UNION COUNTY VOCATIONAL-TECHNICAL HIGH SCHOOL

ACADEMIC PROGRAM GUIDE 2024-2025

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SCHEDULING

Students will complete a course registration form which must be submitted by the announced due date. 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 either of the following categories:

1. Core Content Courses
    a. Career and Technical Education, English, Social Studies, Mathematics, Science, World Language
2. Career and Technical Courses at another UCVTS School*

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

SCHEDULING PRIORITY

Scheduling priority for all career and technical courses is given based on career and technical school relative to the course and then seniority. Students will be scheduled as follows: senior career and technical relative to the course, junior career and technical relative to the course, sophomore career and technical relative to the course, other seniors, other juniors, other sophomores.

Scheduling priority for all other courses, including core-content courses, is given based on seniority. Students will be scheduled as follows: all seniors, all juniors, all sophomores, all freshmen.

Scheduling priority applies only to the development of initial schedules. Once schedules are distributed to students, schedule changes will be made as space permits without regard to priority.

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, students and parents/guardians **must** read and sign a contract outlining course policies and expectations.

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
CTE	95	10	950
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
Total		41	3786.25

3786.25 / 41 = 92.3476

QPA is calculated for transcripts 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 and can be found in Naviance Student. For more details, please see the Student Handbook.

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 and credit 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 Union County Vocational-Technical High School 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 UCTECH is as follows:

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
Career & Technical Education *4 years*	*Varies by Program – Please See Career & Technical Education Requirements*			
English *4 years*	World Literature	Early American Literature	Modern American Literature	Additional English Course
Social Studies *3 years*	World History	United States History I	United States History II	
Mathematics* *4 years*	Combined Algebra	Geometry/Trigonometry	Math Analysis	Next in sequence Math course *or* Additional Math Course
Science *4 years*	Biology **and** Scientific Inquiry & Analysis	Chemistry	Physics	Additional Science Course
World Language* *2 years*	Spanish I	Spanish II		
Fitness/Health *4 years*	Fitness I & Health I	Fitness II & Health II	Fitness III & Health III	Fitness IV & Health IV
Visual and Performing Arts *4 years*		Dance Appreciation		
Financial Literacy		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 AGREEMENTS

Rutgers University: The Academy for Clinical Care Sciences and Exercise Physiology & Related Sciences participate 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#
- Emergency & Clinical Care#
- Medical Terminology#
- Anatomy & Physiology I#
- Fundamentals of Health and Wellness#
- Introduction to Clinical Research
- Anatomy & Physiology II#
- Scientific Principles of Nutrition

Required UCTECH Course

***Kean University*:** The School of Design, School of Sustainable Sciences, and Teacher Education Academy have an articulation agreement with Kean University whereby students will spend their high school senior year at Kean University taking a full freshman college course load which includes a concentration in their Career & Technical Education major.

ACADEMY OF CLINICAL CARE SCIENCES
CAREER & TECHNICAL EDUCATION

[#] *Course is offered in partnership with Rutgers University School of Health Related Professions. Students have the opportunity to earn dual credit.*

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
Career and Technical Education *4 years*	Clinical Care I **and** Dynamics of Healthcare	Medical Terminology **and** Emergency & Clinical Care **and** Community Health	Anatomy & Physiology I **and** Clinical Care II	Anatomy & Physiology II **and** Role of Pharmacy Technician in Healthcare

Course Title: Dynamics of Health Care in Society[#] **Course Number**: 01_1401_050
Grade Level: 9 **Credits**: 2.5

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. This course will serve as a foundation for the students in exploring the fundamentals of health care in today's society.

Course Title: Clinical Care I **Course Number**: 01_1403_050
Grade Level: 9 **Credits**: 2.5

This course builds and expands upon content covered in the Rutgers' University School of Health Related Professions course, Dynamics of Health Care (DOHC). In Clinical Skills I, we examine the health care environment from the perspective of the nurse. Students will begin to utilize the Nursing Process and the idea of Evidence Based Practice. Students are introduced to the fundamental skill and talent of "caring" and explore the unique needs of clients based upon age, condition, developmental status, and culture. Students will "practice" the art of communication as a means to assess these needs.

Course Title: Medical Terminology[#] **Course Number**: 01_2404_050
Grade Level: 10 **Credits**: 5
Pre-Requisite: Successful completion of or concurrent enrollment in 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: Emergency & Clinical Care[#] **Course Number**: 01_2405_050
Grade Level: 10 **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: Community Health
Course Number: 01_2406_050
Grade Level: 10
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.

Course Title: Anatomy and Physiology I[#]
Course Number: 01_3402_050
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: Clinical Care II
Course Number: 01_3404_050
Grade Level: 11
Credits: 5

This course builds upon concepts and skills learned in Clinical Care I. We will begin to look at Nursing as a Profession, focusing upon Theoretical Foundations of Nursing and the in-depth study and application of the Nursing Process. Students will become adept at assessment skills, including vital signs, Health Assessment and Physical Examination and will use this data to plan for Patient Care.

Course Title: Role of Pharmacy Technician in Healthcare
Course Number: 01_4405_050
Grade Level: 12
Credits: 5

Course Title: Anatomy & Physiology II[*]
Course Number: 01_4404_050
Grade Level: 12
Credits: 5
Pre-Requisite: Successful completion of Anatomy and Physiology I

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.

