams are an essential part of the AP experience, enabling students to demonstrate their mastery of college-level course work. AP is accepted by most two- and four-year colleges and universities worldwide for college credit, advanced placement, or both, on the basis of successful exam scores. Universities in more than 60 countries recognize AP Exam scores in the admission process and/or award credit and placement for qualifying scores.

Visit the College Board’s website for more information: www.collegeboard.org

AP Courses at Liberty Common High School

Arts
AP Studio Art
AP Art History
AP Music Theory

English
AP English Language and Composition
AP English Literature and Composition

History and Social Sciences
AP United States History
AP United States Government and Politics

Math and Computer Science
AP Calculus AB
AP Calculus BC
AP Statistics
AP Computer Science A

Sciences
AP Biology
AP Chemistry
AP Physics 2

World Languages and Culture
AP Latin
AP Spanish Language and Culture
AP French Language and Culture
**Concurrent Enrollment Options**

**CU Succeed**
CU Succeed is a unique program of the University of Colorado Denver that works with Liberty Common High School to provide students the opportunity to take LCHS courses for both high school and college credit.

The courses offered in the program are not high school courses for which students earn college credit. They are courses that have been reviewed by CU Denver faculty and have been deemed equivalent in content and academic standards to courses taught on the CU Denver campus.

Additionally, Liberty Common High School instructors have met the same standards as on-campus instructors and have been granted adjunct-faculty status by an academic department of the University.

CU Succeed offers high school students the opportunity to earn college credit at a reduced-tuition rate. Enrollment in CU Succeed courses for CU Denver credit is optional.

Visit the CU Succeed website for more information: [https://clas.ucdenver.edu/cusucceed/](https://clas.ucdenver.edu/cusucceed/)

**CCU Dual Credit Program**
Colorado Christian University (CCU) offers Dual Credit courses to Liberty Common High School students, delivering college credits for courses taught at Liberty, with Liberty’s curriculum and by Liberty’s instructors.

A student enrolled in dual credit can receive both high school and college credit for the course. If enrolled, a student will receive an official Colorado Christian University transcript listing the course number, course name, and letter grade for the course.

CCU is a fully accredited, four-year Christian university located in Lakewood, Colorado. CCU’s accreditation, through the Higher Learning Commission of the North Central Association of College and Schools, means that credits are transferable to almost any school in the nation including state universities and private colleges.

Visit the CCU Dual Credit Program website for more information: [http://www.ccu.edu/dualcreditprogram/](http://www.ccu.edu/dualcreditprogram/).

**CU Succeed Courses**
- College Algebra
- College Trigonometry
- Pre-calculus
- AP Statistics
- Calculus 3

**CCU Dual Credit Courses**
- AP United States History
Academic Policies

**LCHS Numerical Grading Scale**
A+ 97.5, A 92.5, A- 89.5, B+ 87.5, B 82.5, B- 79.5, C+ 77.5, C 72.5, C- 69.5, D+ 67.5, D 62.5, D- 59.5, F 59.5/below

**LCHS Grade-Point Scales**

**Liberty Common High School Grade-Point Average (GPA)**
Includes grades in all courses taken at LCHS (grades 9–12)

**Simple Grade-Point Scale**
All courses taken at LCHS (grades 9–12)
A=4.0 points, B=3.0 points, C=2.0 points, D=1.0 points, F=0.0 points

**Weighted Grade-Point Scale**
All courses taken at LCHS (grades 9-12)
Advanced Placement (AP) and select college-level (CL) courses receive an additional 1.0 point.
A=5.0 points, B=4.0 points, C=3.0 points, D=1.0 points, F=0.0 points
Honors courses (H) receive an additional .5 point.
A=4.5 points, B=3.5 points, C=2.5 points, D=1.0 points, F=0.0 points
Non-weighted elective courses (E) receive no additional points.
A=4.0 points, B=3.0 points, C=2.0 points, D=1.0 points, F=0.0 points

**The Weighted Grade-Point Scale**
- Rewards students for taking the rigorous Liberty Common High School core curriculum.
- Allows students to earn grade-point averages higher than 4.0.
- Encourages and draws attention to rigorous performance.
- Creates more competitive student transcripts for college admission and scholarship awards.

<table>
<thead>
<tr>
<th>Grading Scale</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerical Scale</td>
<td>Letter Grade</td>
</tr>
<tr>
<td>89.5-100</td>
<td>A+, A, A-</td>
</tr>
<tr>
<td>79.5-89.4</td>
<td>B+, B, B-</td>
</tr>
<tr>
<td>69.5-79.4</td>
<td>C+, C, C-</td>
</tr>
<tr>
<td>59.5-69.4</td>
<td>D+, D, D-</td>
</tr>
<tr>
<td>59.4/below</td>
<td>F</td>
</tr>
</tbody>
</table>

**Class Rank**
Liberty Common High School does not rank its students.

**Valedictorian and Salutatorian**
In order to qualify for Valedictorian or Salutatorian consideration, a student must have completed at least 120 credits at Liberty Common High School. Valedictorian and Salutatorian honors will be determined based on the Weighted Grade-Point Scale. In the case of a tie, the school will use an adjusted scale for an A+, A, A-, B+, B, B-, etc., to determine the Valedictorian and Salutatorian.
Transfer Credit
All credits earned at another secondary institution (grades 9-12) will be considered as credit that can be put toward the completion of Liberty Common High School graduation requirements. Only courses taken at Liberty Common High School will count toward a student’s GPA.

With the exception of Latin 2 taken in 8th grade at LCHS (beginning with the class of 2020), courses taken in junior high do not count toward high school credit.

Academic Term
Liberty Common High School operates on a traditional semester system. A semester systems divides the academic year into two equal terms.

Course Credit
Course credit is awarded for all courses on a semester basis, whether the course is a semester or year-long course. Students earn five (5) credits for each semester course completed with a 70% or higher. A failing grade is defined as a D or an F in a semester course.

Credit Enrollment Minimums
Freshman=70 credits
Sophomore=70 credits
Junior=70 credits*
Senior=70 credits*
*Students may request two study halls in one semester when taking two or more AP or college-level courses. All other requests for two study halls will be considered on a case-by-case basis and require extraordinary circumstances.

Credit Benchmarks
Sophomore=60 credits
Junior=120 credits
Senior=180 credits

Drop/Add Policies
- The deadline for schedule changes for all LCHS students is five school-days after the semester begins.
- A high school student who drops a course between the published deadline for schedule changes and the end of the fourth week of the semester will received a “W” noting the student withdrew from the course.
- A high school student who drops a course after the first four weeks of a semester will receive a “WF” which shall be used in calculating grade-point average.

Additional Academic Policies and Options
- Study Hall (SH)—Students are allowed one study hall per semester. Students may request two study halls in one semester when taking two or more AP or college-level courses. All other exceptional requests for two study halls will be considered on a case-by-case basis and require extraordinary circumstances.
- Science or engineering elective courses will meet the science-elective requirement.
- The Composition 2 and Personal Finance requirements may be fulfilled during the junior or senior year.
- The Physical Education, US Government, Science elective and English elective requirements may be fulfilled at any time.
- The Physical Education graduation requirement can be fulfilled through successful completion of a Physical Education elective, Health course, or one season of LCHS high school athletic participation.
- Students in the Class of 2020 had the opportunity to opt into the updated graduation requirements (see pages 8–9). Students in the class of 2020 may not change their graduation requirement path once selected.
LCHS House System

The LCHS House System is a student-organizational structure designed to manage LCHS students through the establishment of vertical divisions to achieve specific academic and student-life objectives. The system supplants the traditional horizontal groupings of school class, age, and grade level by creating smaller integrated communities of students within the school.

The LCHS House System also provides a framework for student governance allowing greater opportunity for development of meaningful leadership.

Purposes:

1. To increase institutional and peer-to-peer support for each student.
2. To ensure individual care for each student with at least two adults who will monitor and support the academic, social, moral, and behavioral growth of each LCHS student.
3. To multiply occasions to build strong, healthy student relationships.
4. To develop leadership skills in every student.
5. To enhance matriculation of new students.
6. To maintain relationships with LCHS graduates.

Organization: LCHS students from all grades are divided into five separate groups called “Houses.” Each House contains approximately 70 students. Each house is overseen by House Deans.

Houses are divided further into Mentor Groups consisting of approximately 35 students. Each Mentor Group is staffed by a faculty/staff member. These groups remain together throughout the students’ high school experience.

Unique Outcomes for LCHS:

1. Strong school-family spirit spanning freshman through senior class divisions.
2. Robust opportunities for all LCHS seniors to be trained as leaders through hands-on service gaining meaningful valuable leadership experience.
3. Robust leadership opportunities for LCHS underclassmen.
4. Strong interpersonal relationship skills for each LCHS student.
5. Focused support internalizing LCHS character development.

House System Terminology:

House—A group of approximately 70 students, freshmen through seniors.

House Captains—Students in each House chosen by their housemates to lead, convene, and organize the House representing it at all school-wide student-governance meetings.

House Dean—A faculty member chosen to oversee the effective development of a House.

House Director —The faculty member who directs the day-to-day operations of the House System.
Mentor—A faculty member assigned to oversee the effective development of a Mentor Group.

