

# **Kaiserslautern High School**



**Course Selection Book**

**2008-2009**

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# GRADUATION REQUIREMENTS

***Graduation requirements for students entering 9th grade after the 2003/04 school year ...***

English	4
Foreign Language	2
Mathematics (must include Algebra I and Geometry)	3
Fine Arts	1
Science (must include Biology)	3
Professional Technical Studies	2*
Social Studies	3**
Health	.5
Physical Education	1.5
Electives	6
Total	26

\*To include .5 computer credit

\*\* To include either World Regions or World History (1), in addition to U.S. History (1) and U.S. Government (.5).

All students must earn a GPA of 2.0 or higher as part of their graduation requirements.

A minimum of 26 units (20 designated and 6 elective) is required for a student to graduate from a DoDDS high school. A student can earn 28 units in four years.

## PROGRAMS OF STUDY

*Recommended courses and suggested electives for two programs at Kaiserslautern High School*

<b>Academic</b>	<b>Rigorous Academic</b>
<p>9<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• Language Arts 9</li> <li>• Algebra I</li> <li>• Physics Applications in the Community</li> <li>• World Regions</li> <li>• Physical Education</li> <li>• 2 credits from Professional Technical Studies, Fine Arts, Computer Science, Foreign Language, or Support Labs</li> </ul>	<p>9<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• Honors Literature 9 / Honors World History 9 (2 credits)</li> <li>• Geometry or Algebra II</li> <li>• Biology</li> <li>• Foreign Language</li> <li>• Physical Education</li> <li>• 1 credit from Professional Technical Studies, Fine Arts, or Computer Science</li> </ul>
<p>10<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• Language Arts 10</li> <li>• Geometry</li> <li>• Biology</li> <li>• World History</li> <li>• Foreign Language</li> <li>• 1.5 credits from Professional Technical Studies, Fine Arts, Health, Computer Science, Foreign Language, or Support Labs</li> <li>• .5 credit Physical Activity &amp; Nutrition (Physical Education)</li> </ul>	<p>10<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• Honors Literature 10 / Honors World History (2 credits)</li> <li>• Geometry or Algebra II</li> <li>• Biology or Chemistry</li> <li>• Foreign Language</li> <li>• 1.5 credits from Professional Technical Studies, Fine Arts, Health, or Computer Science</li> <li>• .5 credit Physical Activity &amp; Nutrition (Physical Education)</li> </ul>
<p>11<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• Language Arts 11</li> <li>• Algebra II or Discrete Math</li> <li>• Chemistry or Science Elective</li> <li>• United States History</li> <li>• Foreign Language</li> <li>• 2 credits from Professional Technical Studies, Fine Arts, Health, Computer Science, Foreign Language, or Support Labs</li> </ul>	<p>11<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• AP English Language and Composition</li> <li>• Algebra II or Math Analysis</li> <li>• Chemistry or Physics</li> <li>• AP United States History</li> <li>• Foreign Language</li> <li>• 2 credits from Professional Technical Studies, Fine Arts, Health, or Computer Science</li> </ul>
<p>12<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• Language Arts 12</li> <li>• Discrete Math or Math Analysis</li> <li>• Physics or Science Elective</li> <li>• U.S. Government/Social Studies Elective</li> <li>• Foreign Language</li> <li>• 2 credits from Professional Technical Studies, Fine Arts, Health, Computer Science, Foreign Language, or Support Labs</li> </ul>	<p>12<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• AP English Literature and Composition</li> <li>• Math Analysis, Calculus or AP Calculus</li> <li>• Advanced Science Course</li> <li>• AP U.S. Government</li> <li>• Foreign Language</li> <li>• 2 credits from Professional Technical Studies, Fine Arts, Health, or Computer Science</li> </ul>

# COURSE DESCRIPTIONS

Kaiserslautern High School is a comprehensive high school, offering a wide selection of courses in core curricular areas, professional technical education, computer science, fine arts, and foreign languages. Student demand determines whether or not elective courses will be scheduled during the school year.

## PROFESSIONAL TECHNICAL STUDIES

**One and ½** Carnegie Units of Career Education are required for graduation from a DoDDS high school. Professional technical credit can be earned by taking classes in the following DODEA Career Clusters and Pathways: Air Force JROTC, Information Support & Services, Hospitality & Tourism, Engineering & Technology, Design/Pre-Construction, Administration & Information Support, and Personal Care Services. Additional Professional Technical Education classes can be taken as credit toward earning a DODEA Career Certification or as elective credit toward graduation requirements.

### **AIR FORCE JROTC**

#### **Air Force JROTC I**

Grade Level: 9-12  
Length: 36 weeks

Code: VEF301

**Major Concepts/Content:** The Air Force JROTC I course is designed to acquaint secondary school students with the historical development of flight and the role of the military in history. Over half of the available classroom hours are spent reviewing the development of flight from ancient legends to the space shuttle. Additionally, the role of the military throughout the history of the United States is identified. The second half of the course examines the make-up of the aerospace community and the United States Air Force. Many of the sixty hours directed to leadership studies relate directly to other school academic subjects, with cadets presenting both written and oral reports. Additionally, wearing of the uniform, Air Force customs and courtesies, and basic drill skills are introduced.

#### **Air Force JROTC II**

Grade Level: 10-12  
Length: 36 weeks

Code: VEF401

**Major Concepts/Content:** The Air Force JROTC II course is designed to acquaint students with the aerospace environment, the human requirements of flight, and the principles of flight and navigation. The course begins with a discussion of the atmosphere and weather. The study is expanded to include the planets and space beyond our solar system. Students develop an understanding of the environment, and how the environment affects flight. Discussion includes the forces of lift, drag, thrust, and weight. Students then study the human physiological requirements of flight. The year concludes with a study of the principles of flight and navigation. Leadership hours stress communication skills, time management, and cadet corps activities. Cadet corps activities include holding positions of greater responsibility in the planning and execution of corps projects.

#### **Air Force JROTC III**

Grade Level: 11-12  
Length: 36 weeks

Code: VEF501

**Major Concepts/Content:** The Air Force JROTC III course is designed to emphasize the propulsion systems of aircraft. Both reciprocal and jet engines are studied in some detail. Rocketry and spacecraft portions of the course include rocket propulsion, guidance and control, and orbits. The space travel topic includes the development, use, and future of artificial earth satellites and interplanetary probes. Leadership hours continue the emphasis on written and communication skills. Additionally, basic management skills, such as planning, directing, and controlling are introduced. Third year cadets put these skills into practice by holding key leadership positions in the cadet corps.

#### **Air Force JROTC IV**

Grade Level: 12

Code: VEF601

Length: 36 weeks

**Major Concepts/Content:** The Air Force JROTC IV course is designed to present the primary features of civil aviation and its impact on our society: careers available in the civil and military aerospace community; and descriptions and uses of modern aerospace vehicles. The civil aviation portion of the course adds to the students' basic knowledge of the aerospace industry as taught in Air Force JROTC I. This information prepares students for discussion on careers in aerospace. The careers portion of the course describes career options and education possibilities and provides practical advice for the new job hunter. The course concludes with a review of modern aerospace vehicles, and their uses and capabilities. Leadership hours refine the development of communication skills and top-level cadet corps jobs provide a laboratory to experiment with newly learned leadership and management skills.

## **BUSINESS LAB**

### **Accounting I**

Grade Level: 10-12

Code: PTB402

Length: 36 weeks

**Major Concepts/Content:** Accounting I introduces students to accepted accounting principles and the complete basic accounting cycle, which includes financial statements for service and merchandising businesses. Additional topics covered are payroll, notes depreciation, forms of ownership, and the importance of dates.

### **Accounting II**

Grade Level: 11-12

Code: PTB502

Length: 36 weeks

**Major Concepts/Content:** Accounting II expands the accounting concepts learned in Accounting I. Students will be introduced to partnership and corporate concepts, accounting procedures for manufacturing businesses, cost and managerial concepts, and analysis tools. Notes and depreciation will be studied in greater depth.

### **Business Law**

Grade Level: 11-12

Code: PTB503

Length: 36 weeks

**Major Concepts/Content:** Business Law provides the student with a survey of the American legal system. This course develops an understanding of law as applied to society and to the individual. Topics include the judicial system, contracts, warranties, guarantees, consumer protection, real property, landlord and tenant relationships, sole proprietorship, partnerships, and corporations.

### **Marketing & Entrepreneurship**

Grade Level: 11-12

Code: PTB501

Length: 36 weeks

**Major Concepts/Content:** The marketing course enables students to gain a basic understanding of marketing principles, techniques, and career opportunities. Instruction will include the relationship of products, prices, and promotions to the marketing of goods and services to consumers. Ethics and social responsibilities of free enterprise will be included. Entrepreneurship focuses on recognizing a business opportunity, starting a business based on the recognized opportunity, and operating and maintaining that business. This course includes planning and strategy concepts, financial and organizational considerations, accounting and financial controls, and other components of business operation. The course will include workplace skills such as time management, money management, materials management, human resources management, facilities management, teamwork, decision-making, problem solving, negotiations, work ethics, and creative thinking.

### **Business & Personal Finances**

Grade Level: 9-12

Code: PTB301

Length: 36 weeks

**Major Concepts/Content:** This course is designed to make students aware of the financial challenges confronting them in daily living. Included will be such topics as how to make intelligent decisions in spending and saving; how to maintain good financial records; how to avoid financial disasters that result from the unwise use of credit cards; information about banking services, insurance choices, and investment choices; and how to prepare income tax forms.

### **Management/International Business**

Grade Level: 11-12

Code: PTB401

Length: 36 weeks

**Major Concepts/Content:** The Management/International Business course introduces students to the basic concepts of world trade, the different world markets, and the methods used to import and export goods. Students are taught to think in terms of legal, cultural, economic, and political environments. The course will include workplace skills such as time management, money management, human resources management, listening skills, speaking skills, and accessing/evaluating electronic resources. This course provides an overview of business as well as the social and economic environments affecting business. Basic principles of organization and management as well as entrepreneurship and management skills and techniques are covered. Units of instructions include economics, finance, marketing, human resources, and global competitiveness.

## **CAREER PRACTICUM**

**Career Practicum**

Grade Level: 11-12

Code: PTW501  
PTW502  
PTW503

(1, 2, or 3 periods)

Length: 18-36 weeks

(3 periods – seniors only)

**Major Concepts/Content:** Career Practicum is designed to provide school-to-career experiences and training through a work practicum related to their career goal. Important aspects are to:

- Provide students an opportunity to acquire an understanding of actual employment settings utilizing their skills and aptitudes
- Apply problem solving skills in the work environment
- Develop communication techniques
- Utilize electronic information systems to search for career information
- Explore information resources
- Acquire learning and self-management tools
- Develop intrapersonal and interpersonal competencies
- Complete job applications
- Participate in job interviews
- Prepare a resume with a cover letter
- Research careers utilizing the Internet, as well as traditional means
- Complete interest and aptitude instruments
- Participate in career-related classroom activities

## **COSMETOLOGY**

**Cosmetology I,  
II,  
III,  
IV**

Grade Level: 10-12

Code: PTC301 (also grade 9)  
PTC401  
PTC501  
PTC601

Length: 36 weeks

**Major Concepts/Content:** Cosmetology is designed to introduce students to the theory and practice of cosmetology with emphasis on the following areas: careers in cosmetology; reception and business management; manicuring; wet and dry hairstyling; facial treatments, and facial make-up applications. Specialty areas include braiding, basic nail extensions and nail art. The concept of school-to-work is introduced to allow students to begin considering cosmetology as a possible career choice. Cosmetology II, III, and IV are designed to provide students an opportunity to develop competencies in manipulative skills and related technical knowledge. Students relate core academic concepts to the requirements of cosmetology through the integration of academic skills and technology knowledge and skills. Emphasis is placed on business entrepreneurship, cooperative education, and advanced techniques in hair shaping, anatomy and physiology, chemistry and chemical services to hair and nails, and advanced hairstyling techniques.