ACADEMY OF LAW & JUSTICE
CAREER & TECHNICAL EDUCATION

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
Sequence for Class of 2025	Intro to Law & Justice	• 21st Century Policing • Crime Scene Investigation • Criminal Law & Procedure	• AP United States Government and Politics • Juvenile Delinquency	Business Law
Sequence for Class of 2026	Intro to Law & Justice	• AP United States Government and Politics • 21st Century Policing	Courses are in the process of revision	
Sequence for Class of 2027	Courses are in the process of revision			

Course Title: The Law & Justice System
Grade Level: 9
Course Number: 01_5601_050
Credits: 5

Course Title: 21st Century Policing
Grade Level: 10
Course Number: 01_2703_050
Credits: 2.5

This course will provide students with an in-depth examination of policing, from its very beginning to the present day. The course will also examine the corrections system and prisoner reentry and recidivism. Guest speakers who are current practitioners in law enforcement, the practice of law, and other who work with law enforcement will collaborate with students to enhance the learning environment. At the conclusion of this course, students will have a comprehensive understanding of the challenges faced by modern police departments as they look to maintain law and safety.

Course Title: Crime Scene Investigation
Grade Level: 10
Course Number: 01_2704_050
Credits: 2.5

This course provides an overview of the many ways that science can be applied to help enforce the law with an emphasis on crime scene investigation procedures. 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: Criminal Law & Procedure
Grade Level: 10, 11
Course Number: 01_3705_050
Credits: 5

Course Title: AP U.S. Government & Politics
Course Number: 01_3704_050
Grade Level: 11
Credits: 5

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: Introduction to Analysis of Public Policy
Course Number: 01_3706_050
Grade Level: 12
Credits: 5

Students will identify a social problem and develop a proposed public policy to address the problem. They will forecast the impact of that policy on social conditions and analyze the political factors affecting the policy. They will be taught how to use graphs, tables, statistical surveys and informal interviewing techniques among other research methods to accomplish this task. This course is offered in conjunction with Syracuse University.

Course Title: Business Law
Course Number: 01_4702_050
Grade Level: 12
Credits: 5

EXERCISE PHYSIOLOGY & RELATED SCIENCES CAREER & TECHNICAL EDUCATION

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
Career and Technical Education *4 years*	Foundations of Exercise Science	Medical Terminology **and** Emergency & Clinical Care **and** Dynamics of Healthcare	Scientific Principles of Nutrition **and** Introduction to Physical Therapy **and** Anatomy & Physiology I	Anatomy & Physiology II **and** Exercise Prescription for Special Populations

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

Course Title: Foundations of Exercise Science
Course Number: 01_1501_050
Grade Level: 9
Credits: 5

The first year of the Exercise Physiology and Related Sciences serves as both an introduction to the field of health and fitness sciences as well as foundation for the material to be covered in future years. The course will be organized into 3 primary sections. *Introduction to Exercise Science*, which provides a history and overview of the field of fitness and health sciences as well as offer general information on physical fitness, *Introduction to Anatomy and Physiology* which will present mechanics, organization, interaction, and cellular functioning of various body systems, and *Introduction to Nutrition* will cover the major components of food as well as selected topics in sports and performance nutrition. The course will stress professional behavior and good character to prepare students for future interactions with clients, co-workers, and other professionals. The course introduces many major concepts that create the foundation required for future high school and college courses.

Course Title: Medical Terminology# **Course Number**: 01_2504_050
Grade Level: 10 **Credits**: 5
Pre-Requisite: Successful completion of or concurrent enrollment in 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: Dynamics of Health Care in Society# **Course Number**: 01_2503_050
Grade Level: 10 **Credits**: 2.5

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: Emergency & Clinical Care# **Course Number**: 01_2505_050
Grade Level: 10 **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: Scientific Principles of Nutrition# **Course Number**: 01_3501_050
Grade Level: 11 **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 Physical Therapy **Course Number**: 01_3502_050
Grade Level: 11 **Credits**: 2.5
Pre-Requisite: Successful Completion of Foundations of Exercise Science

The course is designed to provide an introduction to the profession of physical therapy. Students explore the principles and practices of therapists in the health care industry. Being introduced to clinical skills in the areas of physical therapy enables students to gain understanding of rehabilitative care in multiple settings. After

completion of this course, students may choose to seek higher education for specific degrees/licensure in a variety of fields such as physical therapy, occupational therapy, speech therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise science.

Course Title: Anatomy and Physiology I[#] **Course Number**: 01_3503_050
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: Exercise Prescription for Special Populations **Course Number**: 01_4502_050
Grade Level: 12 **Credits**: 5
Pre-Requisite: Successful completion of Dynamics of Health Care

Exercise Prescription for Special Populations is an interactive course based in project based learning and analysis of the current research in the field of Exercise Science. Students will study the pathology of common diseases and conditions currently impacting the population. Students will then progress to the creation, design and implementation of exercise programs that will provide safe and effective results for these clients taking into account their medical histories and backgrounds. Students will also participate in a review course for their Personal Trainer Certification exam. This course is designed to prepare students to be able to plan and implement fitness programs for healthy individuals. Students will explore the field of personal training, including client consultation and business planning. Practical experiences will allow students to practice the skills needed to develop fitness programs and motivate clients. Upon completion of the course, students will sit for the American College of Sport's Medicine Certified Personal Trainer exam.

