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<td>28</td>
</tr>
</tbody>
</table>
ADMINISTRATIVE STAFF 2017-18

Ms. Ellen Reilly........................................................................................................................................ Principal

Ms. Jamie Lane................................................................................................................................................ Assistant Principal

Science and SPED (CAT B) Departments

Mr. Jeffrey Barham......................................................................................................................................... Assistant Principal

World Language, HPE and Social Studies Departments

Ms. Kate Stavish................................................................................................................................................. Assistant Principal

English, SPED (Cat A) and ESOL Departments

Mr. Sean Rolon.................................................................................................................................................... Assistant Principal

Math, Fine & Performing Arts and CTE Departments

Mr. Paul Stansbery .................................................................................................................................................. Director of Student Services

Student Services Department

Mr. Greg Miller..................................................................................................................................................... Director of Student Activities

Ms. Tzeitzel Barcus............................................................................................................................................... Assistant Director of Student Activities

COUNSELORS

Counselors are assigned alphabetically and students normally retain the same counselor through 12th grade.

<table>
<thead>
<tr>
<th>Counselor</th>
<th>Initials</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Ashley King</td>
<td>A – Ca</td>
<td><a href="mailto:GAKing@fcps.edu">GAKing@fcps.edu</a></td>
<td>703-714-5754</td>
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<td>Ms. Deborah You</td>
<td>Ce - Fa</td>
<td><a href="mailto:DBYou@fcps.edu">DBYou@fcps.edu</a></td>
<td>703-714-5750</td>
</tr>
<tr>
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<td>Fe - Ha</td>
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<td>703-714-5745</td>
</tr>
<tr>
<td>Mr. Greg Olcott</td>
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<td>703-714-5746</td>
</tr>
<tr>
<td>Ms. Tara Lodwig</td>
<td>L - Mi</td>
<td><a href="mailto:TALodwig@fcps.edu">TALodwig@fcps.edu</a></td>
<td>703-714-5747</td>
</tr>
<tr>
<td>Mr. John Allman</td>
<td>Mo - Q</td>
<td><a href="mailto:JCAAllman@fcps.edu">JCAAllman@fcps.edu</a></td>
<td>703-714-5751</td>
</tr>
<tr>
<td>Ms. Patty McNeill</td>
<td>R - Te</td>
<td><a href="mailto:PDMcneill@fcps.edu">PDMcneill@fcps.edu</a></td>
<td>703-714-5748</td>
</tr>
<tr>
<td>Ms. Brook Dalrymple</td>
<td>Th - Z</td>
<td><a href="mailto:BMDalrymple@fcps.edu">BMDalrymple@fcps.edu</a></td>
<td>703-714-5749</td>
</tr>
</tbody>
</table>
These requirements have been proposed and have not yet received final approval from the Commonwealth of Virginia.

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who enter 9th grade 2018-19 and beyond. To graduate from high school, students shall meet the minimum requirements for the Standard Diploma as outlined below, including 22 standard credits, 5 of which must be verified credits. A standard credit is earned when a student passes a course. A verified credit is earned when a student passes a course and either the associated end-of-course SOL test or an authentic performance assessment in the areas of history and social sciences and English (writing). In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. Eligible students with disabilities have the opportunity to use credit accommodations to earn a Standard Diploma. Students must be found eligible for these accommodations. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year, prior to the end of the first nine weeks. See current version of FCPS Regulation 2408.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Standard Credits</th>
<th>Verified Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Science&lt;sup&gt;2, 5&lt;/sup&gt;</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>History and Social Sciences&lt;sup&gt;3, 5&lt;/sup&gt;</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>World Language, Fine Arts, or Career and Technical Ed&lt;sup&gt;6&lt;/sup&gt;</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Economics and Personal Finance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electives&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AP, HN, IB Course, or Career and Technical Education Credential&lt;sup&gt;7&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Aid/CPR/AED Training&lt;sup&gt;8&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits&lt;sup&gt;9, 10&lt;/sup&gt;</strong></td>
<td><strong>22</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

<sup>1</sup> Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses as approved by the Board. The Board of Education (Board) shall approve additional courses to satisfy this requirement.

<sup>2</sup> Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses which incorporate SOL content from multiple academic areas. The Board shall approve courses to satisfy this requirement.

<sup>3</sup> Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.
Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality. Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board as an additional test to verify student achievement.

Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.

Students shall either complete an Advanced Placement, honors, or International Baccalaureate course, or earn a career and technical education credential approved by the Board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, the Armed Services Vocational Aptitude Battery (ASVAB), or the Virginia workplace readiness assessment.

Students are required to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

Students shall successfully complete one virtual course, which may be a noncredit-bearing course or elective credit bearing course that is offered online.

Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the Board.
PROPOSED ADVANCED STUDIES DIPLOMA

26 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

These requirements have been proposed and have not yet received final approval from the Commonwealth of Virginia.

