



Kea'au High School  
Course Description Guide  
2024-2025  
Grades 10, 11, and 12



## Notice of Language Assistance

If you have difficulty understanding English, you have the right to receive language assistance at no cost to you. Please contact your school's principal for more information.

(Traditional Chinese / 繁體中文)

如果您理解英語有困難，您有權得到免費的語言幫助。請聯繫您的學校校長以獲得更多信息。

(Simplified Chinese / 簡體中文)

如果您理解英语有困难，您有权得到免费的语言帮助。请联系您的学校校长以获得更多信息。

(Japanese / 日本語)

英語の理解に困難を感じる方は、無料で言語支援を受ける権利があります。詳細につきましては学校長にお問合わせください。

(Hawaiian / 'Ōlelo Hawai'i) Ina pilikia oe i ka hoomaopopo i ka olelo Pelekania, he kuleana no kou e lawelaweia oe i ke kokua olelo me ka uku ole. E hui kuka me ke poo kumu o kou kula no kekahi ike hou aku.

(Korean / 한국어) 영어를 이해하는데 어려움이 있는 경우, 무료로 통역 지원을 받을 권리가 있습니다. 더 자세한 정보는 학교장에게 연락하십시오.

(Chuukese / Kapasen Chuuk) Ika epwe weires ngonuk omw weweiti fōós un Merika, mi wor omw pwúúng omw kopwe angei aninnisin aweween fōós esapw kame. Kose mochen kékékéri ewe meinapen ewe sukkun (Principal) ren tichikin pworausán.

(Ilokano / Ilokano) Nu narigat mo a maawatan ti Ingles, karbengam nga umawat ti tulong ti lenggwahe ket awan bayad na dayta a serbisyo. Para ti kanayonan nga impormasyon, mabalin a kontakem ti prinsipal ti eskwelaan yo maipanggep iti dayta a serbisyo.

(Samoan / Gagana Samoa) Afai e faigatā ona ē malamalama i le Igilisi, e i ai lau aiā e maua ai le fesoasoani tau gagana e aunoa ma se tupe e te totogi ina. Fa'amolemole fa'afeso'ota'i le pule o lau aoga mo nisi fa'amatalaga.

(Tongan / Lea faka-Tonga) Kapau 'oku faingata'a ke mahino kiate koe 'a e lea faka-Papalangi, 'oku 'i ai ho'o totonu ke ke ma'u ha tokoni fakatonulea 'ikai totongi. Kataki 'o fetu'utaki ki he puleako ki ha toe fakaikiiki ange.

(Tagalog / Tagalog) Kung nahihirapan kang intindihin ang Ingles, karapatan mong makatanggap ng tulong para sa lenggwahe at libre ang serbisyong ito. Para sa karagdagang impormasyon, maari mong kontakin ang prinsipal ng iyong paaralan tungkol sa serbisyong ito.

(Cebuano / Sugboanon) Kon kamo adunay kalisud sa pagsabut sa Iningles, naa moy katungod sa pagdawat sa tabang sa pinulongan nga walay gasto kaninyo. Palihog kontakang prinsipal sa inyong eskwelahan alang sa dugang nga impormasyon.

(Vietnamese / Tiếng Việt) Nếu quý vị thấy khó khăn trong việc hiểu tiếng Anh, quý vị có quyền nhận được sự hỗ trợ ngôn ngữ miễn phí. Vui lòng liên hệ hiệu trưởng của trường quý vị để biết thêm thông tin.

(Spanish / Español) Si tiene dificultad para entender Inglés, tiene derecho a recibir asistencia lingüística sin costo alguno para usted. Comuníquese con el director de su escuela para obtener más información.

(Marshallese / Kajin Majôl) Elañne ejabwe am melele kajin Pälle, ewōr am jimwe ñan jibañ ko ikijien ukok ilo ejelok wōnen. Jouj im kōjjeläik lok principle eo an jikuul eo am ñan melele ko rellep lok.

**Continuous Notice of Non-Discrimination**

The Hawaii State Department of Education (Department) and its schools do not discriminate on the basis of race, color, national origin, ancestry, sex, gender identity, gender expression, sexual orientation, age, disability, and religion in its programs and activities. Please direct inquiries regarding Department nondiscrimination policies as follows:

Civil Rights Compliance Branch  
Hawaii State Department of Education  
P.O. Box 2360  
Honolulu, Hawaii 96804  
(808) 586-3322 or relay  
CRCB@k12.hi.us

Beth Schimmelfennig, Director  
Rhonda Wong, Compliance  
Aaron Oandasan, Title VI  
Toby Yamashiro, Title VII  
Nicole Isa-Iijima, Title IX  
Krysti Sukita, ADA/504

## Table of Contents

General Information, Graduation Requirements	4
Language Arts	8
Social Studies	9
Mathematics	11
Science	12
Physical Education	15
World Languages	18
Career and Technical Education	19
Fine Arts	24
Yearbook	26
Computer Science	27
AVID	27
Cadet Core, Intro to Engineering, STEM	28

# KEA'AU HIGH SCHOOL COURSE CATALOG

## 2024 – 2025

Any course may be canceled at a later date due to not meeting the minimum amount of students needed for the course to be offered.

### COURSE SCHEDULING

1. All students have an equal opportunity to enroll in courses regardless of race, color, religion, sex, handicap, or national origin. All classes are co-educational.
2. Plan your program CAREFULLY:
  - a. Take time and read the course description for classes that you plan to enroll in. Make your decisions carefully and wisely.
  - b. You will be held accountable for the courses that you sign up for during registration.
  - c. You may repeat a course to improve your grades but will not earn additional credit. The lower grade will be dropped when calculating your grade point average.
  - d. Discuss your program with your parents/guardians. They might have suggestions and/or answers to questions that you might have.
  - e. If you need more information or help regarding a particular course that you plan to take, ask a teacher who teaches that course or one who teaches in that subject area.
3. When thinking about course selections, keep in mind:
  - a. The requirements for graduation
  - b. Your educational, occupational, and life goals
  - c. Your experiences in courses that you have already taken
  - d. The pre-requisites for the course
  - e. Your abilities as reflected in standardized tests, your interests and performance in school.
4. Your Advisory Teacher will assist you in completing your selection of course and registration forms.
5. Students interested in: auditing courses for no credit, taking college courses,, taking any off campus credit courses, going “off campus” (seniors only), graduating early, or any other unusual situation should see both their counselor and the registrar.

Promotion: Students must earn the following amount of credits at the end of the designated year to be promoted to the next grade.

Grade 9	5 credits
Grade 10	11 credits
Grade 11	17 credits

Students who do not meet the promotion requirement will remain in the retained grade level for the entire school year, except for students who can be upgraded to senior status at the end of the first semester of the senior year. All other accelerations will be done at the beginning of each school year.

**GRADUATION REQUIREMENTS**  
**Class of 2016 and Beyond**

Course Requirements	Credits	Required Courses
English	4.0 credits	English Language Arts 1, English Language Arts 2, English Language Arts 3, English Language Arts basic elective. 1 Credit for each>
Social Studies	4.0 credits	US History 1 credit World History 1 credit Modern History of Hawaii .5 credit Participation in Democracy .5 credit 12 <sup>th</sup> grade Basic Social Studies elective 1 credit
Mathematics	3.0 credits	Algebra 1 1 credit Geometry 1 credit Basic Math Electives 1 credit
Science	3.0 credits	Biology 1 credit Basic Lab Science 2 credit
World Language (Credit must be in same language)  Fine Arts (Visual or Performing Arts)  Career and Technical Education (Same pathway)	2.0 credits in one of the specified courses	<b>World Languages:</b> Two credits in a single World Language. Credits must be taken in sequence with consecutive course numbers in the study of one language.  <b>Fine Arts:</b> Two credits in Fine Arts  <b>Career and Technical Ed (CTE):</b> Two credits in a single career pathway program of study.
Physical Education	1.0 credit	Physical Ed Lifetime Fitness .5 credit Basic Physical Ed Elective .5 credit
Health	0.5 credit	Health Today and Tomorrow .5 credit
Personal/Transition Plan	0.5 credit	Personal Transition Plan .5 credit
Electives	6.0 credits	
<b>Total</b>	<b>24 credits</b>	