Course Title: Anatomy & Physiology II[*#] **Course Number**: 01_4503_050
Grade Level: 12 **Credits**: 5
Pre-Requisite: Successful completion of Anatomy and Physiology I

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.

SCHOOL OF DESIGN
CAREER & TECHNICAL EDUCATION

** Courses marked with an asterisk may be available to students from other UCVTS schools based on availability. UCTECH students are given priority enrollment in these courses.*

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
Career and Technical Education *4 years*	• Introduction to Form • Introduction to Technique	Graphic Design **and** Industrial Design	Architectural Design **and** AP Art History	***Kean University courses***

Course Title: Introduction to Form
Grade Level: 9
Course Number: TBA
Credits: 2.5.

Course Title: Introduction to Technique
Grade Level: 9
Course Number: TBA
Credits: 2.

Course Title: Graphic Design
Grade Level: 10
Course Number: 01_2308_050
Credits: 5

Course Title: Industrial Design
Grade Level: 10
Course Number: 01_2309_050
Credits: 5

Course Title: Architectural Design
Grade Level: 11
Course Number: 01_3306_050
Credits: 5

Course Title: AP Art History
Grade Level: 11
Course Number: 01_3305_050
Credits: 5

The AP Art History course should engage students at the same level as an introductory college art history survey. This course involves critical thinking and should develop an understanding and knowledge of diverse historical and cultural contexts of architecture, sculpture, painting and other While visual analysis is a fundamental tool of the art historian, art history emphasizes understanding how and why works of art function in context, considering such issues as patronage, gender, and the functions and effects of works of art.

SCHOOL OF SUSTAINABLE SCIENCES
CAREER & TECHNICAL EDUCATION

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
Career & Technical Education *4 years*	Introduction to Environmental Sciences **and** Human Ecology	AP Environmental Science **and** Principles of Agricultural Science - Plant	AP Biology **and** Sustainable Innovations & Entrepreneurship **and** Sustainable Energy Technology & Integration Principles of Agricultural Science - Animal (Elective)	***Kean University courses***

Course Title: Introduction to Environmental Sciences
Grade Level: 9
Course Number: 01_1601_050
Credits: 2.5

Course Title: Human Ecology
Grade Level: 9
Course Number: 01_1602_050
Credits: 2.5

Human Ecology will focus on the ever changing interactions between human social systems and ecosystems. Opportunities will be provided that will allow students to examine issues related to the human population growth, changing social systems, and the effect both have on the use of natural resources (soil, water, food, etc.). In class activities will allow for the analysis of how social developmental needs can conflict with sustainability. Experiments and site visits will examine how to meet societal needs through sustainable development and evaluate how social systems can be co-opted to ensure this development.

Course Title: Plant Science
Grade Level: 10
Course Number: TBA
Credits: 5

Throughout the CASE Principles of Agricultural Science – Plant course, students study the various forms of plants and how plants function. Studies will also include plant interaction with the environment, growth requirements, plant reproduction, and the various ways people use plants in everyday life. Understanding of plant production and management will be necessary to ensure that the supply of plant products will be enough for human food, fiber, and fuel needs.

Course Title: AP Environmental Science
Grade Level: 10
Course Number: 01_2604_050
Credits: 6

Course Title: Sustainable Innovation & Entrepreneurship
Grade Level: 11
Course Number: 01_3606_050
Credits: 2.5

This course will provide students with the opportunity to apply the knowledge that they have acquired through previous coursework in the School of Sustainable Sciences to design, create, and implement a sustainable business plan. This plan will focus on an original and innovative idea for a new product or service that will potentially enhance the environment while reducing our usage of non-renewable resources. Upon the conclusion of the course, students will then propose their ideas to a panel of professionals in the fields of sustainability.

Course Title: AP Biology
Course Number: 01_3607_050
Grade Level: 11
Credits: 6

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: Principles of Agricultural Science - Animal Science
Course Number: TBA
Grade Level: 11,12
Credits: 5

Principles of Agricultural Science—Animal is a foundation-level course engaging students in hands-on laboratories and activities to explore the world of animal agriculture. During the course, students develop a comprehensive Producer's Management Guide for an animal of their choice. Student experiences involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. Throughout the course, students consider the perceptions and preferences of individuals within local, regional, and world markets. Students investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

TEACHER EDUCATION ACADEMY
CAREER & TECHNICAL EDUCATION

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year
Career and Technical Education *4 years*	Introduction to Education **and** Educational Psychology	Multicultural Education **and** Literacy, Numeracy and Technology in the Classroom **and** AP Psychology	Teaching and Learning Across Content Areas	***Kean University courses***

Course Title: Introduction to Education
Course Number: 01_1201_050
Grade Level: 9
Credits: 2.5

This course provides an introduction to education and teaching as a profession in the American educational system. It offers a variety of perspectives on education, including historical, philosophical, social, legal, and ethical issues in a diverse society. This course introduces students interested in a career in education to some of the concepts, practices, and procedures of contemporary American education. The organization and operation of American schools, their financial and legal support, their place and role in the community, as well as some of the historical and philosophical foundations upon which American education is predicated. Teaching as a profession is examined. This course uses K-12 classroom experiences, along with student-centered classroom activities and student-led lessons, to explore issues in schools and education. This course includes organizational structure and school governance, as well as, numerous educational concepts. The focus will include answering questions that are imperative to making a decision of whether or not you want to pursue a career as a "Teacher."