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who enter 9th grade 2018-19 and beyond.

To graduate from high school with an Advanced Studies Diploma, students shall meet the minimum requirements as outlined below which include 26 credits, 5 of which must be verified credits. A standard credit is earned when a student passes a course. A verified credit is earned when a student passes a course and either the associated end-of-course SOL test or an authentic performance assessment in the areas of history and social sciences and English (writing). In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student’s high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year prior to the end of the first nine weeks. See current version of FCPS Regulation 2408.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Standard Credits</th>
<th>Verified Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics¹</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Science²</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>History and Social Sciences³</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>World Language⁴</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fine Arts or Career and Technical Ed</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Economics and Personal Finance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electives⁵</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AP, HN, IB Course, or Career and Technical Education Credential⁶</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>First Aid/CPR/AED Training⁷</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong>⁸, ⁹</td>
<td>26</td>
<td>5</td>
</tr>
</tbody>
</table>

¹ Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) shall approve courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

⁵ Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

⁶ Students shall either complete an Advanced Placement, honors, or International Baccalaureate course, or earn a career and technical education credential approved by the Board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma requirements.
The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, the Armed Services Vocational Aptitude Battery (ASVAB), or the Virginia workplace readiness assessment.

7 Students are required to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

8 Students shall successfully complete one virtual course, which may be a noncredit-bearing course, or may be a course required to earn this diploma that is offered online.

9 Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the Board.

### Sample 9th Grade Schedule

Course periods and honors/regular levels will vary.

<table>
<thead>
<tr>
<th>Red Day Period</th>
<th>Course</th>
<th>Silver Day Period</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Math</td>
<td>2</td>
<td>World Language</td>
</tr>
<tr>
<td>3</td>
<td>PE</td>
<td>3</td>
<td>PE</td>
</tr>
<tr>
<td>5</td>
<td>World History 1</td>
<td>4</td>
<td>Elective</td>
</tr>
<tr>
<td>7</td>
<td>Biology</td>
<td>6</td>
<td>English</td>
</tr>
</tbody>
</table>
MCLEAN HIGH SCHOOL INITIATIVES TO HELP STUDENTS SUCCEED

- **Late bus day** is Thursday. This is a great opportunity for students to make appointments for after school help or to make up work with teachers.

- **The Summer Institute** provides a four-day transition program into high school. It covers everything from a tour of the building to an overview of study skills. The 2018 Summer Institute will be scheduled in the spring and a News You Choose will be sent with the dates and registration procedures. The Summer Institute is scheduled so as not to interfere with scheduled music or sports practices.

- The McLean High School **College and Career Center** provides information associated with post-secondary planning: two and four year colleges, career and technical schools, apprenticeship programs, civilian and military careers, scholarships and financial aid, summer and job opportunities. All students, regardless of their background, academic achievement, or economic situation, are given the opportunity to develop plans for the future that take into account their interests and abilities, current trends in education, the economy and the job market.

- **Counselors** implement a variety of interventions (individualized written plans, contracts, quarterly checklists, etc) with struggling students.

- McLean offers a couple of courses designed to support academic needs. **Strategies for Success** is a graded course for credit designed to teach students study skills. **Literacy Lab** is a course designed to provide students with direct instruction of content area reading and writing skills.

- **Highlander Time** is a remediation, intervention and enrichment period built into the school's master schedule to support students. It is designed to provide students with additional time during the school day to get academic assistance rather than before or after school. Students can review lessons and get extra help from teachers during this time.
MCLEAN HIGH SCHOOL
HONORS ENGLISH 9 VS. ENGLISH 9

All of the honors courses in the McLean English Department involve more depth in essential/expected readings and more frequency in essential/expected writings. They also have a broader scope, incorporating supplemental readings and analyses. A student who takes English 9 Honors at McLean should be a self-motivated, highly organized individual who willingly, and with a positive attitude, takes on the new and additional tasks that this curriculum requires.

The following is a listing of the additional content areas covered in the honors level courses that are not covered in the related non-honors courses. The listing is based on the POS and instructional practices at McLean.

ENGLISH 9 HONORS VS. ENGLISH 9

READING:

- Reading is done mostly outside of class as opposed to inside of class.
- Students will be assigned longer reading passages for homework. They can expect reading check on the day readings are due.
- Students need to demonstrate an ability to read longer, more complex passages.
- Close reading focus is much more analytical. Students need to move beyond the “what” (plot summary) to the “how” (technique) and “why” (theme, author’s purpose).
- Demonstrating the “how” involves understanding how literary devices reveal meaning. The heavy hitters are diction, detail, imagery, tone, and point of view; however, analysis is not limited to these.
- Demonstrating the “why” involves arriving at author’s purpose or theme. Students need to be able to demonstrate an understanding of characterization, inference, and main idea.
- There are related outside readings that are paired with core texts. For example, *The Fault in Our Stars* is paired with *Romeo & Juliet*.
- There is a much greater emphasis on sharing ideas in oral discussion – from informal class discussions to more formal Socratic Seminars and Fishbowls.
- Honors reads 1-2 more books during the year.

