

GAR-FIELD HIGH SCHOOL



Course Offering Book 2009-2010

“School of Champions”

**GAR-FIELD HIGH SCHOOL
COURSE OFFERING
2009-2010**

Grades 9-12

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FROM THE GUIDANCE DIRECTOR

Dear Students and Parents:

The purpose of this course booklet is to let you know about the many opportunities and challenges available to you. These are courses which will be offered at Gar-Field High School during the 2009-2010 school year. Of course, these courses may not be offered if there is not enough interest shown.

As you consider your plans for the future, your interests and your abilities should be a part of these decisions. You also may wish to review the graduation requirements for Virginia Public Schools.

Choose your courses carefully. Teachers are hired based on your selection. Our Counselors look forward to working with you as you design and continue your educational plans.

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Director of Guidance

Administrative & Counseling Staff

Dr. Brenda Aiken
Principal

Jason Supon
Director of Guidance

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Assistant Principal

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Activities Director

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Brian Bassett
I.B. Coordinator

GRADUATION REQUIREMENTS Students classified as freshmen: Fall – 2000, 2001, 2002

	Standard Diploma 22 units required		Advanced Diploma 24 units required	
English	<u>4 units</u>	English 9, 10, 11*, 12 (English 11 requires a passing score on the English Research Paper)	<u>4 units</u>	<u>English 9, 10, 11*, 12</u> (English 11 requires a passing score on the English Research Paper)
Mathematics	<u>3 units</u>	<u>including two course selections from among Algebra I*, Geometry* or higher</u>	<u>4 units</u>	<u>including three different course selections from Algebra I*, Geometry*, Algebra II* or higher</u>
Science	<u>3 units</u>	<u>must include two different disciplines from Earth Science*, Biology*, Chemistry* or Physics</u>	<u>4 units</u>	<u>must include three different disciplines from among Earth Science*, Biology*, Chemistry* or Physics</u>
Social Studies	<u>3 units</u>	<u>World History*, US & Virginia History*, and US & Virginia Government</u>	<u>4 units</u>	<u>World History*, World Geography*, US & Virginia History*, and US & Virginia Government</u>
Health/Physical Education	<u>2 units</u>	<u>Health/PE I and Health/PE II</u>	<u>2 units</u>	<u>Health/PE I and Health/PE II</u>
Foreign Language	<u>n/a</u>	<u>n/a</u>	<u>3 - 4 units</u>	<u>3 units of one language -or- 2 years each of two languages</u>
Fine or Practical Arts	<u>1 unit</u>		<u>1 unit</u>	
Electives	<u>6 units</u>	<u>must include at least 2 sequential electives</u>	<u>1 - 2 units</u>	<u>depending on the foreign language sequence</u>
Verified Units	Verified Units are earned by passing the course and the Standards of Learning (SOL) Test. Required Verified Units: 6 <u>2 English 11 (Writing & Read/Lit)</u> <u>4 Student Choice</u>		Verified Units are earned by passing the course and the Standards of Learning (SOL) Test. Required Verified Units: 9 <u>2 English 11 (Writing & Read/Lit)</u> <u>2 Mathematics</u> <u>2 Science</u> <u>2 Social Studies</u> <u>1 Student Choice</u>	

*indicates classes with SOL Tests

GRADUATION REQUIREMENTS Students classified as freshmen: Fall – 2003 and after

	Standard Diploma 22 units required <i>(Course requirements same as above)</i>	Advanced Diploma 24 units required <i>(Course requirements same as above)</i>
Verified Units	Verified Units are earned by passing the course and the Standards of Learning (SOL) Test. Required Verified Units: 6 <u>2 English 11 (Writing & Read/Lit)</u> <u>1 Mathematics</u> <u>1 Science</u> <u>1 Social Studies</u> <u>1 Student Choice</u>	Verified Units are earned by passing the course and the Standards of Learning (SOL) Test. Required Verified Units: 9 <u>2 English 11 (Writing & Read/Lit)</u> <u>2 Mathematics</u> <u>2 Science</u> <u>2 Social Studies</u> <u>1 Student Choice</u>

MODIFIED STANDARD DIPLOMA

20 units required

Students classified as freshmen: Fall 2000, 2001, 2002, 2003, 2004

Courses Needed:

	English	4 units
Mathematics	3 units: to include content from among applications of Algebra, Geometry, Personal Finance, and Statistics	
Science	2 units: to include content from at least two of the following: applications of Earth Science, Biology, Chemistry, or Physics	
History & Social Science	2 units: must include US & VA History and US & VA Government	
Health/Physical Education	2 units: H/PE I and H/PE II	
Fine or Practical Arts	1 unit	
	Electives	6 units: to include at least 2 sequential electives

Total units = 20 Must meet the Individual Education Program for special education students only, plus a passing grade on a literacy and numeracy test.

Eligibility for this diploma shall be determined by the student’s Individual Education Program after the eighth grade year. The Student must have passed the 8th grade Standards of Learning (SOL) tests in both English and Mathematics to meet the literacy and numeracy requirements for this diploma.

GRADE PLACEMENT

- I. **Ninth Grade:** Successful completion of grade eight
- II. **Tenth Grade:** Six units of credit, three must be required courses
- III. **Eleventh Grade:** Eleven units of credit, six must be required courses
- IV. **Twelfth Grade:** Sixteen units of credit, nine must be required courses.

(A student must be in a program of studies which will enable the student to acquire the minimum number of credits required for graduation by the end of August of the senior year or be in a position to acquire the required graduation credits by the end of the school year through day, night, or summer classes).

Please note that ALL graduation requirements must be completed before the student may participate in the June graduation exercises.

ART

All art courses will count toward meeting the one-credit fine arts requirement.

ART I – BASIC FOUNDATIONS (912000; 912020; 912030) IBMYP Art I (912050)

Grades: 9-10

Prerequisite: None

Credit: 1 (36 weeks)

First-year art students are enrolled in a Basic Foundations course. Art foundations will include two-dimension and three-dimension art production as well as visual literacy experiences with a focus on the elements of art and an introduction to the principles of design. The curriculum for IBMYP Art I will incorporate MYP five Areas of Interaction, strategies and criteria

ART II (913000; 913020; 913030)

Focus on the principles of design with reinforcement of the elements of art

Prerequisite: A grade of “C” or better in Art I

ART III (914000; 914020; 914030)

Focus on art periods, styles and cultures through art production

Prerequisite: A grade of “C” or better in Art II or teacher recommendation

ART IV (914500; 914520) (Not offered at Battlefield)

Focus on art periods, styles, cultures and artists through art

Prerequisite: A grade of “C” or better in Art III

These courses are sequentially designed to extend and further develop experiences in the Basic Foundations course. Artistic expression is explored through discipline-based art education (art production, art history, art aesthetics, and art criticism).