## **ELECTRONICS LAB**

**Digital Electronics I**

Grade Level: 9-12

Code: PTE309

## Digital Electronics II

Length: 18 weeks each

Code: PTE409

**Major Concepts/Content:** The digital electronics courses familiarize students with the skills and technologies involved in digital circuits and their use in modern electronics. Students will develop the technical skills necessary to continue follow-on course work in microprocessors and robotics technology. They will study digital number systems, logic gates and circuits, Boolean algebra, and combinational logic circuitry.

## HEALTH SCIENCE

### Health Science I

Grade Level: 10-12

Code: PTH402

Length: 36 weeks

**Major Concepts/Content:** This course investigates the health care delivery system, its services, occupations, and related sciences. Topics include the study of the language of medicine, medical mathematics, microbiology, anatomy and physiology, diseases/disorders, diagnoses, treatments, patient/client care regimens, career development, and future technological innovations. Skills in science, mathematics, communications, social studies and health are reinforced in this course. Critical thinking, effective decision-making and problem-solving strategies will be incorporated in instructional activities. Reading and writing instruction will be included with every unit. Hands-on experiences, equipment, and materials will make up a substantial portion of the course.

### Health Science II

Grade Level: 11-12

Code: PTH502

Length: 36 weeks

**Major Concepts/Content:** This course is designed to prepare potential health care workers to become effective and efficient multi-skilled health team members. Emphasis is placed on the development of proficiency in employability skills, emergency care skills, safety skills, clerical skills, and health care skills. The work-based learning strategy appropriate for this course is a minimum 65-hour clinical internship where student interns deliver health care in local hospitals, medical/ dental/veterinarian offices, nursing/convalescent/ retirement facilities, wellness centers, etc. Skills in science, mathematics, communications, health, and social studies are reinforced in this course. HOSA activities support networking with health care agencies and professionals through the development of clinical expertise and volunteerism. Reading and writing instruction will be included with every unit. Hands-on experiences, equipment, and materials will make up a substantial portion of the course.

## CULINARY ARTS

### Culinary Arts I, & II

Grade Level: 10-12

Code: PTF401

PTF402

Length: 36 weeks each

**Major Concepts/Content:** The Culinary Arts courses will teach management skills required for a career in the restaurant and food industry. Upon completion of this course students should be able to:

- Qualify for Hospitality Business Alliance Passport.
- Qualify for entry-level endorsement in food service.

#### Instruction will include:

- Lecture
- Demonstrations/simulations
- Restaurant related projects
- Food preparation
- Accounting and cost control
- Retail industry

**\* This course is taught in a  
2-period block.**

## LODGING

### Lodging

Grade Level: 10-12

Code: PTL401

Length: 36 weeks

**Major Concepts/Content:** The Lodging course will teach management skills required for a career in the hotel and lodging industry. Instructional activities will be provided in a general classroom setting and field environment (hotels, BOQ, VOQ, billets). Instruction will include lecture, demonstrations/simulations, lodging related projects, housekeeping and management, accounting and cost control, retail industry, and food and beverage service.

## **INDUSTRIAL TECHNOLOGY**

### **Engineering Design & Technology I & II**

Grade Level: 10-12

Code: PTE501  
PTE601

**(Formerly Robotics I & II)**

Length: 36 weeks each

**Major Concepts/Content:** The Engineering Design & Technology courses introduce students to the technology system, tools, materials process of industry through computer and teacher instruction and hands on real world activities. The courses will provide students with a solid foundation in the following areas:

**Robotics:** Robotics introduces students to the use of robotics in the manufacturing process and its impact on careers and production. It examines the role that computers and robots play in manufacturing tasks. Students will gain an understanding of plant layout and the requirements that must be met to make automation feasible. They examine the many methods of conveyance between automation devices and learn how a flexible robotics system is organized to increase production efficiency.

**Hydraulics:** Hydraulics introduces students to fluid power systems that are essential to industries involved in manufacturing, construction, farming, mining, and transportation. It provides practical hands-on experience with the industrial-grade hydraulics trainer so students can apply the knowledge they gain as they create hydraulic circuits and employ a variety of gauges, valves, actuators, and controls.

**Design:** Students will learn to read and create technical drawings using mechanical drafting tools and industry standard Computer Aided Design (CAD) software. Students will gain real-world experiences with the actual tools and methods used in today's industry.

### **Engineering Drawing/CAD**

Grade Level: 9-12

Code: PTE303

Length: 36 weeks

**Major Concepts/Content:** Engineering drawing is designed for the beginning student. It covers basic fundamentals, equipment, and skills related to the production of drawings. Areas of study include orthographic projections, pictorial drawings, working drawings for manufacturing and construction, graphical solutions, introduction to computer-aided design (CAD), and career-related information. The content includes, but is not limited to, performing measurements in both the metric and customary systems; demonstrating skills in solving problems of appropriate difficulties in industry and graphic communications; analyzing data in terms of conditions or laws that effect design characteristics; and employing basic numerical, communication, and interpersonal skills generally used in the world of work. It is strongly recommended that this course be taken by aspiring engineer students. **This course may count for either Professional Technical or Computer credit.**

### **Architectural Drawing/CAD**

Grade Level: 9-12

Code: PTE305

Length: 36 weeks

**Major Concepts/Content:** The architectural drawing course is designed to provide students with instruction and skills in computer aided drawing (CAD) fundamentals commonly used in the production of residential and commercial buildings. The course includes the study of the basic fundamentals of design, and the skills related to the production of architectural designs. The content includes, but is not limited to, designing interior and exterior elements of structures in both two-dimensional and three-dimensional representations. Students will prepare presentations of designs created using CAD technology. It is recommended that aspiring architects, designers, engineers, CAD technicians, interior decorators take this course. This course may be used as an Applied Engineering Technology major as part of the School-to-Work transition program. **This course may count for either Professional Technical or Computer credit.**

### **Applications of Architectural**

Grade Level: 9-12

Code: PTE405

## Design/CAD

Length: 36 weeks

**Major Concepts/Content:** The applied architectural design course is designed as a capstone project. Emphasis is placed on applying life and educational experiences to architectural design. The team approach to problem solving is emphasized. The content includes, but is not limited to, determining purposes, uses, and aesthetics of structures, the analysis of various architectural designs, apply principles of environmental and energy efficient design, an use current construction materials and practices. Students will prepare and present multimedia presentations using a variety of software and technologies. This is a real or simulated design project meeting the needs of actual clients. This course is the culmination of the Architectural, Engineering, and Construction (AEC) curriculum and is intended as an opportunity for students to utilize all the skills acquired through the AEC strand of courses. This course is recommended for aspiring architects, designers, engineers, CAD technicians, and interior decorators. **This course may count for either Professional Technical or Computer credit.**

## Engineering Design/Development

Grade Level: 9-12

Code: PTE603

Length: 36 weeks

**Major Concepts/Content:** The Engineering Design and Development course forms the capstone project for the Pre-Engineering curriculum. In this course, students will work in teams of two to four individuals to design and construct the solution to an original engineering problem. Each design problem is taken from a database of design problems offered to all DoDEA students enrolled in the course. As students work on their capstone project they will develop technical writing skills and use a variety of CAD, CAM, GIS, fabrication, manufacturing, and robotics technologies. Students will also maintain an engineering journal and develop a portfolio. This course is the culmination of the pre-engineering curriculum and is intended as an opportunity for students to utilize all the skills acquired through the pre-engineering strand of courses. **This course may count for either Professional Technical or Computer credit.**

## COMPUTER EDUCATION

½ Carnegie Unit of Computer Education is required for graduation from a DoDDS high school. Additional computer classes may be taken as professional technical or elective credit.

## Computer Applications I

Grade Level: 9-12

Code: PT1301

Length: 18 weeks

**Major Concepts/Content:** The Computer Applications I course is designed to provide the student with the opportunity to expand technology knowledge and apply various technology applications. This course will equip the student with the necessary technology tools for personal use, employment and advanced education. The Computer Applications I course includes modules with core requirements for word processing, database, spreadsheet, presentation software, and information literacy skills. After completion of the required core modules, based upon interest or need, a student may select any of the other modules. Students will have the opportunity to test out of any core module. Instruction will be provided in a lab utilizing individualized instruction and electronic learning services.

## Word Processing Software Applications

Grade Level: 9-12

Code: PT1303

Length: 18 weeks

**Major Concepts/Content:** Word Processing Software Applications provides students with the opportunity to develop professional level skills in word processing software. Instruction will be provided in a lab utilizing individualized instruction and electronic learning services. Students will use word processing software to demonstrate a thorough understanding of inserting and modifying text, creating and modifying paragraphs, formatting documents, managing documents, working with graphics, and workgroup collaboration. Students successfully completing this course will be **eligible** to take at least one of the user or specialist exams for word processing software certification. **This course may count for either Professional Technical or Computer credit.**

## Presentation Software Applications

Grade Level: 9-12

Code: PT1304

Length: 18 weeks

**Major Concepts/Contents:** Presentations Software Applications provides students with the opportunity to develop professional level skills in presentations software. Students will use presentation software to

demonstrate a thorough understanding of creating a presentation, inserting and modifying text, inserting and modifying visual elements, modifying presentation formats, printing presentations, working with data from other sources, managing and delivering presentations, and workgroup collaboration. Students successfully completing this course will be **eligible** to take at least one of the user or specialist exams for presentation software certification. **This course may count for either Professional Technical or Computer credit.**

**Database Software Applications**

Grade Level: 10-12  
Length: 36 weeks

Code: PTI305

**Major Concepts/Content:** Database Software Applications provides students with the opportunity to develop professional level skills in database management. Instruction will be provided in a lab utilizing individualized instruction and electronic learning services. Students will use database management software to demonstrate a thorough understanding of creating and using databases, creating and modifying tables, creating and modifying queries, creating and modifying forms, viewing and organizing information, defining relationships, producing reports, and integrating with other applications. Students successfully completing this course will be **eligible** to take at least one of the user or specialist exams for database certification. **This course may count for either Professional Technical or Computer credit.**

**Spreadsheet Software Applications**

Grade Level: 10-12  
Length: 36 weeks

Code: PTI306

**Major Concepts/Content:** Spreadsheet Software Applications provides students with the opportunity to develop professional level skills in spreadsheet software. Students will use spreadsheet software to demonstrate a thorough understanding of working with cells and cell data, managing workbooks, formatting and printing worksheets, modifying workbooks, creating and revising formulas, creating and modifying graphics, and workgroup collaboration. Students successfully completing this course will be eligible to take at least one of the user or specialist exams for spreadsheet software certification. **This course may count for either Professional Technical or Computer credit.**