Course Title: Educational Psychology **Course Number**: TBA
Grade Level: 9 **Credits**: 2.5

Pre-Requisite: Successful completion of Introduction to Education

This course provides an in depth exploration of the profession of teaching in the American educational system. This course develops the knowledge, skills and dispositions necessary to prepare future educators. The purpose of this course is to prepare teachers to make effective decisions in diverse classrooms. To accomplish this goal, emphasis is placed on producing master teachers who are self-reflective, lifelong learners and effective communicators.

Course Title: Multicultural Education **Course Number**: TBA
Grade Level: 10 **Credits**: 2.5
Pre-Requisite: Successful completion of Introduction to Education and the Art of Teaching

Course Title: Literacy, Numeracy and Technology in the Classroom **Course Number**: 01_2202_050
Grade Level: 10 **Credits**: 2.5
Pre-Requisites: Successful completion of Introduction to Education and the Art of Teaching

This course provides and in depth exploration of literacy, numeracy and technology in the American education classroom. This course is designed to focus on the priority of literacy and numeracy skills necessary for an effective classroom. Authentic learning can occur when activities or projects offer students an opportunity to directly apply their knowledge and skills to real-world situations. This course will expose the students to make the connection between numeracy, literacy and the Common Core State Standards for Math and English Language Arts. Technology in the classroom will be infused throughout each domain. Some technology resources that will be included but not limited to are: Google Apps, Dropbox, Storyboard that, Microsoft Office, Turnitin.com. Additionally, this course will introduce students to research design and methodology. Students will learn how to critically evaluate the validity, reliability, and limitations of research results. Individual and group activities will involve peer critiques, evaluation of published research and on-line reviews.

Course Title: AP Psychology **Course Number**: 01_2204_050
Grade Level: 10 **Credits**: 5

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.

Course Title: Teaching and Learning Across Content Areas **Course Number**: TBA
Grade Level 11 **Credits**: 5
Pre-Requisites: Successful completion of Differentiated Learning and Literacy, Numeracy and Technology in the Classroom.

This introductory methods course provides students opportunities to plan, assess learning, and observe classroom teachers undertaking best practices. This course will guide students in the selection, implementation, and evaluation of instructional strategies adapted to meet the needs of all students. Students will consider how diverse learning styles can be affected by various instructional strategies. Students will discover basic principles of curriculum development and standards.

CAREER AND TECHNICAL EDUCATION AT UCVTS

Courses below are Career and Technical Education courses at other UCVTS high schools that may be available to UCTECH students. UCTECH students do not have priority enrollment in these courses. Additional information can be found in the Academic Program Guide of the offering school.

Course Title: AP Psychology **Course Number**: 01_5010_020
Grade Level: 11, 12 **Credits**: 5
Pre-Requisite: 85 or higher recommended in US History I
Offering School: AAHS

Course Title: Biochemistry for Health Sciences **Course Number**: 01_5011_020
Grade Level: 11, 12 **Credits**: 5
Pre-Requisite: Successful completion of Biology and Chemistry
Core Requirement: This course may be used to satisfy the UCVTS fourth year science requirement.
Offering School: AAHS *with next priority for UCT EXP, CC*

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.
Offering School: AAHS and AIT

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.
Offering School: AAHS *with next priority for UCT EXP, CC*

Course Title: Health Outcomes and Social Justice **Course Number**: TBD
Grade Level: 11, 12 **Credits**: 2.5
Offering School: AAHS *with next priority for UCT EXP, CC, ALJ*

Course Title: Healthcare Policy: Politics and Power **Course Number**: TBA
Grade Level: 11, 12 **Credits**: 2.5
Offering School: AAHS *with next priority for UCT EXP, CC, ALJ*

Course Title: Introduction to EKG Interpretation **Course Number**: TBD
Grade Level: 11, 12 **Credits**: 2.5

Pre-Requisite: Successful completion of Biology
Offering School: AAHS *with next priority for UCT EXP, CC*

Course Title: Introduction to Forensic Medicine
Course Number: 01_5007_020
Grade Level: 11, 12
Credits: 2.5
Pre-Requisite: Successful completion of Biology
Offering School: AAHS *with next priority for UCT CC*

Course Title: Medical Ethics
Course Number: 01_5004_020
Grade Level: 11, 12
Credits: 2.5
Offering School: AAHS *with next priority for UCT EXP, CC*

Course Title: Medical Illustration
Course Number: 01_5012_020
Grade Level: 11, 12
Credits: 2.5
Pre-Requisite: Successful completion of Anatomy & Physiology I
Offering School: AAHS *with next priority for UCT EXP, CC*

Course Title: Physiology of Stress
Course Number: 01_5013_020
Grade Level: 12
Credits: 2.5
Pre-Requisite: Successful completion of Anatomy & Physiology I
Offering School: AAHS *with next priority for UCT EXP, CC*