Mentor Group—A multi-grade group of approximately 35 students within each House (similar in operation to “homerooms”).

School Captains—Two seniors who have been chosen by the school to help lead all the Houses.

**House names:**

- *Domus Fortitudinis* (House of Fortitude)
- *Domus Gratitudinis* (House of Gratitude)
- *Domus Justitiae* (House of Justice)
- *Domus Prudentiae* (House of Prudence)
- *Domus Temperantiae* (House of Temperance)

**House Activities:** Each House is expected to organize various House events such as cookouts, service projects, teambuilding activities, outings (Putt Putt, bowling, etc.), tournaments, etc. Additionally, each House will develop its own traditions, customs, symbols and crests, and historical awareness of the House’s name and its significance to LCS/LCHS history.

Each House is also expected to organize various school-wide events such as social activities (dances, proms, etc.), competitions, guest lectures, spirit rallies, and service projects.

**House Competitions:** Each year the Houses compete for the Neenan (David & Sharon) Cup Award. This award is given to the House that accumulates the most points in various diverse competitions that accentuate academic, athletic, leadership, character, and school-spirit excellence.

Each quarter, Houses earn points by placing the most students on the Honor Roll, achieving best attendance, receiving the fewest school detentions, winning best dressed, and other competitions. Points can also be earned by student attendance at athletic events, house chant competitions, and other incentive opportunities offered by the LCHS administration.

The goal of the Neenan Cup is to promote healthy competition that boosts spirit and encourages student participation and interaction.

**House Assignments:** Students are placed into each House by the LCHS administration with the assistance of the House Director. Placements are made with an intention to balance talents, skills, and personalities in a way that best strengthens the positive characteristics, qualities, and interpersonal strength of each House. Attention will be paid to such individual strengths as aptitude, confidence, athletic abilities, demonstrated leadership, and any other appropriate qualities of distinction. Siblings will be placed in the same House.

Liberty Common High School 8th-grade students will be assigned to Houses during the House Induction Ceremony held during the spring semester prior to their 9th-grade year.

**Alumni Relations:** Each House works with the LCHS administration and the Liberty Grandparents Club to maintain contact and long-term relationships with LCHS graduates. A graduate’s House will be his primary point of LCHS contact.
LCHS Activities

LCHS competes in the Patriot League as 3A member of the Colorado High School Activities Association.

### LCHS Athletic Programs*

<table>
<thead>
<tr>
<th>Fall Sports</th>
<th>Winter Sports</th>
<th>Spring Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women’s Volleyball</td>
<td>Women’s Basketball</td>
<td>Track and Field (Co-ed)</td>
</tr>
<tr>
<td>Men’s Soccer</td>
<td>Men’s Basketball</td>
<td>Baseball</td>
</tr>
<tr>
<td>Cross Country (Co-ed)</td>
<td></td>
<td>Women’s Soccer</td>
</tr>
</tbody>
</table>

*If LCHS does not offer a high school sport, student athletes may compete with their neighborhood schools.

### LCHS Club Descriptions (Partial Listing)

**Ambassadors Club**
The mission of the Ambassadors Club is to promote community, acceptance, and justice at Liberty Common High School for all students. New high school students will find this club helpful to adapt to Liberty while having fun interacting with other students.

**Card and Board Games Clubs**
Students meet to play board and card game emphasizing strategy. They will play Carcassonne, Settlers of Catan, Puerto Rico, Cribbage, Risk, and many more.

**Chess Club**
Students learn to play chess and play against one another and computer opponents.

**Chinese Language & Culture Club**
Students learn to speak and write in Chinese, as well as enjoy various aspects of Chinese culture such as festivals, food, climate, modern life, mythology, and much more.

**Creative Writing Club**
Students share and discuss prose, plays and poetry. Come to read; come to recite; come to listen.

**CyberPatriot Club**
Students will participate in the nation's premier national highschool cyberdefense competition.

**DJ Club**
This is a student-run club in which participants learn to put playlists together for dances, use a turntable, set up lights, plan light shows, use fog machines, and everything else that professional DJs do.

**Drama Club**
This club focuses on the skills and techniques of acting in a relaxed and fun atmosphere. There are many activities and plenty of improvisation.

**Film Club**
Run by the House System, participants in Film Club gain acquaintance with the tools, skills, and process of filmmaking (from development to post-production) and
are provided opportunities to view and discuss the masterpieces of cinematic history.

**Rebel Alliance**
Participants meet weekly with Liberty Headmaster and former U.S. Congressman Bob Schaffer for lively guided discussions, debates, and special political guests. Topics cover current political issues occurring at the local, state, national, and international levels.

**Jazz Band**
Open to high school musicians interested in participating in a music ensemble that learns and performs various styles of rock and pop music. Students should know how to read music and have previous experience on any of the following instruments: acoustic or electric guitar, bass guitar, drum set, keyboard, voice, and horns (sax, trumpet, and trombone).

**Key Club**
Key Club is an international student-led organization which provides its members with opportunities to provide service, build our community, and develop leadership. Participants seek to be caring and competent servant-leaders who transform communities worldwide. The core values of Key Club International are leadership and character building.

**Junior Classical League**
JCL encourages an interest in and an appreciation of the language, literature, and culture of ancient Greece and Rome to impart an understanding of the debt of western culture to that of Classical antiquity.

**Knowledge Bowl**
Knowledge Bowl is an academic competition in which teams of students have 15 seconds to buzz in and answer all types of questions in history, English, mathematics, science, current events, etc.

**Math League**
This club for high school students provides competitive opportunities and camaraderie for those who like math. Club members experience an invigorating variety of math competitions and challenges. As a team, participants are planning to compete in the Colorado Math League, AMC10, AMC12, CSU Math Day, UNC Math Day, Purple Comet, and possibly others.

**Mu Alpha Theta**
Mu Alpha Theta is a national math honor society. It is open to high school math students at LCHS who have successfully complete both Algebra 1 and Geometry and who have at least a 3.0 grade average in their math classes. This organization offers leadership opportunities in math, tutoring opportunities, math talks and activities, and fun celebrations such as Pi Day.

**Ocean and Science Bowls**
These are clubs formed to get ready for fast-paced question-and-answer formatted competitions similar to Jeopardy quizzing students' knowledge in areas of science.

**RC Engineering Club**
This club is for students wanting to collaborate on radio-controlled engineering projects extending beyond the classroom and into their daily lives. Projects range in scope from the very simple to the brilliantly complex.

**Sports Clubs**
Students play pick-up soccer, ultimate Frisbee, Spike Ball, and have open gym time with faculty during 9th hour either outside or in the Colosseum.

**Spirit Club**
Spirit Club exists to promote school spirit through athletics. Students put on pep rallies, promote spirit games, teach cheers, and create signs and posters for our athletic teams.

**Yearbook Club**
This is an excellent opportunity for students interested in photography, journalism, graphic design, leadership, and social events. Run as part of the House System, students gain opportunities to produce the annual yearbook as well as secure leadership positions to gain experience organizing activities, events and subcommittees of students.

LCHS Clubs are offered primarily at the end of the day during 9th period.
Course Descriptions
WESTERN LITERATURE (H)—E800
Credits: 10
Requirements Met: English—Western Literature
Prerequisites: N/A
Grades: 9–12

This required course focuses on key foundational texts of the western literary tradition from the Hebrew Bible through the Renaissance. Western literature is deeply rooted in the historical framework of western civilization. Western literature is a reflection of the culture at a particular time and is written by authors who write with an intended purpose to act as a “spokesperson” for that culture and time. Successful western literature students gain insight about themselves by examining the human condition and universal themes of various authors; apply knowledge of literary terms and figurative language; and communicate articulately about literature through reading, writing, speaking, and listening.

BRITISH LITERATURE (H)—E300
Credits: 10
Requirements Met: English—British Literature
Prerequisites: N/A
Grades: 10–12

Liberty's course in British literature is a survey conducted through the close study of exceptional and representative works from the broader literary movements. Our particular aim is to produce a meaningful familiarity with the cultural and intellectual heritage imparted to us through the masterful writers of Britain. Nevertheless, like all of our literature courses, this one also seeks to foster greater depth of thought, increased proficiency in the use and appreciation of the English language, and serious moral reflection. Good works of literature serve both as beautiful lenses through which to receive the universal truths of our world and as sounding boards for our own presuppositions about human significance and interpersonal engagement.

AMERICAN LITERATURE (H)—E750
Credits: 10
Requirements Met: English—American Literature
Prerequisites: N/A
Grades: 11–12

This course covers key texts and figures in the American literary tradition from the colonial period to the postwar era of the 20th century. Students see the relationships between their American history studies, the literature of the eras, and their own lives today. Students also track the effect of the European movements and voices on American authors, some of whom fell in line with those traditions, and some of whom sought to break away.
COMPOSITION 2 (H)—E650  
Credits: 5  
Requirements Met: English–Composition  
Prerequisites: N/A  
Grades: 11–12

This course prepares students for the forms of writing encountered at the college level. Students practice various purposes and styles of writing, such as analytical, expository, and persuasive. Research skills, including evaluating, incorporating, and citing sources, are practiced throughout the semester.