WRITING:

- Students need to annotate a variety of readings.
- Students are expected to complete dialectical, or double-sided journals that clearly connect concrete evidence with commentary.
- Honors generally requires more evidence (2-3 pieces) per body paragraph and more commentary.
- Regular focuses heavily on formatting and understanding the prompt.
- Regular topics can be more general and not always literature based.
- Most essays are done in class for both levels.
- Students are expected to write 1-2 more essays a year.

RESEARCH:

- In honors, research tends to be individual while in regular it can also be group based.
- Both focus on proper MLA format and use NoodleBib for Works Cited pages.
McLean High School
English 9 FAQs

1. What are some of the challenges my child might face as they adjust to 9th grade English at McLean High School?
   - We assign homework and it is expected to be turned in on-time.
   - The readings focus on more literature than non-fiction.
   - There is a heavier emphasis on close reading: annotation, dialectical journaling, reflective responses, etc.
   - There is an increased focus on the elements of voice: diction, detail, imagery, syntax, tone, etc.
   - We take plagiarism very seriously at McLean. We have an Honor Code which students are required to write out and sign on all major assessments. Major papers also require a signed cover sheet indicating that students have not used outside help, either personal or electronic in the composition of their work.

2. What skills does my child need to be successful in English 9?
   - 1) Organization
   - 2) Ability to prioritize tasks
   - 3) Ability to be proactive/a self-starter

3. What can my child do over the summer to better prepare for high school English
   - Read! Read! Read!
   - Attend Jump-Up McLean
   - Enjoy summer break! Your child’s mental health is our #1 priority.

4. What elective courses are offered in English?
   - Journalism 1, which prepares them to work on The Highlander newsmagazine
   - Photojournalism 1, which allows them to work on the yearbook
   - Broadcast Journalism 1, which allows them to work on the afternoon news show
   - It’s worth mentioning that we have some of the top journalism programs in the country, and colleges like to see that students have taken journalism because it shows they have a higher level of communication skills!
   - Creative Writing 1
   - Speech/Debate
McLean High School Science Course Offerings
2018-2019

9th Grade Classes in Science
Ninth grade students have the choice of Biology I or Biology I Honors.

**Biology I**
In Biology I, students engage in scientific inquiry through lab work as they explore biological processes. All class and laboratory activities focus on life processes that occur within organisms or cells. Major topics of study include the scientific method, characteristics of life, ecology, biochemistry, cells, energy, DNA and proteins, genetics, biotechnology, evolution and the diversity of life. If dissections are a part of the laboratory experience, alternatives are available. Students are required to take the Standards of Learning End of Course Test.

**Biology I Honors**
In Biology I Honors, students engage in scientific inquiry through lab work as they explore biological processes. All class and laboratory activities focus on life processes that occur within organisms or cells. Major topics of study include the scientific method, characteristics of life, ecology, biochemistry, cells, energy, DNA and proteins, genetics, biotechnology, evolution and the diversity of life. In comparison to Biology 1, students will investigate topics at a deeper level, with an emphasis on analysis, inference and abstraction, and an accelerated pace. Students, either independently or in teams, will participate in an externally-moderated research project. If dissections are a part of the laboratory experience, alternatives are available. Students are required to take the Standards of Learning End of Course Test.

Based on individual needs, other available Biology options include:

**Biology Part I**
Biology Part I is designed to introduce students to the big concepts in biology before they enter the standard biology course. Students will strengthen their communication skills as they engage in scientific inquiry through lab work. All class and laboratory activities focus on life processes that occur within organisms or cells. Major topics of study include the scientific method, ecology, molecules of life, cells, homeostasis, heredity, evolutionary theory, and classification of living things. This course is only for students who are accessing credit accommodations for the standard diploma.