ART PORTFOLIO PREPARATION (914701)

Grades: 11-12

Prerequisite: Successful completion of Art I and II with a “B” or better average or Art I with an “A” average and/or approval of the department chairperson

Credit: 1

The Art Portfolio Preparation studio is intended for highly motivated students committed to serious study in art. The studio will focus on the student’s individual artistic talents. The portfolio, compiled by the student, will demonstrate a variety of experiences in the formal, technical, and expressive means.

IB VISUAL ARTS (SLA or SLB) (913050)

Grade: 11 or 12

Prerequisite: Completion of one year of high school art with a “C” or better average and/or teacher approval

Credit: 1

IB Visual Arts (Standard Level) is a one-year program resulting in an International Baccalaureate Certificate or Diploma. The course is intended for highly motivated students committed to serious study in art. Students will combine persistent research with regular studio work, training, visual, perceptual, and critical awareness of the arts of various cultures, as well as developing creativity, technical skills, and a feeling for the fundamentals of design. Students may choose either SLA (a concentration in studio work) or SLB (a concentration in research). Students are required to take part in an IB assessment process

IB VISUAL ARTS I (HL) (914051)

Grades: 11-12

Prerequisite: Successful completion of two years of high school art courses with a grade of “B” or better in each and/or teacher recommendation

Credit: 1

IB Visual Arts is the first year of a two-year program resulting in an International Baccalaureate Certificate or Diploma. The course is intended for highly motivated students committed to serious study in art. The aim of this course is to provide opportunities to develop the aesthetic, imaginative, and creative faculties as well as to train visual, perceptual, and critical awareness of arts of various cultures. The portfolio, compiled by the student, will demonstrate intensive concentration in studio work and/or research in preparation for the required IB assessment at the end of the second year. Credit will be awarded upon the completion of the two-year program.

IB VISUAL ARTS II (HL) (914551)

Grade: 12

Prerequisite: Successful completion of IB Visual Arts I

Credit: 1

IB Visual Arts II is the second year of a two-year program resulting in an International Baccalaureate Certificate or Diploma. The course is intended for highly motivated students committed to serious study in art. Students will combine persistent research with regular studio work, developing appreciation, creativity, technical skills, and a feeling for the fundamentals of design. Students are required to take part in the IB assessment process. Credit will be awarded upon the completion of the two-year program.

BUSINESS, INFORMATION TECHNOLOGY, AND MARKETING

All business and marketing courses will count toward meeting the one-credit practical arts requirement for graduation.

PRINCIPLES OF BUSINESS AND MARKETING (6115)

Grades: 9-10

Prerequisite: None

Credit: 1

Students discover the roles of business and marketing in the free enterprise system and the global economy. Basic financial concepts of banking, insurance, credit, inheritance, taxation, and investments are investigated to provide a strong background as students prepare to make sound decisions as consumers, wage earners, and citizens. The real world impact of technology, effective communication, and interpersonal skills are evident throughout the course. This course also supports career development skills and explores career options

WORD PROCESSING (6152)

Grades: 9-12

Prerequisite: None

Credit: 1

Students develop intermediate to advanced level word processing skills using a variety of software functions, including graphics, desktop publishing, and telecommunications. Students gain competence integrating other applications such as database and spreadsheet into word processing activities. Classroom experiences also provide skill development in communication

BUSINESS MANAGEMENT (6136)

Grades: 10-12

Prerequisite: None

Credit: 1/2

Students study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations. Quality concepts, project management, problem solving, and ethical decision making are an integral part of the course.

BUSINESS LAW (6132)

Grades: 10-12

Prerequisite: None

Credit: 1/2

Students examine the foundations of the American legal system. Students explore economic and social concepts as they relate to legal principles and to business and personal laws.

ACCOUNTING (6320)

Grades: 10-12

Prerequisite: None

Qualifies for Cooperative Education

Credit: 1

Students study the basic principles, concepts, and practices of the accounting cycle. Students learn fundamental accounting procedures using a manual and an electronic system

ADVANCED ACCOUNTING (6321)

Grades: 11-12

Prerequisite: Accounting

Qualifies for Cooperative Education

Credit: 1

Students gain in-depth knowledge of accounting procedures and techniques used to solve business problems and make financial decisions. Students use accounting and spreadsheet software to analyze and interpret business application.

COMPUTER INFORMATION SYSTEMS (6612)

Grades: 10-12

Prerequisite: Word Processing

Qualifies for Cooperative Education

Credit: 1

Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies.

ADVANCED COMPUTER INFORMATION SYSTEMS (661301)

Grades: 11-12

Prerequisite: Computer Information Systems

Qualifies for Cooperative Education

Credit: 1

Students apply problem-solving skills to real-life situations through advanced integrated software applications, including multimedia presentations, including printed, electronic, and Web publications. Students work individually and in groups to explore advanced computer maintenance activities, Web site development, programming, networking, emerging technology, and employability skills.

PROGRAMMING (6640)

Grades: 10-12

Qualifies for Cooperative Education

Prerequisite: None

Credit: 1

Students explore computer concepts, use logic procedures, and implement programming procedures using one or more programming languages.

ADVANCED PROGRAMMING (6641)

Grades: 11-12

Qualifies for Cooperative Education

Prerequisite: Programming

Credit: 1

Students use their knowledge of computer concepts, logic procedures, and object-oriented programming to develop an advanced level program application in one or more programming languages.

DESIGN, MULTIMEDIA AND WEB TECHNOLOGIES (663001)

Grades: 10-12

Prerequisite: Word Processing

Qualifies for Cooperative Office Education (COE)

Credit: 1

Students develop proficiency in creating desktop publications, multimedia presentations/projects, and Web sites using industry standard application software. Students incorporate principles of layout and design in completing publications and projects. Students design portfolios that may include business cards, newsletters, mini-pages, Web pages, multimedia presentation/projects, calendars, and graphics

ADVANCED DESIGN, MULTIMEDIA AND WEB TECHNOLOGIES (663101)

Grades: 11-12

Prerequisite: Design, Multimedia and Web Technologies

Credit: 1

Students develop advanced skills in creating interactive media, Web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software, applying skills learned to real-world projects.

COOPERATIVE EDUCATION (6799)

Grades: 11-12

Prerequisite: Enrollment in one of the approved business education programs: Accounting, Advanced Accounting, Computer Information Systems, Advanced Computer Information Systems, Programming, Advanced Programming, Desktop/Multimedia and Web Technologies, and Advanced Desktop/Multimedia and Web Technologies.

Credit: 1

Cooperative Education is a one- or two-year course offered to eleventh and twelfth grade students who are enrolled in one of the approved business education programs. It is the supervised, on-the-job instructional phase of an occupational preparation program in business education. While enrolled in an appropriate business education class, the student also continues their business education coordinated in a related business. The teacher-coordinator develops with the on-the-job sponsor and the student an individualized training plan identifying learning experiences related to the student's occupational objective. Cooperation Education may be taken more than once for credit.

