

**ACADEMY FOR  
ALLIED HEALTH  
SCIENCES**



**ACADEMIC PROGRAM GUIDE  
2017-2018**

Dear Parents/Guardians and Students:

The Academic Program Guide is designed to help you select an appropriate course of study for the next academic year. Inside you will find course descriptions detailing the contents and requirements for all of the courses offered at the Academy for Allied Health Sciences. In addition, this Guide contains important information regarding academic policies and procedures, including our grading policy, QPA calculation, and graduation requirements. Please look over this guide carefully, and feel free to contact me or your child's school counselor with any questions or concerns you may have.

Sincerely,

*Walt Smolenski*

Principal  
Academy for Allied Health Sciences

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## **SCHEDULING**

Students will register for courses via the PowerSchool Parent Portal and complete a course registration form which must be returned to the appropriate school counselor. Students and parents should carefully read over all course descriptions and pre-requisites before selecting classes. Students will only be allowed to request courses for which they meet the pre-requisite requirements.

Every attempt will be made to honor a student's course requests; however, conflicts may occur due to scheduling constraints, in which case, students will be enrolled in the courses selected as alternates. Therefore, alternate choices should be selected carefully when planning a schedule of courses and ranked in order of preference.

## **ELECTIVE COURSE SCHEDULING**

Classes that do not fulfill a specific graduation requirement are considered elective courses. Students may choose elective courses from any of the following three categories:

1. Core Content Courses (Vocational Education, Social Studies, Mathematics, Science, World Language)
2. Interdisciplinary Courses
3. Vocational Courses at another UCVTS School\*

\*Scheduling priority is given to students in the school where the vocational course is offered. Students wishing to enroll in a vocational course outside of AAHS may do so only if space permits and the course is educationally beneficial to the student. Vocational courses in other UCVTS schools are available to AAHS students on a limited basis. Please keep this in mind when making elective and alternate choices.

## **SCHEDULE CHANGES**

Schedule changes will **not** be made for reasons of convenience or because of teacher preference. Only changes which are educationally beneficial to the student will be considered.

Scheduling changes will **not** be considered for any of the following reasons:

1. Course content or standards differing from student expectations.
2. Inability of a student to relate well to a given teacher.
3. Dropping a course in order to lighten one's load.
4. Participation in extra-curricular activities and/or athletics.

## **DROP/ADD PERIOD**

Students have two weeks from the start of a semester to request a schedule change. All requests must be made in writing to the student's school counselor and will only be made if the change is educationally beneficial to the student.

## **ADVANCED PLACEMENT (AP) COURSE REQUIREMENTS**

Advanced Placement (AP) courses are college-level courses that give students the opportunity to earn college credit or placement while still in high school. Due to the academic rigor of these courses, enrollment in an AP course has the following eligibility requirements:

1. Students **must** attend an AP Information Session for the course(s) of their choice in the spring of the preceding year.
2. Students and parents/guardians **must** read and sign a contract outlining course policies and expectations.
3. Students **must** have earned a grade of 85 or above in all prerequisite courses or have obtained a recommendation from the subject area instructor.

All AP courses are designed for those wishing to work diligently in order to prepare for the AP Exam administered by the College Board in May.

## GRADING POLICY

Grades may be interpreted as follows:

A	90-100
B	80-89
C	70-79
D	65-69
F	64 or below

For full year courses, each marking period grade counts for 20% of the student's final course grade. Midterm and final examinations each count for 10% of the final course grade.

For semester courses, each marking period grade counts for 40% of the student's final course grade. The final semester examination counts for 20% of the final course grade.

## QUALITY POINT AVERAGE

A Quality Point Average (QPA) will be calculated for each student. The final course grade is multiplied by the number of credits received for the course. The total credits and the total quality points are then divided to produce the QPA as in the *example* below:

Subject	Grade	Credits	Quality Points
Vocational	95	5	475
English	90	5	450
Social Studies	94	5	470
Math	87	5	435
Science	90	6	540
World Language	90	5	450
Fitness	98	3.75	367.5
Health	99	1.25	123.75
<b>Total</b>		36	3311.25

$$3311.25 / 36 = 91.9792$$

### **QPA is calculated only when a course has been completed.**

The QPA appearing on the high school transcript is **unweighted** and includes all subjects with the exception of repeated coursework. An official QPA can be obtained from the student's school counselor.

## FAILURES

Students that fail a course that is required for graduation must attend summer school and successfully complete the course before the next course in that subject area's sequence can be taken. It is the student's responsibility to find and enroll in an approved equivalent of the failed course. The transcript will show the student's failing grade in the course, which will be included in the QPA. The transcript will also show that the student repeated the class and the grade that was earned. Grades earned in repeated coursework are not included in the QPA.

## ACADEMIC PROBATION

Students whose work falls below acceptable standards of achievement (70%) may be placed on academic probation. A conference with a school administrator, counselor, parent(s), and student may be required so that the academic expectations of the Academy for Allied Health Sciences may be reviewed. Options to help a student, such as peer tutoring, individualized instructional plans, or extra assistance from the faculty may be implemented. The school administrator may also take action on a case-by-case basis, including limiting a student's co-curricular options and participation in extra-curricular activities.

## GRADUATION REQUIREMENTS

Students must earn 120 credits to graduate with a high school diploma endorsed by the New Jersey Department of Education. The **required** coursework for Academy for Allied Health Sciences is as follows:

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
<b>Vocational Education</b> <i>4 years</i>	Dynamics of Health Care	Emergency Clinical Care <b>and</b>  Community Health <b>and</b>  Medical Terminology	Anatomy Physiology I	Emergency Medical Technician
<b>English</b> <i>4 years</i>	World Literature	Early American Literature	Modern American Literature	British Literature <i>or</i> AP Literature & Composition
<b>Social Studies</b> <i>3 years</i>	World History	United States History I	United States History II	
<b>Mathematics*</b> <i>4 years</i>	Combined Algebra	Geometry/Trigonometry	Math Analysis	Calculus <i>or</i> AP Calculus I/AB <i>or</i> Probability & Statistics <i>or</i> AP Statistics
<b>Science</b> <i>4 years</i>	Biology <b>and</b> Scientific Inquiry & Analysis	Chemistry	Physics	Additional Science Course
<b>World Language*</b> <i>3 years</i>	Spanish I	Spanish II	Spanish III	
<b>Fitness/Health</b> <i>4 years</i>	Fitness I & Health I	Fitness II & Health II	Exercise Programming & Prescription <b>and</b>  Intro to EKG Interpretation	Fitness IV <b>and</b>  Fundamentals of Health & Wellness
<b>Visual and Performing Arts</b>		Dance Appreciation		
<b>Financial Literacy</b>		Financial Literacy		

\*Initial placement determined by UCVTS.

## AWARDS AND HONORS

**Honor Roll:** Awarded each Marking Period to students earning an 80 or above in all subjects.

**High Honor Roll:** Awarded each Marking Period to students earning a 90 or above in all subjects.

**National Honor Society:** Open to junior and senior students who meet the Society's standards for academics, character, leadership, and service. Students must have a QPA of 92 or above in order to be considered.

**Spanish Honor Society:** Open to junior and senior students earning a 92 or above in Spanish, and an overall QPA of 85 or above. Students must meet the Society's standards for academics, character, leadership, and service.