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**Honors vs. Non-Honors Courses**
Honors courses expect students to work through concepts at a faster pace than non-honors courses. There is an increased demand for independent learning and advanced problem solving skills. FCPS REQUIRES students enrolled in Honors level courses to independently design, develop and conduct an externally judged research project.
### Biology I vs. Biology I Honors

<table>
<thead>
<tr>
<th>Instructional Approach</th>
<th>Biology 1</th>
<th>Biology 1 Honors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sequential and guided</td>
<td>• Combination of guided instruction and independent inquiry</td>
<td></td>
</tr>
<tr>
<td>• Emphasis on building independent learning skills</td>
<td>• Emphasis on enhancing independent learning skills</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Skills</th>
<th>Biology 1</th>
<th>Biology 1 Honors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emphasis on building analysis, inference, and abstraction skills</td>
<td>• Emphasis on enhancing analysis, inference, and abstraction skills</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class Activities</th>
<th>Biology 1</th>
<th>Biology 1 Honors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Highly structured and ordered</td>
<td>• Moderately structured and ordered</td>
<td></td>
</tr>
<tr>
<td>• Teacher directed, some open-ended activities</td>
<td>• Student initiative expected</td>
<td></td>
</tr>
<tr>
<td>• Frequent content/skill review</td>
<td>• Some content/skill review</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Biology 1</th>
<th>Biology 1 Honors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Highly structured and directed</td>
<td>• Moderately structured and directed</td>
<td></td>
</tr>
<tr>
<td>• Some amount of reading/writing required</td>
<td>• Moderate amount of reading/writing required</td>
<td></td>
</tr>
<tr>
<td>• Independent work reinforces new material introduced in class</td>
<td>• Independent work requires some new material to be learned outside of class</td>
<td></td>
</tr>
</tbody>
</table>

### FAQs about 9th grade classes
- **Q:** What is the difference between Biology I and Biology I Honors?
  - **A:** Generally speaking, the Biology I Honors class will cover more material at a deeper level and at a faster pace. See chart above for specifics.
- **Q:** Is there guidance with the externally moderated research project?
  - **A:** Externally moderated projects at the 9th grade level are divided into smaller pieces throughout the duration of the project. Timelines with approximate due dates are provided to students for planning purposes. Teachers provide explanation and limited assistance in class. However, a majority of the research and/or experimentation is conducted outside normal classroom hours.

### What else should 9th graders know?
- Honors Biology I has a summer assignment geared towards beginning the initial stages of the independent research project. This assignment will be distributed to students taking Biology I Honors prior to the end of their 8th grade year and will also be available on the MHS website.
McLean High School Science Class Flow Chart
For Science Graduation Requirements

**Standard Diploma:** 3 lab sciences from 3 different disciplines; 1 verified science credit

**Advanced Diploma:** 4 lab sciences from 3 different disciplines; 2 verified science credits

Possibilities for verified credits appear in shaded below

---

**Advanced Science Courses**

- **AP Biology**
  - (11th or 12th grade)

- **AP Chemistry**
  - (11th or 12th grade)

- **AP Physics**
  - (12th grade)

- **Human Anatomy & Physiology or**
  - Oceanography
  - (11th or 12th grade)

- **AP Environmental Science**
  - (11th or 12th grade)

- **Astronomy**
  - (11th or 12th grade)
Social Studies: World History and Geography I

Content and Historical Thinking Skills:
Students will explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. (C.E.) in terms of the impact on Western civilization.

The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking, raise questions, and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision making. These skills are developed through the study of significant historical substance from the era or society being studied.

What level should I take?

<table>
<thead>
<tr>
<th>All</th>
<th>World History and Geography I, Regular</th>
<th>World History and Geography I, Honors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covers the same content and uses the same online textbook.</td>
<td>Students are expected to learn the essential and expected indicators set out by the county and state in the SOL/POS benchmarks.</td>
<td>Students will learn the essential and expected indicators set out by the county and the state in the SOL/POS benchmarks. In addition, students will be required to learn the honors extensions.</td>
</tr>
<tr>
<td>All students are required to take the Virginia SOL test in May.</td>
<td>Homework and classwork are geared towards reinforcement with a primary focus on recall and application.</td>
<td>Homework and classwork are geared towards preparation for upcoming class activities and units with a focus on analysis and synthesis.</td>
</tr>
<tr>
<td>Writing Expectations</td>
<td>Students will be introduced to components of historical essay writing.</td>
<td>Students write approximately 1 essay per quarter.</td>
</tr>
</tbody>
</table>

Frequently Ask Questions:

1. What is the workload difference between Regular and Honors?
   - Both classes are rigorous; however, Honors students will be expected to complete more reading and outside activities on their own.
2. Are there any differences in grading between Regular and Honors?
   - The tests in Honors classes are weighted more heavily than in the Regular classes.
3. Are the textbooks the same for Regular and Honors?
   - Yes.
4. Will every student get a hardcopy of the textbook?
   - No, the county provides online textbook accesses to every student who is enrolled. Classrooms will be equipped with hardcopies of the textbook.
1. **What is the difference between Geometry and Honors Geometry?**

   A: Since Honors Geometry is an Honors course, the students work through the concepts at a faster pace than “college-prep” geometry. The expectations are higher and much of the material is more abstract and rigorous, with an emphasis on proofs. It contains several topics not covered in “college-prep” Geometry such as truth tables, points of concurrency, vectors, 3-D graphing, indirect proof and Non-Euclidean Geometry.