AP LANGUAGE AND COMPOSITION—E900  
Credits: 10  
Requirements Met: English–Composition  
Prerequisites: A or B+ in previous required English course or teacher approval  
Grades: 11–12

This course demands effective engagement with significant non-fiction texts for the purpose of identifying, appreciating, and cultivating the various skills intrinsic to production of logical and rhetorically compelling prose. The AP designation indicates that this course complies with the curricular requirements specified by the College Board. We will have the unique opportunity to look at some of the most superbly crafted arguments, speeches, debates, letters, and narratives in history, and we will use these to better our own understanding and use of the English language.

AP LITERATURE AND COMPOSITION—E910  
Credits: 10  
Requirements Met: English—Elective  
Prerequisites: A or B+ in previous required English course or teacher approval  
Grade: 12

The AP English Literature and Composition course extends Liberty Common High School’s commitment to serious literary study through textual analysis, close reading, and reflective moral evaluation. The AP designation indicates that this course has been designed in keeping with the formal curricular requirements created by the College Board and that it entails an advanced level of academic rigor. Students should expect to read important works that span various literary periods and genres, a process during which each will develop the knowledge and vocabulary necessary for meaningful engagement with profound and difficult texts.

COMIC LITERATURE (E)—E430  
Credits: 5  
Requirements Met: English—Elective  
Prerequisites: N/A  
Grades: 9–12

This course is a fun exploration of the use of humor in different literary traditions. The moments that make us laugh in a text also make us open our eyes. This class is an enjoyable trek, led by those who knew best how to make readers belly-laugh.
INTRODUCTION TO CLASSICAL PHILOSOPHY (E)—E490
Credits: 5
Requirements Met: English—Elective
Prerequisites: Western Civilization and Western Literature
Grades: 10–12

Introduction to Classical Philosophy is your chance to ask the ultimate questions: What is good? What is true? What is beautiful? What is real? What is knowledge? Through the study of classical philosophy, students will engage in Socratic discussion to engage and answer these questions. Socrates, Plato, Aristotle, and other great thinkers will guide the course.

WORLD CLASSICS (E)—E440
Credits: 5
Requirements Met: English—Elective
Prerequisites: N/A
Grades: 9–12

This course will analyze defining works of literature from a variety of time periods and literary traditions, emphasizing European Literature from 1500–1900. Students will recognize connections between the works, the contextual history, the literary movements, and their own lives.

BASIC SPEECH (E)—E400
Credits: 5
Requirements Met: English—Elective
Prerequisites: N/A
Grades: 9–12

This course focuses on the fundamentals of improving public speaking in formal and informal settings. Students focus on solo speaking opportunities and activities that address the organization, preparation, and delivery of informative and persuasive speeches. Students’ work includes effective listening, group discussions, oral interpretation of famous speeches, and evaluation and preparation of visual aids.

DEBATE (E) —E470
Credits: 5
Requirements Met: English—Elective
Prerequisites: None
Grades: 9–12

This course studies and practices the theory, techniques, and application of various forms of persuasion and debate, including Public Forum, Lincoln-Douglas, and legislative debate. Students research, write debate cases, and organize for and participate in debates.
**THEATRE (E)—E310**
Credits: 5  
Requirements Mt: English—Elective  
Prerequisites: None  
Grades: 9–12  
*Note:* Theatre and World Classics are offered every other year on an alternating basis. World Classics will next be offered for the 2019–2020 school year, and Theatre will next be offered for the 2020–2021 school year.

This course introduces students to the art of theatre from its Classical beginnings to modern-day plays. The course studies a representative play from each of the theatre history periods. The course chronologically studies the development of theatre through history, literature, and performance. Students learn some of the technical aspects of theatre through the study of history, some acting techniques through a performance project, and some play-writing skills through analysis and practice. This class strives to prepare every student to participate in a theatrical production, as an actor, designer, director, or audience member, with informed content knowledge and the required vocabulary. Each student completes a final project in which he or she presents a directorial proposal in the form of a paper, research, design ideas, and concept.

**TOLKIEN'S THE LORD OF THE RINGS: (E) —E325**
Credits: 5  
Requirements Met: English—Elective  
Prerequisites: N/A  
Grades: 9–12  

This course builds on Liberty’s content-based curriculum by offering a full intellectual and Socratic treatment to one of the best-loved trilogies of the 20th century. J.R.R. Tolkien’s masterpiece allows for further investigation of narrative and philosophical themes in the western canon while providing particular opportunity for attention to the elements of myth-creation. Discussions and writing assignments will aim at a deeper understanding and appreciation of the literary, moral, and philological depth that *The Lord of the Rings* provides without depriving students of a chance to enjoy the plain genius of a good story.

**BUSINESS AND TECHNICAL WRITING (E)—E460**
Credits: 5  
Requirements Met: English—Elective  
Prerequisites: None  
Grades: 9–12  

This course addresses the writing skills required to write letters, memos, reports, abstracts, instructions, directions, and proposals that can be clearly and easily understood.
ECONOMICS (H)—H300
Credits: 10
Requirements Met: History—Economics
Prerequisites: N/A
Grades: 9–12

This required course is an intense analysis of a broad spectrum of economics concepts including a study of prices and markets, industry and commerce, work and pay, time and risk management, Austrian Economics, and national and international economies.

WESTERN CIVILIZATION (H)—H500
Credits: 10
Requirements Met: History—Western Civilization
Prerequisites: N/A
Grades: 9–12

This required course stresses the importance of the ancient Greeks and Romans in the development of modern Western civilization. Study begins with the earliest civilizations of the Near East, including Mesopotamia, Egypt, and Israel, before focusing on the society and culture of the ancient Greek world. Students then concentrate on the Romans and examine how Rome emerged and came to dominate the Mediterranean world, through to the transformation of the later Roman Empire and the rise of Christianity. The history of mathematics is included throughout the course. In addition to the textbook, students read and study a number of primary-source documents.

WORLD HISTORY (H)—H350
Credits: 10
Requirements Met: History—World History
Prerequisites: Western Civilization
Grades: 10–12

This required course enables students to practice and develop the critical-thinking skills necessary for historical study. This course focuses on the historical development of Europe, Asia, and the Americas. The culture, religions, and history of these areas are examined, as is their impact on history. Why certain cultures were able to exert cultural, political, and ideological dominance is stressed in this course as well. Students analyze the causes and effects of the interactions between cultures. Corresponding themes in geography are addressed.
UNITED STATES HISTORY (H)—H650
Credits: 10
Requirements Met: History—US History
Prerequisites: N/A
Grades: 11–12

The content of this required course in United States History includes the study of significant events, issues, and problems from colonization to the present day. This course builds upon knowledge and concepts, acquired in 7th and 8th grade. This course also includes historical concepts, citizenship principles and skills necessary for the study of US History. Advanced students may elect to take AP US History.

AP UNITED STATES HISTORY—H700
Credits: 10
Requirements Met: History—US History
Prerequisites: A or B+ in previous required History course or teacher approval
Grades: 11–12

AP US History is designed for students who are willing to study United States history at the college level. The content for this course emphasizes each era of American history. Analytical and research skills are used to study primary sources and scholarly works in an effort to understand United States history.

AMERICAN GOVERNMENT (H)—H410
Credits: 5
Requirements Met: History—Government
Prerequisites: N/A
Grades: 9–12

This course emphasizes the institutions and political forces that have shaped the US federal government and examines the behavior of individuals in the American political system and the non-institutional forces that influence decision-making in US politics (such as political parties, interest groups, and the media). This course enables the student to understand the functions of the federal government and how citizens can participate in the decision-making process.

AP UNITED STATES GOVERNMENT—H420
Credits: 10
Requirements Met: History—Government
Prerequisites: A or B+ in previous required History course or teacher approval; teacher approval required for sophomores
Grades: 10–12

This AP course involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up American politics. This course may be used to fulfill the American Government requirement for graduation.
AMERICAN CIVIL WAR 1861–1865 (E)—H800
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Grades: 9–12

This course examines the social, economic, political, intellectual, and military aspects of the years 1861–1865. Study begins with the origins of the Civil War, and continues through the course of the war, and concludes with an evaluation of the impact of the war on the United States. Key participants and events of the war are studied in detail.

VIETNAM WAR 1945–1975 (E)—H810
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Grades: 9–12

This course examines the US role in the Vietnam conflict from 1945–1975. It analyzes the strategic and diplomatic decisions of each president during that period within the context of the global struggle against communism, decolonization, and domestic politics and culture in both Vietnam and the United States. Particular attention is paid to the period from 1965–1973 when the United States was a principal combatant in the war.