## **ARTICULATION AGREEMENT**

**Rutgers University:** The Academy for Allied Health Sciences participates in an articulation agreement with the Rutgers University School of Health Related Professions. The mission of the program is to provide high school to college or high school to career preparation for multiple health careers through a core curriculum emphasizing science, the human and organizational side of health care, and the opportunity to earn college credit and clinical experience.

The goals of the program are to:

- Promote the concept of the health care team as essential to patient well-being
- Assist in creating a health work force that has ethnic and gender diversity
- Promote a broadly trained health practitioner who will meet the needs for future new health professional
- Provide students with a strong foundation in science, communication, and the health care system
- Enhance quality high school to college articulation.

Courses available as dual-credit opportunities with Rutgers University:

- Dynamics of Health Care<sup>#</sup>
- Emergency & Clinical Care<sup>#</sup>
- Medical Terminology<sup>#</sup>
- Anatomy & Physiology I<sup>#</sup>
- Fundamentals of Health and Wellness<sup>#</sup>
- Introduction to Clinical Research
- Anatomy & Physiology II
- Medical Mathematics
- Scientific Principles of Nutrition

# Required AAHS Course

**Union County College:** The Academy for Allied Health Sciences participates in an articulation agreement with Union County College for AAHS seniors to receive instruction from UCC professors who are certified Emergency Medical Technician-B trainers. UCC professors conduct practical and classroom instruction at AAHS and prepare students for New Jersey State EMT certification exams. All AAHS students must participate in a certification course and all have the opportunity to gain EMT-B certification.

## VOCATIONAL EDUCATION

\* Courses marked with an asterisk may be available to students from other UCVTS schools based on availability. Academy for Allied Health Sciences students are given priority enrollment in these courses.

# Courses are offered in partnership with Rutgers University School of Health Related Profession. Students have the opportunity to earn dual credit.

**Course Title:** Dynamics of Health Care in Society#  
**Grade Level:** 9

**Course Number:** 01\_1001\_020  
**Credits:** 5

In this course, students will learn about the environment and components of the health care field of employment. Topics will include ethics, professional behavior, decision making, problem solving, management, infection control, safety on the job, health careers, stress, time management skills, the history of health care, communication, getting a job and job satisfaction. Students will participate in varied activities and projects to help understand and implement the importance of teamwork and interpersonal relationships throughout their careers. This course will serve as a foundation for the students in exploring the fundamentals of health care in today's society.

**Course Title:** Community Health  
**Grade Level:** 10

**Course Number:** 01\_2001\_020  
**Credits:** 2.5

**Pre-Requisite:** Successful completion of Dynamics of Health Care

This course will explore the various areas of public health, and the many opportunities for careers in this branch of health care. Students will recognize various ways they can make an impact in their own neighborhoods, as well as in their professional careers. We will examine community and government resources, such as WIC, FDA, CDC, Medicaid, public assistance, nutritional programs, senior centers, daycare centers, big brother programs, schools, foster care, handicapped programs, Meals on Wheels and many other outreach programs available to the community. Sanitation issues, animal health issues, disaster preparedness, epidemiology, and public health emergencies will be discussed. Language barrier issues, cultural differences, and all community needs will be examined. Students will become proficient in measuring vital signs. Blood pressure, temperature, pulse, respiration, height and weight will be highlighted. Students will learn various assessment skills, such as differentiating between heart and lung sounds, and be able to recognize numerous abnormal signs and symptoms that patients may exhibit. They will learn how to perform range of motion exercises in patients, and understand the connection between keeping active and maintaining optimal health. Focus will be on the promotion of optimal wellness in the community. Field trips to enrich this curriculum will be included.

**Course Title:** Emergency and Clinical Care#  
**Grade Level:** 10

**Course Number:** 01\_2002\_020  
**Credits:** 2.5

**Pre-Requisite:** Successful completion of Dynamics of Health Care

Students will be trained to respond to community emergencies through the American Red Cross' first aid course. Topics such as bleeding, head injuries, illnesses, trauma, poisoning, behavioral incidents, splinting, substance abuse, skeletal injuries and motor vehicle accidents will be addressed. Professionalism and HIPAA law will be emphasized throughout the course. Guest speakers may be invited to share their experiences and expertise. Throughout this course, the focus will be on understanding many ways that students can make a difference as health care providers in their own communities. Students will be trained in various patient care skills, such as turning and positioning, transfer techniques, wheelchair transport and bed making.

**Course Title:** Medical Terminology#

**Course Number:** 01\_2003\_020

**Grade Level:** 10

**Credits:** 5

**Pre-Requisite:** Successful completion of Dynamics of Health Care

This course is a study of the language related to medical science and allied health specialties with emphasis on word analysis, construction, definition, pronunciation, spelling, and standard abbreviations. The program is system structured to facilitate association of terminology with anatomy and physiology, symptomatology, diagnostic operative and therapeutic procedures.

**Course Title:** Anatomy and Physiology I#

**Course Number:** 01\_3001\_020

**Grade Level:** 11

**Credits:** 5

**Pre-Requisite:** Successful completion of Dynamics of Health Care

Human Anatomy and Physiology is designed for the advanced biology student contemplating a health-related profession. The intent of the course is to provide an in depth study of the human body with an emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. The essential principles that will be presented include: basic anatomical and directional terminology, principles of cell biology and a survey of the Integument, Skeletal system, Muscular system, and Nervous system, including the sensory organs. As the course progresses, students will integrate all parts into the whole, reflecting on the unifying theme of homeostasis. An integral part of the course will be the laboratory component, including dissections of varying higher order species to simulate human anatomy.

**Course Title:** Emergency Medical Technician

**Course Number:** 01\_4001\_020

**Grade Level:** 12

**Credits:** 6

**Pre-Requisite:** Successful completion of CPR Certification Requirements

This course meets the requirements of the National Highway and Transportation Safety Administration's Emergency Medical Technician: National Standard Curriculum. The course is designed to instruct a student to the level of Emergency Medical Technician (EMT). The EMT serves as a vital link in the chain of the healthcare team. The student will learn all skills necessary to provide emergency medical care at a basic life support (BLS) level with an ambulance or other specialized service. Upon successful completion of this course, the student will be eligible to take the state certification exam, which is required to obtain an EMT provider card issued by the NJ Department of Health and Senior Services – OEMS.

**Course Title:** Medical Mathematics (IDST-1400)\*#

**Course Number:** 01\_5001\_020

**Grade Level:** 11, 12

**Credits:** 1.25

**Pre-Requisite:** Successful completion of Dynamics of Health Care

**Co-Requisite:** Course sequenced with Introduction to Clinical Research

This course will provide a review of basic mathematical calculations and will instruct the learner on how to convert equivalents from one system to another and accurately mix and measure drugs. Emphasis will be placed on how these techniques are used in the administration of medications for patient use.

**Course Title:** Introduction to Clinical Research\*

**Course Number:** 01\_5002\_020

**Grade Level:** 11, 12

**Credits:** 1.25

**Co-Requisite:** Course Sequenced with Medical Mathematics

This course is designed to provide students with a basic understanding of what clinical research is and the scientific principles on which it is based. The course starts with a historical perspective on clinical research and then goes on to explore in detail the following topics: purpose and phases of clinical research, clinical trial development and conduct, ethical and regulatory implications, and the roles and responsibilities of all parties involved in clinical research.