2. **Will my student need a TI-83, TI-83+ or TI-84 graphing calculator in Algebra I, Geometry or Algebra II?**

   A: Yes! Every student needs to have a graphing calculator in order to be successful in math. It is used to help students understand many of the concepts. There are two ways your student can obtain one. You may buy it (just make sure it is a TI-83, TI-83+ or TI-84); or your child may borrow one from the school while supplies last. However, if your child borrows one, it must be returned in good working order at the end of the school year. Students enrolled in Algebra II or above will need to buy their own to use.

3. **Can my child enroll in Computer Science in the 9th grade?**

   A: The math department recommends that students wait until the 10th grade to enroll in the course. However, students may enroll in the course anytime after they have successfully completed Algebra I and Geometry. We recommend that any student who is interested in math take Computer Science at some time during high school.

4. **Should my child take Algebra I (or Algebra II) in summer school?**

   A: Most of the time the answer is no. Algebra is the foundation course on which all higher-level mathematics is based. The McLean High School math department strongly recommends that students take the course over the normal school year. This allows a deeper understanding of fundamental concepts. However, if your student is highly motivated and can learn concepts on their own, we suggest the online courses that Fairfax County Public Schools offers. Contact the McLean guidance department for details. *The best course to take during summer school to move ahead is Geometry.*

5. **If my child is not enrolled in an Honors class now, can he/she enroll in Honors classes later?**

   A: Yes. However, the recommendation of the student’s current math teacher is extremely important for changing to the Honors courses. It can be a very difficult transition if a student has not experienced the increased pace and rigor.

6. **After which math classes are the SOL exams given?**

   A: The SOL tests are given to students who complete Algebra I, Geometry, and Algebra II.
7. **What is Mu Alpha Theta?**

A: McLean High School has a local chapter of the National Math Honor Society, Mu Alpha Theta. Every year, students who excel in math and have a GPA of 3.0 or higher may apply for admission. In addition, McLean High School now has a chapter of the National Computer Programming Honor Society.

8. **Where can my child get extra help?**

A: Highlander Time is part of our daily schedule and can be used to seek extra help from a student’s teacher. Extra help can be arranged with a student’s math teacher after school. On Thursdays after school, Algebra 1, Geometry, and Algebra 2 study sessions are organized with Math Honor Society students assisting any student having math questions. The McMathics Tutoring club meets on Thursdays after school and club members are available for all levels of mathematics help.

### McLean High School Mathematics Sequence

<table>
<thead>
<tr>
<th>Grade 8</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Grade Math SOL</td>
<td>Algebra I SOL</td>
<td>Geometry SOL</td>
<td>Algebra II SOL</td>
<td>Trigonometry &amp; Probability &amp; Statistics</td>
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<td>Precalculus with Trigonometry</td>
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<td>Computer Science</td>
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<td>AP Computer Science Principles</td>
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<td>AP Statistics</td>
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<tr>
<td>Algebra I SOL</td>
<td>Geometry SOL</td>
<td>Algebra II SOL</td>
<td>Trig &amp; Prob/ Stat Precalculus with Trigonometry</td>
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<td>AP Applied Calculus</td>
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<td>Calculus AB</td>
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<td>AP Statistics</td>
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<td>Computer Science</td>
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<tr>
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<td>AP Computer Science Principles</td>
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<tr>
<td>HN Algebra I SOL</td>
<td>Geometry HN SOL</td>
<td>Algebra II HN SOL</td>
<td>Precalculus HN</td>
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<td>Applied Calculus</td>
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<td>AP Calculus BC</td>
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<td>AP Statistics</td>
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<td>Computer Science</td>
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<tr>
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<td></td>
<td>AP Computer Science Principles</td>
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<td></td>
<td></td>
<td>AP Calculus Principles</td>
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<td></td>
<td>Multivariable Calculus &amp; Linear Algebra</td>
</tr>
</tbody>
</table>

*Computer Science (JAVA) – can be taken concurrently with Algebra II and above*

*AP Computer Science Principles is complementary to AP Computer Science A and these courses can be taken in any order or at the same time as schedules permit.*
MATH: HONORS VS. NON-HONORS CONTENT

All of the honors courses in the math department involve more depth in essential/expected subjects (less obvious solutions, more multi-step problems, more discovery based learning and less directed learning).

The following is a listing of the additional content areas covered in the honors level courses that are not covered in the related non-honors courses. This listing is based on the POS for these subject and instructional practices at McLean.