FINANCE (6120)

Grades: 10, 11, 12

Prerequisite: None

Credit: 1

Students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success.

ENTREPRENEURSHIP (9094)

Grade: 10-12

Prerequisite: None

Credit: 1

This course is designed for students who wish to concentrate on strategies for career development through ownership/management of their own businesses. Although individual skills are emphasized, the focus of the course is on development of a business plan, including the following: determination of business enterprise, legal considerations, location selection, steps in getting the enterprise started, marketing strategy, and interaction with successful entrepreneurs.

IB BUSINESS AND MANAGEMENT (IB613550)

Grades: 11-12

Prerequisite: Enrollment in IB Program

Credit: 1

IB Business and Management is a recognized International Baccalaureate course. This course is designed to provide a rigorous and critical study of the ways in which individuals and groups interact in a dynamic business environment. It examines how business decisions are made, how these decisions make an impact on internal and external environments, and how these decisions foster international cooperation and responsible

MARKETING

Credits 8120: 2 credits include cooperative education

Credit 8121: no-cooperative education

Grades: 11-12

Prerequisite: None

Students are introduced to functions and foundations involved in the marketing of goods, services, and ideas and achieve skills necessary for successful marketing employment. Students study risk management, selling, promotion, pricing, purchasing, marketing-information management, product/service planning, distribution, and financing. Foundation skills include economics, human resources, and marketing and business necessary for success in marketing occupations.

Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

ADVANCED MARKETING

Credits 8130: 2 credits includes cooperative education

Credit 8131: 1 credit no cooperative education

Grade: 12

Prerequisite: Marketing 8120 or 8121

Students continue to gain knowledge of marketing functions and foundations as they relate to supervisory and management responsibilities and develop skills needed for advancement. They develop skills for supervisory positions and/or for continuing education in a marketing-related field. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied

INTERNET MARKETING (8125)

Grades: 11-12

Prerequisite: None

Credit: 1

Students learn about the paperless exchange of business and marketing information, using technology (e.g., Internet, e-mail, electronic data interchange, and electronic funds transfer). Included in this course is an overview of the technology of Web servers, clients, and net infrastructure and the background of this fast-growing market; the economics of electronic markets; marketing research; advertising on the Web and Web page basics; pricing information; security and encryption; and online business opportunities. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

FASHION MARKETING

Credits 8140: 2 credits includes cooperative education

Credit 8141: 1 credit no cooperative education

Grades: 11, 12

Prerequisite: None

In this specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students will develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, marketing planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied.

ADVANCED FASHION MARKETING

Credits 8145: 2 credits includes cooperative education

Credit 8146: 1 credit no cooperative education

Grade: 12

Prerequisite: Fashion Marketing 8140 or 8141

Students with a career interest in apparel and accessories marketing gain in-depth knowledge of the apparel and accessories industry and skills important for supervisory-management employment in apparel businesses. They develop advanced competencies unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/service technology, and supervision as well as academic skills (mathematics, science, English, and history/social sciences) related to the content are part of this course. Computer/technology applications supporting this course are studied.

SPORTS, ENTERTAINMENT, AND RECREATION MARKETING

Credits 8175: 2 credits includes cooperative education

Credit 8176: 1 credit no cooperative education

Grades: 10, 11, 12

Prerequisite: None

This introductory course helps students develop a thorough understanding of fundamental marketing concepts and theories as they related to the sports, entertainment, and recreation industries. Students will investigate the components of branding, sponsorships, and endorsements, as well as promotion plans needed for sports, entertainment and recreation events. The course also supports career development skills and explores career options. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

ADVANCED SPORTS, ENTERTAINMENT, AND RECREATION MARKETING

Credits 8177: 2 credits includes cooperative education

Credit 8178: 1 credit no cooperative education

Grade: 11, 12

**Prerequisite: Sports, Entertainment, and Recreation Marketing
8175 or 8176**

Students will build on prior knowledge of sports, entertainment, and recreation marketing. This course focuses on the principles of management and planning supported by research, financial, and legal concepts. Students will be able to plan and execute an event; develop a career plan, and establish a sports, entertainment, and recreation product/business. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

HOTEL/ MOTEL MARKETING

Credits 8160: 2 credits includes cooperative education

Credit 8161: no cooperative education

Grade: 11, 12

Prerequisite: None

In this specialized course, students with a career interest in the field of hospitality and recreation develop skills in the areas of hotel front-office procedures, human relations, food and beverage service, purchasing, tourism, travel, and sales promotion. In addition, students obtain a thorough understanding of the hotel-motel industry and the career options available. Academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/ technology applications supporting this course will be included.

ADVANCED HOTEL/MOTEL MARKETING

Credits 8162: 2 credits includes cooperative education

Credit 8163: 1 credit no cooperative education

Grade: 12

Prerequisite: Hotel/Motel Marketing 8160 or 8161

Students gain in-depth knowledge of the marketing functions within the hotel-motel industry and the management responsibilities for those functions. They develop advanced skills in the area of hotel-motel operation in which they choose to specialize.

Career & Technical Education

INTRODUCTION TO GRAPHIC COMMUNICATIONS (8458)

Grades: 9-12

Prerequisite: None

Credit: 1

Graphic design allows students to work with typed images, graphic illustrations, and photographs, to produce pleasing, well- balanced layouts for reproduction. Students will study the elements of design and use Adobe PageMaker, Photoshop, and Illustrator software to generate images. Lessons taught will include software usage, digital camera operation, and all basic steps for reproducing multiple copies of a graphic image with silkscreen and offset printing techniques.

ADVERTISEMENT DESIGN (847245)

Grades: 10-12

Prerequisite: Introduction to Graphic Communications

Credit: 1

Students will learn to design and create layouts that convey a particular message common to advertisements. They will learn how to manipulate text, graphics, and photographs so that they come together in pleasing designs. Major emphasis will be placed on using all aspects of the computer software that enable students to be creative to the point of delivering various design products. A study of how these products are reproduced in quantity will also be examined and experienced as students complete projects.

FOUNDATIONS OF TECHNOLOGY (8403)

Grades: 9-12

Prerequisite: Exploring Technology Education – MS

Credit: 1

This is the beginning high school course in the Design and Technology program. Students will acquire a foundation in technological material, energy, and information and apply processes associated with the technological thinker. Challenged by laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn further how and why technology works. Students work in groups to build and control systems with engineering in the development of a technology.

TECHNICAL DRAWING

(8435) 36 weeks

(8434) 18 weeks (Battlefield HS only)

Grades: 9-12

Prerequisite: None

Credit: 1

Students in this class will create technical drawings using the AutoCAD Design Academy software. Problem solving skills will be developed as students produce drawings in each of the following categories: line, orthographic, section, auxiliary, oblique, isometric, perspective, developments, civil engineering, working drawings, and three-dimensional drawings. This course provides a foundation for students interested in careers that include: engineering; architecture; drafting; surveying; illustration; animation; construction; model making etc. This course helps students develop the organizational skills necessary to attack problems systematically and methodically and to analyze and plan strategies for project completion.