## Honors Recognition Certificate Requirements

Academic Honors	CTE Honors	STEM Honors	Grade Point Average
<p>Overall GPA of 3.0 min</p> <p><b>Four credits of Math:</b> The 4<sup>th</sup> credit beyond Algebra 2 must be earned via a combination of the following half-credit courses (or equivalent IB math courses): Algebra 3 Trigonometry, Analytic Geometry, Precalculus.</p> <p><b>Four credits of Science:</b> Of the four credits, one credit must be in Biology (or equivalent IB, or AP Biology courses) and the other three credits must be lab-based science credits.</p> <p><b>TWO credits minimum</b> must be from AP/IB/Running Start courses (equivalent to credits for two college courses).</p>	<p>Overall GPA of 3.0 min</p> <p>Complete a two course sequence in an approved CTE Program of Study</p> <p>Earn a B or better in each required program of study (coursework).</p> <p>Meet or exceed proficiency on performance-based assessments for corresponding program of study</p>	<p>Overall GPA of 3.0 min</p> <p><b>Four credits of Math:</b> The 4<sup>th</sup> credit beyond Algebra 2 must be earned via a combination of the following half-credit courses (or equivalent IB math courses). Algebra 3, Trigonometry, Analytic Geometry, Precalculus</p> <p><b>Four credits of Science:</b> Of the four science credits, one credit must be earned in Biology 1 (or equivalent IB Biology, or AP Biology courses); and the other three credits must be lab-based science credits</p> <p><b>A STEM Capstone/STEM Senior Project</b></p>	<p>Cum Laude – 3.0 to 3.5</p> <p>Magna Cum Laude- 3.5+ to 3.8</p> <p>Summa Cum Laude- 3.8+ and above</p>

### RECOMMENDED SCHEDULES FOR GRADES:

	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ENGLISH	English 1	English 2	English 3	English 4
SOCIAL STUDIES	US History & Government	World History	MHH/PID	SS elective/ SS elective
MATHEMATICS	Geometry	Algebra	Math Elective	
SCIENCE	Physical Science	Biology	Science Elective	
PE/HEALTH	PE Life Fitness Transition	PE Basic Health		
ELECTIVE				
ELECTIVE				
ELECTIVE				

Kea'au High School  
SCHEDULE CHANGE POLICY

Schedule changes may be done for the following reasons:

1. Scheduling error (two of the same courses on schedule)
2. Incomplete schedule
3. Credit received from summer school, Running Start, Upward Bound, or credit recovery.
4. Off Campus - To obtain "OFF CAMPUS", a student must meet one of the following:
  - a) Employment, verification of employment needed
  - b) Early admission into an institution of higher learning or Running Start
  - c) Other verification reason approved by the principal
5. Incorrect level placement
6. Course required for graduation

**SEMESTER 1**

1. Schedule changes will be allowed from the beginning of the first semester till Mid-Quarter 1.
2. Any change request after the deadline will require administration approval.
3. After the deadline (mid-quarter 1), no schedule changes for a different content/subject area will be allowed.
4. There will be no schedule changes for semester courses after seven weeks into the first quarter.
5. Students who choose to be in School Service must make schedule changes within the first three weeks. There shall be no more than one School Service student, per period, per teacher. Students may have no more than one (1) per year. Grade 9/10/11 students cannot sign up for School Service
6. Students who are failing a course and enroll in School Service must remain with the same teacher.

**SEMESTER 2**

1. Schedule changes will be allowed from the beginning of the second semester for three weeks.
2. Any change request after the deadline will require administrative approval
3. After the deadline, no schedule changes for a different content/subject area will be allowed.
4. There will be no schedule changes for semester courses after seven weeks into the third quarter.
5. There will be no schedule changes for year courses after mid-quarter 2.
6. Students who are failing a course and enroll in School Service must remain with the same teacher.
7. NO SCHEDULE CHANGES WILL BE PROCESSED IN THE 4<sup>TH</sup> QUARTER.

The "drop teacher" is responsible for sending the student's exit grade to the "add teacher" when a change is made.

All teachers are responsible for providing a quarter/semester/year grade three (3) weeks before the end of the respective quarter/semester/year.



## LANGUAGE ARTS COURSES

### **English 9 - LCY1010**

1 Credit

This course provides students with a balanced program based on the Common Core State Standards reading, writing and oral communication. Students will explore the conventions of different genres of fiction and non-fiction in both reading and writing exercises. Through literature students will develop an understanding of human nature, and an appreciation of the writer's crafting techniques. Using the writing process from graphic organizers to final drafts students will connect what they have read to their personal lives and to the world. Communicating in small group settings and whole class settings is expanded to include recitation of poetry, prose or a persuasive speech.

### **English 9 Honors – LCY1010H**

1 Credit

This course provides students with a balanced program based on the Common Core State Standards reading, writing and oral communication. Students will explore the conventions of different genres of fiction and non-fiction in both reading and writing exercises. Through literature students will develop an understanding of human nature, and an appreciation of the writer's crafting techniques. Using the writing process from graphic organizers to final drafts students will connect what they have read to their personal lives and to the world. Communicating in small group settings and whole class settings is expanded to include recitation of poetry, prose or a persuasive speech. This course is a fast-paced and emphasizes the various forms of literature, creative and analytical writing. **Teacher recommendation/signature required.**

### **English 10 – LCY2010**

1 Credit

This course provides students with a balanced program based on the common Core State Standards in reading, writing and oral communication. Students will explore literature from around the world from ancient poetry and translations to modern fiction and non-fiction. Oral and written traditions of various cultures will be studied through universal themes. Students will be given opportunities to read, interpret and respond to literature both personally and critically.

### **English10 Honors – LCY2010H**

1 Credit

This course provides students with a balanced program based on the common Core State Standards in reading, writing and oral communication. Students will explore literature from around the world from ancient poetry and translations to modern fiction and non-fiction. Oral and written traditions of various cultures will be studied through universal themes. Students will be given opportunities to read, interpret and respond to literature both personally and critically. This course is a fast-paced and emphasizes the various forms of literature, creative and analytical writing. **Teacher recommendation/signature required.**

### **English 11 – LCY3010**

1 Credit

This course provides a balanced program of reading, writing, and oral communication. Students learn to become strategic users of the language processes by developing knowledge of specific strategies within these processes and implementing and evaluating the effectiveness of their choice of strategies. Students work with both informational and literary texts. The study of informational texts requires that students conduct research, extract and construct meaning, and complete tasks. The study of literature gives students an opportunity to read, interpret, and respond to literature personally and critically. The study of language includes both the description of language and its role in communication as well as the construction of meaning.

**English 12 – LCY4010**

1 Credit

This course provides students with a balanced program based on the Common Core State Standards in reading, writing and oral communication. Students through comprehensive language study will understand the function and purposes of the many grammatical and rhetorical devices covered in prior years. Increasing vocabulary is a main focus in preparation for college entrance exams. Writing will be literature based and include the entire process of making meaning and constructing argument based on recognizing the needs of the audience. Small group and whole class discussions are accented by preparation for a self-designed, rehearsed eight minute speech.

**Advance Placement English Language and Composition – LAY6010**

1 Credit

This course engages students in becoming skilled readers of prose written in a range of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. All language arts benchmarks are addressed in this course. Students read primary and secondary source material and synthesize what they have read in expository, analytical, and argumentative writing of the kind that is expected in college. **Teacher recommendation/signature required. Only available to grades 11, and 12.**

**Advance Placement English Literature and Composition – LAY6100**

1 Credit

This course engages students in the careful reading and critical analysis of literary texts. All language arts benchmarks are addressed in this course. Students read representative works from various genres and periods, concentrating on works of recognized literary merit. In discussions and in their writing, students experience, interpret, and evaluate what they have read. **Teacher recommendation/signature required. Only available to grade 12.**

**SOCIAL STUDIES****U.S History and Government – CHU1100**

1 Credit

This course examines the development of the United States through historical concepts of change, continuity, and causality; through civics concepts of governance, democracy, conflict, and cooperation; through geographical and anthropological concepts of diversity and unity of human/cultural systems; and through the economic concepts of interdependence, limited resources, and functions of markets. It requires students to judge the past on its own terms, not by present day or current standards, to understand people in the context of their times, and to understand that standards and ideas are constantly changing. This course allows students to examine key ideas, events, people, and movements in the United States, assisting them in developing their own personal, national, and world views necessary to make informed decisions.

**World History and Culture – CHW1100**

1 Credit

This course examines the development and dynamics of human experience through such themes as migration, imperialism, trade, exchanges, and transfers. This course provides a foundation and a rationale for active participation in our global community. It examines diverse perspectives, encourages diverse interpretations and historical empathy, and explores global conflict and cooperation. This course engages students in historical inquiry focusing on the historic, technologic, socio-political, geographic, and economic development of past and contemporary civilizations. Students examine decisions, events, and ideas of the past to make informed judgments on contemporary issues, decisions, and events.

**Modern History of Hawaii – CHR1100**

.5 Credit

This course examines the technological and multi-cultural development of modern Hawaii and how the decisions of the past account for and impact present circumstances. This course examines contemporary Hawaii, engages students in in-depth historical inquiry focusing on the historic, geographic, socio-political, and economic structures in the context of the complex interactions and interrelationships that have shaped and continue to influence major decisions facing Hawaii.