**Imaging Software Applications**

Grade Level: 10-12  
Length: 36 weeks

Code: PTI307

**Major Concepts/Contents:** Imaging Software Applications provides students with the opportunity to develop professional level skills in imaging software. Instruction will be provided in a lab utilizing individualized instruction and electronic learning services. Students will use imaging software to demonstrate a thorough understanding of file formats; using the work area and work spaces; importing, exporting and saving; working with sections; creating and using layers; using masks and channels; managing color, adjusting images; drawing and editing; painting; retouching; using actions; working with type; outputting to print; and outputting for the web. Students successfully completing this course will be eligible to take at least one of the user or specialist exams for imaging software certification. **This course may count for either Professional Technical or Computer credit.**

**Publication Software Applications**

Grade Level: 10-12  
Length: 36 weeks

Code: PTI308

**Major Concepts/Content:** Publication Software Applications is a course designed for students with an interest in desktop publishing. This course will prepare the student for the InDesign Certification Exam as well as provide training in the software for personal use, employment, and advanced education. Students will use modules to learn the Adobe InDesign software application and create projects. **This course may count for either Professional Technical or Computer credit.**

**Interactive Multimedia**

Grade Level: 9-12  
Length: 36 weeks

Code: PTI405

**Major Concepts/Content:** Interactive Multimedia is designed to acquaint students with a variety of multimedia applications. A variety of technology tools will be used to produce multimedia projects that

include graphics, sound, video, programming, and other appropriate technology. The emphasis of this course is the production of individual and/or group projects. This course is for advanced students only. **It may count for either Professional Technical or Computer credit.**

**Web Site Development and Management**

Grade Level: 10-12  
Length: 36 Weeks

Code: PTI407

**Major Concepts/Content:** In Web Site Development and Management, students will design, implement, and manage a web site. This is a hands-on laboratory course designed to teach students the concepts, skills and processes involved in web site development and management. Students will evaluate a variety of existing web sites for content, design, and functionality. Students will work collaboratively to design, construct, and maintain an interactive web site based on a single theme or project. Students will use electronic learning services to access additional resources. **This course may count for either Professional Technical or Computer credit.**

**Computer Animation**

Grade Level: 10 -12  
Length: 36 Weeks

Code: PTI409

**Major Concepts/Content:** The Computer Animation course is designed to provide students with the instruction and skills to create digital illustrations, modeling and animation, character animation, digital motion imagery, and game design. The content includes, but is not limited to, 3D modeling, materials and textures, rendering, and computer animation. Students will also create, record, and edit digital audio, video, and photographic imagery. This course will utilize software programs to develop animation, morphing, 3-D graphics, and virtual reality projects. It is recommended that aspiring graphic designers, computer animators, electronic game designers, engineers, CAD technicians, architects, interior decorators take this course. This course may be used as an Applied Engineering Technology major as part of the School-to-Work transition guidelines. **This course may count for either Professional Technical or Computer credit.**

**Cisco Networking I**

Grade Level: 11-12  
Length: 36 weeks

Code: PTI501

**Major Concepts/Content:** This course prepares students to become network engineers and prepares them for entrance into a technology career field or for further technology study. The program includes a complete range of basic and advanced networking concepts - from pulling cables through such complex concepts as subnet masking rules and strategies. Successful completion of this course and the Cisco Networking 2 course should prepare the student to pass the Cisco Certified Network Associate (CCNA) examination. **This course may count for either Professional Technical or Computer credit.**

**Cisco Networking II**

Grade Level: 11-12  
Length: 36 weeks

Code: PTI601

**Major Concepts/Content:** This second course prepares students to become network engineers and prepares them for entrance into a technology career field or for further technology study. This course includes field experience in network problem solving. Successful completion of this course (and Cisco Networking 1) should qualify the student to pass the Cisco Certified Network Associate (CCNA) exam. **This course may count for either Professional Technical or Computer credit.**

**Computer Service & Support**

Grade Level: 9-12  
Length: 36 weeks

Code: PTI309

**Major Concepts/Content:** This program is intended to prepare students for computer support careers. Students enrolled in this course will learn how to perform shop maintenance, repair computers, install operating systems and software, acquire employment skills, as well as operate a service and support business. The course will provide students with concepts and skills necessary to achieve certification in PC Repair and Technical Support. This distributed learning model of instruction provides a blend of instruction with hands-on experiences that reflects current industry practices. During the course, students will identify and use hand tools, PC hardware and software, and will explore electronics theory. Installation, upgrade and repair will be explored in new and older personal computer systems. A number of operating systems also will be reviewed. Students will train in a simulated work environment using a distributed learning instructional model. Students will be trained to use tools, electronics test equipment, and software to

analyze and solve PC problems. Students will learn about computer architecture and the basic concepts of interconnectivity through hands-on training. During the course, students will analyze defective equipment, determine corrective measures, and make the equipment operational if possible. Students will build a PC as part of the requirements of the course. **(This course can be taken for Career or Computer credit)**

**\*\*\*Special Note: The following programming classes are offered via Distance Education with instructors in remote locations who stay in contact with students using communication software. A local facilitator monitors students' progress. These courses can be taken for Computer credit ONLY.**

**Visual BASIC Programming I DL**      Grade Level: 10-12      Code: PTP3070T

Length: 18 weeks

**Major Concepts/Content:** Programming in Visual BASIC I is a one semester distance education course that will use the Visual BASIC Language. The emphasis of this course is to write computer programs to solve complex problems. Students will analyze a problem, design a solution, write the program needed to solve the problem, test the program and make the necessary corrections in the program. Activities will include hands-on programming, group and individual assignments and special projects. Students will use electronic learning services to access additional resources.

**Visual BASIC Programming II DL**      Grade Level: 10-12      Code: PTP3080T

Length: 18 weeks

**Major Concepts/Content:** Programming in Visual BASIC II is a one-semester distance education course designed to be a continuation of Visual BASIC I. The emphasis of this course is to write computer programs to solve complex problems. Students will analyze a problem, design a solution, write the program needed to solve the problem, test the program and make the necessary corrections in the program. Activities will include hands-on programming, group and individual assignments and special projects. Students will use electronic learning services to access additional resources.

**Java I DL (1st Semester)**      Grade Level: 10-12      Code: PTP3050T  
Length: 18 weeks

**Major Concepts/Content:** Programming in Java is a one-semester course designed to teach students Java programming concepts using a structured approach. Students will develop Java applications and applets. Problem solving and program documentation will be emphasized. Students will analyze a problem, design a solution, write the program needed to solve the problem, test the program and make the necessary corrections in the program. Activities will include hands-on programming, group and individual assignments and special projects. Students may demonstrate the ability to communicate with instructor and peers via communications software. Students will use electronic learning services to access additional resources.

**Java II DL (2nd Semester)**      Grade Level: 10-12      Code: PTP3060T  
Length: 18 weeks

**Major Concepts/Content:** Programming in Java II is a one-semester course designed to teach students Java programming concepts using a structured approach. Students will develop Java applications and applets. Problem solving and program documentation will be emphasized. Students will analyze a problem, design a solution, write the program needed to solve the problem, test the program and make the necessary corrections in the program. Activities will include hands-on programming, group and individual assignments and special projects. Students may demonstrate the ability to communicate with instructor and peers via communications software. Students will use electronic learning services to access additional resources.

**AP Computer Science A DL**

Grade Level: 11-12

Code: PTP5110T

Length: 36 weeks

**Major Concepts/Content:** The course description for the advanced placement courses published by College Boards is to be used for the above course. Computer Science A emphasizes programming methodology with a concentration on problem solving and algorithm development and is meant to be the equivalent of a first-semester college course in Computer Science. It also includes the study of data structures and abstraction. A large part of the course is built around the development of computer programs or parts of programs that correctly solve a given problem. The course also emphasizes the design issues that make programs understandable, adaptable, and, when appropriate, reusable. At the same time, the development of useful computer programs and program modules is used as a context for introducing other important concepts in computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, and the study of standard algorithms and typical applications. In addition, an understanding of the basic hardware and software components of computer systems and the responsible use of these systems are integral parts of the course.

## **FINE ARTS**

**One** Carnegie Unit of Fine Arts Education is required for graduation from a DoDDS high school. Students may earn Fine Arts Education credit by taking classes in **Art, Drama, Music, and/or Humanities**. Additional Fine Arts Education classes can be taken as elective credit toward graduation requirements.

### **ART**

**Fundamentals of Art**

Grade Level: 9-12

Code: ARA301S

Length: 18 weeks

**Major Concepts/Content:** The Fundamentals of Art course is designed as the basic entry course for the art program. The course provides instruction in the use of the elements of line, color, texture, shape, and space arrangement in works of art. Students learn how to compose a balanced, rhythmic, unified design through a series of assignments that use a variety of two- and three-dimensional art media. Course emphasis is placed on basic techniques of drawing, painting, printmaking, ceramics, and sculpture that can be used throughout life for communication, expression, and enjoyment.

**Ceramics**

Grade Level: 9-12

Code: ARE401S

Length: 18 weeks

**Major Concepts/Content:** The ceramics course is designed to provide a studio-oriented experience with the study of clay. Students explore the properties of clay by making utilitarian and sculptural forms that emphasize form, design, and craftsmanship. The course includes instruction in clay applications, in kiln management, and in the historical role of ceramics in our culture. Instructional activities will provide practice in using various materials, tools, and equipment. Students will produce a series of ceramic pieces that demonstrate knowledge of the basic methods of ceramic construction and use of the pottery wheel. Works by several outstanding ceramic artists and/or potters of the twentieth century will be discussed.

**Drawing**

Grade Level: 9-12

Code: ARW401S

Length: 18 weeks

**Major Concepts/Content:** The drawing course is designed for students who want to explore drawing as a means of self-expression. The course activities develop students' skills in the techniques and styles of drawing media. Students explore the two- and three-dimensional aspects in drawing and develop personal expression. Instructional activities will provide practice in using a variety of drawing tools and materials. Students will create drawings that use several widely recognized techniques, such as contour and gestures, and will demonstrate the ability to use several drawing media effectively. Techniques for preserving and presenting drawings will be taught in the course.

**Painting**

Grade Level: 10-12

Code: ARP401S

Length: 18 weeks

**Major Concepts/Content:** The painting course is designed for students who want to develop skills in one or more painting media. The media may be oils, acrylic, watercolor, or tempera. Students will receive

instruction in the techniques and history of various painting styles. Projects and exercises will help students develop the skills and understanding necessary for personal expression. Emphasis will be placed on color theory, painting techniques, and other skills appropriate to the medium. Instructional activities will provide practice in using a variety of painting tools and materials. Students will produce paintings in a personal style and will be able to demonstrate some techniques used in styles other than their own. Units that focus on identifying selected paintings by the movements with which the paintings are associated and on identifying painters who are representative of the major styles or periods of painting will be included.

### **AP Studio Art - Drawing**

Grade Level: 11-12

Code: ARA613S

Length: 18 weeks

**Major Concepts/Content:** The Drawing Portfolio is designed to address a very broad interpretation of drawing issues and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and illusion of depth are drawing issues that can be addressed through a variety of means. Many works of painting, printmaking, and mixed media, as well as abstract, observational, and inventive works, may qualify. The range of marks used to make drawings, the arrangement of those marks, and the materials used to make the marks are endless. The portfolio is submitted in the spring as the AP Exam requirement. This course is for advanced students only.