Course Title: Scientific Principles of Nutrition*
Course Number: 01_5006_020
Grade Level: 11, 12
Credits: 2.5
Offering School: AAHS *with next priority for UCT EXP, CC*

Course Title: Accounting
Course Number: 01_5205_030
Grade Level: 11, 12
Credits: 5
Offering School: AIT

Course Title: AP Economics (Macro/Micro)
Course Number: 01_5206_030
Grade Level: 11, 12
Credits: 5
Pre-Requisite: 85 or higher recommended in Combined Algebra
Offering School: AIT

Course Title: Computer Art
Course Number: 01_5002_030
Grade Level: 11, 12
Credits: 5
Offering School: AIT

Course Title: Project Management
Course Number: 01_5207_030
Grade Level: 11, 12
Credits: 5
Offering School: AIT
*** Scheduling preference will be given to AIT students and then FBLA members.*

Course Title: Web Design
Course Number: 01_5101_030
Grade Level: 12
Credits: 5
Offering School: AIT

Course Title: Data Integrity/Security
Course Number: 01_5102_030
Grade Level: 11, 12
Credits: 2.5
Offering School: AIT

Course Title: Marketing Concepts and Case Studies* **Course Number**: TBD
Grade Level: 11, 12 **Credits**: 5
Offering School: AIT

Course Title: Dance Lab for Non-Majors **Course Number**: 01_5004_035
Grade Level: 11, 12 **Credits**: 2.5
Offering School: APA

Course Title: Music Technology **Course Number**: TBD
Grade Level: 11, 12 **Credits**: 2.5
Offering School: APA

Course Title: Technical Theatre Lab for Non-Majors **Course Number**: 01_5003_035
Grade Level: 11, 12 **Credits**: 2.5
Offering School: APA

Course Title: Biochemistry **Course Number**: 01_5011_040
Grade Level: 11, 12 **Credits**: 2.5
Pre-Requisite: Successful completion of Chemistry
Core Requirement: This course may be used to satisfy a UCVTS science requirement in conjunction with Introduction to Chemical Engineering
Offering School: MHS

Course Title: Environmental Engineering **Course Number**: 01_5009_040
Grade Level: 11, 12 **Credits**: 5
Pre-Requisite: Successful completion of Biology and Chemistry; successful completion or current enrollment in Math Analysis
Core Requirement: This course may be used to satisfy a UCVTS science requirement.
Offering School: MHS

Course Title: Fundamentals of Biomedical Engineering **Course Number**: 01_5014_040
Grade Level: 11, 12 **Credits**: 5
Pre-Requisite: Successful completion of Biology and Chemistry; successful completion of or current enrollment in Physics
Core Requirement: This course may be used to satisfy a UCVTS science requirement.
Offering School: MHS

Course Title: Aerospace Engineering **Course Number**: 01_5005_040
Grade Level: 11, 12 **Credits**: 2.5
Pre-Requisite: Successful completion of or current enrollment in Physics
Offering School: MHS

Course Title: Civil Engineering Design **Course Number**: 01_5003_040
Grade Level: 11, 12 **Credits**: 2.5
Offering School: MHS

Course Title: Electrical Engineering Concepts **Course Number**: 01_5004_040
Grade Level: 11, 12 **Credits**: 2.5
Pre-Requisite: Successful completion of or current enrollment in Geometry/Trigonometry
Offering School: MHS

Course Title: Engineering Ethics
Course Number: TBD
Grade Level: 11, 12
Credits: 2.5
Offering School: MHS

Course Title: Robotics
Course Number: 01_5007_040
Grade Level: 11, 12
Credits: 2.5
Offering School: MHS

ENGLISH

Course Title: World Literature
Course Number: 02_1001_050
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_050
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_050
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 20th Century (World Wars I and II, Post-War 1950's, the 1960's, 1970's, 1980's, 1990's) to Contemporary works of the 21st 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: AP English Literature & Composition **Course Number**: 02_4002_999
Grade Level: 12 **Credits**: 5
Pre-Requisite: 85 or higher recommended in Modern American Literature

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.

Course Title: AP English Language & Composition **Course Number**: 02_5001_999
Grade Level: 12 **Credits**: 5
Pre-Requisite: 85 or higher recommended in Modern American Literature

The AP English Language & Composition provides students the opportunity to learn the principles of argument and rhetoric with frequent opportunities to analyze a variety of nonfiction texts, including essays, speeches, letters, and narratives. Students will learn how to develop an effective argument, analyze the arguments of others, and recognize logical fallacies. Research papers are required.

Course Title: Dramatic Literature: Modern Drama **Course Number**: 02_5003_999
Grade Level: 12 **Credits**: 5
Core Requirement: This course may be used to satisfy the UCT fourth year English requirement.

Students will read and analyze a variety of dramatic works, from classical to contemporary (origins of drama, Elizabethan drama, Restoration: 18th to 19th century drama, 20th century drama, contemporary drama). Major plays and playwrights from world theaters will be discussed. Texts will be studied in chronological order. Through close readings of selected literary works, students will enhance and increase their development of literary and analytical skills. In addition to discussion and essay writing, students will be required to engage in staged performances and scenes from the works in question.

Course Title: Modern and Contemporary 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 modern and contemporary British Literature. 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: Writers of the African Diaspora **Course Number**: 02_5005_999
Grade Level: 12 **Credits**: 5

Core Requirement: This course may be used to satisfy the UCT fourth year English requirement.