**Participation in Democracy – CGU1100**

.5 Credit

This course provides opportunities for students to actively engage in civic discourse and participation. It engages students in the examination of government, political activity, contemporary issues, decision-making and the democratic process. This course focuses on the principles, values and ideals of American constitutional government, global interactions and interconnections, and issues and roles of American citizens. Students are expected to take an active role as citizens and use the tools and methods of social scientists in their inquiry.

**GRADE 12**

**Hawaiian Studies/Pacific Island Culture – CER2200/CER2300**

.5 Credit/.5 Credit

Hawaiian Studies - This course focuses on modern Hawai'i and the impact of the past in terms of economic, cultural, political, and historic development. It looks at the idea of change, continuity, and causality in terms of impact on Hawaiian cultural traditions, values, and technology. It actively engages students in using the tools of the social scientist to develop and evaluate positions on contemporary issues.

Pacific Island Cultures - This course examines the cultural systems of the Pacific Islands, with a focus on analysis of cultural beliefs, practices, cultural assimilation, and preservation. It also examines the political, economic, and social factors that impact settlement and the ecosystems of the Pacific region. It actively engages the students in multicultural problem-solving and decision-making activities and uses the methodology of anthropologists to investigate issues.

**Psychology/Sociology – CSD2200/CSD2300**

.5 Credit/.5 Credit

Psychology - This introductory course surveys the field and acquaints the student with the major areas of psychology, including growth and development, perceptual processes, learning and thinking, motivation and emotion, personality, conflict, abnormal behavior, adjustment, mental health and social behavior. Reading and research will be required.

Sociology - This course will focus on the understanding of relationships among cultures, cultural change and social institutions and conditions. Students will learn and use inquiry and sociological methodologies and practices.

**Geography – CSD2100/Global Studies – CSD240**

.5 Credit/.5 Credit

Geography - This course is a synthesis of the geographical concepts of spatial terms, places and regions, physical and human systems, and the environment. Students examine past and present societies using the tools and methodologies of the geographer to develop and evaluate ecosystems, human patterns, and consequences of human activities on the earth.

Global Studies - This course examines, from a global perspective, contemporary economic, geo-political, and social issues in the global community. It also looks at the historic forces of global encounters and exchanges that affected, changed, and shaped the modern global world. We will study different regions of the world via the five global concepts: interdependence; images and perceptions (related to prejudice, stereotypes, and bias); social justice (fairness and human rights); conflict and conflict resolution, and change and the future.

## MATHEMATICS

### Algebra 1 – MAX1155

1 Credit

This course is designed for students interested in quantitatively oriented programs. Topics include the real number system, first degree equations, and inequalities in one and two variables, polynomials, and graphs. Also included are quadratic equations as well as rational and irrational numbers.

### Geometry - MGX1150

1 Credit

This course develops the students' awareness of the processes of deductive and inductive reasoning along with the understanding and use of the relationships among points, lines, and figures. These include relations among lines such as parallelism, intersections, perpendicularity, and relations among figures such as congruence, similarity, symmetry and rigid motions.

### Honors Geometry - MGX1150

1 Credit

This course is intended for 9<sup>th</sup> grade students who have successfully completed Algebra 1 (High School credit) in grade 8 with a solid understanding of its concepts and earned a C average or higher. Honors Geometry is designed to have an intense focus on the critical thinking, problem solving and technological skills in Geometry.

### Modeling Our World 2 – MAX1180

1 Credit

The course focuses upon the use of modeling to represent mathematical and real-world contexts. The application and creation of mathematical models engages students in learning experiences that relates classroom mathematics to everyday life and decision making. The content of the course focuses upon specific learning expectations defined in the Common Core State Standards for high school mathematics, particularly those standards emphasizing the use of mathematical modeling with linear, exponential, quadratic and rational functions. The course is intended to be taken prior to Algebra II, to provide supplemental learning opportunities for students needing additional support to be successful in Algebra II.

### Algebra 2 –MAX1200

1 Credit

This course extends and builds upon the basic concepts and skills studied in Algebra I. New topics include the introduction of functions including graphing techniques and inverse functions, exponential and logarithmic functions, systems of quadratics, complex numbers, series and sequences, probability, permutations and combinations, determinants and matrices. Teacher recommendation and credit in Algebra I and Geometry may be used to determine student eligibility.

### Math Workshop - MSW1011QA/MSW1011QB

.5 Credit/.5 Credit

This course is designed for students who need to strengthen their understanding of mathematical concepts in each of the mathematical strands: Number and Operations; Measurement; Geometry and Spatial Sense; Patterns, Functions, and Algebra; and Data Analysis, Statistics, and Probability. Concepts should be systematically developed using concrete materials, multiple representations, and symbols. This course is supplemental, repeatable, and should only be given for elective credit. This course must be taken with Algebra 2.

**Trigonometry/Pre-calculus - MCX1010/MCX1020**

.5 Credits/.5 Credit

Trigonometry - This course is designed for students having a two year background in Algebra and one year in Geometry, including some coordinate geometry. This course provides intensive study of trigonometric functions, fundamental identities, inverse trigonometric functions, applications of trigonometric functions and complex numbers.

Pre-calculus - This course extends the study of elementary functions. Graphs and properties of algebraic functions, transcendental functions, and the conics are studied. Graphing with polar coordinates is included. Additional emphasis is placed on integration of appropriate technology (e.g., graphing calculators and computer applications). Teacher recommendation and credit in Algebra 1, Geometry, and Algebra 2 may be used to determine student eligibility. This course is recommended for students who plan to take AP Calculus.

**Statistics/ Probability – MXX1300/MXX1100**

5 Credit/.5 Credit

Statistics - This course provides students with an introduction to statistical issues and concerns and presents strategies for analyzing and interpreting data. This course includes the following topics: graphs and charts, collection and organization of data, measures of central tendency and dispersion, uses and misuses of statistics, frequency distributions, correlation, and regression.

Probability - This course focuses on the probability content standards with emphasis on developing probability concepts inherent in everyday situations experienced in investment, insurance, science, business, and technology. Emphasis is also placed on using probabilities in decision making.

**AP Calculus – MCA1040**

1 Credit

This is a one year course in calculus and related analytic geometry. (It is equivalent to one semester of college calculus.) Students must have a solid background in algebra, geometry, and experience with elementary functions. Topics included are: limits, derivatives, differentials, anti derivatives and integrals of functions.

**Teacher recommendation /signature required, and a B or above in Trigonometry/PreCalculus**

**SCIENCE**

**Physical Science – SPH2603**

1 Credit

Physical Science is a laboratory course that integrates major theories traditionally learned separately in Chemistry, Physics, and Earth Systems Science. Students use scientific investigation and study relationships between science, technology, and society to understand chemistry concepts that include physical and chemical properties of matter, the physical and chemical changes of matter, and the conservation of matter and energy; physics concepts focus on different forms of energy and energy transformations, relationships between force, mass and motion of objects and understanding the major natural forces of gravitational, electrical and magnetism.

**Biology – SLH2203**

1 Credit

Biology 1 is a laboratory course to develop understanding of fundamental life processes, relationships between structure and function, relationships between organisms and their biological and physical environments, environmental adaptations, classification, reproduction, genetics, and evolution. Emphasis is on the use of scientific investigations to develop inquiry process skills and strategies and to clarify the basic concepts of life and the impact of humans and technology on the quality of life.

**Honors Biology – SLH2203H**

1 Credit

Honors Biology is designed for the highly motivated student with a strong interest in the field of science. This course will emphasize higher order thinking skills using online activities, laboratory investigations, independent research, collaborative learning projects, problem solving activities, and bioethical discussions. The student is expected to demonstrate his or her learning through the synthesis, application, and evaluation of the fundamental principles of biology. The course requirements are rigorous; therefore, students are expected to process their learning beyond simple rote memorization. **Teacher recommendation/signature required**

**Chemistry – SPH3503**

1 Credit

Chemistry is a foundational high school course to develop conceptual understanding of structure and properties of matter; chemical reactions; energy in chemical systems; waves and electromagnetic radiation; and engineering in chemical systems. Emphasis is on the application of practices, crosscutting concepts, and core ideas to understand natural phenomena and solve problems using concepts of engineering. This course may require students to use algebraic thinking and analysis, apply functions, and use computational tools for statistical analysis.

**Human Physiology – SLH7503**

1 Credit

Human Physiology is considered a second year biology laboratory course with an in-depth focus and study of the anatomy and functions of the human organism and its parts. Students are provided with extended opportunities to study issues, topics, and themes relevant to human physiology. Emphasis is on using scientific inquiry and analysis of the relationships between science, technology, and society to cover concepts of systems such as blood, circulation, respiration, nutrition, digestion, metabolism, muscular system, nervous system, and reproduction are studied in terms of interaction of the functions and their contribution to the maintenance of a proper condition of the body's internal environment.

