

Godwin High School's Honors & Advanced Placement Course Descriptions 2018-2019

Godwin High School is committed to providing an environment in which all students have equal access to all classes, including Honors and Advanced Placement classes. All classes will be open to all students who have taken the prerequisite courses, made an informed decision with the guidance of parent/guardian, and understand the course expectations. To assist you in your decision-making process, we have compiled this document to give as a reference you a clearer idea of the course descriptions and requirements.

We encourage all families to strongly consider the course descriptions, expected homework requirements, extra-curricular obligations, and suggested pre-requisites before enrolling in Honors or AP courses. High school counselors and administrators are available to discuss options with students and parents. Students and parents need to consider the total picture of the compilation of all courses together in addition to the student's extra-curricular involvements. Students and parents will need to sign an Honors/AP Commitment Form for each course at this level and submit these forms with the course selection sheet.

The content of AP courses is determined by the College Board. Honors courses are locally designed to challenge the student beyond the level offered in a college prep level course and, potentially, to prepare students for the rigor of future AP courses and exams. Students should consider that projects and exams may overlap and can result in work-load fluctuations. Summer work is often required for both levels.

The college admissions process is complex and fluid. Families should direct questions regarding the assignment of college credit for satisfactory scores on AP exams to: www.collegeboard.com/ap/creditpolicy.

A request to drop an Honors/AP course will only be considered after October 15, 2018 and will be dependent upon available space in the requested course/level. Further, prior to making such a request, a student is expected to seek additional assistance from the teacher.

HONORS & AP COURSE DESCRIPTIONS BY CONTENT AREA: (All courses listed below are for weighted credit in GPA calculations)

Note: All elective level Honors & AP courses are offered based on student interest & teacher availability

ENGLISH:

Honors English 9:

- Typical hours of homework per week: 3-4 hours, depending on individual reading speed
- Suggested prerequisite courses and academic achievement:
 - 8th grade Advanced English grade of A or B
 - Previous literature studies that present subject matter of a higher level of sophistication in both content and vocabulary
 - Teacher recommendation
- Course Description:
 - Analyze the meaning and effect of a passage related to grammar and syntax.
 - Write increasingly complex essays as a result of studying professional writers.
 - Understand use of rhetorical and literary devices to create meaning.
 - Greater focus on writing and grammatical instruction that reinforces knowledge in the parts of speech, sentence structure manipulation, abstract reasoning, and greater mastery of literary criticism.
 - Larger list and more rigor in reading selections for common studies novels (English 9A covers anywhere from five to seven literary works in a year)

Honors English 10:

- Typical hours of homework per week: 3-4 hours, depending on individual reading speed
- Suggested prerequisite courses and academic achievement:
 - English 9A: grade of A or B
 - English 9C: grade of A and teacher recommendation
 - Comprehend long texts independently; write analytically about literature and nonfiction; apply knowledge of grammar, organization, and style; and follow MLA guidelines for research
- Course Description:
 - English 10 honors is a survey of world literature that is meant to build off of the fundamentals taught in English 9 honors. In this course, students will read and analyze increasingly complex texts, apply advanced usage in grammar, and compose numerous essays with the intent of preparing for both the Writing SOL and the option of AP English 11.
 - With 1-2 full-length texts per marking period, students study the universality of myths and legends, the evolution of Western theatre including Shakespeare, notable pieces of world rhetoric, thematic poetry and short stories, memoir, and full-length fictional texts.
 - Students write at least 1 full researched analysis during the year and a combination of 2-3 timed in-class essays, processed papers, and/or revisions per marking period.
 - Active, literary-based participation is a requirement.

Honors English 11:

- Typical hours of homework per week: 3-4 hours, depending on individual reading speed
- Suggested prerequisite courses and academic achievement:
 - 10th grade honors English: Grade of A or B
 - 10th grade English: Grade of A
- Course Description:
 - An advanced level study of American Literature and writing.
 - Read more complex, layered texts with tone shifts and multiple tones.
 - Connect tools of persuasion to the meaning of a work as a whole.
 - Develop a distinct voice as a writer by choosing sentence structures, details, etc.
 - SOL English End-of-Course Reading, Literature, and Research Test with the following objectives:
 - Identify prevalent themes, universal characters, and genres in American literature.
 - Use the tools of rhetoric to develop persuasive writing.
 - Create an independent, documented, research project.