Students in this course will be introduced to the works of African American individuals from the periods of slavery to the great Harlem Renaissance to the contemporary era. Through close readings of selected literary works, students will enhance and increase their development of literary and analytical skills. Reading selections will include fiction, nonfiction, drama, and poetry. The writing assignments will consist of the modes of exposition, literary analysis, narration, and description.

Course Title: Contemporary Literature Through Graphic Novels **Course Number**: TBD
Grade Level: 12 **Credits**: 2.5
Core Requirement: This course may be used to satisfy the UCT fourth year English requirement if paired with another course English semester course.

Course Title: Creative Writing **Course Number**: 01_5005_035
Grade Level: 11, 12 **Credits**: 2.5
Core Requirement: This course may be used to satisfy the UCT fourth year English requirement if paired with another course English semester course.

Students will write regularly to develop their writers' voices and master four main genres of creative writing: personal narrative, short fiction, poetry and drama. Students will maintain journals, read high-quality published literature which will serve as models, and participate in skills development activities. The writers' workshop model will be used, and students will learn how to revise and edit their work based on peer feedback. The course will also include publication opportunities, writing contests, and other venues to make writings available to the public.

Course Title: Film and Literature: Mirrors and Windows **Course Number**: TBD
Grade Level: 11,12 **Credits**: 2.5
Core Requirement: This course may be used to satisfy the UCT fourth year English requirement if paired with another course English semester course.

Students in this course will be introduced to the works of African American individuals from the periods of slavery to the great Harlem Renaissance to the contemporary era. Through close readings of selected literary works, students will enhance and increase their development of literary and analytical skills. Reading selections will include fiction, nonfiction, drama, and poetry. The writing assignments will consist of the modes of exposition, literary analysis, narration, and description.

Course Title: LGBTQ+ Literature **Course Number**: 02_5006_999
Grade Level: 11, 12 **Credits**: 2.5
Core Requirement: This course may be used to satisfy the UCT fourth year English requirement if paired with another course English semester course.

LGBT Literature would highlight queer authors, narratives, and history. The course would begin with an introduction to queer literature theory and using the lens of gender and sexuality to analyze texts. From there, the course will go to "closet literature," or texts where the queer element is not outright but reliant on subtext and historical context (The Picture of Dorian Gray, for example). The course will then move to more modern texts, split into pre- and post-Stonewall writings, where students will analyze how shifting cultural climates affected authors and texts. As an elective, the course will not rely heavily on essays, but students will be expected to participate in daily discussions, as well as produce shorter written responses.

SOCIAL STUDIES

Course Title: World History
Course Number: 03_1001_050
Grade Level: 9
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
Course Number: 03_2001_050
Grade Level: 10
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 16th century through the late 19th 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
Course Number: 03_3001_050
Grade Level: 11
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
Course Number: 03_5001_999
Grade Level: 12
Credits: 5
Pre-Requisite: 85 or higher recommended in US History II

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 & Politics **Course Number**: 03_5002_999
Grade Level: 12 **Credits**: 5
Pre-Requisite: 85 or higher recommended in US History II

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 higher recommended in US History II

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: AP African American Studies **Course Number**: 02_5005_999
Grade Level: 12 **Credits**: 5
Core Requirement: This course may *not* be used to satisfy the UCT fourth year English requirement and is offered as an elective opportunity only.

AP African American Studies is a multidisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. The course focuses on four thematic units that move across the instructional year chronologically, providing students opportunities to delve into key topics that extend from the medieval kingdoms of West Africa to the ongoing challenges and achievements of the contemporary moment. Given the multidisciplinary character of African American studies, students in the AP course will develop skills across multiple disciplines, with an emphasis on historical, literary, visual, and data analysis skills. This new course foregrounds a study of the diversity of Black communities in the United States while considering the broader context of Africa and the African diaspora.

Course Title: Genocide Studies & 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.

Course Title: War & Conflict in Modern America **Course Number**: 03_5005_999
Grade Level: 11, 12 **Credits**: 5

This course will examine wars and conflicts throughout recent American history, beginning with World War I. Events will be compared and contrasted through a case study approach. Students will attempt to answer big idea or essential questions using primary and secondary sources as evidence. In particular, students will explore what factors cause wars to become unpopular, when a war is likely to be supported by the American people, and how different groups (racial, gender, or ethic) treated during American wars. The course will target student growth in interdisciplinary skills including reading and analyzing information texts, forming and writing independent views, using data and statistics to analyze the costs/benefits of war, and looking at how science and technology have impacted war through the years.