HONORS GEOMETRY VS. GEOMETRY

- Solve problems with three sets using Venn Diagrams
- Find the coordinates of the points of concurrency
- Special Segments in Triangles
- Write the equation of a circle
- Inequalities involving two Triangles
- Indirect Proofs
- Identify, draw, and label vectors using appropriate notation
- Express the addition and scalar multiplication of vectors
- Represent vectors as matrices and determine resultants
- Apply vectors to practical situations

HONORS ALGEBRA 2 VS. ALGEBRA 2

- Divide complex numbers using complex conjugates
- Use parametric equations to represent a linear or quadratic function
- Graph points and equations in 3 dimensions
- Find the composite of multiple functions
- Find the value and composition of multiple functions
-Verify two functions are inverses using composition
- Identify zeros, y-intercepts, intervals given a graph of a function
- Sketch the graph of a given rational function
- Use conic sections to model practical problems
- Rewrite equations of conic sections
- Find the product of two matrices greater than 2x2 by hand
- Find the determinant of a 2x2 and 3x3 matrix by hand
- Find the inverse of a 2x2 matrix by hand
HONORS PRE-CALCULUS VS. PRE-CALCULUS

- Evaluating Trig Expressions with Composite Inverse Functions
- Solving Trigonometric Equations and Inequalities in Rectangular, Parametric, and Polar
- Area of Triangles
- Vector Notation and Essentials
- Vector Operations
- Applications of Vectors
- Polar Coordinate System
- Converting Between Polar and Rectangular Coordinates
- Graphing Polar Functions with or without a Graphing Calculator
- DeMoivre's Theorem
- Linear Parametric Equations
- Eliminating the Parameter
- Quadratic Parametric Equations
- Motion in Two Dimensions (Rectangular and Parametric)
- Modeling and Applications
- Arithmetic and Geometric Sequences and Series
- Finding nth Term
- Explicit and Recursive Formulas
- Writing Equations for Series using Sigma Notation
- Convergence, Divergence, Limits
- Applications
- Mathematical Induction
- Binomial Theorem
- Factor Theorem, Rational Root Theorem
- Intermediate Value Theorem, Descartes’ Rule of Signs
- Partial Fraction Decomposition
- Finding Limits Graphically, Algebraically, and Numerically
- One-Sided Limits
- Limits at Infinity
- Properties of Limits
- Types of Discontinuity (point, jump, infinite)
- Removable and Non-removable Discontinuities
- Formal Definition of Continuity
- Secant Lines and Tangent Lines
- Local Linearity and Differentiability
- Average Rate of Change, Instantaneous Rate of Change, Velocities
- Finding the Derivative at a Point Graphically and Numerically
- Finding the Derivative at a Point Using the Limit Definition
- Finding Derivative Functions Graphically and Algebraically
- Shortcuts to Derivatives (Constant rule, Power rule, Trig functions)
- Product and Quotient Rules
- Chain Rule
- Second Derivative
McLean High School Visual Arts

PHOTOGRAPHY 1

1. Do I need a camera for this course?
   Yes. You need a 35mm SLR film camera. We have a limited supply of cameras that can be loaned to students but due to the large number of students enrolled in this course, we cannot provide a camera to every student. Most students buy good second hand film cameras or borrow them from family or friends.

2. Will any digital photography be covered in this course?
The course is heavily focused on film photography which provides students with the foundations needed to develop their skills and knowledge in both film and digital photography. Most assignments will have a smaller digital component where students will learn some basic Photo editing software such as Adobe Photoshop.

3. How is the class structured?
   This is a very hands on class where students will spend class time working on multiple aspects of photography including film development, printing in the darkroom, editing and finishing work. A major portion of the class involves self-directed studio time where students are expected to make full use of the facilities and materials provided. Students are provided with constant feedback about their work through the form of group and peer critiques. With the exception of a few assignments, most of the projects involve photographing subject matter outside of school.

4. Is there a fees for this course?
   There is a $65.00 lab fee for this class. With these fees, the school will provide for you all necessary chemicals, dry-mounting supplies, negative storage sleeves and other miscellaneous consumable supplies. You will need to provide photo paper (after 1st quarter) and film (after the first two rolls which are covered by your fees).

ART 1

5. What is covered in this class?
   Art 1 is a perfect foundation class for any of the art classes we teach at McLean. Students will be working a potpourri of different art mediums: Painting, drawing, sculpture etc.

6. Do I need to know how to draw?
   No, this course will give any student the foundations to learning to draw.

7. How is the class structured?
   Students will be given a variety of lessons throughout the year. Lesson timing will vary. Students will be expected to do a small amount of homework.

8. Is there a fees for this course?
   There is a $50.00 fee for this class. (amount may go up) With these fees, the school will provide for you all necessary art supplies you will need for the entire year.
9. Is this class just open for freshman?
   No, this class is open to any grade level. This makes the environment exciting.

CERAMICS 1

1. What will I be making in this course?
   Students will learn the 3 basic handbuilding methods; coil, pinch and slab. They will also learn a variety of glaze techniques. The class goes slowly to help everyone achieve success with ceramic basics. We will be creating functional and nonfunctional pieces.