**Course Title:** Medical Ethics

**Course Number:** 01\_5004\_020

**Grade Level:** 11, 12

**Credits:** 2.5

**Pre-Requisite:** Successful completion of Dynamics of Health Care

This course will explore the major ethical issues confronting the practices of the health sciences. Students will become familiar with legal and institutional positions, consider and debate opposing arguments on the various topics, and examine relevant case studies. This course will expose students to different ethical frameworks and build understandings of how these framework apply to contemporary ethical questions in the health science field. This course will also help students identify and analyze their own positions on important issues in contemporary health science ethics and the compatibility of these positions with broader philosophical commitments.

**Course Title:** Senior Internship

**Course Number:** 01\_5005\_020

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** Student must secure internship at new or existing partner site by December 1. Student must have transportation to the internship.

The senior experience establishes liaisons to provide valuable learning opportunities and bridge the world beyond the campus. Mentorship opportunities will further educational pursuits in the Healthcare field. This out-of-school work experience will be offered during the second semester of the senior year. The internship will provide the opportunity for the student to experience “work-based learning” by placing them in a health care career setting at local facilities. The internship is unpaid.

*Placement locations should be identified by the student with assistance of the internship coordinator.*

*Placements must be found before December 1.*

**Course Title:** Scientific Principles of Nutrition\*#

**Course Number:** 01\_5006\_020

**Grade Level:** 11, 12

**Credits:** 2.5

**Pre-Requisite:** Successful completion of Dynamics of Health Care

This course designed to explore the science and nutrition of food. It will provide students with an understanding of the history and origin of food, the harvesting and production of food, along with the processing of food, and the culinary arts. The digestion process, functions of certain nutrients in the body as well as some effects of specific nutrient deficiency will also be addressed. In addition, food safety and food borne illnesses’ along with the role of food in health, disease prevention, and its affects to the body, both acute and chronic, will also be examined. Guest speakers may be invited to share their knowledge in the food and nutrition sciences .Students will be participating in various activities including field trips, internet based projects, and occasional laboratory based exercises to help summarize and implement the broad disciplines of food science and nutrition.

**Course Title:** Introduction to Forensic Medicine\*

**Course Number:** 01\_5007\_020

**Grade Level:** 11, 12

**Credits:** 2.5

**Pre-Requisite:** Successful completion of Biology

This course provides an overview of the many ways that science can be applied to help enforce the law with an emphasis on disciplines related to allied health sciences. Both lectures and laboratory exercises are utilized to teach the concepts of recognition, evaluation, and utilization of evidence in the criminal justice system. Also covered are the significance of forensics; types, classification, collection, and preservation of evidence; rules governing physical evidence and expert testimony; the various careers that are available in the wide and varied fields of forensics.

**Course Title:** Anatomy and Physiology II\*\*

**Course Number:** 01\_5008\_020

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** Successful completion of Anatomy and Physiology I

**Core Requirement:** This course may be used to satisfy the UCVTS fourth year science requirement.

Anatomy and Physiology is the study of the structure and function of the human body. This course follows a sequential development of the major body systems in an organized and structured curriculum. The course is designed to give the students a selective overview of human anatomical structure and an analysis of human physiological principles. Labs will include, slide work, dissection of various animals and studies of the human skeleton. The course will also use computer simulated dissection.

**Course Title:** Microbiology\*

**Course Number:** 01\_5009\_020

**Grade Level:** 11, 12

**Credits:** 5

**Pre-Requisite:** Successful completion of Biology

**Core Requirement:** This course may be used to satisfy the UCVTS fourth year science requirement.

Microbiology is a high level course with lab components that covers the major principles of microbiology, with an emphasis on human disease. Topics include an overview of microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Students will gain an understanding of microorganisms (both beneficial and pathogenic), how they can be controlled, and how they can be used for human benefit. Students will also implement many important microbial lab techniques such as solution and media preparation, bacterial staining, microscope use, culturing of microorganisms, performing microorganism identification tests, and studying microbial growth control methods. This course will stimulate students' problem solving skills and enhance their ability to work productively in collaborative laboratory groups, important skills for those thinking of a career in the health-related sciences.

*This is a proposed new course for the 2017-2018 school year. The availability of the course is not guaranteed. Please keep this in mind when making course selections.*

**Course Title:** AP Psychology\*

**Course Number:** 01\_5010\_020

**Grade Level:** 11, 12

**Credits:** 5

**Pre-Requisite:** 85 or above in US History I or US History I teacher recommendation

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

*This is a proposed new course for the 2017-2018 school year. The availability of the course is not guaranteed. Please keep this in mind when making course selections.*

**Course Title:** Bioinformatics\*\*

**Course Number:** 01\_5003\_030

**Grade Level:** 11, 12

**Credits:** 5

**Pre-Requisite:** Successful completion of Math Analysis

**Core Requirement:** This course may be used to satisfy the UCVTS fourth year science requirement.

Computational tools are at the forefront of modern medical research including areas such as drug discovery, cancer research, and personalized medicine. This course will introduce students to the fundamental concepts and methods in computational biology, a field encompassing the interface of molecular biology, genetics, and computing. Students will survey a wide range of topics including biological databases, sequence analysis, gene finding, and protein structure analysis. Students will gain practical experience with bioinformatics tools and develop basic skills in the collection and presentation of bioinformatics data, as well as the fundamentals of programming in a scripting language.

*This is a proposed new course for the 2017-2018 school year. The availability of the course is not guaranteed. Please keep this in mind when making course selections.*

*\*\*This course is offered in conjunction with The Academy for Information Technology. AAHS and AIT students are given priority enrollment in this course.*

## ENGLISH

**Course Title:** World Literature

**Course Number:** 02\_1001\_020

**Grade Level:** 9

**Credits:** 5

The World Literature course is designed to expose students to a variety of countries and forms of literature. While participating in individual and class assignments, students will have an opportunity to explore a multitude of cultures. This experience is further enhanced by joint projects and activities which occur between the World History and World Literature classes. A large emphasis is placed on common themes to help students understand and appreciate the similar human conditions that exist in all cultures. These themes include the struggle with intolerance, love, coping with death, metamorphoses, and communion with nature. Many of the selections read and discussed in class come from China, India, Africa, Egypt, the Middle East, Greece, Rome, and Europe during the Middle Ages and Renaissance period. Types of literature covered include the novel, epic poem, poetry, critical essays, editorials, short stories, drama/plays, and several classical selections. In addition to reading, students will be required to write several different forms of literature, essays, and one major research paper.

**Course Title:** Early American Literature

**Course Number:** 02\_2001\_020

**Grade Level:** 10

**Credits:** 5

**Pre-Requisite:** Successful completion of World Literature

The Early and Modern American Literature courses are designed to take the students through an in-depth study of the individual writings that shape and document the American literary tradition. Students will have an opportunity to explore primary texts, novels, poems, and other artistic productions through participation in both individual and group assignments. This experience is further developed through an integrated curriculum with United States History I. A major goal of the course is for the student to come to understand the culture and history of expression of our nation and his or her place within that tradition. Writing and language arts skills are stressed throughout the year's course of study. Many of the selections read and discussed in class come from the conventional cannon of American Literature, but extend beyond to art, dance, writings, and other materials gleaned from pop-culture, cultures excluded from traditional studies, and other sources. The outline for the course of study is chronological. Early American Literature begins with the Native American cultures and their initial contact with European explorers and settlers, continues through Colonial and Revolutionary America, all the way through the end of the Nineteenth Century. Specific units

also deal with Growth and expansion of the 1820s to 1850s, the Civil War, Reconstruction, Industrialization and Immigration, and the Gilded Age.