ARCHITECTURAL DRAWING/DESIGN/CAD (843700; 843720)**Grades: 10-12****Prerequisite: Technical Drawing****Credit: 1**

Architectural Drawing/Design/CAD is an advanced drawing and design course, which provides students the opportunity to learn about the principles of architecture and increase understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential and community planning. Students use computer-aided drawing and design (CAD) equipment and established standards or codes. They prepare models to present and market architectural designs. The course provides information helpful for the homeowner/homebuilder and is especially beneficial to the future architect or engineer.

ENGINEERING DRAWING/DESIGN/CAD**(843600; 843620) 36 weeks****(8493) 18 weeks****Grades: 10-12****Prerequisite: Technical Drawing****Credit: 1**

Engineering Drawing/Design/CAD is an advanced drawing and design course that enables students to use a graphic language for product design, technical illustration, assembly, patent, and aeronautical drawings. It increases their understanding of drawing techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems

CONSTRUCTION TECHNOLOGY (8431)**Grades: 9-12****Prerequisite: None****Credit: 1**

Construction Technology provides students with introductory experiences relating to the construction industry. Laboratory activities will be in areas such as masonry, plumbing, electrical wiring, drywall, house framing, site planning, and roofing.

ELECTRONICS TECHNOLOGY (841600; 843620)**Grades: 10-12****Prerequisite: Basic math and algebra recommended****Credit: 1**

Electronics Technology is an introductory course that combines theory and hands-on activities and lab experiments to learn about electronic parts, how these components work together, and tool and equipment usage. The student will breadboard circuits and make necessary measurements and calculations to complete laboratory experiments.

POWER AND TRANSPORTATION TECHNOLOGY (8445)**Grades: 10-12 (Gar-Field 9-12)****Prerequisite: None****Credit: 1**

Power and Transportation Technology is a course that offers a student the opportunity to experience various methods of power transmission and transportation modes. Problem-solving activities and the development of critical thinking skills will be incorporated while working in the areas of small gas engines, hydraulics, pneumatics, electric motors, and various forms of transportation

INTEGRATED ENGINEERING SYSTEMS TECHNOLOGY I (IEST) (8425)**Grade: 11****Prerequisite: Foundations of Technology recommended****Credits: 1**

During the first year of the program, students will be introduced to various career fields in manufacturing and engineering. Emphasis will be placed on the major systems in automated manufacturing, including: design, electrical, mechanical, manufacturing processes, material handling, and quality control. Students will participate in teams, in a modular classroom setting, to produce manufacturing projects that demonstrate critical elements of manufacturing and develop critical thinking skills.

INTEGRATED ENGINEERING SYSTEMS TECHNOLOGY II (IEST) (8427)**Grade: 11****Prerequisite: Integrated Engineering Systems Technology I****Credit: 1**

This course will help students to develop an in-depth understanding of automation and its applications in manufacturing. Activities in this program will center on flexible manufacturing processes and Computer Integrated Manufacturing. Students work in teams to solve complex interdisciplinary problems that stem from the major systems in automated manufacturing

ENGLISH

ENGLISH 9 (113020)**Grade: 9****Prerequisite: Successful completion of Grade 8****Credit: 1**

Students analyze the elements of short story, drama, poetry, autobiography, biography, mythology, epic, and nonfiction, and develop an independent reading program. They compose narrative, literary, expository, and technical writings. Each unit of literary study involves increasingly complex texts, with an emphasis placed on the development of written and oral communication. Grammar instruction includes sentence formation, usage, and mechanics; and students develop vocabulary skills through a variety of methods. The skills of using the information management process are used to create a research paper.

ENGLISH 10 (114020)**Grade: 10****Prerequisite: Successful completion of English 9****Credit: 1**

Students analyze novels, poetry, essays, editorials, science fiction, and non-fiction from a variety of eras and cultures. Students also develop vocabulary and oral communication skills, use the information management process, and study grammar. Grammar instruction emphasizes sentence formation, usage, and mechanics. Compositions in the narrative, expository, analytical, technical, and persuasive modes reinforce skills from the grammar and literature units. Students develop reading strategies in increasingly complex texts as well as review and expand research skills through completion of a documented paper. Students develop and independent reading program.

ENGLISH 11 (115020)**Grade: 11****Prerequisite: Successful completion of English 10****Credit: 1**

Students critically analyze and evaluate relationships among American literature, history, and culture. Analysis of literary themes, movements and genres, vocabulary development, application of the information management process, the study of grammar, and oral communication skills are incorporated into this course. Narrative, analytical, expository, technical, and persuasive compositions reinforce grammar and literature skills. Students develop an independent reading program. Students refine research skills by completing a documented paper addressing a question, problem or issue. **Successful completion of the eleventh grade research paper is a requirement for successful completion of this course.**

ENGLISH 12 (116020)**Grade: 12****Prerequisite: Successful completion of English 11; students may enroll if they have successfully completed the English 11 course work but have not passed the research paper****Credit: 1**

Students critically analyze and evaluate relationships among British literature, history and other cultures. Analysis of literary themes, movements and genres, vocabulary development, application of the information management process, the study of grammar, and oral communication skills are incorporated into this course. Through writing narrative, analytical, expository, technical, and persuasive compositions, students reinforce skills studied in the grammar and literature units. Students develop an independent reading program. Students practice independent research skills through the completion of documented papers.

IB MIDDLE YEARS PROGRAM ENGLISH 9 (113051)**Grade: 9****Prerequisite: Successful completion of Grade 8 and interest in advanced study.****Credit: 1**

Middle Years Program English 9 prepares students planning to enroll in the International Baccalaureate Sequence of English classes. Students will complete all objectives of English 9 in accelerated program. Students expand speaking skills by creating presentations from group and individual research. In class studies, emphasis is placed on the reading and analysis of complex texts, and independent reading is expected. Students develop both grammar and vocabulary skills in conjunction with frequent writing in all expository modes. Development of critical analysis and support in thinking and writing are emphasized.

IB MIDDLE YEARS PROGRAM ENGLISH 10 (114051)**Grade: 10****Prerequisite: Successful completion of IB MYP English 9 or a grade of B or better in English 9, student interest in advanced study, and teacher recommendation.****Credit: 1**

Middle Years Program English 10 prepares students planning to enroll in International Baccalaureate English courses in Grades 11 and 12. Students will complete all English 10 objectives through an accelerated program using challenging in-depth readings. Grammar and vocabulary studies are structured to support reading and writing levels. Oral skills are honed in group and individual presentations and discussions. Formal writings are evaluated for close analysis, elaboration of details, and fluid articulation of ideas.