2. Is this class just open for freshman?
   No, this class is open to any grade level. This makes the environment exciting.

3. How is the class structured?
   This is a very hands on class where students will working independently on each lesson. Students are expected to work and stay busy each class. Cleaning of the studio is part of every class to ensure a safe, clean environment for all.

4. Is there a fees for this course?
   There is a $60.00 lab fee for this class. (which may go up in 2018-19. With these fees, the school will provide for you all necessary tools, clay and glazes.)
Art Elective Flow Chart

9th Grade Art Electives

Studio Art and Design 1  Ceramics 1  Photography 1
Digital Art and Design 1 (formerly Computer Graphics 1)

2017-2018
Course Description: Each freshmen student will take 9th grade HPE which will include 3 quarters of Physical Education, 1 quarter of Health and a 3 week First Aid and CPR course. Most physical activity units will be approximately 4 ½ weeks. The students may participate in a variety of activities as prescribed in the Fairfax County Program of Studies, may which include, but are not limited to, the following: bowling, basketball, field hockey, fitness, lacrosse, pickle ball, soccer, softball, team handball, ultimate frisbee, volleyball, archery, badminton, distance running, golf, skating, power walking, table tennis, tennis, track and field, weight training and conditioning, hiking, orienteering, yoga, aerobics, dance, and recreational games. The sport activities offered will change with each school year to help prevent the repetition of units. Students will also participate in various fitness related activities in their HPE classes throughout the school year.

FAQ’s

How do I get a PE uniform?
-Uniforms can be purchased on My School Bucks at the start of the school year for $10.
On the Fairfax County Public Schools home page, you can get more information about the Foreign Language Program. Please click on Academic Programs (on the left of the home page), then on “Foreign Language” which is listed in the curriculum box on the right. Or you may type in the following:

http://www.fcps.edu/DIS/OHSICS/forlang/index.htm

There is an overview of the Foreign Language program in the County, the languages offered, the philosophy, an explanation of our Performance Assessment (PALS, or Performance Assessments for Language Students), the Program of Studies (Syllabus) for French and Spanish, the other will be coming soon and are very similar, the State Standards of Learning for modern languages and Latin, the National Standards etc.

In addition, level 4 language courses carry an additional .5 GPA weight to enable all students to strengthen their language skills and prepare for AP language courses.

The sequence of courses in foreign Language at McLean High School is as follows:

<table>
<thead>
<tr>
<th></th>
<th>French 1</th>
<th>French 2</th>
<th>French 3</th>
<th>French 4</th>
<th>AP French</th>
<th>Language</th>
<th>*French 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>Chinese 1</td>
<td>Chinese 2</td>
<td>Chinese 3</td>
<td>**Chinese 4</td>
<td>**AP Chinese</td>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>German 1</td>
<td>German 2</td>
<td>German 3</td>
<td>German 4</td>
<td>AP German</td>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>Latin 1</td>
<td>Latin 1</td>
<td>Latin 2</td>
<td>Latin 3</td>
<td>Latin 4</td>
<td>AP Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>Spanish 1</td>
<td>Spanish 2</td>
<td>Spanish 3</td>
<td>Spanish 4</td>
<td>AP Spanish</td>
<td>Language</td>
<td></td>
</tr>
</tbody>
</table>

* French 5 is offered at McLean High School to meet the needs of students coming through the French immersion program at Kent Gardens Elementary School and other students with outside experience. This class is offered contingent upon sufficient enrollment.

** Chinese 4 and AP Chinese are offered through Marshall Academy if McLean does not have sufficient enrollment.

Arabic 1, 2 and 3 are offered through the Fairfax Academy program. McLean students are able to begin Arabic language instruction through this program.
Korean 1,2,3,4 and AP are offered through the Fairfax Academy program. McLean students are able to access Korean language instruction through this program.
Performing Arts

Vocal Music
- Women’s Choir
- Madrigals (advanced mixed)
- Men’s Choir
- Armonia (advanced women’s)
- Women’s Choir

Music Theory
- Music Theory & AP Music Theory

Guitar
- Guitar 1 & 2

Band
- Wind Ensemble
- Jazz Band
- Concert Band
- Percussion Techniques
- Symphonic Band
- Jazz Band
- Percussion Techniques

Contact: Linda Martin  lsmartin1@fcps.edu  mhschoralsociety.com

Orchestra
- Concert Strings
- Philharmonic Strings
- Symphonic Strings
- String Techniques

Contact: Starlet Smith  SASmith4@fcps.edu  www.mhsorchester.org

Drama
- Drama 1-4
- Technical Theatre 1-4

Contact: Phillip Reid  pareid@fcps.edu  703-714-5817

For further information please contact Department Chair, Linda Martin  lsmartin1@fcps.edu
BUSINESS & INFORMATION TECHNOLOGY COURSES