Advanced Placement English 11:

- Typical hours of homework per week: 4-5 hours, depending on individual reading speed
- Suggested prerequisite courses and academic achievement:

- Honors English 10; grade of A or B
- Strong desire to improve analytical writing skills
- Comprehend complex texts independently; identify and discuss the effect of literary and rhetorical strategies; write analytically under timed conditions with attention to usage, organization, and style; apply MLA guidelines for research
- Course Description:
 - AP Language and Composition is a college level course for high school students that focuses heavily on nonfiction and prepares students to both analyze rhetoric and compose original arguments. In their study of rhetoric, students will examine a variety of texts including: narratives, speeches, letters, editorials, documentaries, artwork, photographs, cartoons, and charts.
 - The course is also a survey of American literature. Students will read works from the American literary canon and discuss such topics as the duality of freedom and security in American culture, individuals' roles in society, education, race, family, and the American Dream.
 - To facilitate discussion, analysis, and practice with AP writing in class, students will independently, outside of class: blog online throughout the year, research an extended paper each semester, read 1-2 full-length texts each marking period, and read 2-4 short texts each week.
 - This course includes guided practice for the AP exam, the SAT verbal and writing sections, and the End of Course Reading SOL.

Honors English 12:

- Typical hours of homework per week: 3-4 hours
- Suggested prerequisite courses and academic achievement:
 - Successful completion of English 11 Honors
 - Teacher recommendation.
- Course Description:
 - This course surveys British literature from pre Anglo-Saxon times to the present.
 - Enriching the literature curriculum, teachers include parallel studies of English art, music, history, film and philosophy.
 - Students are expected to make literary connections with an emphasis on writing, discussion, and project based learning.

Advanced Placement English 12:

- Typical Hours of Homework a Week: 3-5 hours, depending on individual reading speed; additional time when out of class papers/projects are assigned
- Suggested prerequisite courses and academic achievement:
 - English 11 Honors **OR** English 11 AP Language and Composition
 - minimum 'B' average – recommended that this is prior to the Reading SOL being averaged into year-grade
 - ability to read for plot, character, conflict, theme, and basic literary devices independently
 - strong writing skills related to grammar, organization, style, and MLA guidelines for research
- Course Description:
 - Focus on the historical and philosophical influences on literature
 - Write pieces that require analysis, synthesis, and evaluation
 - Study British, American, and World Literature
 - Prepare for the Advanced Placement Literature and Composition Exam
 - Reading Expectations:
 - 2-3 full length texts (or comparable) for summer reading assignment
 - 2-3 full length novel/plays (or comparable) per marking period
 - focus on poetry
 - Writing Expectations:
 - paragraph response for bi-weekly vocabulary quiz of 25 words
 - Reader Response Journal – regular entries to correspond with reading assignments, including summer reading
 - 2-3 timed writing exercises per marking period
 - required revisions on some timed writings
 - 1 out of class essay (or comparable) per marking period – 5-7 pages in length; research required on 2 of 4 assignments

MATH:

Honors Geometry:

- Typical hours of homework per week: 3-4 hours
- Suggested prerequisite courses and academic achievement:
 - Earned grade of 92 or higher (Semester and Final grades) in Algebra I
 - Recommendation of current Math Teacher
- Course Description:
 - Students are expected to be able to work independently and to have strong problem-solving skills.
 - Students will work on the following curriculum skills at an accelerated pace:
 - Understand the nature of axiomatic system through investigation
 - Use logical reasoning when comparing plane, solid, and coordinate geometries
 - Use deductive reasoning from given assumptions
 - Classify figures in terms of congruence and similarity
 - Use coordinate representatives of 2 and 3 dimensional figures
 - Use transformations to identify congruence and similar figures

Honors Algebra II:

- Typical hours of homework per week: 3-4 hours
- Suggested prerequisite courses and academic achievement:
 - Earned grade of 90 or higher (Semester and Final grades) in Algebra I
 - Earned grade of 85 or higher in Honors Geometry
 - Earned grade of 93 or higher in Geometry
 - Recommendation of current Math Teacher
- Course Description:
 - Students are expected to be able to work independently and to have strong problem-solving skills.
 - Students will work on the following curriculum skills at an accelerated pace:
 - Solve linear equations, inequalities, and systems of equations
 - Solve and graph quadratic equations and higher degree equations
 - Explore patterns through finite differences and recursive formulas
 - Investigate polynomials
 - Discover matrices and how to apply them in problem solving
 - Explore statistics and their applications
 - Use a graphics calculator

Honors Math Analysis/Trigonometry:

- Typical hours of homework per week: 3-4 hours
- Suggested prerequisite courses and academic achievement:
 - Earned grade of 85 or higher in Honors Algebra II
 - Earned grade of 93 or higher in Algebra II
 - Earned grade of 85 or higher in Honors Algebra II
 - Recommendation of current Math Teacher
- Course Description:
 - Students are expected to be able to work independently and to have strong problem-solving skills.
 - Students will work on the following curriculum skills at an accelerated pace:
 - Explore polynomials, logarithms and exponential functions, matrices, theory of equations, curves, and conics
 - Investigate limits, derivatives, vectors, permutations, and probability
 - Solve and apply parametric and polar equations
 - Explore, graph, and apply trigonometric and circular functions
 - Solve trigonometric equations and verify trigonometric identities
 - Use a graphics calculator

AP Statistics:

- Typical hours of homework per week: 3-6 hours
- Suggested prerequisite courses and academic achievement:
 - Earned grade of 92 or higher (Semester and Final grades) in Honors Algebra II
 - Earned grade of 85 or higher (Semester and Final grades) in Math Analysis/Trigonometry
 - Recommendation of current Math Teacher
- Course Description:
 - AP Statistics is equivalent to a non-Calculus based, introductory-level college statistics course.
 - Students are expected to be able to work independently and to have strong problem-solving skills as the course requires a consistent level of abstract thinking and application of concepts.
 - The course is aligned with College Board's Advance Placement curriculum for AP Statistics and covers the topics of Data Analysis, Probability, Experimental Design, and Statistical Inference.

AP Calculus AB:

- Typical hours of homework per week: 5-6 hours
- Suggested prerequisite and academic achievement:
 - Earned grade of A or B in Math Analysis/Trigonometry
 - Recommendation of current Math Teacher
- Course Description:
 - Course is aligned with College Board's Advanced Placement curriculum.
 - Functions, limits, derivatives, integrals will be covered in depth.
 - Students are expected to take the AP exam at the conclusion of the course.

AP Calculus BC:

- Typical hours of homework per week: 5-7 hours
- Suggested prerequisite and academic achievement:
 - Earned a passing grade in AP Calculus AB
 - Recommendation of current Honors Pre-Calculus Teacher with an accompanying grade of B or better
- Course Description:
 - Course is aligned with College Board's Advanced Placement curriculum.
 - Also covers functions, limits, derivatives, integrals will be covered in depth, plus...
 - Parametric functions, vector functions, polar functions, sequences, and infinite series.
 - Students are expected to take the AP exam at the conclusion of the course.

AP Computer Science:

- Typical hours of homework per week: 4 – 6 hours
- Suggested prerequisite and academic achievement:
 - Earned a B or better in Algebra 2
 - Recommendation of current math teacher
- Course Description:
 - Course is aligned with College Board's Advanced Placement curriculum.
 - The course is taught using the Java programming language as determined by the Advanced Placement Board.
 - This course includes that study of variables, objects, arrays, classes, inheritance, and interfaces.
 - The course will also include the study of basic search and sort algorithms.
 - Students are expected to take the AP exam at the end of the course.