IB ENGLISH I (115051)**Grade: 11****Prerequisite: Successful completion of IB MYP English 10 or a grade of B or better in English 10, student interest in advanced study, and teacher recommendation.****Credit: 1**

While meeting all the objectives for English 11, students follow an accelerated, internationally based curriculum. IB English I is part one of a two year program in which students develop a knowledge of the literature and culture of both the United States and other countries. Reading from a variety of genres and texts, students develop and practice detailed and critical analysis in oral and written forms. Students produce two essays that are externally assessed by the International Baccalaureate Organization. **Successful completion of the eleventh grade research paper is a requirement for successful completion of this course**

IB ENGLISH II (116051) – Higher Level**Grade: 12****Prerequisite: Successful completion of IB English I with a grade of “C” or better.****Credit: 1**

The students in IB English II, while meeting all the objectives for English 12, complete the second year of the accelerated internationally based curriculum begun in IB English I. Students refine their skills in structuring ideas and argumentation in a logical, persuasive, and sustained manner in both oral and written work. Students engage in independent literary criticism of major works of literature through detailed study, supporting their ideas with precise and relevant examples. Successful completion of an internally assessed oral exam, two externally assessed essays, and two externally assessed written exams meet the requirements for a Higher Level International Baccalaureate Diploma or Certificate and may qualify for advanced standing in college and/or college credit.

CREATIVE WRITING I (117120)**Grades: 11-12 and 10 with Permission****Prerequisite: Successful mastery of Grade 9 and Grade 10 Language Arts objectives****Credit: 1**

Students write and revise extensively to develop voice and style. Students select topics in virtually all writing assignments. They experiment with a variety of subjects, genres, techniques, purposes, and audiences. They produce polished writing in fiction, non-fiction, poetry and drama. Students will submit their work for publication in the school’s literary magazine.

CREATIVE WRITING II (117720)**Grades: 11-12****Prerequisite: Successful completion of Creative Writing I****Credit: 1**

Students who have completed the first level of Creative Writing refine their skills in writing and revising to further develop their style. They examine the composing processes of professional writers and participate in the process of producing a literary magazine.

JOURNALISM I (120020)**Grades: 10-12****Prerequisite: Successful completion of previous English courses and teacher recommendation****Credit: 1**

Students develop basic skills in journalism. They study and write the news, feature, sports, editorial, and other forms of journalistic articles. They study interviewing, various types of research, legal rights and responsibilities, page design, photography, desktop publishing and advertising. They produce articles for publication in the mass media.

JOURNALISM II (121020)

Grades: 11-12

Prerequisite: Successful completion of Journalism I and journalism teacher recommendation

Credit: 1

Students produce a news publication. Working cooperatively, students apply skills and techniques learned in Journalism I.

PHOTO JOURNALISM/YEARBOOK (121520)

Grades: 10-12

Prerequisite: Tenth grade or higher; yearbook staff assignment. At Osbourn Park is Journalism I (120020)

Credit: 1

Students learn various aspects of publication while assisting in the production of the high school yearbook. Students participate in each step of production from planning the ladder diagram to distribution of the completed publication. This course may be taken more than once for credit.

IBMYP Introduction to Speech Communication and Theatre (130050)

Grade 10-12

Prerequisite: None

Credit: 1

Students are given instruction in the areas of Theatre Arts history, speech, and performance. During this process, students will learn to make the connections between theatre arts of different cultures and will learn to value drama and performance as a necessary contribution to society.

AN INTRODUCTION TO SPEECH COMMUNICATION (130020)

Grades: 9-12

Prerequisite: None

Credit: 1

Students develop their speaking skills, as well as learn the dynamics of speech and the categories of speech (forensics) competition. Students participate in the creative processes of oral interpretation.

IB THEORY OF KNOWLEDGE (TOK) (151550)

Grade: 12

Prerequisite: IB diploma candidacy or at least four IB classes taken concurrently

Credit: 1

IB Theory of Knowledge is a course required for IB Diploma candidates. It is designed to foster in students a habit of mind that reflects on human ways and limits of knowing as well as on the human ability to communicate these ways of knowing. Students will explore fundamental questions of epistemology by reflecting and questioning the basis of knowledge and experience, examining cultural and ideological bias, and by formulating rational arguments and value judgments of their own. Academic disciplines examined include language, history, logic, science, mathematics, ethics, and aesthetics. The course includes an externally assessed paper and an internally assessed oral presentation

ESOL

ESL COURSES CAN FULFILL THE FOLLOWING GRADUATION REQUIREMENTS:

- **English:** One of the four required English credits may be earned with ESL III or IV, but all ESOL students must pass English 11, English 11 SOLs, and the English 11 Research Paper.
 - ✓ The usual sequence for English is ESL III or IV, Eng 9, Eng 10, and Eng 11. Students may take ESL and Eng courses concurrently with ESOL teacher

recommendation. Students may take ESL III simultaneously with Eng 9 and ESL IV simultaneously with Eng 10 or Eng 11. Proficiency Level 2 students may be considered for placement in Sheltered Eng 9 on a case-by-case basis.

- **Elective Credit**
- **Sequential Electives** – if ESL III and IV is not replacing English 12
- **Foreign Language (World Languages)** – up to 2 credits, if not used for other credit
- **Foreign Language**–up to 2 credits

ESL I (5710) (5711) (5712) (5713) (5714)

Grades: 9-12

Prerequisite: None

Credit: 1/2-5 (as applicable to the state recommendation)

Students become familiar with American culture and the rules, responsibilities, and opportunities of students in an American high school. They learn the basic skills of listening comprehension, speaking, reading, and writing of English needed to function in a mainstream classroom. Students study survival English vocabulary, grammar, and language patterns through an integrated study of the basic concepts of social studies, math, science, and other subject areas. ESL I is a class for ESOL Level 1 students who have little to no English; they may or may not have previous formal schooling or literacy in their home language.

ESL II (5720) (5721) (5722) (5723)**

Grades: 9-12

Prerequisite: ESL I or ESOL Teacher Recommendation

Credit: 1/2-4 (as applicable to the state recommendation)

Students learn English with more focus on literacy skills and content-specific language and concepts that are aligned with the academic courses they are studying. Students learn English for the purpose of functioning in content classes. Students also continue to learn about American customs and culture. ESL II is a class for ESOL students at Level 2 program proficiency level.

ESL III (5730) (5732) (5733)**

Grades: 9-12

Prerequisite: ESL II or ESOL Teacher Recommendation

Credit: 1/2-1 (as applicable to the state recommendation)

Students continue to gain more proficiency in the English skills of listening, speaking, reading, and writing with the class work being more aligned to basic requirements, with adapted materials and appropriate accommodations, to the level of work of an English 9 class. Students continue to learn about American cultural nuances and prepare for academic classes. ESL III is a class for ESOL students at Level 3.