**Environmental Science – SIH3603**

1 Credit

This is a problem or issues - based course where students investigate such environmental topics as forestry, global warming, invasive species, green-technology, alternative energy, and sustainability. Students analyze environmental issues, identify and evaluate alternate solutions, and take actions to help maintain and improve the quality of our sustainable environment. Emphasis is on the use of laboratory and fieldwork to study the local and global environment.

**Marine Science – SEH2503**

1 Credit

Marine Science offers students opportunities to expand their understanding of the physical and biological sciences through interactions and experience with the ocean and its inhabitants. Students will learn about processes that influence the hydrosphere, as well as the influence of the hydrosphere on the environment. This course emphasizes the use of laboratory and field investigation to collect data on structure, function, and interactions of the diverse marine organisms and ultimately explore issues involving human impact on the marine environment

**Physics – SPH5603**

1 Credit

Physics is a foundational high school physics course to develop conceptual understanding of motion and stability; forces and interactions; energy in physical systems; waves and electromagnetic radiation; and engineering in physical systems. Emphasis is on the application of practices, crosscutting concepts, and core ideas to understand natural phenomena and solve problems using concepts of engineering. This course may require students to use algebraic thinking and analysis, apply functions, and use computational tools for statistical analysis.

### AP Environmental Science –SIH3903

1 Credit

AP Environmental Science is designed to be the equivalent of a one-semester, introductory college course in environmental science, stressing scientific principles and analysis through inquiry and laboratory experiences. The goal of this 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 both natural and human-induced environmental problems, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Environmental science is interdisciplinary: it embraces a wide variety of topics from different areas of study. This course helps to prepare students for the Advanced Placement Examination. The examination is representative of a college-level course and measures skills and knowledge typically learned in the field of environmental science. Students are to meet all relevant benchmarks in Biological Science (B.S.) **Recommended Pre-requisites: One course in high school Biology and one course in high school Chemistry. One credit in Algebra is desirable due to the analytic nature of this course**

### STEM – XAT1000

1 Credit

In this self-directed and project based course, students are expected to demonstrate skilled or masterful levels for all STEM Competencies as they address the following major outcomes for the course: \* Research: Conduct research to reflect upon and determine a project to address a specific community need. \* Design: Design, Build, Test, Refine, and Deliver a solution to address the need. \*Reflection: Engage in ongoing reflection throughout all levels of the project design and its impacts on the local and global community. \*Technology: Learn to use technologies with the aid of online self-guided tutorials, student mentoring, and/or professional assistance arranged by the course facilitator. Accessible technology may include, but is not limited to; probe-ware, biotechnology, bio-agricultural systems, computer-aided design, 3-D modeling, architectural design, animation, games design, surveying and mapping (GPS), Geographic Information Systems, programming, database applications, web page design, digital photo and video editing. \* Career Skills; Acquire career-building skills. Skills include reflection on and integration of personal values with career interests, strategic resume development, and enhancing job search capability. Project-based learning experiences will specifically address skills with STEM fields. Successful projects will integrate the practice and development of specific skills from all four areas -- Science, Technology, Engineering Design, and Mathematics. STEM Capstone projects will address all four areas of STEM and will directly reflect meet or exceed levels of all STEM Competencies.

**This course (STEM-XAT1000) does not meet science requirement for a high school diploma. It is intended for those students working towards STEM honors.**

## PHYSICAL EDUCATION

### **Physical Education Lifetime Fitness /Transition to High School – PEP1005/TGG1103**

Required for all 9<sup>th</sup> grade

#### **Physical Education Lifetime Fitness**

.5 Credit

This course will integrate physical activity and personal fitness by exposing students to the wide range of physical activity resources. Conditioning principles will be taught with the use of technology such as heart rate monitors and pedometers, where appropriate. Other activities may include, but not limited to: badminton, volleyball, basketball, ultimate Frisbee, archery, bowling, golf, aerobics, soccer, sham ball and softball.

#### **Transition to High School**

.5 Credit

This course is designed to assist 9th grade students' transition into the high school setting. It develops study habits, employability skills, self-image and basics skills of reading, writing, computer literacy and the general learner outcomes. The course guides students in the establishing of a student portfolio designed to highlight the student's accomplishments throughout their high school career.

### **Physical Education Life Activities /Health Today/Tomorrow - PEP1010/HLE1000**

Required for all 10<sup>th</sup> grade

#### **Physical Education Life Activities**

.5 Credit

This course further develops and strengthens physical movement forms, concepts, principles, and skills through participation in a variety of physical fitness experiences, including invasion, target, net and field games. Emphasis is placed on the acquisition of skills, understanding of rules and strategy, ability to work together, and the application of knowledge into the game situation.

#### **Health Today/Tomorrow**

.5 Credit

Students in this required course develop and practice skills that will promote and protect the health of self and others. Students engage in in-depth discussion and exploration of current issues and health trends for adolescents. Content (topic) areas can include but are not limited to: Promote Mental and Emotional Health, Promote Healthy Eating and Physical Activity, Promote Personal Health and Wellness, Promote Safety and Prevent Unintentional Injury and Violence, Promote Tobacco-Free Life Styles, Promote Alcohol and other Drug-Free Life Style, and Promote Sexual Health and Responsibility. Emphasis will be placed on the application of standards-based health knowledge and skills in making healthy personal choices, and in advocating for the health of others

## **PE ELECTIVES**

### **Team Sports 1/ Team Sports 2 – PTP1640/PTP1650**

.5 Credit/.5 Credit

This course is designed to strengthen physical movement forms, concepts, principles, and skills through participation in a variety of team sports. These include basketball, volleyball, soccer/speedball, softball, team handball, flag football, ultimate Frisbee and court hockey. Students will develop knowledge of basic offensive and defensive strategies of the games and an awareness of team position roles and responsibilities. The emphasis is on the skills required to perform some movement forms at a basic level and mastery level. Students will learn to work together to accomplish team or group goals and objectives



**Individual/Dual Sports – PIP1610/PIP1620**

.5 Credit/.5 Credit

Individual and dual sports could include, but are not limited to: archery, gymnastics, judo, racquetball, tennis, squash, volleyball, badminton, handball, ping pong, wrestling, golf, pickleball, table tennis, weight training and outdoor education such as hiking, backpacking, and survival skills. Students will learn to appreciate the benefits each individual and dual sport has on maintaining a physically active lifestyle. Key features of this course: introduce a variety of individual and dual sports; emphasize fundamental skills and techniques; develop an appreciation for individual and dual sports as lifetime activities. This course is designed for students to strengthen physical movement forms, concepts, principles, and skills through participation in a variety of individual and dual sports. Individual and Dual Sports 1 should reintroduce a variety of modified games and lead-up activities that require students to apply a variety of locomotor skills (jumping, leaping, running, etc.), movement concepts (chasing, fleeing, dodging, etc.) and manipulative skills (throwing, catching, volleying, striking, etc.), in complex changing situation

**Physical Fitness for Life 1A/ 1B – PFP1310/PFP1320**

.5 Credit/.5 Credit

This standards-based course is designed for students to gain an understanding of their bodies and ways to improve their overall fitness by designing and implementing a variety of physical fitness training programs and evaluating the results of each. The content of this course empowers learners to actualize a vision of themselves as competent movers with the skills, knowledge, and desire to become life-long participants in physical activities. Students will learn to accurately assess personal fitness levels by completing a variety of measurement assessment activities. The physical fitness assessment activities may include the following: mile run, shuttle run, sit-ups, pull-ups, vertical hang, standing long jump, vertical leap, 600-yard walk-run, pacer, and sit-and-reach. Instruction will introduce and/or reintroduce a variety of training principles (Frequency, Intensity, Time, and Type [FITT], progression, overload, etc.) that are required to improve personal fitness levels and they must develop and implement more than one personal fitness program based on these training principles. Students will re-assess their fitness levels after participating in their individual training programs and will use the results to evaluate the training program and set realistic training goals for the future. Instruction in this course should emphasize measuring improvements of personal fitness components (cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition) and the development, implementation and evaluation of personal fitness training programs. Key features of this course: assessment of personal fitness, develop more than one training program based on existing principles; re-assess personal fitness to evaluate results of training programs