SCIENCE:

Honors Earth Science:

- Typical hours of homework per week: 2-4 hours
- Suggested prerequisite and academic achievement:
 - Earned grade of A in Physical Science in 8th Grade
 - Strong interest in the sciences
 - Teacher recommendation
- Course Description: Honors Earth Science is an SOL End-of-Course Test Class that connects the study of Earth's composition, processes, atmosphere, freshwater, oceans, and its environment in space. There is also an emphasis on the historical contributions of scientific thought about the Earth and space, as well as the interpretation of maps, charts, tables, and profiles. Students are expected to be able to extract key information from scientific publications, and analyze and interpret real-time data from various sources. Students in Honors are also expected to complete a long-term, independent, science project. The ability to work both independently and with others, to think critically, and to problem solve are critical. Strong time-management skills are also key. Additionally, students need strong reading and writing skills.

Honors Biology:

- Typical hours of homework per week: 2-3 hours
- Suggested prerequisite and academic achievement:
 - Success in previous honors or advanced level science courses
 - Strong interest in the sciences
 - Teacher recommendation
 - Willingness to prepare written lab reports
- Course Description: In addition to county curriculum and state standards of learning for all Biology students, Honors students are expected to:
 - Read for content in their textbooks, assigned journal articles, and other print sources. Students are responsible for the reading, which is then applied in problem solving activities.
 - Follow written instructions in labs and activities
 - Be able to conduct inquiry labs and written lab reports
 - Have some ability to apply concepts to problem solving. We help develop this skill, but students who are not independent thinkers, who look for the teacher to supply all the answers will struggle and be frustrated
 - Have advanced interpretive skills – including reading and analyzing data, graphs, charts and diagrams; mathematical models and some statistics; taking information from several sources and producing a logical connection between them.

AP Biology:

- Typical hours of homework per week: 5-7 hours
- Suggested prerequisite courses and academic achievement:
 - Previous success in honors biology or advanced level science courses
 - Significant interest in the sciences, particularly Biology
 - Concurrent enrollment in Chemistry or prior completion of Chemistry
 - Demonstrates a willingness to complete homework assignments
- Course Description:
 - AP Biology is an advanced elective science course that is taught at an accelerated pace.
 - AP Biology is intended to vastly expand the student's knowledge of the biological sciences, to hone his/her laboratory techniques and writing, and to develop skills, habits, and knowledge that will prepare the student for success at the University level and beyond.
 - Laboratory experiments will be a significant component of the course so that students can explore Biology in action. Many of the laboratory investigations involve the inquiry model, and students should expect to produce quality work without a step-by-step procedure.
 - Students will learn the application of data analysis and statistical procedures of lab results.

Honors Chemistry:

- Typical hours of homework per week: 3-5 hours
- Suggested prerequisite courses and academic achievement:
 - Completion of Honors Biology with a B or higher
 - Strong interest in the sciences
 - Teacher recommendation
 - Concurrent enrollment in Honors Algebra II or higher math
- Course Description:
 - Students need to be independent thinkers and should be able to apply concepts and problem solving skills when attempting new problems.
 - Laboratory exercises promote application of key concepts and require evaluation of chemical technique and calculations. Many labs are inquiry based. Students will need to be able to problem solve and come up with a clear, concise, step-by-step lab while working in groups.
 - The classwork and homework as well as tests are more challenging in preparation for AP Chemistry. A greater proficiency in problem solving is required.

AP Chemistry:

- Typical hours of homework per week: 5-7 hours
- Suggested prerequisite courses and academic achievement:
 - Completion of Honors Chemistry with a B or higher
 - Strong interest in the sciences
 - Teacher recommendation
 - Concurrent enrollment in Trigonometry or higher math
- Course Description:
 - AP Chemistry is an equivalent college level course for mastery of basic inorganic chemistry concepts. This rigorous class is best suited for a student that is self-motivated and genuinely interested in chemistry.
 - Students should have strong mathematical foundations in algebra and problem solving skills. Students are expected to link material and concepts and have the ability to apply in another concept. All laboratory exercises support the current topics and required theory knowledge and mathematics for critique of technique and data analysis.
 - This class requires reading and problem sets outside of class and a minimum of 6 hours per week of study time.