ESL IV (5731) (5734) (5735)**

Grades: 9-12

Prerequisite: ESL III or ESOL Teacher Recommendation

Credit: 1/2-1 (as applicable to the state recommendation)

Students refine all English language skills with regular or adapted classroom materials. Emphasis is on vocabulary for specific purposes and specific content-based instruction (science, social studies, and math concepts and language) including preparation and support of mainstream English classes or specific academic

ESL MATH (399920)

Grades: 9-12

Prerequisite: None

Credit: 1

This course is designed to present and reinforce elementary math skills in a condensed format using manipulatives and special materials appropriate to the level of students. Instruction will include number concepts, estimation, problem solving, operations, measurement, decimals and fractions. Target participants are level 1 or 2 students who have limited or no previous academic experience in math.

ESOL SHELTERED COURSES

ESL Sheltered Content Courses are sections of courses that are taught by certified content/academic teachers for ESOL students at proficiency Level 2 (*with ESOL teacher recommendation*), Level 3, and Level 4.

Courses are designed specifically for ESOL students who need additional strategies and accommodations and may be co-taught with an ESOL teacher and/or planned in collaboration with ESOL. Students are taught all regular SOL course objectives and receive content credit for that subject area course. Sheltered courses are very successful in helping ESOL students meet SOL requirements. Level 4 students should not be placed automatically in all sheltered classes. ESOL students should be scheduled into Sheltered courses based upon their individual needs and should be gradually mainstreamed into regular classes as quickly as possible.

Course numbers for Sheltered Classes are the same as for those of the regular academic courses but have a suffix of 79 for scheduling purposes. ESOL students need to work with their ESOL teachers and guidance counselors in their schools to know which courses have sheltered sections. These may vary from year to year.

ESOL ADJUNCT COURSES

****ESOL adjunct or back-up classes, taught by an ESOL teacher as one of the ESL II, III, or IV sections, provide reinforcement of the content of a regular or sheltered academic class. Generally adjunct courses are only recommended for ESOL students needing additional support. Emphasis is on the most difficult course-specific concepts and on helping to prepare students for SOL tests, if applicable.**

ENGLISH ADJUNCT COURSES

ESOL ADJUNCT ENGLISH 9 (ESL 571001)
ESOL ADJUNCT ENGLISH 10 (ESL 571122)
ESOL ADJUNCT ENGLISH 11 (ESL 572022)
Grades: 9-12

Prerequisite: ESL I or ESOL Teacher Recommendation
Credit: 1

ESOL students enrolled in the regular English class may be offered this class to support and reinforce all content objectives of the regular English course. Taught by the ESOL teacher, this course can count as ESL II, III, or IV.

MATHEMATICS ADJUNCT COURSES

ESOL ADJUNCT ALGEBRA I, Part 1 (ESL 571021)
ESOL ADJUNCT ALGEBRA I, Part 2 (ESL 571022)
ESOL ADJUNCT GEOMETRY (ESL 571121)
ESOL ADJUNCT ALGEBRA 1 (ESL 572021)
ESOL ADJUNCT ALGEBRA II (ESL 572121)

Grades: 9-12
Prerequisite: ESL I or ESOL Teacher Recommendation
Credit: 1

ESOL students enrolled in the regular math class listed above may be offered this class to support and reinforce all content objectives of the regular math course. Taught by the ESOL teacher, this course can count as ESL II, III, or IV.

SCIENCE ADJUNCT COURSES

ESOL ADJUNCT EARTH SCIENCE (ESL 572023)
ESOL ADJUNCT BIOLOGY (ESL 572123)
ESOL ADJUNCT CHEMISTRY (ESL 572323)

Grades: 9-12

Prerequisite: ESL I or ESOL Teacher Recommendation

Credit: 1

ESOL students enrolled in the regular science class may be offered this class to support and reinforce all content objectives of the regular science course. Taught by the ESOL teacher, this course can count as ESL II, III, or IV.

SOCIAL STUDIES ADJUNCT COURSES

ESOL ADJUNCT WORLD HISTORY & GEOGRAPHY
from 1500 (ESL 572024)

ESOL ADJUNCT US & VA GOVERNMENT (ESL 572224)
ESOL ADJUNCT US & VA HISTORY (ESL 573024)

Prerequisite: ESL I or ESOL Teacher Recommendation

Credit: 1

ESOL students enrolled in the regular history class may be offered this class to support and reinforce all content objectives of the regular history course. Taught by the ESOL teacher, this course can count as ESL II, III, or IV

Family & Consumer Science

All Family and Consumer Science courses will count toward meeting the one-credit practical arts requirement for graduation.

DISCOVERING FAMILY & CONSUMER SCIENCE
(8219)

Grades: 9-10

Prerequisite: None

Credit: 1

Students enrolled in Discovering Work and Family Sciences focus on managing resources to achieve individual goals; making informed consumer choices; creating and maintaining a living environment; making decision related to nutrition, clothing, and housing. Teachers highlight the basic skills of math, science, and communications when appropriate in the content.

CAREER/LIFE PLANNING (8226, 8227)

Grades: 9, 10, 11, 12

Credit: (8226 = 1/2, 8227 = 1)

Students enrolled in Life Planning focus on developing a life management plan; caring for self and others to ensure wellness; building and maintaining constructive relationships; building and maintaining strong, functional families; developing lifelong career planning; coordinating personal and career responsibilities; and establishing a plan for using resources. Critical thinking, practical problem solving, and entrepreneurship opportunities within the area of personal, family, and career planning are emphasized. Teachers

highlight the basic skills of mathematics, science, and communication with appropriate in content.

CHILD DEV/PARENTING (823201)

Grades: 9, 10, 11, 12

Prerequisite: None

Credit: 1

Students enrolled in Parenting focus on assessing the impact of the parenting role in society; taking responsibility for individual growth within the parent-child relationship; preparing for a healthy emotional and physical beginning for parent and child; meeting developmental needs of children and adolescents; building positive parent-child relationships; using positive guidance and discipline to promote self-discipline, self-respect, and socially responsible behavior; obtaining parenting information, support, and assistance; and planning ways that families and society can share in nurturing children and adolescents. Critical thinking, practical problem solving, and entrepreneurship opportunities within the area of parenting responsibilities and education are emphasized. Teachers highlight the basic skills of math, science, and communication when appropriate in the content.

INDIVIDUAL DEVELOPMENT (8210)

Grades: 9, 10, 11, 12

Prerequisite: None

Credit: 1

Students enrolled in Individual Development focus on encouraging personal potential of self and others throughout the life-span; enhancing positive views of self and others; managing stressful situations; formulating a plan to achieve career goals; forming healthy, caring relationships with family members and peers; managing conflict; choosing responsible ways to express oneself; and evaluating the importance of responsible parenting to individuals, families, and society. Critical thinking, practical problem-solving, and entrepreneurship opportunities within the area of individual mental, emotional, and physical health are emphasized. Teachers highlight the basic skills of math, science, and communication when appropriate in the content.