PRINCIPLES OF LIBERTY: AMERICAN POLITICAL PHILOSOPHY (E)—H820
Credits: 5
Requirements Met: Elective
Prerequisites: None
Grades: 10–12

In this spring-semester course, students learn about the philosophy of the Founding Fathers and the objectives of the Declaration of Independence. Students explore philosophers with whom the Founders were most familiar, and by whom they were most persuaded. The Constitution and Bill of Rights are examined mainly from the perspectives and intentions of its framers and ratifiers. Subsequent amendments and application will be covered in less depth. The most relevant of the Federalist Papers are read and analyzed. Final course modules examine profiles in presidential leadership along with other significant Americans framed within the context of fidelity to America’s founding principles. Students also consider contemporary political topics and evaluate public-policy objectives against principles of the Founders. The course frequently features guest visits by scholar lectures, and presentations by political officeholders, and candidates. Multiple fieldtrips to the State Capitol support lesson content.
### MATHEMATICS

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Pathway 1</th>
<th>Pathway 2</th>
<th>Pathway 3</th>
<th>Pathway 4</th>
<th>Pathway 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>Algebra 1</td>
<td>Pre-algebra</td>
<td>Pre-algebra</td>
<td>Algebra 1</td>
<td>Varies: Two years in one course or transfer from a different school.</td>
</tr>
<tr>
<td>8th Grade</td>
<td>Geometry</td>
<td>Algebra 1</td>
<td>Algebra 1</td>
<td>Geometry</td>
<td></td>
</tr>
<tr>
<td>9th Grade</td>
<td>Algebra 2</td>
<td>Geometry</td>
<td>Geometry</td>
<td>Algebra 2</td>
<td>Algebra 1</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Pre-calculus</td>
<td>Algebra 2</td>
<td>Algebra 2</td>
<td>College Alg</td>
<td>Geometry</td>
</tr>
<tr>
<td>11th Grade</td>
<td>AP Calc AB/BC</td>
<td>Pre-calculus</td>
<td>College Alg</td>
<td>College Trig</td>
<td>Algebra 2</td>
</tr>
<tr>
<td>12th Grade</td>
<td>Calculus 3 or AP Stats</td>
<td>AP Calc AB/BC or AP Stats</td>
<td>College Trig</td>
<td>AP Calc AB/BC or AP Stats</td>
<td>College Alg</td>
</tr>
</tbody>
</table>

**ALGEBRA 1 (H)—MA200**
Credits: 10
Requirements Met: Math
Prerequisites: Pre-algebra course or passing a pretest
Grades: 9–10

This course introduces basic concepts for algebraic equation solving. It includes expressions, linear equations and graphs, inequalities, systems of linear equations, and quadratic equations and graphs. Topics from geometry and statistics are introduced as well.

**GEOMETRY (H)—MA300**
Credits: 10
Requirements Met: Math
Prerequisites: Algebra 1
Grades: 9–10

This course provides a thorough knowledge of the main topics of classical plane and solid geometry. Students learn how a large body of results may be deduced from a comparatively small number of assumptions. Through regular practice, students are trained to present an argument in a clear and orderly fashion using classical geometric definitions, postulates, and theorems. Finally, students are introduced to coordinate geometry and the geometric aspect of trigonometry.
MATHEMATICS

ALGEBRA 2 & TRIGONOMETRY (H)—MA400
Credits: 10
Requirements Met: Math
Prerequisites: Algebra I & Geometry
Grades: 9–11

The emphasis of this course is on functions including radical, piecewise, exponential, logarithmic, inverse, and trigonometric functions. Students also study sequences and series. Also studied are indirect proof, polar coordinates, vectors, and parametric equations. Probability and statistics topics as well as topics in discreet mathematics are included.

COLLEGE ALGEBRA (H)—MA450
Credits: 10
Requirements Met: Math
Prerequisites: Algebra II
Grades: 9–12

This course includes topics in algebra designed for students planning to attend college: functions, domains, ranges, graphs, data scatter plots and curve fitting, solving equations and systems of equations, polynomial functions, rational functions, and selected other topics. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized.

COLLEGE TRIGONOMETRY (H)—MA460
Credits: 10
Requirements Met: Math
Prerequisites: College Algebra
Grades: 9–12

This course includes topics in trigonometry and analytic geometry designed for students planning to attend college: numerical and analytical trigonometry, application of trigonometric functions, vectors, polar coordinates, analytic geometry, sequences and series, mathematical induction and selected other topics. Graphing calculators are used extensively. Functions and applications are emphasized.

PRE-CALCULUS (CL)—MA500
Credits: 10
Requirements Met: Math
Prerequisites: Recommend an A in Algebra II and advanced NWEA/CMAS scores
Grades: 9–12

This course includes topics in algebra and trigonometry and is designed for students intending to take the calculus sequence. This course focuses on linear, quadratic, and polynomial functions, inequalities, exponential and logarithmic functions, systems and matrices, trigonometric functions, analytic and applied trigonometry, vectors, complex numbers, polar coordinates and functions, and analytic geometry. The first semester is equivalent to College Algebra (MA450), and the second semester is equivalent to College Trigonometry (MA460).
AP CALCULUS AB—MA600
Credits: 10
Requirements Met: Math
Prerequisites: Pre-calculus or College Trig
Grades: 9–12

The objective of AP Calculus AB is to prepare students for college work requiring knowledge and conceptual understanding of calculus. Topics covered in AP Calculus AB are limits, derivatives of algebraic functions, applications of the derivatives, applications of the definite integral, transcendental functions, and methods of integration. This course prepares students for the AP Calculus AB exam in the spring. Students interested in completing both AP Calculus AB and AP Calculus BC in a single year should register for AP Calculus BC in the spring semester only, in addition to registering for AP Calculus AB for both fall and spring semesters.

AP CALCULUS BC—MA650
Credits: 5 (if taken with AB in the spring semester)
Credits: 10 (if taken in fall and spring semesters)
Requirements Met: Math
Prerequisites: Pre-calculus, AP Calculus AB
Grades: 9–12

The objective of AP Calculus BC is to prepare students for college work requiring knowledge and conceptual understanding of calculus. Topics studied in the first semester of AP Calculus BC are limits, differentiation, integration, and applications of differentiation and integration. Topics studied in the second semester of AP Calculus BC are parametric equations, polar coordinates, vectors, infinite sequences and series, and polynomial approximations of series. This course prepares students to take the AP Calculus BC examination in the spring. The AP Calculus BC Exam includes both AB and BC topics. Students interested in completing both AP Calculus AB and AP Calculus BC in a single year should register for AP Calculus BC in the spring semester only, in addition to registering for AP Calculus AB for both fall and spring semesters. Students who are taking AP Calculus BC after AP Calculus AB should register for both fall and spring semesters of AP Calculus BC.

AP STATISTICS—MA550
Credits: 10
Requirements Met: Math
Prerequisites: Algebra 2
Grades: 9–12

AP Statistics is a year-long mathematics course centered around four main topics: exploring data; planning a study; probability as it relates to distributions of data; and inferential reasoning. Students are expected to propose and carry out a statistical study. This course is designed to help prepare students for the Advanced Placement exam.
CALCULUS 3 (CL)—MA700
Credits: 10
Requirements Met: Math
Prerequisites: AP Calculus BC
Grades: 9–12

This is the third course of a three-year sequence in calculus. The topics include: vector algebra and analytic geometry in two and three dimensions; multivariable differential calculus and tangent planes; multivariable integral calculus; optimization and Lagrange multipliers; vector calculus including Green's and Stokes' theorems.
### SCIENCE

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Pathway 1</th>
<th>Pathway 2</th>
<th>Pathway 3</th>
<th>Pathway 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Grade</td>
<td>Biology</td>
<td>Biology</td>
<td>Biology</td>
<td>Biology</td>
</tr>
<tr>
<td>10th Grade</td>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Conceptual Chemistry/Physic</td>
</tr>
<tr>
<td></td>
<td>Math: Pre-Calc</td>
<td>Math: College Alg</td>
<td>Math: Algebra 2</td>
<td>Math: Geometry</td>
</tr>
<tr>
<td>11th Grade</td>
<td>Physics</td>
<td>Physics</td>
<td>Physics</td>
<td>Chemistry</td>
</tr>
<tr>
<td></td>
<td>Math: Calc AB/BC</td>
<td>Math: College Trig</td>
<td>Math: College Alg</td>
<td>Math: Algebra 2</td>
</tr>
<tr>
<td>12th Grade</td>
<td>*Science elective</td>
<td>*Science elective</td>
<td>*Science elective</td>
<td>Physics</td>
</tr>
</tbody>
</table>

*Science or engineering elective courses will meet the Science elective graduation requirement.

**BIOLOGY (H)—SCI300**
Credits: 10  
Requirements Met: Science—Biology  
Prerequisites: N/A  
Grades: 9–12  

This is an introductory biology course that covers these topics: chemistry of life, cell structure and function, respiration and photosynthesis, cell division, genetics, taxonomy, human biology, and ecology. Students participate in frequent labs using microscopes, gel electrophoresis, and dissecting equipment to enhance reading and lectures.

**CHEMISTRY (H)—SCI900**
Credits: 10  
Requirements Met: Science—Chemistry  
Prerequisite: Algebra I, Geometry  
Grades: 10–12  

This course emphasizes fundamental concepts regarding the interactions of energy and matter. Rigorous problem solving and quantitative lab work are required. Topics covered include chemical structures, states of matter, reactions, stoichiometry, acids/bases, gaseous reactions, solutions, and thermodynamics.
CONCEPTUAL CHEMISTRY AND PHYSICS (E)—SCI410
Credits: 10
Requirements Met: Science—Elective
Prerequisite: Restricted to sophomores and above not yet in Algebra II
Grades: 10–12

This course prepares students to succeed in general chemistry and general physics. The content is basic chemistry and physics concepts which are built upon in the higher-level classes. Applicable math skills are developed to solve problems in both subject areas. Sophomores not yet in Algebra 2 will be required to complete Conceptual Chemistry and Physics prior to enrolling in Chemistry.