**Physical Fitness for Life 2A/ 2B – PFP1330/PFP1340**

.5 Credit/.5 Credit

This standards-based course is designed for students to gain an understanding of their bodies and ways to improve their overall fitness by designing and implementing a variety of physical fitness training programs and evaluating the results of each. The content of this course empowers learners to actualize a vision of themselves as competent movers with the skills, knowledge, and desire to become life-long participants in physical activities. Students will learn to accurately assess personal fitness levels by completing a variety of measurement assessment activities. The physical fitness assessment activities may include the following: mile run, shuttle run, sit-ups, pull-ups, vertical hang, standing long jump, vertical leap, 600-yard walk-run, pacer, and sit-and-reach. Instruction will introduce and/or reintroduce a variety of training principles (Frequency, Intensity, Time, and Type [FITT], progression, overload, etc.) that are required to improve personal fitness levels and they must develop and implement more than one personal fitness program based on these training principles. Students will re-assess their fitness levels after participating in their individual training programs and will use the results to evaluate the training program and set realistic training goals for the future. Instruction in this course should emphasize measuring improvements of personal fitness components (cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition) and the development, implementation and evaluation of personal fitness training programs. Key features of this course: assessment of personal fitness, develop more than one training program based on existing principles; re-assess personal fitness to evaluate results of training programs

**Weight and Resistance Training 1A 1B – PWP1210/PWP1220**

.5 Credit/.5 Credit

This course is designed to introduce and/or reintroduce weight and resistance training safety and etiquette as well as define muscular strength and endurance. Topics related to safety and etiquette could include, but are not limited to: breathing, proper footwear, posture, technique, spotting, proper use of equipment, proper procedures, etc. Instruction should define and reinforce development of muscular strength and endurance through modified weight and resistance training exercises including: plyometrics, free weights, universal apparatus, own body weight (as resistance), resistance bands and/or tubing, pulleys, medicine balls, weighted ropes, etc. Students will be required to develop and implement a training program not only geared to improve their muscular strength and conditioning, but also to increase their overall flexibility and body composition. Weight and resistance training exercises should target muscle groups including muscles of the head and neck, trunk, lower and upper extremities, and combinations of these muscle groups. Key features of this course: introduce safety and etiquette relative to weight and resistance training, define muscular strength and endurance, develop a training program, and provide modified weight and resistance training activities.

**Weight and Resistance Training 2A/2B - PWP1230/PWP1240**

.5 Credit/.5 Credit

This course is designed to introduce and/or reintroduce students to heart rate and body composition. Students will apply training methods that work on improving heart rate and increasing lean body mass. Initial individualized assessments should be done to measure body composition and monitor heart rate levels. Students should update or develop a training program with goals to monitor heart rate in an attempt to lower resting heart rate (RHR), increase VO2 Max, and train within their target heart rate (THR) zone in addition to improving overall body composition. A variety of weight and resistance training exercises can be used, which include, but are not limited to: plyometrics, free weights, universal apparatus, own body weight (as resistance), resistance bands and/or tubing, pulleys, medicine balls, weighted ropes, etc. Exercises should train muscles of the head and neck, trunk, lower and upper extremities, and a combination of these muscle groups. Periodically throughout this course, students should assess their heart rate levels and body composition and modify their training program as needed to reinforce their personal goals. Appropriate technology should be used if available. Key features of this course: introduce heart rate and body composition, apply training methods that will lower RHR, increase VO2 Max, train in their THR and improve body composition, and periodically assess and make adjustments to personal weight and resistance training programs.

**Body Conditioning 1A/ 1B – PBP1110/PBP1120**

.5 Credit/.5 Credit

This standards-based course is designed to introduce a range of weight training and aerobic training activities that could be incorporated into a total body conditioning program. Students will apply these aerobic activities to develop and/or update a training program that applies the Frequency, Intensity, Time, and Type (FITT) principle and emphasizes total body conditioning. Aerobic activities may include: step aerobics, dance aerobics, brisk-walking, running and/or jogging, cycling, etc. Activities should reinforce the three parts of an aerobic activity – warm-up, cardio, cool down – and the importance of each to the overall benefits of a successful workout. As a result of this course cardiorespiratory endurance, muscular endurance, flexibility and coordination will improve and an appreciation for aerobics as a lifetime activity will be reinforced. Key features of this course: introduce a range of aerobic activities; develop and implement a body conditioning program that incorporates a variety of aerobic activities; reinforce the different parts of an aerobic exercise.

**Body Conditioning 2A/ 2B – PBP1130/PBP1140**

.5 Credit/.5 Credit

This standards-based course is designed to introduce a range of weight training and aerobic training activities that could be incorporated into a total body conditioning program. Students will apply these aerobic activities to develop and/or update a training program that applies the Frequency, Intensity, Time, and Type (FITT) principle and emphasizes total body conditioning. Aerobic activities may include: step aerobics, dance aerobics, brisk-walking, running and/or jogging, cycling, etc. Activities should reinforce the three parts of an aerobic activity – warm-up, cardio, cool down – and the importance of each to the overall benefits of a successful workout. As a result of this course cardiorespiratory endurance, muscular endurance, flexibility and coordination will improve and an appreciation for aerobics as a lifetime activity will be reinforced. Key features of this course: introduce a range of aerobic activities; develop and implement a body conditioning program that incorporates a variety of aerobic activities; reinforce the different parts of an aerobic exercise.

## WORLD LANGUAGE

### Hawaiian Language

#### **Hawaiian Language 1 – WPH1000**

1 Credit

Students will learn the basic fundamentals of the Hawaiian language. Emphasis will be on speaking, listening, reading and writing the Hawaiian language. Students will also gain a basic understanding and appreciation of the Hawaiian culture through the study of the language.

#### **Hawaiian Language 2 – WPH2000**

1 Credit

Students will further develop their proficiency of speaking, reading, writing and understanding the Hawaiian Language. Students will also gain a deeper understanding and appreciation of the Hawaiian culture through the study of the language. Prerequisite: C or better in Hawaiian I

#### **Hawaiian Language 3 – WPH3000**

1 Credit

Students will continue to develop their proficiency of speaking, reading, writing & understanding the Hawaiian Language. Emphasis will be on speaking. Translating Hawaiian literature is another part of this course. Students will also gain a deeper understanding and appreciation of the Hawaiian culture through the study of the language.

#### **Hawaiian Language 4 - WPH4000**

1 Credit

Students will continue to develop their proficiency of speaking, reading writing, and understanding the Hawaiian language. Areas of emphasis are: speaking and translating Hawaiian literature. Students will also gain a deeper understanding and appreciation of the Hawaiian culture through the study of the language.

### Spanish

#### **Spanish 1 – WES1000**

1 Credit

In this introductory course, students will master the Spanish sound system with emphasis on Spanish pronunciations. Classroom activities encourage students to develop the ability to interact to simple social situations using memorized language re-combinations of learned material supported by basic grammar and vocabulary pertaining to everyday life. An appreciation of Spanish culture will be developed via hands-on activities.

#### **Spanish 2 – WES2000**

1 Credit

Intensive language comprehension and production training continues at this level as students become more proficient at understanding, speaking, reading, and writing in a variety of situations. Hispanic culture will be included in a number of activities. Audio/visual aids will supplement the language study throughout the course.

#### **Spanish 3 – WES3000**

1 Credit

Intensive language comprehension and production training continues at this level as students become more proficient at understanding, speaking, reading, and writing in a variety of situations. Hispanic culture will be included in a number of activities. Audio/visual aids will supplement the language study throughout the course.

#### **Spanish 4 – WES4000**

1 Credit

Increasing vocabulary and knowledge of finer points of grammar enable students to refine oral and written communication. Topics and projects are carefully selected to help students broaden the range of situations in which they can operate, connect language study to other disciplines and use the language inside and outside of the classroom setting.

### Sign Language

#### **Sign Language 1 – WNS1000**

1 Credit

Students will learn the basic fundamentals of sign language. Emphasis will be on learning and practicing receptive skill of basic everyday signs, alphabets and numbers in sign language. They will also gain a basic understanding of deaf culture and different degrees of hearing loss.

#### **Sign Language 2 – WNS2000**

1 Credit

Students will further develop their proficiency of communicating and understanding sign language. They will also gain a deeper understanding and appreciation of the deaf culture through study of sign language.

## CAREER AND TECHNOLOGY EDUCATION

### DIGITAL DESIGN

#### **Foundations of Creative Media - TCC1000**

1 Credit

Foundations of Creative Media is an introductory course designed to inform students about careers in creative media, including digital design and digital film production. This Level 1 course serves as the foundation course for both the Digital Design and Film & Media Production programs of study. Upon completion of the course, a proficient student will be able to explain what comprises the creative media industry sector, explain principles of digital design and its influences, demonstrate basic knowledge of digital camera and video equipment, and create a digital photo collection using design and equipment knowledge. A student will also be able to describe various occupations and outline the steps necessary to advance in specific careers.