## **HUMANITIES**

### **Humanities**

Grade Level: 10-12

Code: HUH401S

Length: 18 weeks

**Major Concepts/Content:** The humanities course is designed to be an integrated study of history, literature, language, philosophy, the visual arts, theatre, dance, and music. Emphasis is placed on critical thinking, creativity, and the rights and responsibilities of the individual in a society. Students explore aspects of human behavior and human ideals. Instructional activities will be interdisciplinary in focus, drawing content examples, and resources from a variety of curriculum areas. Emphasis is placed on the arts, including theater, the visual arts, dance music, architecture, film, and television. Activities also emphasize the cultural resources of the host nation and the diverse cultures where DoDDS schools are located. The course will provide opportunities for individuals to explore ethical and moral issues.

### **Drama-Theater**

Grade Level: 9-12

Code: DRA301

Length: 18-36 weeks

**Major Concepts/Content:** This beginning course in drama is designed to help the student apply basic speaking and performance skills to personal, classroom, and real-life situations and to instill confidence in each individual student in handling those situations. Upon completion of the drama course, students should be able to understand the basic concepts of drama, apply basic drama concepts to the activities involved in theatrical productions, and participate in play cuttings and one-act play presentations while developing individual character interpretations.

## **MUSIC**

### **Intermediate Band**

Grade Level: 9-12

Code: MUI302

Length: 36 weeks

**Major Concepts/Content:** The intermediate band course is designed to acquaint students with intermediate to advanced instrumental music skills which include, but will not be limited to, the following content: intermediate to advanced level sight-reading skills; discrimination of pitch; absolute essentials for playing in tune; intermediate to advanced rhythm concepts and patterns; techniques for achieving the essentials of unity, balance, and contrast in performing instrumental music; the study of all major and minor scales; the opportunity of performing a variety of good musical repertoire; and listening skills development.

### **Advanced Band**

Grade Level: 9-12

Code: MUI303

Length: 36 weeks

**Major Concepts/Content:** The advanced band course is designed to acquaint students with advanced instrumental music skills. The content includes, but is not limited to, the following: the interpretation and analysis of musical scores; the application of musical nuances in playing from a score; independent

performance of all major and minor scales; advanced rhythm patterns; performance as a soloist and in small and large group ensembles; a variety of music repertoire, including style, periods, forms, electronic music; intermediate to advanced level sight-reading exercises; and introduction to computer/synthesizer musical composition.

### **Jazz Ensemble**

Grade Level: 10-12  
Length: 36 weeks

Code: MUI304

**Major Instructional Activities:** Instructional activities will be provided through the following processes: using daily sight-reading exercises during regular full-group rehearsals; practicing aural dictation and ear-training; improvising to a given chord progression; playing in tune; performing as a soloist and in small and large group ensembles; playing a wide variety of jazz and big-band repertoire; training in, and the development of, good practice habits; and training in the basics of jazz harmony.

### **Piano I Piano II**

Grade Level: 9-12  
Grade Level: 10-12  
Length: 36 weeks

Code: MUS303  
MUS304

**Major Concepts/Content:** The Piano courses are designed to develop students' music and keyboard skills. The content includes, but is not limited to, refining listening skills, reading and writing notation in bass and treble clefs; reading, writing, and playing more complex rhythm concepts and patterns, constructing major and minor scales with arpeggiated triads and dominant seventh chords played in both hands; playing in varied examples of duple and triple meter; playing technically advanced melodies to enhance left- and right-hand independence, playing varied accompaniment styles and duets; and experimenting with more complex examples of classical and contemporary piano repertoire. Instructional activities in Piano will include, but will not be limited in scope to demonstrating knowledge of musical elements and keyboard technique through reading/playing scale and rhythm patterns, and listening to examples of multiple piano styles and forms from different historical periods and composers.

### **Beginning Chorus**

Grade Level: 9-12  
Length: 36 weeks

Code: MUV301

**Major Concepts/Content:** The beginning chorus course is designed to provide students, but not limit them to, the following vocal musical learning experiences: learning the beginning and basic fundamentals of sight-reading vocal music, rehearsing and performing unison and two-part music, singing with small and large groups, studying intonation, experiencing a wide variety of choral literature including secular and no secular music, singing with keyboard and other instrumental accompaniment, and participating in public performances and musical productions.

### **Advanced Chorus**

Grade Level: 10-12  
Length: 36 weeks

Code: MUV302

**Major Concepts/Content:** The advanced chorus course is designed to provide students, but not limit them to the following advanced vocal musical learning experiences: continuing development of sight-reading ability; analyzing, rehearsing, and performing unison, two-, three-, and four-part music; singing with small and large ensembles in addition to solo opportunities; singing a cappella; experiencing a wide variety of choral literature including secular and no secular music; singing with individual and ensemble instrumental accompaniment; and participating in choral performances.

## **FOREIGN LANGUAGE**

**Two** Carnegie Units of the same Foreign Language are required for graduation from a DoDDS high school.

### **FRENCH**

#### **French I**

Grade Level: 9-12  
Length: 36 weeks

Code: FLF301

**Major Concepts/Content:** The foreign language Year I course is designed to provide students with an oral proficiency foundation as they begin to speak the target language. Students learn to pronounce and discriminate between the various vowel and consonant sounds and respond to and to imitate authentic patterns of intonation, rhythm, and pronunciation. Students learn to give simple oral and written information by learning appropriate learned vocabulary, word order, and grammatical forms. This beginning stage of the study of a foreign language will focus on oral proficiency. Beginning vocabulary and structures will be practiced daily. Students develop communication skills to function in everyday situations. In addition, this part of the beginning stage includes development of reading and writing and an appreciation of cultural diversity.

### **French II**

Grade Level: 9-12

Code: FLF401

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year II course continues to emphasize oral proficiency, with focus on speaking and listening skills. Students continue to develop communication skills to function in everyday situations. Students continue development of the reading and writing skills and foster appreciation of cultural diversity. The Year II course is designed to provide activities, projects, and experiences that enable students to appreciate and value the target language culture. Students are also made aware of the value of foreign language study. Career opportunities are explored and students learn that the knowledge of a second language can be a useful tool in international, economical, and social situations.

### **French III**

Grade Level: 9-12

Code: FLF501

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year III course is designed to continue the development of oral proficiency skills. This year marks the first half of the intermediate stage. Students continue to develop communication skills to sustain meaningful conversations on a variety of topics. In addition, the intermediate stage includes continual development of reading and writing skills in appropriate cultural contexts. Students continue to develop sensitivity and appreciation for the target language culture. Listening, speaking, reading, writing, and critical thinking skills become more spontaneous and fluency in all skills is emphasized. The art of analyzing information and concepts is stressed. Students are encouraged to think in the target language. Students continue learning to value the broadened career opportunities open to those who have knowledge of a second language and culture.

### **French IV**

Grade Level: 11-12

Code: FLF601

Length: 36 weeks

**Major Concepts/Content:** The Year IV foreign language course is designed to continue review and reinforcement of oral proficiency skills. Students continue to develop communications skills to sustain meaningful conversations on a variety of topics. During this second half of the intermediate stage, students continue development of reading and writing skills in appropriate cultural contexts. Students demonstrate self-reliance and creative communication as their oral proficiency skills are improved. Fluency in speaking the language is continually stressed.

### **AP French Language**

Grade Level: 11-12

Code: FLF615

Length: 36 weeks

**Major Concepts/Content:** The Advanced Placement foreign language courses are designed to prepare students for Advanced Placement testing which takes place at the end of the school year. The College Board provides revised curriculum outlines for each language on an annual basis. Students practice oral proficiency and written deliveries. An extensive review of grammatical usage is included for multiple choice, essay, and free response testing situations. Students should be able to communicate with a high degree of accuracy and fluency.

### **French V**

Grade Level: 11-12

Code: FLF602

Length: 36 weeks

**Major Concepts/Content:** The foreign language V courses provide special projects and activities for independent study. Students read and write reports on the different classical works written in the host nation/target language. Students are encouraged to write original stories, poems, and essays in the target

language. They also view films, videos, plays, filmstrip/cassette sets, and other materials about the host nation's culture, spoken in the target language. When using the computer for writing skills, compositions, and independent study, first drafts are typed, polished, corrected, and modified before printing the final, finished product. Students are encouraged to interact and use the language with native speakers.

#### **French VI**

Grade Level: 11-12

Code: FLF603

Length: 36 weeks

**Major Concepts/Content:** The Year VI foreign language course begins the advanced stage of involvement in the target language study. The student develops and refines oral proficiency skills in order to be able to communicate in a variety of situations with a high degree of accuracy and fluency. In addition, reading and writing skills are expanded to include a variety of literary genres and written experimentations. The student also acquires a refined cultural understanding to function appropriately in multi-cultural settings. Students are encouraged to interact with native speakers.

### **GERMAN**

#### **German I**

Grade Level: 9-12

Code: FLG301

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year I course is designed to provide students with an oral proficiency foundation as they begin to speak the target language. Students learn to pronounce and discriminate between the various vowel and consonant sounds and respond to and to imitate authentic patterns of intonation, rhythm, and pronunciation. Students learn to give simple oral and written information by learning appropriate learned vocabulary, word order, and grammatical forms. This beginning stage of the study of a foreign language will focus on oral proficiency. Beginning vocabulary and structures will be practiced daily. Students develop communication skills to function in everyday situations. In addition, this part of the beginning stage includes development of reading and writing and an appreciation of cultural diversity.

#### **German II**

Grade Level: 9-12

Code: FLG401

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year II course continues to emphasize oral proficiency, with focus on speaking and listening skills. Students continue to develop communication skills to function in everyday situations. Students continue development of the reading and writing skills and foster appreciation of cultural diversity. The Year II course is designed to provide activities, projects, and experiences that enable students to appreciate and value the target language culture. Students are also made aware of the value of foreign language study. Career opportunities are explored and students learn that the knowledge of a second language can be a useful tool in international, economical, and social situations.

#### **German III**

Grade Level: 9-12

Code: FLG501

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year III course is designed to continue the development of oral proficiency skills. This year marks the first half of the intermediate stage. Students continue to develop communication skills to sustain meaningful conversations on a variety of topics. In addition, the intermediate stage includes continual development of reading and writing skills in appropriate cultural contexts. Students continue to develop sensitivity and appreciation for the target language culture. Listening, speaking, reading, writing, and critical thinking skills become more spontaneous and fluency in all skills is emphasized. The art of analyzing information and concepts is stressed. Students are encouraged to think in the target language. Students continue learning to value the broadened career opportunities open to those who have knowledge of a second language and culture.

#### **German IV**

Grade Level: 9-12

Code: FLG601

Length: 36 weeks

**Major Concepts/Content:** The Year IV foreign language course is designed to continue review and reinforcement of oral proficiency skills. Students continue to develop communications skills to sustain meaningful conversations on a variety of topics. During this second half of the intermediate stage, students continue development of reading and writing skills in appropriate cultural contexts. Students

demonstrate self-reliance and creative communication as their oral proficiency skills are improved. Fluency in speaking the language is continually stressed.