**Course Title:** Modern American Literature

**Course Number:** 02\_3001\_020

**Grade Level:** 11

**Credits:** 5

**Pre-Requisite:** Successful completion of Early American Literature

Modern American Literature closely parallels US History II in its chronological, psycho-social, thematic-based approach to the continuation of the American literary experience through intense individual and group readings and analyses of literary works spanning American Literature from 1865 (Twain) through the 20<sup>th</sup> Century (World Wars I and II, Post-War 1950's, the 1960's, 1970's, 1980's, 1990's) to Contemporary works of the 21<sup>st</sup> Century. Novels include, but are not limited to, *The Sun Also Rises*, *To Kill a Mockingbird*, *Catcher in the Rye*, *Fahrenheit 451*. The drama *A Streetcar Named Desire* may also be read and the film viewed for additional immersion in the study of play-writing and producing for the student who possesses a penchant for the genre. Independent studies are strongly encouraged and instructor-facilitated. Emphasis is placed upon further developing and mastering of grammatical techniques and continued exposure to the Writing Process Approach employed to enhance student written production (i.e. narrative, persuasive, informational, creative writing), as well as to facilitate successful outcomes on standardized test-taking. Through advanced study and immersion in a myriad of learning environs, the student will independently select a literary research topic, develop a thesis, and produce a research paper following MLA Documentation Style guidelines. Focus is on student integration of the relationship between literacy and the world as an impetus for developing a continuing appreciation for the acquisition of knowledge

**Course Title:** British Literature

**Course Number:** 02\_4001\_999

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** Successful completion of Modern American Literature

This course will focus on a chronological study of British Literature from its Anglo-Saxon period to the present. Emphasis will be placed upon reading and interpreting works of the great masters, from Chaucer and Shakespeare to Joyce and Eliot in thematic units which compare and contrast works from various time periods. The student will be exposed to various forms of literature from poetry and short stories to dramas and novels. In addition, students will be expected to demonstrate a strong command of their writing skills through essay writing, critical writing, creative writing, and a research paper, and to focus on clear development of literary analysis. Class participation and public speaking will be essential to the group dynamic of the course and will be used to enhance the information of the texts with personal interpretation and discussion.

**Course Title:** AP English Literature & Composition

**Course Number:** 02\_4002\_999

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** 85 or above in Modern American Literature or Modern American literature teacher recommendation

The AP English Literature and Composition class will be a combination of preparation for the AP English Literature and Composition Exam to be taken in May as well as a collegiate level study of literature and writing. Through a curriculum outlined by the College Board, the class will enable students to read and understand complex texts and demonstrate this understanding through mature and effective writing. The literature of the course can be broken down into three genres: poetry, drama, and fiction (novel and short story). Close reading will revolve around the experience, interpretation, and evaluation of literature. Students will be expected to read deliberately and thoroughly, taking time to understand a work's complexity, to absorb its richness of meaning, and to analyze how that meaning is embodied in literary form. Concurrently, students will be expected to have a strong background in grammar in order to focus intense concentration on enhancing their abilities in analytical and critical writing. Various forms of writing will be emphasized and frequent writing assignments of varying lengths with several drafts should be expected.

## SOCIAL STUDIES

**Course Title:** World History  
**Grade Level:** 9

**Course Number:** 03\_1001\_020  
**Credits:** 5

This course explores the world history, economics, and geography from 1450 C.E. to the present. Geographic influences on history will be explored, as will political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. The course utilizes various elements of technology and interdisciplinary philosophies to meet the needs of the students as well as the goals of the instructor.

**Course Title:** United States History I  
**Grade Level:** 10

**Course Number:** 03\_2001\_020  
**Credits:** 5

**Pre-Requisite:** Successful completion of World History

This course involves the study of the development of the North American continent from the late 16<sup>th</sup> century through the late 19<sup>th</sup> century. The course analyzes the political, economic, and social factors that led to the creation of modern democracy and the struggle to keep this grand experiment alive. Specific topics that are discussed start with the arrival of the British, Spanish, and French in the 1500's, their interaction with the native populations, Colonial America, the Revolutionary War, the writing of the United States Constitution, the Civil War, Slavery, and Industrial Growth in America. The course utilizes various elements of technology and interdisciplinary philosophies to meet the needs of the students as well as the goals of the instructor.

**Course Title:** United States History II  
**Grade Level:** 11

**Course Number:** 03\_3001\_020  
**Credits:** 5

**Pre-Requisite:** Successful completion of United States History I

In this course, students will study the social, political, and economic characteristics of the United States from 1880 to the present. Topics will include American Imperialism, Progressivism, the United States at War, the Great Depression, the Sixties, and the Vietnam Conflict, among others. Students will take part in a variety of activities geared to accommodate different learning styles. These activities include simulations, writing exercises, cooperative learning, and visual and audible expression.

**Course Title:** AP United States History  
**Grade Level:** 12

**Course Number:** 03\_5001\_999  
**Credits:** 5

**Pre-Requisite:** 85 or above in US History II or US History II teacher recommendation

The AP United States History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history. The course prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year introductory college courses. Students should learn to assess historical materials – their relevance to a given interpretive problem, reliability, and importance – and to weigh the evidence and interpretations presented in historical scholarship. An AP U.S. History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Topics covered will include: American diversity, American identity, culture, demographic changes, economic transformations, environment, globalization, politics and citizenship, reform, religion, slavery and its legacies in North America, and war and diplomacy.

**Course Title:** AP U.S. Government and Politics

**Course Number:** 03\_5002\_999

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** 85 or above in US History II or US History II teacher recommendation

This course will give students an analytical perspective on government and politics in the United States. The course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. Topics of discussion include: The U.S. Constitution, political parties, interest groups, mass media, public policy, civil rights, and civil liberties. Students are expected to be up-to-date on current events in order to facilitate discussion.

**Course Title:** AP European History

**Course Number:** 03\_5003\_999

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** 85 or above in US History II or US History II teacher recommendation

The goals of the AP European History course are for students to gain knowledge of basic chronology of major events and trends from approximately 1450 to the present. Also, students will develop an understanding of some of the principal themes in modern European history including intellectual and cultural history, political and diplomatic history as well as social and economic history. Finally, the students will gain an ability to analyze historical evidence, as well as express historical understanding in writing. This is a demanding course for students with a serious interest in history. Students will be expected to interpret and analyze historical documents as well as identify trends over time.

**Course Title:** Genocide Studies and The Holocaust

**Course Number:** 03\_5004\_999

**Grade Level:** 11, 12

**Credits:** 5

This course will be an examination of the history of genocide, including the causes and consequences of genocides. The students will examine the psychological and sociological aspects of genocides, including hate and prejudice, de facto and de jure discrimination, and organized violence towards specific groups. The course will specifically analyze genocides and compare and contrast the unique settings of each, including the genocides within Africa, Asia, and Europe. Topics will include possible genocides in the Ottoman Empire, Soviet Union, Germany, China, Cambodia, Bosnia, Rwanda, and the Sudan. Studies will be done utilizing primary and secondary sources, literature, and film. The class will help students attain a detailed understanding of human rights, international policy, and the social studies. Furthermore, students will gain a deeper appreciation for different cultures and religions around the world. Students will learn the complex interactions between different groups of people and the consequences of prejudice and discrimination between these groups. The course will challenge the students to utilize critical thinking skills to improve the world.