ACCOUNTING (632000)

Accounting is the language of business and beneficial for any student planning on studying business in a postsecondary school. This course is for students who want to learn about the financial operations of modern business enterprises and prepares students to make better financial decisions for the future. Students study accounting concepts for sole proprietorships, partnerships, and corporations to understand the fundamental accounting equation, the business transaction analysis process, and the elements of financial reporting. Interpretation of accounting information is mastered through decision-making and problem-solving approaches that include source documents, case studies, and simulations. Technology integration and related accounting software applications are used to enhance skills to analyze and evaluate financial situations. Internet learning activities are used to reinforce research, communication, and team building skills. Course topics include forms of ownership, accounts receivable/accounts payable systems, payroll, taxes, and banking activities. Upon completion of this course, students will be able to complete an accounting cycle from transactions to financial statements. Industry certification may be available as part of this course.

PROGRAMMING (664000)

Prerequisite: Computer related course or equivalent skills
Students explore computer concepts, apply logic procedures, and implement programming procedures with one or more languages, such as Visual Basic.Net. Graphical User Interfaces may be used as students design and develop interactive multimedia applications. In addition, HTML or JavaScript may be employed to create Web pages.
FAMILY AND CONSUMER SCIENCES COURSES

GOURMET AND INTERNATIONAL FOODS  (825900)
This course allows students to explore food safety and sanitation, prepare and experience the flavor of global cuisines, become skilled in food presentation, and learn about the diverse careers opportunities related to the hospitality, tourism and recreation industry. Skills in mathematics, science, and technology will be reinforced throughout the curriculum. Students completing Gourmet and International Foods with a "B" or better may be eligible to articulate 4.5 credits at Stratford University. Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922. Students successfully completing this course may be eligible for articulated credit with approved colleges or universities.

MARKETING COURSES

FASHION MARKETING 1 (814000)
This is a specialized option that enables students to investigate and prepare for careers in fashion marketing and design. The objective is to provide students with preparation in the technology of fashion merchandising and basics of fashion marketing that will lead to immediate employment and/or become the basis for continuing education. Students may continue the classroom instruction through a Mall Marketing program in their Junior or Senior year or the Fashion Design program through the Academies.
INTRODUCTION TO MARKETING (811000)
This introductory course in marketing enables students to gain a basic understanding of marketing principles, techniques, and career opportunities. Students will develop fundamental social, economic, mathematical, marketing, job search and decision-making skills necessary for successful initial employment in retail, wholesale, or service businesses. Field trips, guest speakers, and competitive events through DECA membership enhance the course work.

Technology Education

STEM Design (843500)
STEM Design is a high school foundation class in Technology and Engineering Education. The course provides balance between basic applied engineering using the newest technologies, and skill building in Computer Aided Design (CAD). Students will be exposed to authentic problems which will assist in the development of personal skills in visualization, design, construction, digital development and problem solving principles. Students will also implement standards and concepts from mathematics and science to Mechanical Motion, Energy, Electronics, and Transportation Systems.
Special Education Department

Department Chairs
Kimberly Farmar – LD/ED/OHI (703) 714-5757
Mark Thompson – ID/AUT/Work Study (703) 714-5803

Team Taught Courses

<table>
<thead>
<tr>
<th>Subject</th>
<th>English</th>
<th>Math</th>
<th>Science</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>English 9</td>
<td>Algebra I</td>
<td>Biology</td>
<td>World History I</td>
</tr>
<tr>
<td></td>
<td>English 10</td>
<td>Geometry</td>
<td>Chemistry</td>
<td>World History II</td>
</tr>
<tr>
<td></td>
<td>English 11</td>
<td>Algebra II</td>
<td>or Active Physics</td>
<td>US/VA History</td>
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<td></td>
<td>English 12</td>
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<td></td>
<td>Government</td>
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Self-Contained Courses

<table>
<thead>
<tr>
<th>Subject</th>
<th>English</th>
<th>Math</th>
<th>Science</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>English 9</td>
<td>Algebra I Part I</td>
<td>Biology Part I</td>
<td>World History I</td>
</tr>
<tr>
<td></td>
<td>English 10</td>
<td>Geometry</td>
<td></td>
<td>World History II</td>
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<td></td>
<td>English 11</td>
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<td></td>
<td>US/VA History</td>
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<td></td>
<td>English 12</td>
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<td>Government</td>
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</tbody>
</table>

Other Self Contained Courses

- Strategies for Success
- Foundations of Science
- Foundations of English
- Foundations of US/VA History
- Foundations of US/VA Government
- Life Skills
- Developmental Reading
- Individualized/Personal Financial Math
- Education for Employment
- Work Awareness and Transition
- Career Preparation
- Adapted Physical Education