#### **Digital Design 1 – TCD2000**

1 Credit

Digital Design 1 is the second course in the Digital Design program of study designed to introduce students to the digital design process and the creation of basic design work and page layouts reflective of the process. Upon completion of the course, a proficient student will be able to explain artistic intent and influence summarize ADA guidance, apply design software techniques, conceptualize and create photographs and illustrations of increasing complexity, and produce basic single and multipage layouts. *Prerequisite: TCC1000 – Foundations of Creative Media.*

### FILM AND MEDIA PRODUCTION

#### **Foundations of Creative Media - TCC1000**

1 Credit

Foundation of Creative Media is an introductory course designed to inform students about careers in creative media, including digital design and digital film production. This Level 1 course serves as the foundation course for both the Digital Design and Film & Media Production programs of study. Upon completion of the course, a proficient student will be able to explain what comprises the creative media industry sector, explain principles of digital design and its influences, demonstrate basic knowledge of digital camera and video equipment, and create a digital photo collection using design and equipment knowledge. A student will also be able to describe various occupations and outline the steps necessary to advance in specific careers

#### **Digital Video Technology- TCV2000**

1 Credit

Digital Video Technology is the second course in the Film and Media Production program of study designed to introduce students to the post-production process for digital film/video. Upon completion of the course, a proficient student will be able to demonstrate basic digital video and audio recording skills, video and audio uploading and editing techniques, and explain the film production process from concept to completion. *Prerequisite: TCC1000 – Foundations of Creative Media.*

### BUSINESS – ENTREPRENEURSHIP

#### **Foundations of Business & Marketing – TBB1000**

1 Credit

An introductory course designed to inform students about careers in various sectors of business, as well as basic business concepts. This Level 1 course serves as the foundation course for the Business Management, Entrepreneurship, Financial Management, Marketing Management, and Supply Chain and Logistics Technology programs of study. Upon completion of the course, a proficient student will have foundational knowledge of business and business-related occupations and concepts, including management, finance, marketing, and entrepreneurship and how each intertwines.

**Entrepreneurship 1- TBE2000**

1 Credit

Entrepreneurship 1 is the second course in the Entrepreneurship program of study designed to inform students about careers related to starting and running a business. Students prepare for the business world by examining basic principles in management, finance, and marketing as they apply to entrepreneurship. Upon completion of the course, a proficient student will be able to describe the foundations of small business operations and how entrepreneurship intertwines to create the fabric of the labor market. *Prerequisite: TBB1000– Foundations of Business and Marketing.*

**HOSPITALITY, TOURISM, AND RECREATION****Foundations of Culinary – TTU1000**

1 Credit

This course provides an introduction and orientation to a series of related occupations in the food industry and the qualifications of a successful food service worker. The knowledge, skills, work attitudes and habits developed will enable students to understand basic principles of quantity food preparation, safety and sanitation, use and care of equipment, and food service organization. This course provides practical work experiences in the classroom and laboratory.

**Culinary Arts: Food Preparation – TTP2000**

1 Credit

This second 2 course is designed to qualify an individual for entry-level positions in the food industry. Classroom and laboratory experiences place an emphasis on quantity food preparation and service, sanitation, safety, selection and purchasing of food and supplies, storeroom control, and care of supplies and equipment. *Prerequisite: TTU1000 – Foundations of Culinary.*

**AGRICULTURE, FOOD, AND NATURAL RESOURCES****Foundations of Agriculture, Food, & Natural Resources – TAO1000**

1.0 Credit

Foundations of Agriculture, Food, & Natural Resources is an introductory course designed to inform students about careers in agriculture and understand the important role that agriculture plays in the twenty-first century. This Level I course serves as the foundation course for the Animal Systems, Food Systems, Natural Resources Business, and Natural Resources Management programs of study. Upon completion of the course, a proficient student will have foundational knowledge of various agriculture-related career fields, ecosystems, plant systems, animal systems, and the reproduction systems of plants and animals.

**Principles of Food Production – TAP2000**

1.0 Credit

Principles of Food Production is the second course in the Food Systems program of study designed to inform students designed to provide students with the knowledge and skills pertaining to plant and animal structural anatomy, systems physiology, genetics, and biotechnology. Upon completion of this course, a proficient student will have developed basic skills and knowledge in the economics of production, and other management approaches associated with plant and animal production, including learning foundational Hawaiian traditions and values of honoring and conserving the land and its resources. *Prerequisite: TAO 1000 Foundations of Agriculture, Food, and Natural Resources.*

**Food Products & Processing Systems 1 TAD 3000**

1 Credit

The third course in the Food Systems program of study designed for students interested in being part of the sustainability of Hawaii's food systems through plant and/or animal products. Upon completion of this course, a proficient student will have basic knowledge of the history of agriculture and food production and processing in Hawaii, the process of creating a sustainable product, start-up process to creating a business, and the importance of food safety and sanitation. *Prerequisite: TAP 2000 Principles of Food Production.*

## NURSING SERVICES

### Foundations in Health Services – THF1000

1 Credit

Foundations of Health Service is an introductory course designed to inform students about careers in the Health Services field, as well as basic medical skills and terminology. This Level I course serves as the foundation course for the Public Health Services, Diagnostic Services, Emergency Medical Services, Human Performance Therapeutic Services, and Nursing Services programs of study. Upon completion of the course, a proficient student will have foundational knowledge of various medical careers, foundational healthcare skills, safety skills, traditional Hawaiian health care philosophies, and ethics.

### Advanced Health Services – THA2000

1 Credit

Advanced Health Services is the second course for the Nursing Services programs of study. It is designed to develop student understanding of the structures and functions of the human body. Upon completion of the course, a proficient student will be able to characterize the functions of various organs and body systems and their interplay with one another in the human body. *Prerequisite: THF1000 – Foundations in Health Services*

### Nursing Services 1 – THS3000

1 Credit

Nursing Services 1 is the third course in the Nursing Services program of study and is an applied course designed to develop the skills necessary for a career in nursing. Upon completion of the course, a proficient student will be able to assess, monitor, evaluate, and report patient/client health status, apply safety and wellness protocols, and communicate effectively with the patient and family members. *Prerequisite: THA2000 – Advance Health Services*

### Nursing Services 2 – THS4000

1 Credit

Nursing Services 2 is the fourth course in the Nursing Services program of study designed to inform and develop the skills necessary for a career in nursing, including awareness of varying levels of occupations and credentials available in the field. Upon completion of the course, a proficient student will be able to demonstrate patient care and wellness techniques, infection control protocols, and basic nursing responsibilities associated with various healthcare facilities. *Prerequisite: THS3000 – Nursing Services I.*

## AUTOMOTIVE MAINTENANCE AND LIGHT REPAIR

### Foundations of Automotive Maintenance and Light Repair – TTF1000

1 Credit

Introduction to Automotive Maintenance and Light Repair (MLR) is an introductory course designed to inform students about careers in automotive repair, as well as basic safety and service skills. This course serves as the foundation course for the Automotive MLR program of study. Upon completion of the course, a proficient student will have foundational knowledge of safety in the workplace, technician service skills, and basic engine and tire maintenance.

### Automotive Maintenance and Light Repair 1 – TTA2000

1 Credit

The Maintenance and Light Repair (MLR) 1 course is the second course in the Automotive MLR program of study designed to inform students about automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. Upon completion of the course, a proficient student will perform diagnostic services and service and/or repair vehicle electrical systems, electrical accessories, and charging systems. *Prerequisite: TTF1000 - Foundations of Automotive Maintenance and Light Repair*

## AUTOMOTIVE COLLISION REPAIR

### Foundations of Automotive Collision Repair – TTC1000

1 Credit

Foundations of Collision Repair is an introductory course designed to inform students about careers in automotive collision repair, as well as basic safety and service skills. This course serves as the foundation course for the Automotive Collision Repair program of study. Upon completion of the course, a proficient student will have foundational knowledge of safety in the workplace, technician service skills, locate and describe major parts of an automotive body, and basic steps in the collision repair process.