AP Physics 1:

- Typical hours of homework per week: 4-6 hours
- Suggested prerequisite courses and academic achievement:
 - Earned grade of A or B in Honors Chemistry or A in College Prep Chemistry.
 - A or B in College Prep Physics
 - Concurrent enrollment in Trigonometry, earned grade of A or B in Algebra I.
- Course Description:
 - AP Physics is equivalent to a first semester Trig Based College Physics Course. AP Physics 1 presents a complex study in the areas of force and motion, energy transformations, wave phenomena, electricity, and non-Newtonian physics.
 - The use of mathematics, including algebra and trigonometry, is important, but conceptual understanding of physical systems is the primary concern. Limited instruction on algebraic techniques will be provided, and it is assumed that students will have a thorough understanding of algebra.
 - Laboratory experiments will be a significant component of the course so that students can experience the principles of physics in action. Many of the laboratory investigations involve the inquiry model, and students should expect to produce quality work without a step-by-step procedure.

AP Physics 2:

- Typical hours of homework per week: 4-6 hours
- Suggested prerequisite courses and academic achievement:
 - Earned grade of A or B in AP Physics 1 or strong A in College Prep Physics.
- Course Description:
 - This is a rigorous physics survey course integrating considerable depth of coverage in fluids, thermodynamics, electricity, magnetism, optics and modern topics.
 - AP Physics 2 is equivalent to a second semester Trig Based College Physics Course. Students are expected to come into the course with a strong foundation in Algebra and Trig, problem solving and data analysis skills. Students are routinely asked to solve problems and mathematically support their findings while applying knowledge accrued from basic science skills.
 - Students will be expected to apply concepts that are studied to new applications as well as applications seen in class. There is a strong emphasis on lab work in the class, including more challenging inquiry investigations.

AP Physics C: Mechanics Only:

- Typical hours of homework per week: 3-6 hours
- Suggested prerequisite courses and academic achievement:
 - Earned grade of A or B or C in AP Physics 1 or strong A in College Prep Physics.
 - Earned grade of A or B in Honors Chemistry.
 - Earned grade of A or B in Trigonometry.
 - Concurrent enrollment in Calculus (college prep or AP AB/BC).
- Course Description:
 - AP Physics C Mechanics is equivalent to a first semester Calculus Based College Physics Course. AP Physics C presents a complex study in the areas of Kinematics, Forces, Energy & Momentum Transfer, Gravitation & Oscillations. The expectation is that students will take the APC Mechanics test at the end of the year.
 - Conceptual understanding of physical systems is helpful but not required, as the pace of the course allows for adequate instruction on conceptual relationships. Instruction on calculus and its application to problem solving will be provided.
 - Laboratory experiments will be a significant component of the course so that students can experience the principles of physics in action. Many of the laboratory investigations involve the inquiry model, and students should expect to produce quality work without a step-by-step procedure. Expectations for lab writing will be at the college level.

AP Environmental Science:

- Typical hours of homework per week: 3-5 hours
- Suggested prerequisite courses and academic achievement:
 - Honors Earth Science, Honors Biology, Honors Chemistry, Algebra 2
 - Highly recommended from college prep chemistry
- Course Description:
 - AP Environmental Science is designed to explore the impact that humans have on the environment. With Ecology as the base discipline of study, students will explore how ecosystems are structured and function.
 - Additionally, students will investigate how human actions are disrupting the function of these systems through the study of air, water, and soil pollution, agriculture, population growth, energy resources and consumption, and alternatives to environmental degradation.
 - These topics will be explored via lecture, lab, and, project based assignments.

SOCIAL STUDIES/ SOCIAL SCIENCES:

Honors World History and Geography I:

- Typical hours of homework per week: 3 hours
- Suggested prerequisite courses and academic achievement:
 - 90 or better in Honors English 8
 - 90 or better in Civics and Economics
- Course Description:
 - World History and Geography I is the Study the history of people, places, and religions from ancient times to 1500. Major areas of focus include Mesopotamia, ancient Greece and Rome, and the Middle Ages. Comparative studies include African, early American, and Asian contributions to civilization.
 - Students will be expected to work independently on assigned tasks.
 - Intense writing will be expected which includes essay tests, short-term projects as well as thesis driven papers using primary sources and analyzing primary and secondary sources.