## MATHEMATICS

**Course Title:** Combined Algebra

**Course Number:** 04\_1001\_020

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

Combined Algebra is an in-depth coverage of all topics in a traditional Algebra I course and most topics in a traditional Algebra II course. These topics include the study of linear equations, absolute value equations, quadratic equations and parabolas, functions, basic matrix operations, linear inequalities, systems of equations and inequalities, polynomial and rational equations, and powers, exponents, and radicals. This is a rigorous course with an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form.

**Course Title:** Geometry/Trigonometry

**Course Number:** 04\_2001\_020

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** Successful completion of Combined Algebra or placement test results

Geometry/Trigonometry is an in-depth coverage of plane and solid geometry with additional study of selected topics from plane trigonometry and discrete mathematics. Geometry topics include the study of reasoning and logic, proofs, constructions, lines, triangles, polygons, circles, similarity, congruence, transformations, planar and space measurements. Trigonometry topics include trigonometric ratios as defined for the right triangle and unit circle, reciprocal, quotient and Pythagorean identities, inverse trigonometric functions, Law of Sines and Law of Cosines. Discrete mathematics topics include basic principles of iteration, recursion, and mathematical induction, which are used to solve combinatorial and algorithmic problems. Geometry/Trigonometry is a rigorous course with an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form. Appropriate computer software as well as educational media is used to introduce and reinforce concepts visually.

**Course Title:** Math Analysis

**Course Number:** 04\_3001\_020

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** Successful completion of Geometry/Trigonometry or placement test results

Math Analysis is an in-depth coverage of advanced algebra as well as the rigorous study of pre-calculus. Topics include real numbers, exponents and radicals, polynomials and factoring, fractional expressions, solving equations and inequalities, functions and their graphs, polynomial and rational functions, complex numbers, exponential and logarithmic functions, trigonometric functions, analytic trigonometry, analytic geometry/conic sections, series and sequences, probability, statistics and data analysis, linear algebra and matrix mathematics and determinants. Connections between algebra, geometry, and trigonometry will be made. These topics form the foundation for the successful study of calculus. Math Analysis is a rigorous course with an emphasis on developing problem-solving and reasoning abilities, the use of graphing calculators, communicating mathematically in both written and oral form, and solving real life problems.

**Course Title:** Calculus

**Course Number:** 04\_4001\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** Successful completion of Math Analysis

The Calculus course is an alternative to the AP Calculus I/AB course. It is designed specifically for students not planning on taking the AP Calculus Exam. However, most of the topics covered in the college-level AP course will also be covered here at a slower pace. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. Topics covered include the initial review of pre-calculus topics, limits, differentiation and its applications, and integration and its applications. There is an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form. Even though this is not an Advanced Placement course, students are still expected to spend a considerable amount of time outside of class on homework preparation and daily studying.

**Course Title:** AP Calculus I/AB

**Course Number:** 04\_4002\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** 85 or higher in Math Analysis or Math Analysis teacher recommendation

AP Calculus I/AB is a rigorous college-level course which emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. Topics covered include the initial review of pre-calculus topics, limits, differentiation and its applications, and integration and its applications. There is an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form. Since this is an Advanced

Placement college-level course, students are expected to spend a considerable amount of time outside of class in homework preparation and daily studying.

**Course Title:** AP Calculus II/BC

**Course Number:** 04\_5001\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** 85 or higher in AP Calculus I/AB or AP Calculus I/AB teacher recommendation

AP Calculus II/BC is a rigorous college level course that emphasizes a multi-representational approach to calculus. Students learn to express mathematical concepts geometrically, numerically, analytically, and verbally. As a continuation of Calculus I, topics covered in this class include applications and techniques of integration, L'Hopitals' Rule, improper integrals, an introduction to differential equations, infinite series and sequences, conic sections, parametric and polar equations. Students who enroll in Calculus II will be expected to participate in a collaborative learning environment. As in Calculus I, problem solving and mathematical communication in written and oral form are an essential component of this course. All students are expected to spend considerable time outside of class in homework preparation and daily study.

**Course Title:** Multivariable Calculus

**Course Number:** 04\_5002\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** 85 or higher in AP Calculus II/BC or AP Calculus II/BC teacher recommendation

Multivariable calculus is a rigorous college level course which emphasizes a multi-representational approach to calculus. Students learn to express concepts geometrically, numerically, analytically and verbally. As a continuation of AP Calculus II/BC, students will need a strong working knowledge of differentiation and integration techniques. Topics include an introduction to linear algebra, vector functions and the geometry of space, differentiation and integration of functions with several variables, multiple integrals, partial derivatives, directional derivatives, line integrals, Green's Theorem, vector analysis, and related applications. Students who enroll in Calculus III will be expected to participate in a collaborative learning environment. Problem solving and mathematical communication in written and oral form are an essential component of this course. Any student who chooses to enroll in this class will be expected to spend considerable amounts of time outside of class in homework preparation and daily study. High expectations of student performance will be maintained.

**Course Title:** Mathematical Statistics and Data Sciences

**Course Number:** 04\_5006\_999

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** Successful completion of or current enrollment in Multivariable Calculus

This course can qualify as a junior/senior-level college subject that provides a strong core foundation in graduate level statistics and data sciences, which are heavily used throughout industry. Coursework will include a calculus-based approach to probability and statistics, beginning with probability axioms, which will be used to derive and discuss various discrete and continuous probability distributions, along with their applications to statistical analysis. Major topics will include: random variables, distribution functions and expectation, special parametric families of univariate distributions, joint and conditional distributions, stochastic independence, sampling and sampling distributions, parametric point and interval estimation, and testing of hypotheses. Students will use R-Programming Language to acquire and analyze (reduction, visualization, summarizations, correlating, etc) raw data to prepare for formal analyses (e.g. modeling, linear regression, estimation, testing, etc.). Students will use single and multiple-variable regression techniques to model and validate data as part of a capstone project to close out the course.



**Course Title:** Probability and Statistics

**Course Number:** 04\_5004\_999

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** Successful completion of Math Analysis

Probability and Statistics is an introductory course in descriptive statistics and statistical inference including the study of probability. Topics of study include summary statistics, graphical displays of data, sampling, probability distributions, confidence intervals and significance testing. Practical problems involving correlation, linear regression, surveys, experiments and hypothesis testing are also included. There will be an emphasis on developing a critical perspective of data and statistical analyses as they are presented in popular culture. Problem-solving and reasoning abilities will be enhanced. Graphing calculator, written and oral communication and collaboration skills will be employed in solving real-life problems.

**Course Title:** AP Statistics

**Course Number:** 04\_5005\_999

**Grade Level:** 12

**Credits:** 5

**Pre-Requisite:** 85 or higher in Math Analysis or Math Analysis teacher recommendation

AP Statistics is an intensive course that introduces students to the major concepts and tools for drawing conclusions from data. Areas of study include data analysis, regression analysis, probability, sampling and experimentation, and statistical inference. Theory and practice involve summary statistics and graphical displays of data, correlation, linear regression, survey design and implementation, design of experiments, probability distributions, confidence intervals and hypothesis testing. Graphing calculator, statistical software, and written and oral communication skills will be developed by solving real-life problems and interpreting the results using actual data.