### **AP German Language**

Grade Level: 11-12

Code: FLG614

Length: 36 weeks

**Major Concepts/Content:** The Advanced Placement foreign language courses are designed to prepare students for Advanced Placement testing which takes place at the end of the school year. The Educational Testing Service provides revised curriculum outlines for each language on an annual basis. Students practice oral proficiency and written deliveries. An extensive review of grammatical usage is included for multiple choice, essay, and free response testing situations. Students should be able to communicate with a high degree of accuracy and fluency.

### **German V**

Grade Level: 11-12

Code: FLG602

Length: 36 weeks

**Major Concepts/Content:** The foreign language V courses provide special projects and activities for independent study. Students read and write reports on the different classical works written in the host nation/target language. Students are encouraged to write original stories, poems, and essays in the target language. They also view films, videos, plays, filmstrip/cassette sets, and other materials about the host nation's culture, spoken in the target language. When using the computer for writing skills, compositions, and independent study, first drafts are typed, polished, corrected, and modified before printing the final, finished product. Students are encouraged to interact and use the language with native speakers.

### **German VI**

Grade Level: 11-12

Code: FLG603

Length: 36 weeks

**Major Concepts/Content:** The Year VI foreign language course begins the advanced stage of involvement in the target language study. The student develops and refines oral proficiency skills in order to be able to communicate in a variety of situations with a high degree of accuracy and fluency. In addition, reading and writing skills are expanded to include a variety of literary genres and written experimentations. The student also acquires a refined cultural understanding to function appropriately in multi-cultural settings. Students are encouraged to interact with native speakers.

## **SPANISH**

### **Spanish I**

Grade Level: 9-12

Code: FLS301

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year I course is designed to provide students with an oral proficiency foundation as they begin to speak the target language. Students learn to pronounce and discriminate between the various vowel and consonant sounds and respond to and to imitate authentic patterns of intonation, rhythm, and pronunciation. Students learn to give simple oral and written information by learning appropriate vocabulary, word order, and grammatical forms. This beginning stage of the study of a foreign language will focus on oral proficiency. Beginning vocabulary and structures will be practiced daily. Students develop communication skills to function in everyday situations. In addition, this part of the beginning stage includes development of reading and writing and an appreciation of cultural diversity.

### **Spanish II**

Grade Level: 9-12

Code: FLS401

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year II course continues to emphasize oral proficiency, with focus on speaking and listening skills. Students continue to develop communication skills to function in everyday situations. Students continue development of the reading and writing skills and foster appreciation of cultural diversity. The Year II course is designed to provide activities, projects, and experiences that enable students to appreciate and value the target language culture. Students are also made aware of the value of foreign language study. Career opportunities are explored and students learn that the knowledge of a second language can be a useful tool in international, economical, and social situations.

**Spanish III**

Grade Level: 10-12

Code: FLS501

Length: 36 weeks

**Major Concepts/Content:** The foreign language Year III course is designed to continue the development of oral proficiency skills. This year marks the first half of the intermediate stage. Students continue to develop communication skills to sustain meaningful conversations on a variety of topics. In addition, the intermediate stage includes continual development of reading and writing skills in appropriate cultural contexts. Students continue to develop sensitivity and appreciation for the target language culture. Listening, speaking, reading, writing, and critical thinking skills become more spontaneous and fluency in all skills is emphasized. The art of analyzing information and concepts is stressed. Students are encouraged to think in the target language. Students continue learning to value the broadened career opportunities open to those who have knowledge of a second language and culture.

**Spanish IV**

Grade Level: 10-12

Code: FLS601

Length: 36 weeks

**Major Concepts/Content:** The Year IV foreign language course is designed to continue review and reinforcement of oral proficiency skills. Students continue to develop communications skills to sustain meaningful conversations on a variety of topics. During this second half of the intermediate stage, students continue development of reading and writing skills in appropriate cultural contexts. Students demonstrate self-reliance and creative communication as their oral proficiency skills are improved. Fluency in speaking the language is continually stressed.

**AP Spanish Language**

Grade Level: 11-12

Code: FLS615

Length: 36 weeks

**Major Concepts/Content:** The Advanced Placement foreign language courses are designed to prepare students for Advanced Placement testing which takes place at the end of the school year. The Educational Testing Service provides revised curriculum outlines for each language on an annual basis. Students practice oral proficiency and written deliveries. An extensive review of grammatical usage is included for multiple choice, essay, and free response testing situations. Students should be able to communicate with a high degree of accuracy and fluency.

**Spanish V**

Grade Level: 11-12

Code: FLS602

Length: 36 weeks

**Major Concepts/Content:** The foreign language V courses provide special projects and activities for independent study. Students read and write reports on the different classical works written in the host nation/target language. Students are encouraged to write original stories, poems, and essays in the target language. They also view films, videos, plays, filmstrip/cassette sets, and other materials about the host nation's culture, spoken in the target language. When using the computer for writing skills, compositions, and independent study, first drafts are typed, polished, corrected, and modified before printing the final, finished product. Students are encouraged to interact and use the language with native speakers.

**Spanish VI**

Grade Level: 11-12

Code: FLS603

Length: 36 weeks

**Major Concepts/Content:** The Year VI foreign language course begins the advanced stage of involvement in the target language study. The student develops and refines oral proficiency skills in order to be able to communicate in a variety of situations with a high degree of accuracy and fluency. In addition, reading and writing skills are expanded to include a variety of literary genres and written experimentations. The student also acquires a refined cultural understanding to function appropriately in multi-cultural settings. Students are encouraged to interact with native speakers.

# LANGUAGE ARTS

Four Carnegie Units of Language Arts are required for graduation from a DoDDS high school.

Language Arts 9

Grade Level: 9

Code: LAE301

Length: 36 weeks

**Major Concepts/Content:** The Language Arts 9 course is designed to strengthen students' skills in listening, speaking, writing, literature, and language. The content includes, but is not limited to, preparing oral reports in various content areas; using appropriate pitch, stress, juncture and rate in formal and informal speech; using the dictionary and the thesaurus to develop an increasingly comprehensive and precise vocabulary in both speaking and writing; locating resources (magazines, reference sources, films, and microfiche) by using indexes, catalogs, and the Reader's Guide; practicing the process of composition, including prewriting, drafting, revising, proofreading, and publishing; writing correspondence using appropriate forms (business, friendly); identifying with literary characters of the student's own age, and understanding how the characters' actions and emotions reflect the student's own actions and emotions; understanding that literature is written at different levels for different purposes and for different audiences; and reading self-selected books to help students learn to view reading as a useful and pleasurable activity.

**Honors Literature 9**

Grade Level: 9

Code: LAE371

**(With Honors World History 9)** Length: 36 weeks

**Major Concepts/Content:** This is an integrated course for students interested in taking 9<sup>th</sup> grade Honors Social Studies and English. The course uses the chronological study of world history from Ancient Civilization to 1500 A.D. and covers the themes of culture, science/technology and society, geography, and time/continuity and change. The content integrates readings and writings that focus on exploring, interpreting, and analyzing literature and other readings that extend and support the world history discussions and research. The themes of geography provide the focus for preparing students to understand how humans adapt to the environment. The course is a demanding study of world history and literature, requiring students to understand, analyze, and interpret the connections between major historical events and the writings of the time. Critical thinking, philosophical discussion, concept attainment, vocabulary development, language usage, and research will be stressed. The development of discussion and presentation skills will focus on analysis, interpretation, and evaluation. Students will receive a grade in both English and World History.

**Language Arts 10**

Grade Level: 10

Code: LAE401

Length: 36 weeks

**Major Concepts/Content:** The Language Arts 10 course is designed to strengthen students' skills in listening, speaking, writing, literature, and language. The content includes, but is not limited to, outlining or mapping main ideas and details of information received aurally or through research; using vocabulary and sentence structure appropriate to the listener and the situation; understanding the importance of speech in influencing the course of events in a democratic society; using interviewing skills; using parliamentary procedure skills; using formal debating skills; refining test-taking skills to meet secondary and post-secondary demands; writing a paraphrase, summary, or precise; writing compositions for newspaper publication; writing a short paper using research techniques; selecting appropriate sources of information for the topic; understanding and explaining the type of conflict in a given literary selection (psychological, social, environmental); experiencing a wide range of literary forms (e.g., short stories, novels, non-fiction, poetry, drama); using the media center research facilities; and reading self-selected books to help students learn to view reading as a useful and pleasurable activity.

**Honors Literature 10**

Grade Level: 10

Code: LAE471

**(With Honors World Hist. 10)** Length: 36 weeks

**Major Concepts/Content:** This is an integrated course for students interested in taking 10<sup>th</sup> grade Honors Social Studies and English. The course uses the chronological study of world history from 1500 to the present and covers the themes of culture, science and technology, economics, and government. The content integrates readings and writings that focus on exploring, interpreting, and analyzing literature and

other readings that extend and support the world history discussions and research. The course is a demanding study of world history and literature, requiring students to understand, analyze, and interpret the connections between major historical events and the writings of the time. Critical thinking, philosophical discussion, concept attainment, vocabulary development, language usage, and research will be stressed. The development of discussion and presentation skills will focus on analysis, interpretation, and evaluation. Instructional activities will be provided using the content of World History. Students will read and critically respond to a wide spectrum of challenging literary selections that mirror the cultures, themes and times of the period from 1500 to the present. Students will conduct in-depth research on topics relative to major historical events, people, and regions. Many of the learning activities will culminate in shared products for Social Studies and English. Students will receive a grade in both English and World History.

### **Language Arts 11**

Grade Level: 11

Code: LAE501

Length: 36 weeks

**Major Concepts/Content:** The Language Arts 11 course is designed to strengthen students' skills in listening, speaking, writing, literature, and language. The content includes, but is not limited to, developing an increasingly comprehensive vocabulary in conversation and discussion; developing small group and large group discussion skills; inferring conclusions from a series of oral statements; respecting the presence of dialects and regional variations in speech; writing essays responding to social, political, and literary concepts; writing resumes; writing compositions of more than one paragraph using narration, exposition, and/or description; developing individual criteria for the aesthetic appreciation of literature; recognizing and understanding the use of literary and stylistic devices; dramatizing literature; experiencing a wide range of literary works written in the United States by writers from the major ethnic groups in the U.S. population, including both classic and modern works; using the media center research facilities; and reading self-selected books to help students learn to view reading as a useful and pleasurable activity.

### **Language Arts 12**

Grade Level: 12

Code: LAE601

Length: 36 weeks

**Major Concepts/Content:** The Language Arts 12 course is designed to strengthen students' skills in listening, speaking, writing, literature, and language. The content includes, but is not limited to, recognizing how continued development of communication skills can enhance one's future career and leisure activities; using communication skills in preparing for career choices; using the research skills necessary to meet the demands of post-secondary classes; using computer technology, where hardware is available, as an aid in writing compositions; writing in a clear and personal style; responding to literary masterpieces which are the common heritage of all people; engaging in perceptive reading and critical analysis of English and world literature; engaging in discussions of philosophical questions as revealed in literary works; and using the media center research facilities.