PHYSICS (H)—SCI450
Credits: 10
Requirements Met: Science—Physics
Prerequisite: Algebra 2
Grades: 11–12

This is a laboratory course studying the interactions of energy and matter. Units of study include forces, motion, waves, sound, optics, electricity, relativity, heat transfer and electrostatics. Experiments enhance students’ understanding of physical concepts and the methods of science. Students record, analyze, and interpret data through various technologies to examine the fundamental laws of nature. The course requires considerable use of mathematics and problem-solving skills.

ANATOMY AND PHYSIOLOGY (E)—SCI750
Credits: 10
Requirements Met: Science—Elective
Prerequisite: Biology (recommend B or better)
Grades: 10–12

The study of anatomy and physiology is designed for students with strong interest in advanced study of biology and biomedical topics. The structure, function, and interaction of the major human body systems are taught during the year. Dissection of vertebrate organs reinforces the study of anatomy and provides a chance for comparison of humans with other animals. A team of volunteer medical professionals gives guest lectures throughout the year, and students are encouraged to attend an optional cadaver lab field trip.

ASTRONOMY (E)—SCI600
Credits: 5
Requirements Met: Science—Elective
Prerequisites: N/A
Grades: 9–12

This course is aimed at understanding Earth’s place in space. This includes study of the sun; moon; solar system—theories of its origins and how we have explored it; the life cycle of stars and galaxies; constellations—their origins in myth and their use today; and identification of the major seasonal groups. This course also includes the study of the structure, origin, and future of the universe. Students are encouraged to attend an evening session of stargazing.
GEOLOGY “ROCKS” (E)—SCI810
Credits: 5
Requirements Met: Science—Elective
Prerequisites: N/A
Grades: 9–12

This class will introduce students to the wonderful world of geology. We will start with the formation and identification of minerals and rocks, emphasizing the atomic structure and chemistry involved. The Theory of Plate Tectonics will be explored, and how the patterns of earthquakes and volcanoes support that theory. This will be followed with learning about weathering, erosion, and deposition processes that shape the surface of the Earth. Introduction to different map types will lead students to interpreting them and how they show some of the geologic events that have occurred. Surface and subsurface water and how they create different features on the Earth will be presented. Finally, geologic history, how the earth got to be the way it is, will be covered.

AP CHEMISTRY—SCI950
Credits: 10
Requirements Met: Science—Elective
Prerequisites: Chemistry, Algebra 2
Grades: 11–12

This course is designed according to the College Board Advanced Placement guidelines to be the equivalent of the general-chemistry course usually taken during the first college year. Students gain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course contributes to the development of the students’ abilities to think clearly and to express their ideas orally and in writing, with clarity and logic through a greater emphasis on chemical calculations, the mathematical formulation of principles, as well as through the nature and variety of experiments done in the laboratory component. Students should expect to spend approximately 10 hours of work per week on the class between the in-class instruction, laboratory work, and studying outside of class.

AP BIOLOGY—SCI350
Credits: 10
Requirements Met: Science—Elective
Prerequisite: Biology, Chemistry
Grades: 11–12

AP Biology, as designed by The College Board, is a rich and challenging class for highly motivated students in biology, equivalent to a college introductory biology course. The rigor of this class stems from its depth of content, as well as its emphasis on science processes through completion of several college laboratories. Students use college texts and supplementary materials to understand the following major themes in biology: evolution, energy transfer and homeostasis, continuity and change, relationship of structure to function, regulation of life processes, and interaction among biological systems. Successful performance on the national AP Biology exam may result in the granting of college credit at many universities.
AP Physics 2—SCI480
Credits: 10
Requirements Met: Science—Elective
Prerequisites: Physics and College Algebra or Pre-calculus
Grade: 12

AP Physics 2, along with the prerequisite physics course, is equivalent to an algebra-based, college-level, introductory physics course. AP Physics 2 students focus on the following topics: fluid statics and dynamics, thermodynamics, PV diagrams and probability, electrostatics, electrical circuits with capacitors, magnetic fields, electromagnetism, physical and geometric optics, and topics in modern physics. Traditional mechanics and other important introductory topics were covered in the prerequisite Physics course. Emphasis will be placed on applying physics concepts to think critically and solving problems. Algebra and trigonometry are the primary mathematical tools for problem solving. Hands-on laboratory and the scientific investigation will be emphasized. Students will prepare for the AP Physics 2 exam.
Science and engineering elective courses meet the Science elective graduation requirement.

INTRODUCTION TO ENGINEERING (E)—ENG100
Credits: 5
Requirements Met: Introduction to Engineering
Prerequisite: Algebra 1
Grades: 10–12

This course introduces the engineering method and focuses on the design process. By introducing scientific principles through the use of creative projects, students begin to understand the iterative process of engineering design. Examples of engineering design projects include spy gliders, wind turbines, and polymers. Students will also be introduced to the fundamentals of computer-aided design and the creation of objects with 3D printers.

ELECTRICAL AND COMPUTER ENGINEERING 1 (E)—ENG210
Credits: 5
Requirements Met: Science—Elective
Prerequisites: Geometry, Introduction to Programming (or AP Comp Sci or equivalent programming experience)
Fee: $35.00
Grades: 10–12

This course is a hands-on course in basic electronics with a strong focus on microcontrollers. Microcontrollers are tiny embedded computers that are inside many different common electronic devices today, such as cell phones, cameras, music players, household appliances, home weather stations, thermostats, and toys. Students will learn the basics of a variety of electronic components and will also be exposed to fundamental computer programming concepts. Previous computer-programming experience is required. Some previous experience with C, Java, or another programming language with similar C-like syntax is helpful but not required.

Students learn to create their own inventions using a microcontroller inventor’s kit. Example inventions include flashing light displays, controllers for traffic lights, small moving robots, and interactive toys and games. Initially, there are very structured, hands-on lessons leading students through the basics in order to develop a general knowledge base. As the course progresses, there are opportunities to apply the skills learned to solve new problems and create new designs.
ENGINEERING

ELECTRICAL AND COMPUTER ENGINEERING 2 (E)—ENG250
Credits: 5
Requirements Met: Science—Elective
Prerequisites: Algebra 2 and Trigonometry (Note: Electrical and Computer Engineering 1 is not required prior to Electrical and Computer Engineering 2.)
Fee: $35.00
Grades: 10–12
This course is an introductory course on digital logic circuits. Digital logic circuits are a fundamental underlying technology in computers, cell phones, calculators, and many other electronic devices. Topics include binary numbers, binary arithmetic, Boolean algebra, logic gates, gate minimization techniques, and combinational logic. Introductory sequential logic elements such as latches, flip-flops, and counters will also be introduced as time permits. Students will complete several labs which will involve programming an FPGA (Field Programmable Gate Array) board to accomplish various tasks.

BIOENGINEERING (E)—ENG300
Credits: 5
Requirements Met: Science—Elective
Prerequisite: Geometry, Introduction to Engineering
Fee: $35.00
Grades: 11–12
This is a course that combines engineering with the life-sciences with a focus on three main areas: make, model and measure.

Make for Biology: Students use 3D printers to redesign and build a prosthetic device using professional CAD software such as Fusion 360.

Model of Biology: Students will learn how to model biological systems that are described by simple differential equations. Models will be simulated using professional math and modeling software such as Simulink, a visual block diagram module of MatLab. Algebra 2 math skills will suffice to perform the simulations.

Measure of Biology: Students will get an introduction to the time and frequency domain description of (analog or digital) signals and systems. Students will use this knowledge to analyze and interpret biological signals.
MECHANICAL ENGINEERING (E)—ENG400
Credits: 5
Requirements Met: Science—Elective
Prerequisite: Geometry, Introduction to Engineering
Fee: $35.00
Grades: 11–12

This course focuses on design, simulation, and prototyping of small mechanical systems using a professional CAD-CAM package such as Fusion 360.

Parametric modeling in a Computer Aided Design environment: Students first learn to sketch in a CAD environment, then move on to 3D modeling of individual parts and end by creating a virtual assembly of those parts.

Design with CAD: Students will design a model of a mechanical movement of their choice. The parts for the design will be fabricated with 3D printers and assembled into a working prototype.

Simulation: Using the Finite Element Analysis (FEA) capabilities of the CAD software, students will study the effects of stress, strain, tension, and compression as they pertain to the design of their prototype.

Computer Aided Machining: Students will get an introduction to CAM by learning how to program CNC (Computer Numeric Controlled) routers and machine some simple parts.

ROBOTICS ENGINEERING (E)—ENG500
Credits: 5
Requirements Met: Science—Elective
Prerequisites: Geometry
Fee: $35.00
Grades: 9–12

Students learn how to build robots, how to program robots using a programming language, how to apply science and engineering principles to robot design and troubleshooting, how to use various sensors, and how to work within design teams. Students will work on individual and small-group projects designed to develop their robotics, engineering, and teamwork skills.