### Collision Repair: Non-Structural – TTC2000

1 Credit

The Collision Repair: Non-Structural course is the second course in the Automotive Collision Repair program of study designed to inform students on various repair procedures for non-structural damage, including panels and body components, metal finishing and welding, body filling, and glass, plastics, and hardware. Upon completion of the course, a proficient student will be able to analyze non-structural collision damage and write and revise repair plans, as well as prepare vehicles for repair and perform basic collision repairs. *Prerequisite: TTC 1000- Foundations of Automotive Collision Repair.*

## WELDING

### Foundations of Manufacturing (Welding) - TAM1000

1 Credit

Foundations of Manufacturing is an introductory course designed to inform students about careers in advanced manufacturing and related areas, including electronics, welding, automation, robotics, and motor and logic controls. This Level 1 course serves as the foundation course for Welding programs of study. Upon completion of the course, a proficient student will be able to describe various advanced manufacturing occupations and outline the steps necessary to advance in specific careers, employ tools safely, possess foundational knowledge of advanced manufacturing components and processes, interpret basic project drawings, and demonstrate proper measurement and application of mathematical concepts

### Welding 1 – TAW2000

1 Credit

Welding 1 is the second course in the Welding program of study designed to provide students with the skills and knowledge to effectively perform cutting and welding applications used in the advanced manufacturing industry. Upon completion of the course, a proficient student will develop skills in fundamental safety practices in welding, interpreting drawings, creating computer aided drawings, identifying and using joint designs, efficiently laying out parts for fabrication, basic shielded metal arc welding (SMAW), mechanical and thermal properties of metals, and quality control. *Prerequisite: TAM1000- Foundations of Manufacturing.*

### Welding 2 – TAW3000

1 Credit

Welding 2 is the third course in the Welding program of study designed to provide students with opportunities to effectively perform cutting and welding applications of increasing complexity used in the industry. Upon completion of the course, a proficient student will build on the knowledge and skills of the Welding 1 course and apply them. Specifically, students will be proficient in (1) fundamental safety practices in welding, (2) gas metal arc welding (GMAW), (3) flux cored arc welding (FCAW), (4) gas tungsten arc welding (GTAW), and (5) quality control methods. *Prerequisite: TAW2000 - Welding 1*

## RESIDENTIAL AND COMMERCIAL CONSTRUCTION

### **Foundations of Construction – TCF1000**

1 Credit

Foundations of Construction is an introductory course designed to inform students about careers in building and construction. This Level 1 course serves as the foundation course for the Residential & Commercial Construction programs of study. Upon completion of this course, a proficient student will be able to describe various construction occupations and outline the steps necessary to advance in specific construction careers. Students will be able to employ tools safely, explain building systems and materials, and interpret basic construction drawings to complete projects, demonstrating proper measurement and application of mathematical concepts.

### **Residential & Commercial Construction 1 – TCR2000**

1 Credit

Residential & Commercial Construction 1 is the second course in the Residential & Commercial Construction program of study intended to have students develop an understanding of the different phases of a construction project from start to finish. Upon completion of this course, a proficient student will be able to demonstrate knowledge and skills in the early phases of building construction, including site layout, concrete and floor to ceiling systems. Proficient students will be able to frame walls, ceilings, and floors of a structure, while safely employing tools and interpreting construction drawings to complete projects. *Prerequisite: TCF1000 - Foundations of Construction.*

### **Residential & Commercial Construction 2 – TCR3000**

1 Credit

Residential & Commercial Construction 2 is the third course in the Residential & Commercial Construction program of study designed to allow students to develop an understanding of the different phases of a construction project from start to finish. Upon completion of this course, a proficient student will be able to demonstrate knowledge and skill in the later phases of building construction including roofing systems, exterior finishing, stair framing systems, masonry systems, and MEP systems. Students will be able to perform masonry work, frame roofs, install shingles on roofs, apply exterior finishes, and build and install stairs while safely employing tools and interpreting construction drawings to complete projects. *Prerequisite: TCR2000 - Residential & Commercial Construction 1*

## ARCHITECTURAL DESIGN

### **Foundations of Architectural Design – TAF1000**

1 Credit

Foundations of Architectural Design is an introductory course designed to inform students about careers in architecture. This course serves as the foundation course for the Architectural Design program of study. Upon completion of the course, a proficient student will have foundational knowledge of the process of architectural design, sketching and technical drawing techniques, and basic tool usage and computer-aided software.

### **Architectural Design 1 – TAA2000**

1 Credit

Architectural Design 1 is the second course in the Architectural Design program of study designed to equip students with the knowledge and skills to be successful in various fields of architecture. Upon completion of the course, a proficient student will have a fundamental understanding of requirements to become an architect, urban planning, landscape design and restoration architecture, as well as compliance with applicable federal rules and regulations. A proficient student will also demonstrate technical knowledge and skills through continued technical drawings and models of varying complexity. *Prerequisite: TAF1000 - Foundations of Architectural Design.*

### **Architectural Design 2 – TAA3000**

1 Credit

Architectural Design 2 is the third course in the Architectural Design program of study designed to provide students with the opportunity to apply skills learned in previous courses and continue to strengthen their individual design process and aesthetics across a series of real-world applications. Upon completion of the course, a proficient student will have foundational knowledge on various types of architecture, including sustainable architecture and architectural standards for various building types, as well as design constraints such as topography, site analysis, client wishes. A proficient student will demonstrate continued practice and refinement of technical drawing skills (freehand, manual, and CAD) and modeling techniques through a series of design projects. *Prerequisite: TAA2000 - Architectural Design 1.*



## FINE ARTS - PERFORMING ARTS

### **Exploration in Drama -FTE1000**

1 Credit

This introductory course is designed to enhance understanding of life through the study and performance of dramatic works. Emphasis is on developing students' ability to express themselves freely and establish personal criteria for critical evaluation of drama activities. Students will gain insight into a broad spectrum of theatre through study of various phases of play production. **Only available to 9<sup>th</sup> grade**

### **Theatre Arts – FTP5000**

1 Credit

This course will focus on the study and performance of drama and theatre. Students will review a wide range of scripted materials, such as plays, screenplays, teleplays, and Readers Theatre scripts. Students will analyze dramatic criticism, creation of original dramatic works and the role of dramatic arts in society. In addition, students will work collaboratively on performances. **Only available to grades 10, 11, and 12.**

### **Play Production 1 – FTP1000**

1 Credit

In this course, students will learn about the various aspects of producing a play for an audience, such as directing, acting, staging, set designing, and costuming. Understanding the basic principles of play production and theatre is developed through active participation in the production of a play. *Prerequisite: FTP5000 – Theatre Arts.*

### **Play Production 2 – FTP2000**

1 Credit

This course is designed to provide students who have completed Play Production 1 with opportunities to assume minor directorial responsibilities in producing a play for an audience and participate in various aspects of theatre arts, including production, promotion, and critiquing activities. Students develop leadership skills and perform production duties beyond the scheduled rehearsal times. *Prerequisite: FTP1000 – Play Production 1*

### **Chorus 1 – FMC1000**

1 Credit

Chorus 1 is designed for students to develop performance skills, knowledge, and understanding of vocal music. Musical arrangements from a variety of styles and periods are sung in unison and two-part harmony. Solo and ensemble singing are performed

### **Ukulele 1 – FML1000**

1 Credit

Ukulele 1 is an introductory course designed to provide students with the opportunity to develop skills in ukulele playing. Students will be involved with performing, listening to, and evaluating ukulele music.

### **Ukulele 2 FML 2000**

1 Credit

This course is a continuation of the Ukulele 1 course. Students develop intermediate skills in ukulele playing, such as picking melodies and solo work. Students will be involved with performing, listening to, and evaluating ukulele music.

### **Ukulele 3 – FML3000**

1 Credit

This course is a continuation of the Ukulele 2 course or its equivalent. Students develop appropriate higher-level skills in ukulele playing, with a focus on analyzing and improvising music. Performing as a soloist and in groups for the school community is an important part of the course.

### **Piano 1 – FMK1000**

1 Credit

This is an introductory course designed to provide students with the opportunity to develop skills in piano playing. Students will be involved with performing, listening to, and evaluating piano music.

### **Piano 2 – FMK2000**

1 Credit

This intermediate course is a continuation of the Piano 1 course and is designed to provide students with the opportunity to further develop skills in piano playing. The course places greater emphasis on basic music theory and its application through performance. Students will be involved with performing, listening to, and evaluating piano.

**Piano 3 – FMK3000**

1 Credit

This is an advanced course designed to help students to continue to refine and develop piano playing skills. The course includes the advanced application of music theory, composition, improvisation, and performance. Students will be involved with performing, listening to, and evaluating piano music.

**Piano 4 – FMK4000**

1 Credit

This is an advanced course designed to help students to continue to refine and develop piano playing skills. The course includes the advanced application of music theory, composition, improvisation, and performance. Students will be involved with performing, listening to, and evaluating piano music.

**Intro to Band – FMB1000**

1 Credit

Introduction of musical techniques and instruments are taught in this course. This will include care of an instrument, correct posture, breath control, tone production, intonation, articulation, musical terminology, and fingerings. Students study simple music and are given the opportunity to play and listen to different types of musical compositions.

**Band 1 – FMB2000**

1 Credit

Band 1 course is designed for students who have fulfilled the requirements of Introductory Band or its equivalent. Continued development of skills and understanding is maintained through studying of complex exercises and performing appropriate music literature. Students develop listening skills to increase understanding of tonality, style, dynamic nuances, and interpretation of various styles of music. Performances for school and public are an integral part of the program. Original band literature, arrangements, and orchestral transcription from Grades I to IV are included for study and performance.

**Band 2 – FMB3000**

1 Credit

Band 2 course is designed for students who have fulfilled the requirements of Band 1. Development of appropriate and higher level musicianship qualities are emphasized and taught. Band literature (Grades I to IV) from various classifications is studied for performance. The course will provide opportunities for school and community performances.