## SCIENCE

**Course Title:** Biology

**Course Number:** 05\_1001\_020

**Grade Level:** 9

**Credits:** 6

Biology I is a laboratory based course which will emphasize the scientific method and current biological techniques that will challenge students to think creatively, make critical evaluations of their own work, and provide them with a model for interpreting the world around them. Students will develop the fundamental skills of problem-solving, concise writing, expressing original ideas, reading critically, and public speaking. The course is designed as an introductory course for first year students. However, it will delve into the more complex details by examining biology at a molecular, cellular, organismal and ecological level. Therefore, not only should it complement their previous experience with the life sciences, but also intrigue and entice those students interested in a biology-related career to pursue further studies in the field of Biological Sciences.

**Course Title:** Scientific Inquiry and Analysis

**Course Number:** 05\_1002\_020

**Grade Level:** 9

**Credits:** 5

Scientific Inquiry and Analysis is an interdisciplinary full year course. The course emphasizes development of skills that are common to the various disciplines of science. Students will obtain proficiency in the use of graphing calculators and computers within scientific contexts. In particular, students will utilize technology for scientific data acquisition, mathematical analysis of data, and presentation of data obtained from a wide array of physical, biological, and social science contexts. Skills and procedures that are common to all laboratory sciences will be highlighted such as the scientific method, systems of measurement, unit conversions, significant figures, error analysis, laboratory reports, measurement tools and techniques, and experimental design. Additionally, the course will provide an introduction to the core concepts of physics and chemistry. Students will practice and apply a variety of methods for the collection, organization, description, and presentation of scientific data. In particular, students will use various mathematical models and techniques such as iteration, recursion, and the application of probability and statistics, to solve and analyze problems arising

within the context of the sciences. The course will culminate in a student-designed, independent research project, through which students will apply skills and techniques learned in this course to analyze a real-world question.

**Course Title:** Chemistry

**Course Number:** 05\_2001\_020

**Grade Level:** 10

**Credits:** 6

**Pre-Requisite:** Successful completion of Biology and Scientific Inquiry and Analysis

Chemistry is a rigorous course intended to give the serious science student a well-rounded background in general chemistry. The student will be exposed to a variety of experiences both individually and in groups. It is designed on the principle that observation, experimentation, problem solving and reliance on mathematics is central to the development of an understanding of the subject. Hands-on activities emphasize safe laboratory practices and the aspects of applied chemistry. Topics covered include the scientific method, atomic structure, and molecular architecture, physical and chemical behavior of matter, quantitative and qualitative analysis, periodicity, laboratory technique, right-to-know and industrial chemistry. Since an accommodation to a variety of learning styles is stressed, students will be evaluated with a variety of criteria as well. Written homework, reports, class presentations, teacher-designed and standardized tests, class participation and observation of laboratory skills will be used to evaluate the student's general knowledge and academic success.

**Course Title:** Physics

**Course Number:** 05\_3001\_020

**Grade Level:** 11

**Credits:** 6

**Pre-Requisite:** Successful completion of Chemistry

Physics is an in-depth, rigorous course in which students study the behavior of the physical world. The course is designed to help students develop a broad background in general physics. Students will learn about Mechanics (motion, forces, and energy), Thermodynamics, Electricity and Magnetism, Waves, and Optics. Additional topics will be investigated as time permits. Physics emphasizes the development of reasoning and problem-solving abilities. Students will routinely utilize technology such as graphing calculators and computers for data collection and analysis, both in the classroom and in the laboratory. Hands-on laboratory experience is a fundamental part of the course, with algebra and trigonometry used extensively to analyze data. Students will learn to communicate scientifically and mathematically, in both written and oral forms, while investigating real-life phenomena.

**Course Title:** AP Biology

**Course Number:** 05\_5001\_020

**Grade Level:** 11, 12

**Credits:** 6

**Pre-Requisite:** 85 or higher in Biology and Chemistry or Biology teacher recommendation

AP Biology is designed to be the equivalent of a college introductory biology course. Three general areas of biology, molecules and cells, heredity and evolution, and organisms and populations, will be covered in detail. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation for science as a process. To gain conceptual understanding students must participate in scientific inquiry, recognize unifying themes that integrate the many parts of biology, and apply biological knowledge and critical thinking to environmental and social issues.

**Course Title:** AP Chemistry

**Course Number:** 05\_5002\_020

**Grade Level:** 11, 12

**Credits:** 6

**Pre-Requisite:** Successful completion of or current enrollment in Math Analysis; 85 or higher in Chemistry or Chemistry teacher recommendation

Chemistry is a rigorous course intended to give the serious science student a well-rounded background in general chemistry. The student will be exposed to a variety of experiences both individually and in groups. It is designed on the principle that observation, experimentation, problem solving and reliance on mathematics is central to the development of an understanding of the subject. Hands-on activities emphasize safe laboratory

practices and the aspects of applied chemistry. Topics covered include the scientific method, atomic structure, and molecular architecture, physical and chemical behavior of matter, quantitative and qualitative analysis, periodicity, laboratory technique, right-to-know and industrial chemistry. Since an accommodation to a variety of learning styles is stressed, students will be evaluated with a variety of criteria as well. Written homework, reports, class presentations, teacher-designed and standardized tests, class participation and observation of laboratory skills will be used to evaluate the student's general knowledge and academic success.

**Course Title:** AP Physics C: Mechanics

**Course Number:** 05\_5003\_999

**Grade Level:** 12

**Credits:** 6

**Pre-Requisite:** Successful completion of or current enrollment in AP Calculus I/AB; 85 or higher in Physics or Physics teacher recommendation

This is a calculus-based college-level continuation of the Physics course. The course is designed to be equivalent to the first semester of a typical college sequence in physics for science and engineering majors. Major areas of study include kinematics, forces and motion, work and energy, systems of particles, rotational dynamics and statics, gravitation, and oscillations. The main goal of the course is to further develop students' problem solving and critical thinking skills through in-depth investigation of classical mechanics. This course emphasizes problem solving, working collaboratively, and communicating scientifically in both written and oral form. Calculus is used extensively, both in developing and unifying concepts and in problem solving. The laboratory component of this course focuses on the design of experiments, with students developing skill in measuring, organizing, and analyzing data.

**Course Title:** AP Physics C: Electricity & Magnetism

**Course Number:** 05\_5004\_999

**Grade Level:** 12

**Credits:** 6

**Pre-Requisite:** Successful completion of AP Calculus I/AB; 85 or higher in Physics C: Mechanics or Physics teacher recommendation

Electricity & Magnetism is a calculus-based college-level continuation of the Physics I course. The course is designed to be equivalent to the second semester of a typical college sequence in physics for science and engineering majors. Major areas of study include electric forces and fields, Gauss' Law, electric potential, capacitance, DC circuits, magnetic forces and fields, and induction. The main goal of the course is to further develop students' problem solving and critical thinking skills through in-depth investigation of classical mechanics and electricity & magnetism. This course emphasizes problem solving, working collaboratively, and communicating scientifically in both written and oral form. Calculus is used extensively, both in developing and unifying concepts and in problem solving. The laboratory component of this course focuses on the design of experiments, with students developing skill in measuring, organizing, and analyzing data.

**Course Title:** Agriculture, Food, and Natural Resources

**Course Number:** 05\_5007\_999

**Grade Level:** 11, 12

**Credits:** 5

**Core Requirement:** This course may *not* be used to satisfy the AAHS fourth year science requirement and is offered as an elective opportunity only.

This class is an introductory course designed to teach students about the world of agriculture, the pathways of study they may pursue, and the science, mathematics, reading, and writing components they will use throughout the CASE curriculum. Woven throughout the course are activities to develop and improve employability skills of students through practical applications. Students' experiences will involve the study of the three Components of Agricultural Education (Classroom/Lab Instruction, SAE & FFA), Communicating Today, the Science of Agriculture, and Biology in agriculture, Plants, Animals, Natural Resources, and the Mechanics of Agriculture. While surveying the opportunities available in agriculture and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning.