Project difficulty and goals are adjusted according to the prior robotics and engineering experience of the student. Students will develop skills which could be used in robotics competitions; however, extracurricular competition is not required as part of the class.
Senior Engineering Design (E) — ENG600
Credits: 10
Requirements Met: Science—Elective
Prerequisites: Algebra II, Introduction to Engineering, and one Engineering Elective
Fee: $35.00
Grade: 12

Students conduct major open-ended research/design projects. They complete an application of analysis and design principles and techniques to the synthesis, modeling, optimization, fabrication, and testing of electrical, mechanical, and electromechanical systems. Students complete individual and team oral and written reports. This course prepares students to approach an engineering design project in a small team. Topics include project selection, research methods on the chosen project, a review of the design process, including concept generation, concept selection, construction, testing, and evaluation, as well as written and oral presentation skills.
FOREIGN LANGUAGE

LATIN 1 (H)—FLL100
Credits: 10
Requirements Met: Foreign Language, Latin
Prerequisites: N/A
Grades: 9–12

This course covers the first sixteen chapters of *Wheelock’s Latin*. It is designed to fully prepare students to continue their study of Latin in higher-level courses, but also to cover the historical and cultural achievements of the Romans and how they affect Western Civilization. The course also emphasizes English vocabulary that comes from Latin roots and the study of both Latin grammar and English grammar.

LATIN 2 (H)—FLL200
Credits: 10
Requirements Met: Foreign Language, Latin
Prerequisites: Latin 1 or with the approval of the Administration
Grades: 9–12

This course starts with an extensive review of Latin 1 and expands into further development of the students’ skills with an emphasis on preparing the students with the knowledge necessary to move on to Latin 3. The course covers the first thirty-two chapters of *Wheelock’s Latin*.

LATIN 3 (H)—FLL300
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Latin 2 or with the approval of the Administration
Grades: 9–12

This course starts with an extensive review of Latin 1 and 2 and expands into further development of the students’ skills with an emphasis on preparing the students with the knowledge necessary to move on to Latin 4. The course covers all forty chapters of *Wheelock’s Latin* and then moves into unadapted readings from prose authors, with an emphasis on historical works.

LATIN 4 (H)—FLL400
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Latin 3 or with the approval of the Administration
Grades: 10–12

This course starts with an extensive review of Latin 1–3 and expands into further development of the students’ skills with an emphasis on preparing the students with the knowledge necessary to move on to AP Latin. The course covers unadapted readings from prose and verse authors, with an emphasis on various genres of Roman poetry. The selected readings change each year, only repeating after three years.
LATIN 5 (H)—FLL600
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Latin 4 or approval of the Administration
Grades: 11–12

This course starts with an extensive review of Latin 1–3 and expands into further development of the students’ skills with an emphasis on preparing the students with the knowledge necessary to move on to AP Latin. The course covers unadapted readings from prose and verse authors, with an emphasis on various genres of Roman poetry. This course is for students who have completed Latin 4, but are not yet prepared for AP Latin. It will most likely be merged with Latin 4, but the Latin 5 students will have additional requirements, such as an increased writing component.

LATIN 6 (H)—FLL700
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Latin 5, AP Latin, or approval of the Administration
Grades: 12

This course starts with an extensive review of Latin 1–3 and expands into further development of the students’ skills. The course covers unadapted readings from prose and verse authors, with an emphasis on various genres of Roman poetry. This course is for students who have completed Latin 5, but are not interested in AP, or students who have already completed AP Latin and wish to continue studying Latin. It will most likely be merged with Latin 4 and 5, but the Latin 6 students will have additional requirements, such as an increased writing component.

AP LATIN—FLL500
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Latin 4 or approval of the Administration
Grades: 11–12

This course will follow all guidelines for AP Latin in order to prepare students for the AP exam. AP Latin promotes reading Latin poetry and prose with historical and literary sensitivity. Students are encouraged to develop linguistic skills by engaging in multiple activities, including translating poetry and prose from the required-reading list, precisely and literally; reading passages of poetry and prose with comprehension, and analyzing literary texts in clear, coherent written arguments, supported by textual examples. AP Latin is roughly equivalent to an upper-intermediate college or university course.
ANCIENT GREEK 1 (H)—FLG100
Credits: 10
Requirements Met: Foreign Language
Prerequisites: N/A
Grades: 9–12

This course is the Greek equivalent of the Latin 1 course. It emphasizes vocabulary, grammar, and basic reading skills. Like Latin 1, it is designed to fully prepare students to continue their study of Greek in higher-level courses, but also to cover the historical and cultural achievements of the Ancient Greeks and how they affect Western Civilization. The course also emphasizes English vocabulary that comes from Greek roots and the study of both Greek grammar and English grammar.

ANCIENT GREEK 2 (H)—FLG200
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Ancient Greek 1
Grades: 9–12

This course is the Greek equivalent of the Latin 2 course. It emphasizes vocabulary, grammar, and basic reading skills. Like Latin 2, it is designed to fully prepare students to continue their study of Greek in higher-level courses, but also to cover the historical and cultural achievements of the Ancient Greeks and how they affect Western Civilization. The course also emphasizes English vocabulary that comes from Greek roots and the study of both Greek grammar and English grammar.
FRENCH 1 (H)—FLF100
Credits: 10
Requirements Met: Foreign Language
Prerequisites: N/A
Grades: 9–12

This course focuses on introductory French, covering language skills emphasized through basic reading, listening, speaking, and writing. Emphasis is placed on practical vocabulary in written and oral use of the language along with proper use of grammar and cultural information. Lessons cover the varied use of the present tense for verbs. The simple past tense is introduced after students have had significant practice with the present tense. Students are exposed to various cultural themes relevant to French-speaking countries. Some literature is introduced as fits the curriculum and class readiness. The teacher consistently uses French in class and encourages students to speak in French as much as possible.

FRENCH 2 (H)—FLF200
Credits: 10
Requirements Met: Foreign Language
Prerequisite: French 1 or approval of the Administration
Grades: 9–12

This course builds on French 1 with richer expressions and exploration of past-tense verb usage, introduction of future tense for verbs and moods such as the conditional and subjunctive. Students build on and deepen their base of vocabulary in French through thematic vocabulary units and exposure to new words in written and oral sources. Students also have significant practice with and development of foundational grammar skills applied to reading, listening, speaking and writing. Students continue to learn about the cultures of French-speaking countries through readings and other lessons. More literature is included as fits the curriculum and class readiness. The teacher consistently uses French in class and encourages students to speak in French as much as possible.

FRENCH 3 (H)—FLF300
Credits: 10
Requirements Met: Foreign Language
Prerequisite: French 2 or approval of the Administration
Grades: 9–12

This course continues to develop student proficiency in all areas of the language. The course thoroughly reviews and extends the students’ knowledge of grammar. Students read and discuss adapted and unadapted literature as well as study aspects of Francophone culture and history. The course requires students to acquire a much broader vocabulary. Conversational skills continue to build and students develop fluency and spontaneity in speaking. Course activities are conducted in French.
FRENCH 4 (H)—FLF400
Credits: 10
Requirements Met: Foreign Language
Prerequisite: French 3 or approval of the Administration
Grades: 10–12

This course further develops language skills. Students read, discuss, and analyze unadapted French literature as they learn more about Francophone history and culture. There is a continuing emphasis on grammar and oral communication skills. Students compose essays, present research, and lead discussions. Course activities are conducted in French.

AP FRENCH LANGUAGE—FLF500
Credits: 10
Requirements Met: Foreign Language
Prerequisite: French 4 or with the approval of the Administration.
Grades: 11–12

Note: This course is not currently slated to be offered in 2019-2020.

This course specifically prepares students to take the College Board AP French Language and Culture Exam. The course promotes proficiency in French and includes interpersonal, interpretative, and presentational modes of communication. Students develop their understanding of the various cultures of the French-speaking world. Course activities are conducted in French.
FOREIGN LANGUAGE

SPANISH 1 (H)—FLS100
Credits: 10
Requirements Met: Foreign Language
Prerequisites: N/A
Grades: 9–12

This course focuses on introductory Spanish, covering language skills emphasized through basic reading, listening, speaking, and writing. Emphasis is placed on the proper use of grammar, practical vocabulary in written and oral use of the language and cultural information. Lessons cover the varied use of the present tense for verbs. The simple past tense is introduced after students have had significant practice with the present tense. Students are exposed to various cultural themes relevant to Spanish speaking countries. Some literature is introduced as fits the curriculum and class readiness. The teacher consistently uses Spanish in class and encourages students to speak in Spanish as much as possible.

SPANISH 2 (H)—FLS200
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Spanish 1 or approval of the Administration
Grades: 9–12

This course builds on Spanish 1 with richer expressions and exploration of past-tense verb usage, introduction of future tense for verbs and the introduction of moods such as the conditional and subjunctive. Students build on and deepen their base of vocabulary in Spanish through thematic vocabulary units and exposure to new words in written and oral sources. Students also have significant practice with and development of foundational grammar skills applied to reading, listening, speaking, and writing. Students continue to learn about the cultures of Spanish-speaking countries through readings and other lessons. More literature is included as fits the curriculum and class readiness. The teacher consistently uses Spanish in class and encourages students to speak in Spanish as much as possible.