**Band 3 - FMB4000**

1 Credit

Band 3 course is designed for students who have fulfilled the requirements of Band 2. Development of appropriate and higher level musicianship qualities is emphasized and taught. Band literature (Grades I to IV) from various classifications is studied for performance. The course will include discussion on performance preparation, music styles, and careers in music. The course will provide opportunities for school and community performances

**Band 4 – FMB5000**

1 Credit

Band 4 course is designed for students who have fulfilled the requirements of Band 3. Development of appropriate and higher level musicianship qualities are emphasized and taught. Band literature (Grades I to IV) from various classifications is studied for performance. The course will include discussion on performance anxiety, auditioning for solos, and aesthetics. The course will provide opportunities for school and community performances.

**FINE ARTS - VISUAL ARTS****Ceramics 1 – FVL1000**

1 Credit

This is an introductory course that introduces clay as a universal medium of expression. Functional and non-functional pieces from diverse cultures are introduced and analyzed. Hand building techniques involving, pinch, coil, slab, and free-form modeling are covered. Glazes and glazing techniques, and other methods of surface decoration are explored. **Only available to grades 11 and 12.**

**Ceramics 2 – FVL2000**

1 Credit

This intermediate course offers students opportunities to refine methods in clay hand-building techniques, glazing, and surface decoration. Ceramic pieces from various world cultures are introduced and analyzed. **Only available to grades 11 and 12.**

**General Art 1 – FVB1000**

1 Credit

This course helps students to explore a variety of media and techniques for personal expression and provides further opportunities for them to apply the elements and principles of design in imaginative solutions to visual problems. Art forms of historical periods and diverse cultures are also studied as contextual and introductions to art processes.

**General Art 2 – FVB2000**

1 Credit

This course follows General Art 1 and provides further opportunity to strengthen and refine productive skills and increase knowledge about art, art history, and the visual artifacts of diverse cultures. Students are encouraged to examine the artworks of others and refine skills in a selected mode of expression.

**General Art 3 – FVB3000**

1 Credit

This is an advanced course to further expand skills learned in General Art 2. This course provides students with opportunities to develop a portfolio of works which demonstrate attainment of art production skills, creative potential, aesthetic sensitivity, and understanding of personal expression through the Visual Arts. This is an advanced course for art students that wish to continue pursuing their fine arts study.

**Photography 1 – FVP1000**

1 Credit

This is an introductory course on photography. Basic techniques taught are composition, exposure, lighting, camera care and operation, black & white film processing, contact printing, enlarging and print mounting using traditional photographic techniques. Darkroom safety procedures are introduced and followed.

**Photography 2 – FVP2000**

1 Credit

This is an intermediate course covering advanced techniques in exposure involving measured and controlled light and time, the use of filters, film development for specific requirements and basic color photography through traditional film techniques and digital technologies. Advanced darkroom techniques and procedures will be utilized. Prerequisite: Photography 1

**Photography 3 – FVP3000**

1 Credit

This advanced course further develops skills and techniques learned in Photography 1 & 2 and offers new ideas and techniques utilized in contemporary photography. It is designed to emphasize the use of imaging process creative and vital forms of visual communication. Individualized studies will stress experimentation and research in specialized areas of interest, such as multimedia presentations. Additional experiences will relate photography to imaging process in video, still and motion pictures, television & advertising art either through traditional photographic techniques or through digital media. Development of a portfolio of images is strongly encouraged

**YEARBOOK****Yearbook Production 1 – XYY8610**

1 Credit

Students will participate in the production of the school yearbook. Units of study include teamwork, responsibility, brainstorming, content, coverage, concept, reporting, writing, headlines, captions, editing, photography, typography, design, graphics, finances, yearbook campaigns, advertising and distribution.

**Yearbook Production 2 - XYY8630**

1 Credit

Students will continue gaining skills in the production of school yearbook. Units of study include teamwork, responsibility, brainstorming, content, coverage, concept, reporting, writing, headlines, captions, editing, photography, typography, design, graphics, finances, yearbook campaigns, advertising and distribution.

**Newswriting – LJY8210**

1 Credit

This course is for students who are interested in participating as a member of the school newspaper staff. It covers study of the various parts of the newspaper, its major functions, and the responsibilities involved in newspaper production.

## COMPUTER SCIENCE

### **Foundations of Computer Science – TIF1000**

1 Credit

Foundations of Computer Systems and Technology is an introductory course designed to inform students about careers in the information technology sector and basic technologies. This Level 1 course serves as the foundation course for the Programming, Networking, Cybersecurity, Web Design & Development programs of study.

### **Directed Study Computer Science – ECS9900**

1 Credit

Directed study of computer science focuses on further developing computational thinking skills through the medium of Android App development for mobile platforms. This course utilizes industry-standard tools such as Android Studio, Java programming language, XLM, and device emulators. Students collaborate to create original solutions to problems of their choosing by designing and implementing user interfaces and Web-based databases.

*Prerequisite: Computer Science A/B or prior computer experience.*

### **Advanced Placement (AP) Computer Science Principles - ECS9800**

1 Credit

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. The curriculum framework provides a detailed description of the course content. The key sections of this framework are described in the following text:

-computational thinking practices (connecting computing, creating computational artifacts, abstracting, analyzing problems and artifacts, communicating, collaborating)

-seven big ideas (creativity, abstraction, data and information, algorithms, programming, the internet, global impact)

-learning objectives that integrate computational thinking practice or skill

**No prerequisite or experience required. Only available to grades 10, 11, and 12.**

### **Advanced Placement (AP) Computer Science Application - ECS9500**

1 Credit

This course prepares high school students for the Advanced Placement (AP) Computer Science/ AB Examination and is aimed at helping students develop the ability to design and implement computer-based solutions to problems in several application areas; design and select appropriate algorithms and data structures to solve problems; code fluently in a well-structured fashion using an accepted high-level language, e.g., Java; and to identify the major components of a computer system (hardware and software), their relationship to one another, and the roles of these components within the system. Students recognize the ethical and social implications of computer use. AP Computer Science meets the requirements as set forth in the Advanced Placement Computer Science Program course description and is designed to give students the necessary information and skills to program in Java.

*Prerequisite: ECS9800- AP Computer Science Principles.* **Only available to grades 11 and 12.**

### **AVID Advancement Via Individual Determination**

9<sup>TH</sup> Grade AVID – TGG8090

10<sup>TH</sup> Grade AVID – TGG8100

11<sup>th</sup> Grade AVID – TGG8110

12<sup>th</sup> Grade AVID – TGG8120

AVID is a course which prepares students for college. This course target students in the academic middle (B, C, and some D students) who want to go to college and are willing to work hard. Students will learn organizational skills, study skills, and work on critical thinking and questioning. Students will participate in activities which will make college more attainable. WIC-R or writing, inquiry, collaboration, and reading forms the basis of the AVID curriculum. Prerequisite: teacher recommendation, application

### **AVID Tutor – XLP1015XA/XLP1015XB**

1 Credit

Students enrolled in this course will be trained to tutor and mentor students in the AVID classes. Tutors will maintain confidentiality, assist teachers with binder checks, provide learning assistance, encourage academic success, help with team building activities, facilitate tutorials and maintain a tutor log. Prerequisite: AVID teacher recommendation. **Only available to grades 11 and 12.**

**Cadet Core – XLP1015QA/ XLP1015QB**

1 Credit

The Cadet Core is a leadership development program with the mission to help all students become their best version. Content is aligned to national standards with a curriculum that stretches over four years and emphasis is placed on leadership, uniforms, physical fitness, and academics. Students learn responsibility in a rigorous environment in which uniform expectations are high and discipline is established through drill and ceremony and inspections.

**Intro Engineering – XET0100**

1 Credit

This is a basic introduction to engineering course for all students. Concepts and standards from Math, Science, Career and Technical Education, Social Studies and Language Arts will be integrated into the development of ideas and projects which better human life. Course topics include What is engineering, Engineering Communications, History of Engineering, Design and Modeling, Basic Electricity, Introduction to 3D Solid Modeling, and Problem Solving. Students will produce a culminating project which integrates the multiple content areas. This is the first in a series of courses for an Academy of Engineering program.

**Integrated STEM – XEP0500**

1 Credit

This integrated STEM course provided opportunities for students to make clear connections between and among the Science, Technology, Engineering, and Mathematics disciplines and can incorporate other content areas such as English Language Arts, Social Studies, Career and Technology Education or Art. Integrated STEM education cultivates deep-rooted and transferable learning experiences that purposefully apply the practices of the STEM disciplines through thematic, interdisciplinary, or problem/place/culture-based learning approaches. Integrated STEM supports the learning goals and progressions of individual subjects, helping to build foundational knowledge and skills in each discipline and make connections across content areas. This course enables students to identify a project of interest and apply science, technology, engineering, and math skills to answer a question within the community. *Prerequisite: XET0100 – Intro to Engineering.*