Honors World History and Geography II:

- Typical hours of homework per week: 3 hours
- Suggested prerequisite courses and academic achievement:
 - 90 or better in Honors English 8 or 9
 - 90 or better in Honors or Accelerated WHGI
- Course Description:
 - World History and Geography II studies and explores people, places and religions from about 1500 to the present. The Renaissance, and Reformation and global war periods are analyzed. Comparatives studies of the empires in India, China, Japan, sub-Saharan Africa and Central America are included.
 - Students will be expected to work independently on assigned tasks, complete short-term projects as well as thesis driven papers using primary sources and analyze primary and secondary sources.
 - Intense writing will be expected which includes book reviews, essay tests and thesis driven papers using primary sources and analyzing primary and secondary sources.

AP European History:

- Typical hours of homework per week: 6-7 hours
- Suggested prerequisite courses and academic achievement:
 - 90 or better in Honors English 9
 - 90 or better in World Geography, WHI or WHII
- Course Description:
 - AP European History requires students to read and take notes.
 - Students should possess the ability to discuss the relevant events of modern European history from the Renaissance period to the fall of Communism.
 - Tests will resemble those of the AP Exam. Students are required to write essays discussing historical events. Some essays require the use of primary documents.
 - Successful completion of the national AP European Exam may result in the awarding of college credit.

Honors United States History

- Typical hours of homework per week: 3-4 hours
- Suggested prerequisite courses and academic achievement:
 - 90 or better in Honors English 10
 - 90 or better in Honors World History I and II
- Course Description:
 - Honors United States History is an accelerated history class for high school students. While focusing on political, economic, and social history, the student will explore the implications of historic events and policies on America's past and present.
 - Students will be expected to work independently on assigned tasks and complete short-term and long term projects. There will be an emphasis on primary and secondary sources as well as on historical research and writing.

AP US History:

- Typical hours of homework per week: 6-7 hours
- Suggested prerequisite courses and academic achievement:
 - 90 or better in Honors English 10
 - 90 or better in Honors World History I and II
 - Prior AP experience is strongly recommended
 - Students need to have a degree of independence and be self-motivated learners
 - Possess excellent writing skills and critical thinking skills.
 - There is an increased emphasis on self-directed reading.
- Course Description:
 - Advanced Placement United States History is a college level course for high school students. It is designed to provide students with the analytical skills and factual knowledge necessary to critically examine the issues and problems of American History and their implications.
 - Students will learn to assess historical materials and evaluate the evidence and interpretations presented in historical scholarship. In order to prepare students for college level courses, they will be expected to read and learn the facts of history independently, decipher the material in primary sources, and apply their knowledge to expository and evaluative essays.
 - Successful completion of the national AP U.S. History Exam may result in the awarding of college credit.

Honors VA and US Government

- Typical hours of homework per week: 3 – 4 hours
- Suggested prerequisite course and academic achievement

- 90 or better in WHGII and VA/US History (College Prep or Honors level)
- Students need to have a degree of independence and be self-motivated learners
- Students need to be factual as well as conceptual masters of the material;
- Interpret primary source material
- Exhibit independence in group activities and projects; focus on themes and the “why”
- Possess excellent writing skills and critical thinking skills.
- There is an increased emphasis on self-directed reading.
- Extensive writing assignments are expected on a regular basis

Course Description:

- The American Government course is focused around eight units: Foundations, Political
 - Belief/Behavior, Parties & Interest Groups, Legislative Branch, Executive Branch, Judicial Branch, Civil
 - Rights & Liberties, and Public Policy.
- Each unit is designed to give students historical background, an understanding of general concepts and the opportunity to analyze key legislation and court cases.
- Testing which involves difficult multiple choice and extensive essay writing.
- Students will recognize the importance of the Constitution as it relates to ALL areas of their lives.
- Students will possess a deeper knowledge of the strengths and weaknesses of the American Government

AP Government:

- Typical hours of homework per week: 4-5 hours
- Suggested prerequisite courses and academic achievement:
 - Prior AP experience and consistent grade of 90 or better in past social studies classes is strongly recommended
- Course Description:
 - The AP American Government course is focused around eight units: Foundations, Political Belief/Behavior, Parties & Interest Groups, Legislative Branch, Executive Branch, Judicial Branch, Civil Rights & Liberties, and Public Policy.
 - Each unit is designed to give students historical background, an understanding of general concepts and the opportunity to analyze key legislation and court cases.
 - Students will recognize the importance of the Constitution as it relates to ALL areas of their lives.
 - Students will possess a deeper knowledge of the strengths and weaknesses of the American government in addition, politics and understand their role in the process.