Course Title: United States History Through Crime** **Course Number**: 03_5006_999
Grade Level: 11, 12 **Credits**: 5

This course is an examination of the modern history of the United States through the crimes that were committed during the time period. Beginning in September, students will engage in a thorough analysis of the psychology of criminals, the establishment of criminal law in the United States, and an evaluation of the justice system for crimes committed in each time period. The course will specifically analyze how mass crimes are a representation of the major issues within a time period, and how learning about these crimes can help one understand that time period. Topics will include mass resistance after the U.S. Civil War, political corruption in the Gilded Age, domestic terrorism during the First Red Scare, bootlegging and gangsters of the 1920s, bank robberies of the Great Depression, treason and espionage during the Cold War, the crimes of the rebellious 1960s (serial killers, cults, and drugs), and the gang wars of the late 20th century. Studies will be done utilizing primary and secondary sources, literature, and film. The culmination of the course will be a thorough analysis of mass domestic terrorism in the 21st century to create hypotheses of why these crimes are occurring presently and how society and/or the government can solve these issues.
***This course is offered in conjunction with The Academy for Law & Justice. ALJ students are given priority enrollment in this course.*

Course Title: AP Human Geography **Course Number**: 03_5007_999
Grade Level: 12 **Credits**: 5

AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). The course is equivalent to an introductory college-level course in human geography.

Course Title: Race and Media
Course Number: 03_5008_999
Grade Level: 11, 12
Credits: 2.5

Students in Race and Media will learn how the historical roots of racial stereotypes and biases, how media has perpetuated and worsened those stereotypes, and what can be done to overcome implicit biases. Students in this course should expect to complete a parent permission form, due to the nature of the course content and the harmful stereotypes and language in it. Some media will include films and radio plays, television, news media, and popular music. Blackface, yellowface, brownface and their impacts will be discussed.

MATHEMATICS

Course Title: Combined Algebra
Course Number: 04_1001_050
Grade Level: 9
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_050
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_050
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.

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 recommended in Math Analysis

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 recommended in AP Calculus I/AB

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. 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**: 2.5
Pre-Requisite: Successful completion of AP Calculus II/BC
Co-Requisite: Course Sequenced with Linear Algebra

Multivariable Calculus, also known as Calculus III, is part of the core college math curriculum for science, engineering, math, computer science, and other disciplines which is typically taken by students during the first half of their sophomore year in college. As a continuation from AP Calculus II/BC, students will need a strong working knowledge of differentiation and integration techniques. Topics include vector functions and the geometry of space, differentiation and integration of functions with several variables, multiple integrals, partial derivatives, directional derivatives, optimization, line integrals, Green's Theorem, vector analysis, and related applications. Problem solving and mathematical communication in written and verbal forms are an essential component of this course, as well as working in a collaborative learning environment. Students are expected to spend a considerable amount of time outside the class of homework and daily preparation.

Course Title: Linear Algebra **Course Number**: 04_5008_999
Grade Level: as determined by UCVTS Placement Test **Credits**: 2.5
Pre-Requisite: Successful completion of AP Calculus II/BC
Co-Requisite: Course Sequenced with Multivariable Calculus

An introductory Linear Algebra is part of the core college math curriculum for science, engineering, math, computer science, and other disciplines which is typically taken by students during the second half of their sophomore year in college. The course covers the fundamentals of vector spaces and linear transformations on an axiomatic basis. Topics include: solutions of linear systems, matrix algebra over the real numbers, linear independence, bases and dimension, eigenvalues/eigenvectors, and determinants. As a prominent real-world application, the course will include an introduction to Linear Programming (LP) and the fundamental concepts behind the Simplex Algorithm for solving LPs. Students are expected to spend a considerable amount of time outside the class on homework and daily preparation.

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/Linear Algebra

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 & 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.

Course Title: AP Statistics **Course Number**: 04_5005_999
Grade Level: 12 **Credits**: 5
Pre-Requisite: 85 or higher recommended in Math Analysis

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_050
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 & Analysis
Course Number: 05_1002_050
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_050
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_050
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_999
Grade Level: 11, 12 **Credits**: 6
Pre-Requisite: 85 or higher recommended in Biology and Chemistry

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_999
Grade Level: 11, 12 **Credits**: 6
Pre-Requisite: Successful completion of or current enrollment in Math Analysis; 85 or higher recommended in Chemistry

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 recommended in Physics

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; successful completion or current enrollment in Physics C: Mechanics

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. 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: AP Environmental Science **Course Number**: 05_5012_999
Grade Level: 11, 12 **Credits**: 5

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

Course Title: The Chemistry of Food **Course Number**: TBD
Grade Level: 12 **Credits**: 5

The goal of this course is to provide students with the skills and knowledge to answer questions such as: How are the different types of food (Carbs, proteins, fats) processed. What happens in digestion? How does the way it's cooked (i.e. application of heat) affect the food. How do the proportions determine the outcome? What are the functions of vitamins?

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 for Heritage & Native Speakers **Course Number**: 06_2002_999
Grade Level: 9 **Credits**: 5
Pre-Requisite: Placement test results

This course is designed for incoming freshmen students for whom Spanish is a native or heritage language. This course provides those students with the opportunity to expand their existing proficiency and to develop their reading and writing skills. Orthography, diacritics, and vocabulary development are stressed. Emphasis will be placed on usage appropriate to academic and professional settings. This course will provide students with the opportunity to improve strategic speaking, reading, and writing skills, to master grammar points of particular concern to native and heritage speakers, and to enhance their understanding and appreciation of Hispanic cultures and sociopolitical realities. The course also aims to strengthen students' sociolinguistic awareness and critical thinking skills. Students will be expected to enter Spanish 3 upon successful completion of this course.

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.