*This is a proposed new course for the 2017-2018 school year. The availability of the course is not guaranteed. Please keep this in mind when making course selections.*

**Course Title:** Introduction to Sustainability

**Course Number:** 05\_5008\_999

**Grade Level:** 11, 12

**Credits:** 5

**Core Requirement:** This course may *not* be used to satisfy the AAHS fourth year science requirement and is offered as an elective opportunity only.

This course examines the fundamental concepts and principles of sustainability. The course is informed by a review of key philosophical and ethical principles, and incorporates sociopolitical, ecological, and economic aspects in an interdisciplinary survey of the field. Students learn to evaluate complex challenges in our efforts to balance human needs and activities with the capacities of the natural world and to identify promising solutions.

## WORLD LANGUAGE

**Course Title:** Spanish I

**Course Number:** 06\_1001\_999

**Grade Level:** 9

**Credits:** 5

This course serves as an introduction to formal language study. Because language learning is a cumulative and cultural experience, the focus of the first level language course is to assist the student in establishing a foundation that he or she may build upon as language study continues. Interest in Hispanic culture will be stimulated by the study of culture, which provides a better understanding of the life, customs and speech of the people.

**Course Title:** Spanish II

**Course Number:** 06\_2001\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** Successful completion of Spanish I or placement test results

This intermediate course expands upon the foundations of Spanish 1 continuing the same communicative approach to further develop skills in listening, understanding, speaking, reading and writing of the Spanish language. Activities are used to expand interpersonal communication as well as interpretation and presentation skills. The course includes cultural experiences that allow students to expand their understanding of the Spanish culture through its products and practices.

**Course Title:** Spanish III

**Course Number:** 06\_3001\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** Successful completion of Spanish II or placement test results

This course is designed to continue the communicative approach and objectives of levels I and II, as well as provide for a more in depth study of the structure of the Spanish language. Students will become more proficient in interpersonal communication, interpretation and presentation skills. Cultural experiences are expanded to include more reading of authentic realia.

**Course Title:** Spanish IV

**Course Number:** 06\_4001\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** Successful completion of Spanish III

This course is designed to provide the student with a more in depth study of the Spanish language and culture. It will continue the same communicative approach but will focus on the more difficult nuances of the language and will include more reading than previous levels. Cultural experiences will be expanded to include a more in-depth study of the history, literature, art, economics and social issues of the culture. Students will use the language to make connections on topics they have learned in other core content areas. Instruction, as well as student participation, is exclusively in the Spanish language.

**Course Title:** AP Spanish Language and Culture

**Course Number:** 06\_5001\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** 85 or higher in Spanish IV or Spanish IV teacher recommendation

The AP Spanish Language course is a rigorous course of study that is equivalent to a college level course. The fundamental objective of this course is for students to achieve a high level of capability in speaking, writing, reading and listening. Since language and culture are inextricably bound together, cultural understanding should be developed along with these four language skills. Through the year different methods and strategies will be used to practice and develop the four skills. This class is conducted entirely in Spanish and students are encouraged to participate in all classroom activities using Spanish. Students will be exposed to all kinds of materials that will help them to reinforce and expand their knowledge of Spanish. This course offers a large variety of performance options such as dialogues, debates, presentations, and interviews in which students will demonstrate their abilities to communicate proficiently on topics of personal, academic or social nature.

**Course Title:** AP Spanish Literature and Culture

**Course Number:** 06\_5002\_999

**Grade Level:** as determined by UCVTS Placement Test

**Credits:** 5

**Pre-Requisite:** 85 or higher in Spanish IV or Spanish IV teacher recommendation

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students continue to develop proficiencies across the full range of the modes of communication (interpersonal, presentational, and interpretive), honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, and literary criticism).

**Course Title:** Linguistics

**Course Number:** 06\_5003\_999

**Grade Level:** 11, 12

**Credits:** 5

**Core Requirement:** This course may *not* be used to satisfy the AAHS third year World Language requirement and is offered as an elective opportunity only.

The knowledge of a World Language is a universal tool that opens gateways to human understanding and presents a new approach to dealing with the everyday realities of life. Linguistics is at the base of every World Language. Student will be introduced to the history of a language, the core of a language, the people who speak different languages and the future of language to enhance those skills honed in World Language studies. Language study enhances understandings in other disciplines: history, geography, sociology, literature, and the arts. Linguistics takes these features, recognizes the connection between each branch of learning and language, and analyzes them further. Linguistics is the bridge between language and culture. An effective World Language program recognizes individual differences in learning patterns and abilities and offers options to students with diverse needs and interests. The study of Linguistics will harness these differences. Students will use their knowledge from previous language courses to build upon different skills. They will reflect on their own language experiences. They will consider the many influences of languages. They will appreciate the entire language-learning experience.

## HEALTH AND PHYSICAL EDUCATION

*Students will take four years of Health and Fitness. Each year, they will take three marking periods of fitness and one marking period of health education.*

**Course Title:** Fitness I  
**Grade Level:** 9

**Course Number:** 07\_1001\_020  
**Credits:** 3.75

**Course Title:** Fitness II  
**Grade Level:** 10

**Course Number:** 07\_2001\_020  
**Credits:** 3.75

**Course Title:** Exercise Programming & Prescription  
**Grade Level:** 11

**Course Number:** 07\_3003\_020  
**Credits:** 3.75

**Course Title:** Fitness IV  
**Grade Level:** 12

**Course Number:** 07\_4001\_020  
**Credits:** 3.75

The Fitness course is designed to enhance the physical, mental, emotional, and social well-being of the students. A scientific approach highlighting exercise physiology is the foundation for the student's learning. Integration of kinesiology and principles of anatomy and physiology heighten student's understanding of how the body relates to exercise and the science of human performance. Research identifies that consistent physical activity improves the quality and longevity of life and is an essential part of achieving overall health. It is important that students gain awareness and appreciation of the relationship between exercise and wellness and the science of human performance. Students will understand and consistently demonstrate the components of physical fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. Activities, which incorporate these components and enable students to meet their personal fitness needs, are emphasized. Experiences, which contribute to the development of positive attitudes toward physical fitness and positive self-esteem, will be carried into the adult life of the student. Through the AAHS fitness and health program, students receive certification in First Aid, CPR and Basic Life Support as well as skill sets in Rapid EKG Interpretation.

**Course Title:** Health I  
**Grade Level:** 9

**Course Number:** 07\_1002\_020  
**Credits:** 1.25

This course is designed to prepare the students to recognize and react to life threatening medical emergency situations, cardiac and respiratory distress, and provide care for victims of choking, respiratory arrest and cardiac arrest. Principles of anatomy and physiology are integrated to enhance understanding of how the human body systems interact and depend on each other. Knowledge of how the human body functions normally will help students identify appropriate care to give an ill or injured person. Practical application and a hands-on approach to learning enables the students to practice and demonstrate skills needed to care for respiratory and cardiac emergencies. Through research in AIDS education and substance abuse, the students will be able to identify preventable factors that may contribute to illness or injury. Upon completion of this course, the students will receive Red Cross Certification for the Professional Rescuer in Adult, Child and Infant CPR, AED Essentials, and Community First Aid. The acquirement of these life-saving skills will enhance the students' self-esteem as well as form responsible citizens whose abilities will be a vital part of the community.