### **AP English Language and Composition**

Grade Level: 11, 12

Code: LAC614

Length: 36 weeks

**Major Concepts/Content:** An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. The college composition course for which the AP Language and Composition course substitutes is one of the most varied in the curriculum. As in the college course, its purpose is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. College writing programs recognize that skill in writing proceeds from students' awareness of their own composing processes: the way they explore ideas, reconsider strategies, and revise their work. This experience of the process of composing is the essence of the first-year writing course, and AP Language and Composition emphasize this process, asking students

to write essays that proceed through several stages or drafts, with revision aided by teacher and peers in preparation for the AP exam in the spring.

**AP English, Literature, and Composition**

Grade Level: 11, 12  
Length: 36 weeks

Code: LAL613

**Major Concepts/Content:** An AP English course in Literature and Composition should engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students should deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Reading in an AP course should be both wide and deep. These courses include the in-depth reading of texts drawn from multiple genres, periods, and cultures. In their AP course, students also read works from several genres and periods—from the sixteenth to the twentieth century—but, more importantly; they should get to know a few works well. They should 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. In addition to considering a work's literary artistry, students should consider the social and historical values it reflects and embodies. The approach to such close reading involves the following elements: the experience of literature, the interpretation of literature, and the evaluation of literature. All three of these aspects of reading are important for an AP course in English Literature and Composition. Moreover, each of the three aspects of reading corresponds to an approach to writing about literary works. Writing to understand a literary work may involve writing response and reaction papers along with annotation, free writing, and keeping some form of a reading journal. Students will prepare to take the AP exam in the spring.

**The following lab is designed to assist students with the reading and language components of their courses. Entrance is limited to students with a teacher recommendation and/or a qualifying standardized test score. Reading Lab is taken for elective credit. It does not substitute for a Language Arts graduation requirement.**

**Reading Lab 9, 10, 11, 12**

By recommendation

Code: RED305, RED405  
RED505, RED605

Length: 36 weeks

**Major Concepts/Content:** Upon completion of the reading support course, students should be able to:

- Apply higher-level comprehension skills
- Practice study techniques
- Identify the meaning of specialized words in the content area
- Identify the stated and implied main ideas
- Articulate conclusions about personal reading tastes

**MATHEMATICS**

**Three** Carnegie Units of Mathematics (see graduation requirements on page 1) are required to meet DoDDS graduation requirements.

**Algebra I**

Grade Level: 9-12  
Length: 36 weeks

Code: MAA301

**Major Concepts/Content:** This course may be the most common entry-level course for students who have had a rich and varied middle level mathematics program. It expands upon basic algebraic concepts previously acquired and integrates those principles with everyday life. The processes of problem solving, reasoning, communication and making connections are emphasized. Students will use formulas, functions, and equations to describe and clarify relationships. Students will learn how to write and translate

expressions into mathematical form, solve first and second degree equations, use the concept of a function to model real-world phenomena.

### Algebra I Lab

Grade Level: 9-12

Code: MAA305

Length: 36 weeks

**Major Concepts/Content:** This class will support and reinforce the basic algebraic concepts taught in the Algebra I, MAA 301, course. Students will have additional opportunities to learn how to write and translate expressions into mathematical forms, solve first and second degree equations, and use the concept of a function to model real-world phenomena. They will also expand their problem solving experiences to further develop their reasoning, representation, connections, and communication skills. **This class must be taken concurrently with Algebra I. A teacher recommendation and/or a qualifying standardized test score are required. Students only receive elective credit for this support class.**

### Geometry

Grade Level: 10-12

Code: MAG401

Length: 36 weeks

**Major Concepts/Content:** This course is designed to develop and promote student reasoning and problem solving involving geometric concepts and properties. Topics of study will include deductive reasoning using points, lines, and planes; segments, angle and triangles; quadrilaterals; polygons; and three-dimensional figures. Algebraic concepts are integrated with the geometric concepts throughout the course. Applications to real life situations are prevalent throughout the course.

### Geometry Lab

Grade Level: 10-12

Code: MAG405

Length: 36 weeks

**Major Concepts/Content:** The Geometry support class is designed to provide a developmental approach to the understanding of algebraic and geometric concepts already acquired, and to integrate the algebraic and geometric principles learned to real-life situations. This course is offered for students in addition to the regular class, as a support. Concepts are taught while concurrently reinforcing connections from algebra to geometry and geometry to algebra, which are integrated throughout the class. **This class must be taken concurrently with Geometry. A teacher recommendation and/or a qualifying standardized test score are required. Students only receive elective credit for this support class.**

### Discrete Mathematics

Grade Level: 11-12

Code: MAZ501

Length: 36 weeks

**Major Concepts/Content:** This is an introductory course in discrete mathematics. By design it shows a different view of mathematics than seen in traditional mathematics courses. It is an applications driven course that is based upon the study of events that occur in small, or discrete, chunks. Discrete concepts are used extensively in business, industry, government, and the digital world. The major areas of study are counting and probability, graph theory, the mathematics of social choice (voting and fair division), and coding and encryption. Some of the questions investigated in discrete math are: What does a bar code mean? What is the most efficient way a delivery truck can visit ten destinations? Should you buy a lottery ticket?

### Algebra II

Grade Level: 10-12

Code: MAA401

Length: 36 weeks

**Major Concepts/Content:** This course will help students to view algebra as a language of modeling the real world through problem solving and using the language of manipulating symbols. Students will make connections by integrating algebra into geometry, data analysis, and into other curricular areas. Student reasoning will involve linear equations and inequalities, systems of linear equations, matrices and determinants, quadratic equations and relations, functions and graphs, powers, roots, and radicals, exponential and logarithmic functions, polynomials and polynomial functions, rational expressions and functions, sequences and series, probability and statistics, and circular trigonometric functions.

### Math Lab III

Grade Level: 10-12

Code: MAA405

Length: 36 weeks

**Major Concepts/Content:** Math Lab III will support and reinforce upper level mathematics courses such as Algebra II or Discrete Mathematics. Students will have additional opportunities to build on their problem solving experiences to further develop their reasoning skills, and develop methods of justifications. A variety of applications and some general problem-solving techniques will be used. Students will experience activities that reinforce and enhance their understanding of the mathematics concepts taught in the regular class. Learning will be experienced through concrete and modeling activities, whenever possible, with less emphasis on computational or symbolic manipulation. Instructional activities will include the use of graphing calculators, computer software, and other appropriate manipulatives to promote student reasoning and discovery of mathematic concepts. **This class must be taken concurrently with Algebra II or Discrete Math. A teacher recommendation and/or a qualifying standardized test score are required. Students only receive elective credit for this support class.**

### **Math Analysis**

Grade Level: 11-12  
Length: 36 weeks

Code: MAD501

**Major Concepts/Content:** This course will involve students in units and topics of study of operations with functions and equations, circular functions, vectors, applications of matrices, complex and polar coordinates, recursion, advanced proof ideas, rates and areas, statistical inference, algebra and algorithms. Problem solving in real world applications involving these units of study will be the beginning and focal points of lessons. Connections will be made of graphs with equations with real world situations. Reasoning in trigonometry, probability, discrete math, mathematical structure, and the conceptual underpinnings of calculus is a major emphasis in this course.

### **Calculus**

Grade Level: 11-12  
Length: 36 weeks

Code: MAC601

**Major Concepts/Content:** Students will study calculus ideas (limit, differentiation, integration) all from a perspective of limits using technology, and answer real problems that expand their understanding of function, space, symmetry, etc. using the Archimedean ideas. The course combines many of the trigonometric, geometric, and algebraic techniques needed to prepare students for the study of calculus at the college level and strengthens their conceptual understanding of problems and mathematical reasoning in solving problems. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. The standards develop the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling. Graphing calculators may be used throughout the course to aid in the solution of the problems. Students should be encouraged to talk about the mathematics of change in calculus, to use the language and symbols of calculus to communicate, and to discuss problems and methods of solutions.

### **AP Calculus AB**

Grade Level: 11-12  
Length: 36 weeks

Code: MAC612

**Major Concepts/Content:** AP Calculus AB is a college-level course that differs from a high school calculus course in terms of depth of coverage and time commitments for study. The content is organized to emphasize major topics which include the following: (1) functions, graphs, and limits, (2) derivatives, and (3) integrals. These topics are detailed in the AP Calculus AB course description, which is available at AP Central (<http://apcentral.collegeboard.com>). Students should understand that this course is designed to be a fourth-year mathematics course, and the equivalent of a yearlong, college-level course in single variable calculus. The course requires a solid foundation of advanced topics in algebra, geometry, trigonometry, analytic geometry, and elementary functions.

### **AP Statistics**

Grade Level: 11-12  
Length: 36 weeks

Code: MAZ611

**Major Concepts/Content: Major Content/Concepts:** AP Statistics is a college-level course which differs from a high school statistics course in terms of depth of coverage and time commitments for study. The content is organized to emphasize major topics which include the following: (1) data investigation, (2) designing and conducting studies, (3) anticipating patterns using probability and simulations, and (4) statistical inference. These topics are detailed in the AP Statistics course description, which is available at AP Central (<http://apcentral.collegeboard.com>). AP Statistics provides a systematic development of the concepts, principles, and tools of statistics with an emphasis on inquiry and critical-thinking skills associated with the collection, representation, analysis, and drawing conclusions from authentic data.

Technology is a central component of the course and includes the use of graphing calculators, computers, and data analysis software. The College Board requires the use of graphing calculators for this course.

**\*\*\*Special Note: The following course is offered via Distance Education with an instructor in a remote location who stays in contact with students using communication software. A local facilitator monitors students' progress.**

**AP Calculus BC - DL**

Grade Level: 11-12  
Length: 36 weeks

Code: MAC6130T

**Major Content/Concepts:** AP Calculus BC is a college-level course that differs from a high school calculus course in terms of depth of coverage and time commitments for study. The content is organized to emphasize major topics which include the following: (1) functions, graphs, and limits, (2) derivatives, (3) integrals, and (4) polynomial approximations and series. These topics are detailed in the AP Calculus BC course description, which is available at AP Central (<http://apcentral.collegeboard.com>). AP Calculus BC is an extension of AP Calculus AB, and provides the equivalent of a second course in a college calculus sequence. Students are expected to take the AP Calculus BC Exam at the end of this course.

## **PHYSICAL EDUCATION**

**1½ Carnegie Unit(s)** of Physical Education is required for graduation from a DoDDS high school.

**Personal Fitness  
Required**

Grade Level: 9-12  
Length: 18 weeks

Code: PEF301

**Major Concepts/Content:** This semester course, which is required for graduation, is designed to enable students in grades nine through twelve to develop the movement skills and conceptual knowledge to make personal physical fitness decisions for a lifetime. Developmentally appropriate concepts of movement, physical fitness, and personal and social development are included in this course. Students apply appropriate information and problem solving that will help them achieve an individual, optimal level of fitness. The course focuses on why fitness is important, assessing an individual's exercise and activity needs, and how to exercise safely.

**Lifetime Sports  
Required**

Grade Level: 9-12  
Length: 18 Weeks

Code: PEL301

**Major Concepts/Content:** This semester course, which is required for graduation, is designed to enable students in grades nine through twelve to develop the movement skills and conceptual knowledge for sports participation throughout life.