FAMILY RELATIONSHIPS (8223, 8225)

Grades: 9, 10, 11, 12

Prerequisite: None

Credit: (8223 = 1/2, 8225 = 1)

Students enrolled in Family Relations focus on analyzing the significance of the family, nurturing human development in the family throughout the life span, analyzing factors that build and maintain healthy family relationships, developing communication patterns that enhance family relationships, dealing effectively with family stressors and conflicts, managing work and family roles and responsibilities, and analyzing social forces that influence families across the life span. Critical thinking, practical problem solving, and entrepreneurship opportunities within the area of family responsibilities and services are emphasized. Teachers highlight the basic skills of mathematics, science, and communication when appropriate in content.

NUTRITION AND WELLNESS (8228, 8229)

Grades: 9, 10, 11, 12

Prerequisite: None

Credit: (8228 = 1/2, 8229 = 1)

Students enrolled in Nutrition and Wellness focus on making choices that promote wellness and good health, analyzing relationships between psychological and social needs and food choice; choosing foods that promote wellness; obtaining and storing food for self and family; preparing and serving nutritious meals and snacks; selecting and using equipment for food preparation; and identifying strategies to promote optimal nutrition and wellness of society. Critical thinking, practical problem solving, and entrepreneurship opportunities within the area of nutrition and wellness are emphasized. Teachers highlight the basic

skills of math, science, and communication when appropriate in the content.

CHILD LIFE AND LITERATURE (907220)

Grades: 10-12

Prerequisite: A "C" average in English

Credit: 1

Child Life and Literature is designed for students who wish to pursue careers dealing with children (teaching, parenting, pediatrics, children's librarian, etc.) or students who have an interest in learning more about children and their literature. Child Life and Literature integrates the development of the child and the various genre of literature, teaches group dynamics, coping skills, and real-life skills. Activities such as puppet shows, dramatizations, skits, marionette shows, video evaluations and comparisons, read-alongs, and sing-alongs will be an integral part of this course. The class will require 10 hours of hands-on experience with young children. The class is taught in a team approach with an English teacher. Teachers highlight the basic skills of math, science, and communication when appropriate in the content.

GRADS PARENT EDUCATION (8278)

Grades: 9-12

Prerequisite: Application and Interview Required

Credit: 1 credit

This course has been designed to meet the needs of teen parents. Students enrolled in the Graduation, Reality, and Dual-role Skills Program (GRADS) concentrate on developing self-esteem; using effective communication skills; maintaining positive relationships; promoting wellness, prenatal, and postnatal care; evaluating the cost of parenthood; adjusting to parenthood; understanding child development; providing child care; managing family relationships; exploring careers; applying employability skills; managing economic resources and expenditures; and balancing work and family. Teachers highlight the basic skills of math and science when appropriate in the content. Completer sequences and certifications do not apply..

GRADS WORK STUDY (821301)

Grades: 9-12

Prerequisite: Application and Interview Required

Credit: 1 credit

This is an on-site internship course designed to meet the needs of students interested in careers working with infants and toddlers. The thirteen Child Development Associates competencies are explored throughout the course. Hands-on experience operating the infant toddler center is an integral part of this class. Teachers highlight the basic skills of math, science, and communication when appropriate in the content. Twenty hours of off-site work, family or volunteer activities is required. Completer sequences and certifications do not apply.

EARLY CHILDHOOD EDUCATION I (8285)

Grade: 10, 11, 12

Prerequisite: Application and Interview Required

Credits: 2

Students prepare to be primary providers of home-, family-, or institution-based child care services by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record-keeping; and referral procedures. Critical thinking, practical problem solving and entrepreneurship opportunities within the field of early childhood education are emphasized. Practical experiences under the supervision of the instructor are required. Students also prepare for continuing education leading to careers in early childhood fields.

EARLY CHILDHOOD EDUCATION II (8286)

Grade: 11, 12

Prerequisite: Early Childhood Education I

Credits: 2

Students focus on occupational skills needed by personnel employed in early childhood-related fields, such as education, medical/health care, social services, counseling, psychology, and entrepreneurship. Work-based experiences under the supervision of the instructor are required. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education are emphasized.

VIRGINIA TEACHERS FOR TOMORROW / TEACHER CADET (9062)

Grade: 12

Prerequisite: 3.0 GPA and Application

Credit: 1

This course introduces seniors to a career in teaching and education. The primary elements of the curriculum components are the learner, the school, and the teacher and teaching. The components are intentionally broad in scope and provide a great deal of flexibility based on the career interest of a student. In addition to the fundamental curriculum components, all students are required to participate in an internship outside the Virginia Teachers for Tomorrow classroom. The internship may involve the pres-school level through Grade 12.

World Language

FRENCH I (511020)

SPANISH I (551020; 551030)

Grades: 9-12

Prerequisite: None

Credit: 1

Students use the language authentically, communicating in real-life situations from the beginning of the course. They learn the sound system and basic grammar and vocabulary, primarily through use of the language in meaningful contexts. All basic skills of the language are learned: understanding, speaking, reading, and writing. Emphasis is on communication in interpersonal situations. Culture is an integral part of the entire course

FRENCH II (512020)

SPANISH II (552000; 552020; 552030)

Grades: 9-12

Prerequisite: Level I (“B “ or better recommended) and teacher recommendation

Credit: 1

Students continue to learn the language through its use in realistic contexts with more complex grammatical structures. Additional listening, speaking, writing and reading skills are acquired through practice with authentic materials and in real-life situations. The study of customs and culture is an integral part of the course

FRENCH III (513020)

SPANISH III (553020; 553030)

Grades: 9-12

Prerequisite: Level II (“B” or better recommended) and teacher recommendation

Credit: 1

The emphasis for study continues on all four skills of communication, listening, speaking, reading, and writing. Students continue to work toward the mastery of the essential elements of grammar and the development of a sufficient vocabulary to use the language proficiently in most situations. Reading skills continue development through use of more challenging authentic materials. Students’ writing skills are expected to be increasingly complex and sophisticated. Students

continue to develop an awareness and appreciation of other cultures and customs in their community and elsewhere.

LATIN I (531020)

Grades: 9-12

Prerequisite: None

Credit: 1

The student of Latin I is introduced to the morphology of an inflected language with the primary focus on the noun system and indicative mood of verbs. The syntax of the language builds from words and phrases to sentences. The student develops a basic Latin vocabulary with opportunities to enlarge his/her English vocabulary through derivative study. Classical pronunciation to aid in reading comprehension is taught. The student is introduced to the customs of daily life and the geography of ancient Rome.

LATIN II (532020)

Grades: 9-12

Prerequisite: Latin I (“C+” or better recommended) or equivalent and teacher recommendation

Credit: 1

Latin II is an elective course offered in Grades 9-12. The student continues a study of Latin morphology with the primary focus on the subjunctive mood of verbs, infinitives and participles, increasingly sophisticated syntactic concepts are introduced, and the student expands his/her comprehension skills through readings of appropriate difficulty. The student continues to develop a Latin vocabulary and to enlarge his/her English vocabulary through derivative study. The student studies the people, places, and events that shaped Roman history.