SPANISH 3 (H)—FLS300
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Spanish 2 or approval of the Administration
Grades: 9–12

This course applies Spanish 1–2 skills and grammar knowledge for a deeper understanding of the language as well as the associated literature and cultures. Students continue to broaden their base of vocabulary in Spanish through thematic vocabulary units in class as well as through exposure to vocabulary in authentic texts. Students spend a significant portion of class time deepening their communicative abilities in the areas of reading, writing, speaking, and listening. Nearly all course activities are conducted in Spanish. Students will read authentic texts by authors from various Spanish-speaking countries.
SPANISH 4 (H)—FLS400
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Spanish 3 or approval of the Administration
Grades: 10–12

This course focuses on complete expression of one's ideas, observations, and feelings in Spanish. This course continues the development of the four basic language skills: reading, listening, speaking, and writing. Students review grammatical structures and apply them to communicative situations. Students continue to broaden their base of vocabulary in Spanish through thematic vocabulary units in class as well as through exposure to vocabulary in authentic texts. Students also study various Spanish-speaking cultures in depth, including the study of the art, music, history, literature, and geography of Spanish-speaking countries. Continued emphasis is on oral proficiency along with grammar. All course activities are conducted in Spanish. Students are expected to express themselves in a comprehensible manner in both written and spoken Spanish as well as to understand and respond to spoken and written Spanish.

AP SPANISH LANGUAGE- FLS500
Credits: 10
Requirements Met: Foreign Language
Prerequisites: Spanish 4 or approval of the Administration
Grades: 11–12

The purpose of this course is to help students continue to improve their language skills in reading, writing, listening, and speaking as well as to prepare for the AP Spanish Language exam. Students develop their language skills through a variety of activities. They develop their listening and reading skills and expand their vocabulary through exposure to and discussion of authentic written and oral sources in Spanish. They develop their speaking and writing skills by expressing themselves in written and oral form including description, narration, and the development of arguments. Grammar review is included as relevant to communicating tasks that students complete. Students also deepen their understanding of Spanish-speaking cultures through the study of authentic texts and discussion of various cultural topics. All course activities are conducted in Spanish.
ART ELECTIVE ROTATION

<table>
<thead>
<tr>
<th>2019-20</th>
<th>2020-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Ceramics Foundations</td>
<td>● Ceramics Foundations</td>
</tr>
<tr>
<td>● Drawing Foundations</td>
<td>● Drawing Foundations</td>
</tr>
<tr>
<td>● Graphic Design Foundations</td>
<td>● Graphic Design Foundations</td>
</tr>
<tr>
<td>● Photo Foundations</td>
<td>● Photo Foundations</td>
</tr>
<tr>
<td>● AP Art History</td>
<td>● AP Art History</td>
</tr>
<tr>
<td>● AP Studio Art</td>
<td>● AP Studio Art</td>
</tr>
<tr>
<td>● Intermediate Graphic Design*</td>
<td>● Intermediate Painting &amp; Drawing*</td>
</tr>
<tr>
<td>● Intermediate 3D Design &amp; Sculpture*</td>
<td>● 3D Design &amp; Sculpture Foundations*</td>
</tr>
<tr>
<td>● Intermediate Photography*</td>
<td></td>
</tr>
</tbody>
</table>

*Courses that have an asterisk are offered every other year.
All art courses have an elective fee of $35.

CERAMICS FOUNDATIONS (E)—A530

Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Fee: $35.00
Grades: 9–12

Students are introduced to the medium of clay, especially the traditional techniques of hand building and wheel throwing. With an emphasis on quality over quantity, this class takes the students through all the steps required to produce a pot, vase, bowl or other vessel with a professional level of craftsmanship. “Practice makes perfect” and “if at first you don’t succeed, try, try again” are the official mottos of this class. Students will have worked hard to make something truly beautiful by the end of the semester....and they get to take it home!
ART

DRAWING FOUNDATIONS (E)—A510
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Fee: $35.00
Grades: 9–12

This course is designed to build technical proficiency in drawing using an array of traditional media including charcoal, ink, and graphite. Students practice observational drawing to develop skill in line quality and control, shading, and cross-hatching. The course covers still-life drawing, the human face and figure, linear perspective, and an introduction to the basics of 2-D composition.

INTERMEDIATE PAINTING & DRAWING (E)—A660
Credits: 5
Requirements Met: Elective
Prerequisites: Drawing Foundations
Fee: $35.00
Grades: 9–12

This course is offered every other year. This course refines the skills developed in the Drawing Foundations course and allows for more individualized direction and expression. This course covers the materials and techniques of acrylic and watercolor. Students work toward gaining a sophisticated understanding of painting, color and tonal relationships, and composition. Students learn specific painting techniques, such as creating paint from scratch, glazing, and impasto.

Projects cover a variety of genres including landscape, portraiture, abstraction, expressionism, and more. More advanced concepts of painting and drawing are addressed including ways of creating visual metaphors. Artistic research to develop ideas is a critical component of this class.

GRAPHIC DESIGN FOUNDATIONS (E)—A450
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Fee: $35.00
Grades: 9–12

This class introduces students to graphic design as a form of visual communication through the use of type, image, and color. Students develop various graphic design commissions. Projects also explore design processes in visual communication, creative problem solving, and basic design practice of critiques and discussion. Students learn to use graphic design software.
INTERMEDIATE GRAPHIC DESIGN (E)—A460
Credits: 5
Requirements Met: Elective
Prerequisites: Graphic Design Foundations
Fee: $35.00
Grades: 9–12

This course is offered every other year. We build on the content of the Graphic Design Foundations course, further applying basic design concepts to more complex design problems. This includes magazine layout and cover design, advertising, and infographics. We will also explore more advanced applications of vector illustration and digital photo manipulation.

3D DESIGN & SCULPTURE FOUNDATIONS (E)—A400
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Fee: $35.00
Grades: 9–12

This course is offered every other year. In 3-D Design & Sculpture Foundations, students are introduced to materials and methods of working with three-dimensional sculpture and design. Mediums and methods may include paper, plaster, clay, mixed media, and wire forms. Note: this is not a computer course; it literally takes place in 3 dimensions.

INTERMEDIATE 3-D DESIGN AND SCULPTURE (E)—A400
Credits: 5
Requirements Met: Elective
Prerequisites: 3D Design Foundations
Fee: $35.00
Grades: 9–12

This course is offered every other year. This course expands on the skills and concepts introduced in 3-D Design & Sculpture Foundations. Note: this is not a computer course; it literally takes place in 3 dimensions.

PHOTOGRAPHY FOUNDATIONS (E)—A600
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Fee: $35.00
Grades: 9–12

In this course, students learn the fundamentals of photography, both technical and expressive. Students explore film development, darkroom printing, and digital photography using Adobe Photoshop. There is a strong emphasis on how to use the unique qualities of photography to employ the elements of art and principles of design. Students investigate historical and contemporary master photographers in order to apply their techniques, work from multiple genres, and achieve conceptual depth.
INTERMEDIATE PHOTOGRAPHY (E)—A650
Credits: 5
Requirements Met: Elective
Prerequisites: Photography Foundations
Fee: $35.00
Grades: 9–12

This course is offered every other year. This course refines the skills developed in the Photography Foundations course and allows for more individualized direction and expression. Students further explore the potential of digital photography focusing on manipulating the image and composition using Adobe Photoshop. Students also learn more advanced darkroom techniques. Artistic research to develop ideas is a critical component of this class.

AP STUDIO ART—A850
Credits: 10
Requirements Met: Elective
Prerequisites: At least one intermediate-level art elective and completed application (See an art teacher to obtain an application.)
Fee: $35.00
Grades: 10–12

AP Studio Art is a program providing high school students the opportunity to create portfolios of college-level work, which are submitted for evaluation at the end of the school year. Qualifying portfolio scores enable students to earn college credit and/or advanced placement. Students choose one of three portfolio options: Painting & Drawing, 2-D Design, or 3-D Design. Each portfolio contains three required sections: Quality, Concentration, and Breadth.

Students commit themselves to the ongoing process of making art involving informed and critical decision-making, development of technical skills, and independent work. Students respond to personal and global issues through their preferred medium while establishing an individual voice and style of communication.

AP ART HISTORY—A860
Credits: 10
Requirements Met: Elective
Prerequisites: Western Civilization
Grades: 10–12

The AP Art History course develops an understanding and knowledge of diverse historical and cultural contexts of architecture, sculpture, painting, and other media. In this course, students examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. Art history emphasizes understanding how and why works of art function in context, considering such issues as patronage, gender, and religion. This course engages students at the same level as an introductory college art history survey. Many colleges and universities offer advanced placement and/or credit to students who perform successfully on the AP Art History Exam.
COMPUTER TECHNOLOGY (E)—C300
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Grades: 9–12

This course offers a broad but practical introduction to computer hardware, software, and networking concepts. During this exploration, we will take a look at the history of computers, understand how information is represented by a computer, examine computer hardware by assembling/disassembling a computer, install an operating system, look at how software is written, uncover the architecture of the Internet, and explore internet information exchange methods (web pages, email, and files).

INTRODUCTION TO PROGRAMMING (E)—C200
Credits: 5
Requirements Met: Elective
Prerequisites: Algebra 1
Grades: 9–12

This course is a study of how software is written. The course is for students wanting to write or “program” their own software or games using python. To this end, we study basic programming-control structures, algorithms, graphics, simple data structures and basic object-oriented programming language concepts.