**Physical Activity and Nutrition  
Required**

Grade Level: 10-12  
Length: 18 weeks

Code: PEN301

**Major Concepts/Content:** This one semester physical activity and nutrition course is required for graduation. This course provides a variety of opportunities for students to experience alternative, non-competitive physical activities. It is designed to enable students in grades nine through twelve to develop the movement skills and conceptual knowledge necessary to implement a personal physical activity and nutrition plan. Students participate in non-competitive physical activity and meal planning with pre and post physical activity and nutrition assessments. Students access information, obtain and analyze data, and develop their own personal physical activity and nutrition plan.

**Rhythmics-Dance  
Elective**

Grade Level: 10-12  
Length: 18 weeks

Code: PEG409

**Major Concepts/Content:** This semester course is designed to enable students in grades ten through twelve to continue to develop the movement skills and conceptual knowledge in sports and physical activities involved in a physical conditioning program. **NOTE: This course does not meet the PE graduation requirement; it may be taken as elective credit only.**

## **HEALTH**

**One-half** Carnegie Unit of Health is required for graduation from a DoDDS high school.

### **Health Ed Required**

Grade Level: 10-12  
Length: 18 weeks

Code: HLH301

**Major Concepts/Content:** This required health education course is designed to help high school students extend their conceptualization of knowledge, attitudes, and skills related to health issues learned in middle school. The focus is on students dealing with the world today and preparing for adult living based on a health and wellness ethic. Developmentally appropriate concepts of personal and community health, safety, mental health, alcohol, tobacco, and other drugs, and family life and human sexuality are taught in this course. Students will utilize health education concepts when applying health information literacy skills, enhancing intrapersonal and interpersonal communications, analyzing internal and external influences, and applying thinking, self-management, and advocacy to promote wellness and reduce health risks.

## **SCIENCE**

**Three** (see graduation requirements on page 1) Carnegie Units of Science are required for graduation from a DoDDS high school.

### **Physics Applications in the Community**

Code: SCP302

Length: 36 weeks

**Major Concepts/Content:** Introduction to Physics presents concepts of physics in relation to world experiences. Information is presented in an integrated approach, linking physics with technology, social perspectives, and the history and nature of science. The course presents a thematic approach to physics using explorations of topics. Kinematics and dynamics are introduced by studying the physics of sports and transportation systems. Communication and information technologies are used to examine wave theory, light, and sound. Electrical and thermal energy topics are studied within the context of the home, as well as on a global scale. Applications of physics to health and medicine provide opportunities to study x-rays, CT scans, and ultrasound. Scientific predictions, such as those associated with radioactive decay, Newton's first two laws, the Law of Universal Gravitation, and special relativity, are contrasted with non-scientific views in order to highlight the characteristics of good science.

### **Biology Required**

Length: 36 weeks

Code: SCB401

**Major Concepts/Content:** Biology is designed to provide students with an integrated approach to the study of living organisms, in addition to science as inquiry, science and technology, science and social perspectives, and the history and nature of science. The course integrates unifying science concepts and processes of systems, order and organization, evidence, models and explanation, change, consistency and equilibrium; and form and function. Scientific inquiry and understanding about inquiry are emphasized through practical implications and meaningful applications. Based on the philosophy that scientific knowledge is best acquired through inquiry, the course uses a variety of techniques to introduce, stimulate, explore, and reinforce major scientific concepts, theories, principles, and skills.

### **AP Biology**

Grade Level: 11-12  
Length: 36 weeks

Code: SCB612

**Major Concepts/Content:** AP Biology provides an understanding of the unifying themes and fundamental concepts and principles of biology with an emphasis on inquiry and critical thinking skills including problem solving, mathematical reasoning, and experimental investigations. Topics of study include molecules and cells, heredity and evolution, and organisms and populations. Laboratory work is an integral component of this course. Technology including graphing calculators, probe ware, graphing and data analysis software, and biological apparatus is used throughout this course. Students should understand that this course is designed to be a second year biology course, and the equivalent of a two-semester long introductory, college level biology course. The course requires a working knowledge of

biology, and chemistry. The breadth, pace and depth of material covered exceeds the standard high school Biology course, as does the college-level textbook, laboratory work, and time and effort required of students. This course provides the biology foundations for college majors in biology. AP Biology is a college-level course that differs from a high school Biology course in terms of depth of coverage, the type of laboratory work and time commitments for study. The three topics in AP Biology are detailed in the AP Biology course description, which is available on AP Central (<http://apcentral.collegeboard.com>). Students are expected to take the AP Biology Exam at the end of this course.

### **Human Anatomy and Physiology**

Grade Level: 10-12

Code: SCX401

Length: 36 weeks

**Major Concepts/Content:** Human Anatomy and Physiology is an elective course for students with a special interest and high motivation for an in-depth study of normal human structures and functions. Information is presented in an integrated approach with science as inquiry, science and technology, science and social perspectives, and the history and nature of science. The course integrates biology and chemistry using unifying concepts and processes of systems, order and organization, evidence, models and explanation, change, consistency and equilibrium, and form and function. Scientific inquiry and understanding about inquiry are emphasized through practical and meaningful applications. Topics students study include the muscular, nervous, digestive, respiratory, circulatory, excretory, endocrine, and reproductive systems, and genetics.

### **Chemistry Applications in the Community**

Level: 10-12

Code: SCC502

Length: 36 weeks

**Major Concepts/Content:** Chemistry Applications in the Community is an entry-level course designed to help students understand the chemistry behind some important societal issues. Information is presented in an integrated approach with science as inquiry, science and technology, science and social perspectives, and the history and nature of science. The course integrates unifying science concepts and processes of systems, order and organization, evidence, models and explanation, change, consistency and equilibrium, and form and function. Scientific inquiry and understanding about inquiry are emphasized through practical implications and meaningful applications. Students study basic concepts of chemistry, while integrating physical concepts with societal issues.

### **Chemistry**

Grade Level: 10-12

Code: SCC501

Length: 36 weeks

**Major Concepts/Content:** Chemistry is designed to help students understand the major principles of chemistry. Information is acquired through an integrated approach, incorporating advanced topics with science as inquiry, science and technology, science and social perspectives, and the history and nature of science. The course integrates unifying science concepts and processes of systems, order and organization, evidence, models and explanation, change, consistency and equilibrium; and form and function. Scientific inquiry and understanding about inquiry are emphasized through practical implications and meaningful applications. Topics students study include atomic theory and structure, chemical bonding, principles of chemical reactions, molecular structure, and how science and technology relate to chemistry.

### **AP Chemistry**

Grade Level: 11-12

Code: SCC612

Length: 36 weeks

**Major Concepts/Content:** The AP Chemistry course is designed to be the equivalent of the general chemistry course taken during the first year of college. For some students, this course enables them to undertake, as a college freshman, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses. Students prepare to take the AP exam in the spring.

## Physics

Grade Level: 10-12

Code: SCP501

Length: 36 weeks

**Major Concepts/Content:** Physics presents basic concepts of physics in relation to world experiences. Information is presented in an integrated approach, linking physics with technology, social perspectives, and the history and nature of science. The class is designed to provide an understanding of the physical laws fundamental to all sciences. Fundamental laws of mechanics are introduced, along with measurement and problem-solving techniques. Other topics included are wave theory, heat, sound, light, magnetism, electricity, atomic structure, nuclear reactions, and high-energy physics.

## Environmental Science

Grade Level: 11-12

Code: SCZ401

Length: 36 weeks

**Major Concepts/Content:** Environmental Science is designed to be an elective course for students with a special interest and high motivation for an in-depth study of environmental science. Information is presented in an integrated approach with science as inquiry, science and technology, science and social perspectives, and the history and nature of science. The course integrates unifying science concepts and processes of systems, order and organization, evidence, models and explanation, change, consistency and equilibrium, and form and function. Scientific inquiry and understanding about inquiry are emphasized through practical implications and meaningful applications. Topics students study include, but are not limited to, the laws of matter and energy, ecosystem analysis, population dynamics, renewable and nonrenewable resources, human impact on the environment, and the relationships among economics, politics, ethics, and the environment.

## AP Environmental Science

Grade Level: 11-12

Code: SCZ611

Length: 36 weeks

**Major Concepts/Content:** AP Environmental Science provides an investigative approach to the interrelationships of the natural world through the study of the fundamental concepts, principles, and methodologies of environmental science, with an emphasis on inquiry and critical thinking skills including problem solving and experimental investigations. Topics of study include Earth systems and resources, ecosystems and energy flow, population biology, land and water use, energy resources and consumption, pollution, and global change. These themes in AP Environmental Science are detailed in the AP Environmental Science course description, which is available on AP Central (<http://apcentral.collegeboard.com>). Laboratory work and field studies are an integral component of this course. Technology including graphing calculators, probe ware, graphing and data analysis software, and environmental sciences apparatus is used throughout this course. Students should understand that this course is designed to be a second year environmental science course, and the equivalent of a one semester-long, laboratory-based, introductory, college level environmental science course. The course requires a working knowledge of biology, chemistry and/or physics, and one year of algebra. The breadth, pace and depth of material covered exceeds the standard high school Environmental Science course, as does the college-level textbook, laboratory work, and time and effort required of students. Students are expected to take the AP Environmental Science Exam at the end of this course.

## **SOCIAL STUDIES**

**Three** (see graduation requirements on page 1) Carnegie Units of Social Studies are required for graduation from a DoDDS high school.

## World Regions

Grade Level: 9

Code: SSC301

Length: 36 weeks

**Major Concepts/Content:** The world regions/cultures course is designed to study other cultures so students can understand the global community in which they live. Students develop skills necessary to analyze change and continue the study of cultures and geography begun in the sixth and seventh grades. An overview of physical geographic concepts and skills is basic to this course. Its emphasis is on the cultures of the Southwest Asia (Middle East), Africa, South Asia, Central Asia, East Asia, Southeast Asia, and Europe. The host nation culture is studied and used as a basis of comparison. Instructional activities will be provided relative to the content of the world cultures and regions course. Students will locate major

cultures in specific geographic areas, compare the development of different societies, and use geographic skills to explore physical and cultural diversity of regions.

### **World History**

Grade Level: 10-12

Code: SSW401

Length: 36 weeks

**Major Concepts/Content:** The world history course is designed to build on the content in the ninth grade geographical and cultural studies by studying the historical development of these cultures. The course continues the chronological study of ancient world civilizations. After an overview of the Early Ages, the course emphasizes the period from the Middle Ages to the contemporary world. Using the multidisciplinary approach, world history is a balanced program, not just a history of Western Europe. Attention is given to Europe, Asia, Africa, North and South America. The host nation's history and culture are used for comparison.

### **Honors World History 9**

Grade Level: 9

Code: SSW371

#### **(With Honors Literature 9)**

Length: 36 weeks

**Major Concepts/Content:** This is an integrated course for students interested in taking 9<sup>th</sup> grade Honors Social Studies and English. The course uses the chronological study of world history from Ancient Civilization to 1500 A.D. and covers the themes of culture, science/technology and society, geography, and time/continuity and change. The content integrates readings and writings that focus on exploring, interpreting, and analyzing literature and other readings that extend and support the world history discussions and research. The themes of geography provide the focus for preparing students to understand how humans adapt to the environment. The course is a demanding study of world history and literature, requiring students to understand, analyze, and interpret the connections between major historical events and the writings of the time. Critical thinking, philosophical discussion, concept attainment, vocabulary development, language usage, and research will be stressed. The development of discussion and presentation skills will focus on analysis, interpretation, and evaluation. Instructional activities will be provided using the content of World History. Students will read and critically respond to a wide spectrum of challenging literary selections that mirror the cultures, themes and times of the period from Ancient Civilization to 1500 A.D. Students will study geographical factors that impact civilizations and conduct in-depth research on topics relative to major historical events, people, and regions. Many of the learning activities will culminate in shared products for Social Studies and English. Students will receive a grade in both English and World History.