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 & Culture **Course Number**: 06_5001_999
Grade Level: as determined by UCVTS Placement Test **Credits**: 5
Pre-Requisite: 85 or higher recommended in Spanish IV

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 & Culture **Course Number**: 06_5002_999
Grade Level: as determined by UCVTS Placement Test **Credits**: 5
Pre-Requisite: 85 or higher recommended in Spanish IV

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

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.

HEALTH & 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 – II – III - IV
Course Number: 07_1001_999; 07_2001_999; 07_3001_999; 07_4001_999
Grade Level: 9, 10, 11, 12
Credits: 3.75

This physical fitness course continues to assist students in attaining optimal wellness physically, mentally, emotionally and socially. The program once again offers activities which incorporate the five components of fitness: cardiovascular endurance, muscular endurance, muscle strength, flexibility and body composition. The Fitnessgram will be administered to measure students' fitness levels and help set fitness goals. The students will also be introduced to various sports activities as well as "Project Adventure". These activities are designed to promote enjoyment and foster an interest in sports, physical activity, and teamwork which can last a lifetime. The students will also participate in the annual Marine Corps Youth Physical Fitness Challenge. The top finishers among the boys and girls will go on to represent the school at the annual competition for the state of New Jersey.

Course Title: Health I
Course Number: 07_1002_999
Grade Level: 9
Credits: 1.25

The freshmen health education course is designed to assist the student in attaining optimal wellness physically, mentally, emotionally, and socially. Through discussion and research, the students will become better prepared to make responsible, health-enhancing decisions, communicate effectively, and adopt health practices to reduce preventable health problems for themselves, their families, and their communities. Topics will include nutrition, weight management and eating disorders, human sexuality, conception and birth, contraception, and STDs

Course Title: Health II **Course Number**: 07_2002_999
Grade Level: 10 **Credits**: 1.25
Pre-Requisite: Successful completion of Health I

The sophomore health education course is designed to expose the students to character education. Character education consists of the six pillars of character: trust, respect, responsibility, caring, fairness and citizenship. This will help the students make better choices and decisions in regards to health and personal well-being. Topics covered include healthy relationships, self-esteem and tolerance. Video clips, short reading excerpts and role playing will be used in the class room along with class discussions.

Course Title: Health III **Course Number**: 07_3002_999
Grade Level: 11 **Credits**: 1.25
Pre-Requisite: Successful completion of Health II

The Junior Health course consists of CPR and First Aid training and certification. It is designed to prepare students to recognize signs and symptoms of cardiac and respiratory distress and provide care for the victims of choking, respiratory arrest and cardiac arrest. It will enable students to provide care for victims suffering from severe bleeding, musculoskeletal injuries, sudden illness, soft tissue injuries and poisoning. 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 to an ill or injured person.

Course Title: Health IV **Course Number**: 07_4002_999
Grade Level: 12 **Credits**: 1.25
Pre-Requisite: Successful completion of Health III

Senior Health will consist of substance use/abuse, mental illness, disabilities and health care. Students will be responsible for explaining the importance of mental and emotional health and determining the emotional, social and financial impact of mental illness on the family, community and state. Students will also determine the effects of accessibility and affordability of healthcare on family, community and the global health. Also, responsible choices will be emphasized as well as a review of sex education.

Course Title: Fitness I **Course Number**: 07_1001_020
Grade Level: 9 **Credits**: 3.75
Core Requirement: This is the required fitness course for Exercise Physiology and Clinical Care students.

Course Title: Fitness II **Course Number**: 07_2001_020
Grade Level: 10 **Credits**: 3.75
Core Requirement: This is the required fitness course for Exercise Physiology and Clinical Care students.

Course Title: Fitness III **Course Number**: 07_3003_020
Grade Level: 11 **Credits**: 3.75

Course Title: Fitness IV **Course Number**: 07_4001_020
Grade Level: 12 **Credits**: 2.5
Core Requirement: This is the required fitness course for Exercise Physiology and Clinical Care students.

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.

Course Title: Health I **Course Number**: 07_1002_020
Grade Level: 9 **Credits**: 1.25
Core Requirement: This is the required health course for Exercise Physiology and Clinical Care students.

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.

Course Title: Health II **Course Number**: 07_2002_020
Grade Level: 10 **Credits**: 1.25
Pre-Requisite: Successful completion of Health I
Core Requirement: This is the required health course for Exercise Physiology and Clinical Care students.

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: Health III **Course Number**: 07_3002_020
Grade Level: 11 **Credits**: 1.25
Pre-Requisite: Successful completion of Health II

Course Title: Fundamentals of Health & Wellness[#] **Course Number**: 07_4003_020
Grade Level: 12 **Credits**: 2.5
Pre-Requisite: Successful completion of Health III and Dynamics of Healthcare
Core Requirement: This is the required health course for Exercise Physiology and Clinical Care students.

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.

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: Senior Internship
Course Number: 01_5002_050
Grade Level: 12
Credits: 5 or 10
Pre-Requisite: Student must secure internship at new or existing partner site by September 1 or December 1. Student must have transportation to the internship.

The senior internship experience establishes corporate and educational liaisons to provide valuable learning opportunities and bridge the world beyond the campus. Mentorship opportunities have furthered such educational pursuits in the science, technology, or mathematics 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 science, technology, or mathematics career setting with local companies. The internship is unpaid.

Placement locations should be identified by the student with assistance of the SLE coordinator. Placements must be found before September 1 or December 1.