**Course Title:** Health II  
**Grade Level:** 10

**Course Number:** 07\_2002\_020  
**Credits:** 1.25

**Pre-Requisite:** Successful completion of Health I

The CPR Health Education course is designed to prepare the students to recognize signs and symptoms of cardiac and respiratory distress and provide care for victims of choking, respiratory arrest, and cardiac arrest. Principles of anatomy and physiology are integrated to enhance students' understanding of how the human body systems interact and depend on each other. Knowledge of how the human body functions normally will help students identify appropriate care to give an ill or injured person. This course will allow the students to

become certified First Responders based on the criteria from the American Red Cross.

**Course Title:** Introduction to EKG Interpretation

**Course Number:** 07\_3004\_020

**Grade Level:** 11

**Credits:** 1.25

**Pre-Requisite:** Successful completion of Health II

The Exercise Physiology III course is designed to provide an introduction to the profession of physical therapy as well as to provide the students with the knowledge to perform rapid EKG interpretation. Students will explore the principles and practices of therapists in the health care industry. Students will also be able to examine and apply health promotion concepts and skills to support a healthy, active and productive lifestyle through a deep understanding of the cardiovascular system. Upon completion of the course, students will be able to Identify, analyze and interpret twenty- one basic heart rhythms on an electrocardiogram utilizing an EKG ruler, including but not limited to sinus rhythms, ventricular rhythms and asystole.

**Course Title:** Fundamentals of Health & Wellness<sup>#</sup>

**Course Number:** 07\_4003\_020

**Grade Level:** 12

**Credits:** 1.25

**Pre-Requisite:** Successful completion of Health III and Dynamics of Healthcare

This course is adapted to the needs of the allied health student whose specialization will be as a part of a health care team. The general goal is to provide a survey or introduction to human disease by a method that is somewhat less intensive than the classic and general systematic pathology that is offered to medical students. It is intended to provide the student with a better understanding and appreciation of the human body in both health and disease. An examination of health problems, disease processes, and discussions of normal functions for comparisons occur. Classification, symptoms, and terminology associated with disease and wellness are discussed. An orientation to treatment, diagnosis, and prognosis is presented.

## **INTERDISCIPLINARY STUDIES**

**Course Title:** Financial Literacy

**Course Number:** 08\_1001\_999

**Grade Level:** 10

**Credits:** 2.5

***Required Sophomore Course***

The Financial Literacy online course is designed to meet the high school graduation requirement for personal financial literacy as set forth by the Department of Education for the State of New Jersey. Aside from mandated standards, however, financial education is critically important for our young adults. This course will focus on teaching students the skills they need to reach financial independence, maximize their net worth, and maintain a strong credit score. Credit card usage, appropriate debt, banking services, investments, budgeting, insurance, and prevention of identity theft will be explored and discussed. Students will be engaged in learning about finances in an online environment under the direction and supervision of a teacher. The online approach incorporates a variety of techniques and interactive experiences to accommodate different learning styles. Students will have the opportunity to choose, at their own discretion, to explore more deeply into a topic, repeat a lesson, or seek personal attention from the teacher. Providing students with a sound, practical financial education will benefit them as they venture to college and work where they will be faced with managing money on their own.

**Course Title:** Dance Appreciation

**Course Number:** 08\_1002\_999

**Grade Level:** 10

**Credits:** 5

***Required Sophomore Course***

The Dance Appreciation mini-course is designed to provide UCVTS students with an appreciation of world dance forms, social dance, musical theatre, and more specifically how and why dances are created. The course has a total of 10 classes. Students have 6 online classes which delve into basic terms used in choreography for in all dance forms. The online classes will also examine ritual dance and folk dance in several cultures,



and include contemporary social dance. Students are given an opportunity to share any part dance has taken in their lives. Students also have 4 in-person classes which give them the tools to create choreography in any style of their choosing. Students will break into groups to create a short dance, 12 counts of 8, which will be performed in front of their class. All classes both online and practical are aligned with the NJ Core Curriculum Content Standards in Performing Arts-Dance, to fulfill the State Requirement in Visual and Performing Arts.

**Course Title:** Film and Genre Studies  
**Grade Level:** 11, 12

**Course Number:** 08\_1003\_999  
**Credits:** 5

Film and Genre is designed for the student as a comprehensive guide to studying the language of film as a visual art form. The student examines and explores cinema through a chronological/historical approach, the introduction of terminology and techniques, the study of genres, selected classics (from the silent era to the digital age), themes, and critical analysis of film in order to attain visual literacy. Coursework focuses on acquiring and honing technical knowledge as well as developing an appreciation of the art by exploring objective and subjective aesthetics, experiences, emotions, and alternative worlds created by filmmakers. Film and Genre is not a filmmaking class per se – rather a critical exploration of visual text. However, the film student does have the opportunity to elect to create, write, direct, and produce a film, as an end-of-the-year performance assessment.

*The availability of the course is not guaranteed. Please keep this in mind when making course selections.*

**Course Title:** Introduction to Humanities  
**Grade Level:** 11, 12

**Course Number:** 08\_1004\_999  
**Credits:** 5

The Humanities are those branches of learning concerned with human thought and relations. These branches incorporate the study of the central expressions of human values: fine arts, literature, philosophy, history, culture, and the social sciences. Knowledge of the humanities enables students to understand the present and the future from a historical perspective. Students will also develop skills in critical reading and interpretation, analytical thinking, researching, and writing. This will be accomplished by initiating activities that promote a variety of learning styles, interdisciplinary problem solving, cooperative learning, public speaking, and technological application. These insights and skills provide a foundation for careers in many different professions and for productive and rewarding lives as educated citizens.

*The availability of the course is not guaranteed. Please keep this in mind when making course selections.*

**Course Title:** Communications Media  
**Grade Level:** 11, 12

**Course Number:** 08\_1005\_999  
**Credits:** 5

This course will allow students to become acquainted with contemporary media and its effects on their society. They will be given an opportunity to develop the skills and command the information necessary to function in a high-profile job market. Today, journalists are “in the field” researching and capturing illustrative images. The news media is recreating itself into a features-driven service, and storytelling is valued as highly as straight reporting. News stories are no longer destined only for the metropolitan news editors and television/cable news anchors, but for newswires, blogs, and the Internet at large. By offering a challenging and innovative course such as Communications Media, the students also are learning the skills necessary to work behind and beyond a variety of media outlets. One of the most important real-life skills that the Communications Media class enforces is the need for teamwork.

*The availability of the course is not guaranteed. Please keep this in mind when making course selections.*

**Course Title:** Global Ethics  
**Grade Level:** 11, 12

**Course Number:** 08\_1006\_999  
**Credits:** 2.5

Modern societies, such as the United States, are increasingly propelled and changed by advances in science



and technology. Sciences and technology are combined in modern societies to provide increasing human control over natural and social environments. Tremendous ongoing achievements have spawned great hopes, fears, and controversies. This semester course examines the sociological implications of particular scientific and technological advances. It explores alternative conceptions of the relationship of science and technology to other aspects of the social order, i.e., to the economics, politics, philosophy, and culture of the times. Specific areas of study include environmental issues, medical ethics, science and religion, the atom bomb, genetic manipulation, space travel, and mass communications. This course will utilize a variety of multi-media resources and is project-based.

*The availability of the course is not guaranteed. Please keep this in mind when making course selections.*