- Successful completion of the national AP Government test may result in the awarding of college credit.

Honors Principles of Leadership

- Typical hours of homework per week: 1-2 hours
- Suggested prerequisite courses and academic achievement:
 - B or better in Honors English 10
 - B or better in World History I or II
- Course Description:
 - The primary goal of this course is to promote and develop leadership skills for life.
 - Students will develop an awareness of his/her own leadership potential, while gaining the appropriate skills to advance both personal and group goals.
 - Students are encouraged to analyze the responsibilities and commitments in the context of leadership for the common good and for purposeful change.
 - The course includes the study of leadership as well as the application of leadership theories, concepts, and skills. Students will develop their own leadership potential through the completion of personal and leadership self-assessments, values exploration, event planning and leadership skill practice through course activities.

AP Psychology:

- Typical hours of homework per week: 4-5 hours
- Suggested prerequisite courses and academic achievement:
 - 90 or Higher in previous Socials Studies Courses and English Classes
 - Strongly recommend successful completion of previous Honors or AP level English or Social Studies course
- Course Description:
 - The purpose of the AP course in Psychology is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals.
 - Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology.
 - Students also learn about the ethics and methods psychologists use in their science and practice.
 - Students will perform psychological research and will be expected to work independently on various assignments during the course.
 - Successful completion of the national AP Psychology test may result in the awarding of college credit.

MISCELLANEOUS

Engineering Explorations I Honors 8450A

- Typical hours of homework: 1 - 2 hours of work outside of class
- Suggested prerequisite courses and academic achievement:
 - Technical Drawing & Design 8435
- Course Description:
 - Students will explore engineering careers, history, practices, and concepts throughout the year.
 - This class focuses on using STEM education, science, math, engineering, and technology, to analyze and solve problems
 - Students learn how to use tools and machines for processing materials or products.
 - Using STEM concepts, students will apply mathematical and scientific principles to technical problems.
 - Likewise, students use computers to analyze data and mechanical/electrical systems to solve problems.

Engineering Studies II Honors 8491A

- Typical hours of homework: about 2 hours of work outside of class
- Suggested prerequisite courses and academic achievement:
 - Engineering Explorations 8450A
- Course Description:
 - Students will further their knowledge and experience gained in Engineering Explorations through hands on project based work.
 - Students will use machines and tools for processing materials and products.
 - Students will implement STEM concepts by using math and science principles to solve technical problems.

Honors Virginia Teachers for Tomorrow I

- Typical hours of homework per week: 2-3 hours
- Suggested academic achievement:
 - Application process: includes
 - 3 teacher recommendations
 - Essay
 - Earned grade point average of 3.0
- Strong interest in education
- Course Description:
 - a focus on learning about one's self
 - a study of our educational system from our historical, political, and actual classroom viewpoints, focusing on the learner, the school, and the teacher
 - a study of specific teaching methods in various subject areas
 - an opportunity for students to gain firsthand knowledge of teaching through practical experience in the elementary and middle schools
 - a unit on child development from birth to adolescence
 - a wide variety of guest speakers, films, current publications, field trips, discussions, videotaping, role playing, decision making, problem solving, interviewing, practice teaching, and observation activities

Honors Virginia Teachers for Tomorrow II

- Typical hours of homework per week: 2 hours
- Academic achievement:
 - Teachers for Tomorrow I
 - Strong interest in Education
- Course Description:
 - Practicum experience in elementary and middle schools.
 - 4 days a week
 - Independent study and research in current education topics
 - Class management
 - Teaching methods
 - FEA projects
 - Explore careers in education
 - Mock interview with Henrico County Public School educators