### **Honors World History 10**

Grade Level: 10

Code: SSW471

#### **(With Honors Literature 10)**

Length: 36 weeks

**Major Concepts/Content:** This is an integrated course for students interested in taking 10<sup>th</sup> grade Honors Social Studies and English. The course uses the chronological study of world history from 1500 to the present and covers the themes of culture, science and technology, economics, and government. The content integrates readings and writings that focus on exploring, interpreting, and analyzing literature and other readings that extend and support the world history discussions and research. The course is a demanding study of world history and literature, requiring students to understand, analyze, and interpret the connections between major historical events and the writings of the time. Critical thinking, philosophical discussion, concept attainment, vocabulary development, language usage, and research will be stressed. The development of discussion and presentation skills will focus on analysis, interpretation, and evaluation. Instructional activities will be provided using the content of World History. Students will read and critically respond to a wide spectrum of challenging literary selections that mirror the cultures, themes and times of the period from 1500 to the present. Students will conduct in-depth research on topics relative to major historical events, people, and regions. Many of the learning activities will culminate in shared products for Social Studies and English. Students will receive a grade in both English and World History.

### **United States History**

Grade Level: 11-12

Code: SSU501

Length: 36 weeks

**Major Concepts/Content:** The United States history course at the eleventh grade level is designed to be a required one-year course, with emphasis on our nation's history from Reconstruction to the present. Both basic and advanced social studies skills receive emphasis. The first quarter is used to review,

reinforce, and expand the student's knowledge of pre-civil War United States. The remaining quarters concentrate on post-Reconstruction to the present, influences of and relations with the host nation during these periods are explored as part of the course.

### **AP US History**

Grade Level: 11-12

Code: SSU611

Length: 36 weeks

**Major Concepts/Content:** The AP program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program 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, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship. An AP United States 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. In addition to exposing students to historical content, an AP course should also train students to analyze and interpret primary sources, including documentary material, maps, statistical tables, and pictorial and graphic evidence of historical events. Students should learn to take notes from both printed materials and lectures or discussions, write essay examinations, and write analytical and research papers. They should be able to express themselves with clarity and precision and know how to cite sources and credit the phrases and ideas of others. Students prepare to take the AP exam in the spring.

### **United States Government**

Grade Level: 12

Code: SSG601

Length: 18 weeks

**Major Concepts/Content:** The United States government course is a required one semester course designed to provide students with essential knowledge, skills, and attitudes related to the nation's government and its historical development. The students review the purpose and function of government that they studied in eighth and eleventh grade. Major emphasis is on the structure of the federal government, political responsibility and participation, and state and local government. Some attention is given to economic systems and alternative political systems. Comparison with the host nation's government is encouraged as a part of the program.

### **AP American Government and Politics**

Grade Level: 12

Code: SSG612

Length: 36 weeks

**Major Concepts/Content:** The AP Government and Politics course follows an outline published by the College Board and students will have an opportunity to take the AP exam in this area for possible college credit. A well-designed AP course in U.S. Government and Politics will give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes.

### **AP European History**

Grade Level: 12

Code: SSZ611

Length: 36 weeks

**Major Content/Concepts:** AP European History is designed for students desiring to participate in a college level history class emphasizing concepts, major historical facts and personalities, and historical cross chronological analysis. Students will be expected to gain knowledge and demonstrate the ability to relate the themes of culture, diplomacy, economics, and political and social history from the High Renaissance to the present. The course provides the student with the ability to relate the context to understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic and intellectual discourse. Wide readings and discussions and various instructional strategies will provide students with the opportunity to explore and analyze social, political, and economic trends across time and their influence on the growth and development of Europe. This course is the equivalent of an introductory college history class. The study of European history since 1450 introduces students to cultural, economic, political, and social

developments that played a fundamental role in shaping the world in which they live. Students get the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. The course covers the themes of Intellectual and cultural history, Political and Diplomatic History, and Social and Economic History. Students are expected to take the AP exam at the end of the course.

### **Sociology**

Grade Level: 10-12  
Length: 18 weeks

Code: SSS401

**Major Concepts/Content:** The sociology course is an elective one-semester course for grades ten through twelve that deals with the study of the structure of society, and its groups, institutions, and cultures. Students investigate societal and cultural phenomena that influence the behavior of groups and individuals. Students study current social problems and utilize methods of sociological investigation and research. Instructional activities will be provided in the content area of sociology. Students plan, design, and develop research projects relative to the study of institutions and society. Interviews, case studies, and interactions with agencies and community personnel involved in working with people will be a part of the learning activities.

### **Economics**

Grade Level: 10-12  
Length: 18 weeks

Code: SSN401

**Major Concepts/Content:** The economics course is a one-semester course designed to acquaint students with the major concepts in the study of economics. Students study how scarce resources are allocated among competing demands. The production, distribution, and accumulation of wealth are discussed and analyzed. Supply and demand, business organization, money and banking, the role of the federal government, and comparisons among economic systems are major topics of study.

### **Psychology**

Grade Level: 10-12  
Length: 18 weeks

Code: SSP501

**Major Concepts/Content:** The psychology course is designed to be a one-semester elective course offered at the eleventh and twelfth grades. This study of the behavior of human beings focuses on physical characteristics, cognitive activity, emotional states, and social interaction.' Students study the stages of human development, motivational theory, theories of personality, and mental wellness and illness. The process of scientific investigation is a major part of this course. Students will participate in-group activities that enhance the study of specific units, outline theories of behavior, make case studies, and complete research for oral and written reports. Activities will include participating in self-awareness and group dynamic activities.

### **Model United Nations (Fall semester)**

Grade Level: 10-12  
Length: 18 weeks

Code: SSZ403

**Major Concepts/Content:** The model United Nations course is designed to study the major operations and functions of the United Nations and the role of diplomacy in the organization work. The major political, economic, and cultural concerns of Asia, Africa, the Americas, Europe, and the Middle East will be studied with major emphasis on assigned countries. Instructional activities will be provided using the content of the model United Nations course. Students will be assigned a country to research. They will prepare resolutions on a current problem that reflects their assigned country's political and economic goals. Debates on resolutions in model United Nations simulations will demonstrate parliamentary procedure.

### **Street Law**

Grade Level: 10-12  
Length: 18 weeks

Code: SSZ303

**Major Concepts/Content:** The Street Law course is an elective one-semester course designed to provide students with knowledge about law that is of practical use in their everyday lives. Students will learn how every purchase, lease, contract, marriage, divorce, crime, or traffic violation places them face-to-face with the law. Depending on the length of the course, topics will include an introduction to law and the legal system, criminal law, torts, consumer law, family law, housing, and individual rights and responsibilities. Students will study some of the current issues and controversies relating to the law and legal system. Students will learn the different methods of solving legal problems, including negotiation, mediation, and

the trial process. An effort will be made to make the course relevant to students in DoDEA schools by including special lessons that compare American and the host nation's law and instruct students in the basics of the Code of Military Justice.

## **OTHER ELECTIVES**

### **Journalism**

Grade Level: 10-12

Code: LAJ401

**(Elective credit only)**

Length: 18 - 36 weeks

**Major Concepts/Content:** The journalism course encourages student responsibility for the development of personal and staff management skills, for the production of a publishable product, and for adherence to ethical values affecting journalists, while helping students at the same time to refine and put to practical use their thinking, writing, and critiquing skills. The study of journalism will also introduce students to the problems and opportunities present in mass media today. The content includes, but is not limited to, choosing and using appropriate writing techniques in preparing publishable material; utilizing accepted techniques in the preparation of journalistic material (applying ethical methods of obtaining information for use in writing, rewriting, editing, and proofreading material, writing headlines, identifying material appropriate for school publication, creating an aesthetic page layout, demonstrating balanced writing on controversial issues, differentiating between fact and opinion, and practicing assigned staff responsibilities in an efficient manner); recognizing ethical issues in the practice of journalism (recognizing situational factors affecting publication of material, checking sources to ensure reliability, displaying good taste, and avoiding plagiarism); and demonstrating personal development congruent with journalistic practices and career goals, demonstrating the ability to follow journalistic work schedules and deadlines, using managerial and supervisory skills, functioning without supervision, and analyzing journalistic materials based upon accepted standards. Students in the class will produce a school newspaper.

### **Yearbook Production (Elective credit only)**

Grade Level: 10-12

Code: AAY301

Length: 18 - 36 weeks

**Major Concepts/Content:** The Yearbook Production class is designed to produce the official yearbook for the school. All phases of yearbook production, including photography, copy writing, page layout, in addition to selling advertisements and books are included. The concept of accurate photojournalism is balanced with the need to present the events, activities, and personalities of the school year in a positive manner.

### **English as a Second Language**

Grade Level: 9-12

Code: LAA301 1<sup>st</sup> year  
LAA401 2<sup>nd</sup> year  
LAA501 3<sup>rd</sup> year  
LAA601 4<sup>th</sup> year

Length: 36 weeks

**Major Concepts/Content:** The English as a Second Language courses are designed to develop and increase English language proficiency and academic skills for students whose primary language is not English. They actively involve students in developing the skills of understanding, listening, speaking, viewing, reading and writing to support the student's mastery of DoDEA's general education content standards. Emphasis is placed on the acquisition of basic interpersonal communication skills related to meeting everyday needs and participating in the American school cultural, and on the cognitive academic language needed for success in the general education classroom. The content includes the development of both social and academic listening and speaking skills through dialogues, conversations, chants, role-playing, and oral reporting. The content also includes the development of reading strategies, in both fiction and nonfiction, previewing, determining main idea and details, inferring, analyzing, and evaluating written material; and the development of writing, both factual and creative, at all stages of the writing process including prewriting, drafting, responding to peer writing, revising, editing, and publishing. Vocabulary and syntax are presented and developed in context and in authentic situations using the language of the general education content classes. The development of critical thinking and study skills, and sociocultural knowledge is emphasized throughout the learning process. **Two years of ESL credit can be substituted for two years of Language Arts credit.**

**AVID 9, 10, 11, 12**  
**(Elective credit only)**

Grade Level: 9-12

Code: LAV301  
LAV401  
LAV501  
LAV601

Length: 36 weeks

**Major Concepts/Content:** AVID (Advancement Via Individual Determination) is a language arts based curriculum with emphasis on the writing process and writing as a tool of learning. In addition to inquiry and collaboration, AVID also provides students with academic survival skills, i.e., time management, note taking, textbook reading, library research, test taking skills, and study skills. The Cornell note-taking system is taught and students are expected to use this system in all classes. **Entrance is limited to students with a teacher recommendation.**

**Staff Assistant**

(No credit toward graduation)

Grade Level: 9-12

Length: 18-36 weeks

Code: AAC301

**Major Concepts/Content:** The staff assistant course is designed to provide students with experiences in assisting professional school personnel in the duties for which they are responsible. **NOTE: No credit for staff assistant is permitted toward graduation.**