THE ART OF WEB DESIGN (E)—C650
Credits: 5
Requirements Met: Elective
Prerequisites: Graphic Design Foundations (A450) recommended
Grades: 9–12

This is a project-based course primarily investigating the technical aspects of the content, styling, and action of a website. It is also meant to expose students to the artistic principles needed to design and create effective websites. For the final project, students will build a website for a real world organization.

AP COMPUTER SCIENCE—C700
Credits: 10
Requirements Met: Elective
Prerequisites: Algebra 1
Grades: 9–12

The course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and is the equivalent of a first-semester college-level course in computer science. It also includes the study of data structures, object-oriented concepts (inheritance, polymorphism, encapsulation, etc.), design concepts, algorithms, and abstraction.
COMPUTER SECURITY FUNDAMENTALS (E)—C750
Credits: 5
Requirements Met: Elective
Prerequisites: Computer Technology course or equivalent knowledge and experience
Grades: 9–12

This course covers the basics of network security and computer administration. Topics covered include types of cyber-crimes, Internet infrastructure and protocols, operating system administration, good security practices and techniques, software vulnerabilities and malware, web and email security, and network intrusion detection/prevention. Time is not spent on the “latest virus” or various conspiracy theories, but on how, at their core, networks and operating systems work and security can be put in place to protect the information contained on these machines.
LIBERTY SINGERS (E)—MU350
Credits: 10
Requirements Met: Elective
Prerequisites: N/A
Grades: 9–12

Liberty Singers is a vocal ensemble comprised of high school students. Students study proper vocal production and techniques, sight-reading, music theory, ensemble skills, musicianship, and music appreciation. Repertoire is selected to represent a variety of genres, musical time periods, composers, musical techniques, and languages. Students are graded on their preparation and participation during class and in public performances.

CONCERT BAND (E)—MU500
Credits: 10
Requirements Met: Elective
Prerequisites: 2 years band experience or equivalent private study (teacher’s discretion)
Grades: 9–12

Concert Band is an instrumental ensemble comprised of high school students. The purpose of this class is to offer students various musical experiences to expand and develop their understanding and appreciation of music through a wide and varied repertoire. Students are graded on their participation during class, in public performances, and monthly playing tests.

STRING ORCHESTRA (E)—MU600
Credits: 10
Requirements Met: Elective
Prerequisites: 2 yrs orchestra experience or equivalent private study (teacher’s discretion)
Grades: 9–12

String Orchestra is an instrumental ensemble comprised of 7th-12th grade students. The LCHS orchestra focuses on developing and expanding student knowledge of string techniques, performance repertoire, ensemble skills, musicianship, and music appreciation. Students are graded on their participation during class, in public performances, and weekly practice logs.

INTRODUCTION TO MUSIC THEORY (E)—MU700
Credits: 10
Requirements Met: Elective
Prerequisites: N/A
Grades: 9–12

This two semester course entails study of fundamentals of the mechanics of music, including notation, scales, key signatures, music terminology, intervals, rhythm and meter, chord construction, and music reading.
AP MUSIC THEORY—MU800
Credits: 10
Requirements Met: Elective
Prerequisite: Introduction to Music Theory
Grades: 10–12

The ultimate goal of an AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music. This goal may best be achieved through the student's development of aural skills, sight-reading skills, written skills, compositional skills, and analytical skills. Students are graded on their preparation and participation during class, written homework, quizzes, tests, and a final music theory project.

MUSICAL THEATRE PRODUCTION (E)—MU910
Credits: 5
Requirements Met: Elective
Prerequisites: Instructor Approval
Grades: 9–12

This semester class is designed to develop skills in various aspects of producing a major musical. It is open to students with a variety of interests including singing, acting, and dancing. The Fall 2019 show will be in mid-November. Casting auditions will be held the first two weeks of the Fall 2019 semester and students will be coached in preparing an audition monologue and solo. Participants will be required to attend the final performances and additional rehearsals/meetings beyond regular class time. Please note there will be evening rehearsals prior to the show, and full participation is mandatory.

MUSIC HISTORY 1: EARLY TO BAROQUE (E) —MU940
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Grades: 9–12

This semester-long survey course studies the history and development of Western Music during the Medieval, Renaissance, and Baroque periods. Students are graded on their preparation and participation during class, homework, quizzes, and tests.

MUSIC HISTORY 2: CLASSICAL TO MODERN (E)—MU970
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Grades: 9–12

This semester-long survey course studies the history and development of Western music from the Classical period to the present. Students are graded on their preparation and participation during class, homework, quizzes, and tests.
PHYSICAL EDUCATION/HEALTH

HEALTH (E)—PE400
Credits: 5
Requirements Met: Physical Education/Health
Prerequisites: N/A
Grades: 9–12

Health class teaches students to live healthy, productive lives, along with making positive choices about their futures. It sets the framework for the health and wellness practices students will need throughout life. Nutrition, exercise safety, bones, and muscles will be covered in detail. Students will also become First Aid/CPR certified.

PHYSICAL EDUCATION TEAM/INDIVIDUAL SPORTS (E)—PE320
Credits: 5
Requirements Met: Physical Education/Health
Prerequisites: N/A
Fee: Uniform $17.50
Grades: 9–12

Team and individual sports are emphasized four days per week. Several activities include badminton, floor hockey, team building, volleyball, basketball, ultimate frisbee, ping pong, and more. Heart-rate monitors will be in use once per week during “fitness days.” Students learn the rules and skills for each sport. Students will also learn the main muscles and components of physical fitness throughout the semester. Students are highly encouraged to enroll in this course before taking Personal Fitness/Weight Training. This is a great class for freshman who will want to continue in upper-level physical education courses. Please note students are required to purchase and wear a Liberty Physical Education uniform consisting of t-shirt and shorts.

PERSONAL FITNESS/WEIGHT TRAINING (E)—PE340
Credits: 5
Requirements Met: Physical Education/Health
Prerequisites: Instructor approval or PE Team Sports
Fee: Uniform $17.50
Grades: 10–12

Activities include fitness/team games three days per week, increased athletic performance (vertical jump, broad jump, shuttle run, etc.), personal fitness programs/goal setting, nutrition, weight room safety, and basic to advanced weight training. This course is designed to enhance and develop muscular strength and endurance, as well as cardiovascular endurance and flexibility. A variety of cardiovascular-endurance games will be played to keep students near or at their respective target heart-rate zones. Please note students are required to purchase and wear a Liberty Physical Education uniform consisting of t-shirt and shorts.
SOCIAL DANCE (E)—PE330
Credits: 5
Requirements Met: Physical Education/Health
Prerequisites: N/A
Grades: 9—12

Students learn the basics of American social dancing. This class teaches rhythm, coordination, balance, partnering, and aerobic endurance while learning basic dance steps. Students learn the basics of social etiquette, refinement, and presentation. The class also covers the historical, sociological, and cultural aspects of social dance.
PERSONAL FINANCE (E)—H600
Credits: 5
Requirements Met: Personal Finance
Prerequisites: Economics
Grades: 11–12

Using the Dave Ramsey High School Curriculum, we reinforce sound principles of managing money. Our study focuses on saving and investing, credit and debt, financial responsibility and money management, insurance/risk management, and income and careers. Guest speakers in each of these areas reinforce what is taught in this course. Students complete a course workbook, which is theirs to keep.

CLASSICAL MYTHOLOGY (E)—HU200
Credits: 5
Requirements Met: English—Elective
Prerequisites: N/A
Grades: 9–12

This course is an introduction to Greek and Roman mythology via literature and art history. It assumes no knowledge of Latin or Greek, and all primary sources will be in translation. The course covers all of the major sagas—the creation of the universe, the origins of the Olympians, the Trojan cycle, and lives of the great heroes Hercules, Perseus, and Theseus. The emphasis of the course is on the content of the stories, although some time is devoted to basic analysis and interpretation, such as common patterns and motifs. There is a substantial writing component.

VOCABULARY MASTERY (E)—HU300
Credits: 5
Requirements Met: English—Elective
Prerequisites: N/A
Grades: 9–12

This course is devoted entirely to the mastery of English vocabulary. It is a logically arranged introduction to Indo-European linguistics, Germanic roots (including Anglo-Saxon), the influence of Greek, Latin, and the Romance languages, and major patterns in English vocabulary, such as prefixes and suffixes. The purpose of the course is multifaceted, as it serves as a supplement to the regular study of roots and vocabulary in English classes, a thorough development of any student’s verbal repository, and as direct preparation for the verbal section of any standardized test. There is a substantial writing component.
MISCELLANEOUS COURSES

WOODSHOP (E)—A700
Credits: 5
Requirements Met: Elective
Prerequisites: N/A
Fee: $35.00
Grades: 9

This class includes making woodworking projects using mostly hand tools. The class is limited to 15 students.

STUDY HALL- SH100/SH200
Credits: 0
Prerequisites: N/A
Grades: 9–12

Students are expected to complete schoolwork or read silently. Students are allowed one study hall per semester. Students may request two study halls in one semester when taking two or more AP or college-level courses. All other requests for two study halls must be for extraordinary academic reasons, and may be considered on a case-by-case basis for exceptional circumstances.