LATIN III (533020)

Grades: 10-12

Prerequisite: Latin II (“C+” or better recommended) or equivalent, teacher recommendation

Credit: 1

Latin III is an elective course offered in Grades 10-12 that serves to synthesize the skills already mastered, to complete the corpus of grammar, and to introduce specialized syntactic constructions. The course provides for translation practice, reading comprehension, an introduction to rhetorical devices, and both Latin and English vocabulary expansion through a study of Latin selections. The student develops an understanding of the relationship between the works read and their social, economic, political, and historical contexts.

SPANISH NATIVE SPEAKERS PROGRAM

Spanish for Native Speakers Courses allow native or heritage speakers of Spanish to continue to learn Spanish in an accelerated manner commensurate with their pre-assessed skills. Students who take these courses may earn a foreign language credit. The goal is for both native and non-native speakers of Spanish to learn together in the advanced courses beyond Level III .

SPANISH FOR NATIVE SPEAKERS I- BEGINNING LEVEL (551050)

Grades: 9-12

Prerequisite: Native speakers of Spanish & Recommendation of teacher based on assessment of student’s skills

Credit: 1

This course is designed for Spanish-speaking students at the high school level. It recognizes the natural skill of native speakers who were born in the US and never had formal education in a Spanish-speaking country, or students who may have come from a Spanish –speaking country and due to many circumstances may not have had the opportunity to receive formal education, yet are proficient in their understanding and speaking of Spanish for interpersonal purposes. The course will build on these existing listening and speaking skills, and also develop basic

reading and writing skills, with an emphasis on grammatical concepts. The course will try to tap the natural potential of native speakers to fill the gap of skill acquisition in general, especially emerging literacy, instill pride in a rich heritage, and allow students to succeed to their full potential.

SPANISH FOR NATIVE SPEAKERS II- INTERMEDIATE LEVEL (552050)

Grades: 9-12

Prerequisite: Successful Completion of Spanish for Native Speakers I or Native Speakers of Spanish & Recommendation of teacher based on assessment of student's skills

Credit: 1

This course is designed for Spanish-speaking students at the high school level. This level is for Spanish-speaking native speakers who have some proficiency in all skills, to include listening, speaking, reading and writing, but at a level commensurate with students who have had interrupted or limited formal schooling in a Spanish-speaking school. It also recognizes the natural skill of native speakers and emphasizes expansion and not replacement of the student's existing language skills. The course will continue to tap the natural potential of native speakers to fill the gap of skill acquisition, instill pride in a rich heritage, and allow students to succeed to their full potential. The course will also continue to build on existing listening and speaking skills, and especially continue to develop reading and writing skills.

SPANISH FOR NATIVE SPEAKERS III- ADVANCED LEVEL (553050)

Grades: 11-12

Prerequisite: Successful Completion of Spanish for Native Speakers II or Native Speakers of Spanish & Recommendation of teacher based on assessment of student's skills

Credit: 1

This course is designed for Spanish-speaking students at the high school level. Who have had formal study of Spanish in a school setting in their native countries or have an advanced level of literacy. The course continues to recognize the natural skill of native speakers and emphasizes expansion and not replacement of the student's existing language. The course will continue to tap the natural potential of native speakers to fill the gap of skill acquisition, instill pride in a rich heritage, and allow students to succeed to their full potential. The course will build on existing reading and writing skills and expand authentic readings by authors of the Spanish-speaking world and require advanced compositions and projects.

INTERNATIONAL BACCALAUREATE PROGRAM

IB MYP FRENCH II (511220)

IB MYP SPANISH II (550720)

Grades: 9-10

Prerequisite: French I, and Spanish I, ("C+" or better recommended) or equivalent and teacher recommendation

Credit: 1

This course is part of the IB sequence to prepare students for completion of the IB Program and the external exam in level V. Students will be able to: use French, or Spanish effectively as a means of practical communication; gain insight into the life and civilization of the communities where the language is spoken, and into the local and standard aspects of language; have positive attitudes towards speakers of other languages and an appreciation of, and empathy for, other cultures; and have a basis of communication skills necessary for future study in the IB Foreign Language strand of courses. The integration of the IB MYP Areas of Interaction and Assessment Criteria will be used as a means of broadening student experience, placing context, and helping students to develop attitudes and values based on knowledge and skills. This course will prepare students for the IB MYP French, or Spanish III course.

IB MYP FRENCH III (513255)

IB MYP SPANISH III (553255)

Grades: 9-10

Prerequisite: French II, and Spanish II ("C+" or better recommended) or equivalent and teacher recommendation

Credit: 1

This course is part of the IB sequence to prepare students for completion of the IB Program and the external exam in level V. Students will be able to: use French, or Spanish effectively as a means of practical communication; gain insight into the life and civilization of the communities where the language is spoken, and into the local and standard aspects of language; have positive attitudes towards speakers of other languages and an appreciation of, and empathy for, other cultures; and have a basis of communication skills necessary for future study in the IB Foreign Language strand of courses. The integration of the IB MYP Areas of Interaction and Assessment Criteria will be used as a means of broadening student experience, placing context, and helping students to develop attitudes and values based on knowledge and skills. This course will prepare students for the IB French or Spanish IV course

IB FRENCH IV (514250)

IB SPANISH IV (554250)

Grades: 11-12

Prerequisite: Successful completion of IBMYP Level III with a C+ or better; can take in grade 10 if started sequence in middle school

Credit: 1

IB Foreign Language IV is designed to develop proficiency in highly motivated language students. Students will be expected to master all the objectives of the Level IV curriculum in a more rigorous and accelerated manner. The course seeks to develop all skills emphasizing language for communication, using authentic materials in preparation for the International Baccalaureate Language B Exam. An introduction to the International Baccalaureate Language B Program will be an integral part of this class.

IB LATIN IV (534050)

Grades: 11-12

Prerequisite: Successful completion of Latin III

Credit: 1

IB Latin IV is the first in a two-year classical language course offered in the International Baccalaureate elective group. Students who have successfully completed Level III may enroll in their junior year. It is the aim of this course to prepare students to read and analyze original Latin texts through an accelerated and rigorous manner. In addition, students will develop an awareness and understanding of the Roman World and its contribution to modern culture.

IB FRENCH V (515250)

IB SPANISH V (555250)

Grade: 12

Prerequisite: Successful completion of IB Level IV with a C or better

Credit: 1

This is an advanced level course designed to strengthen fluency and proficiency in both oral and written foreign languages and to prepare students for the International Baccalaureate Language B Exam. The student will be able to speak the language with sufficient accuracy to participate in formal and informal conversations with ease. The student will be able to appreciate, discuss and comment (orally and in writing) on various literary forms. The in-depth study of literary works, contemporary articles and the review of complex linguistic structures will substantiate the course. Compositions will be on literary and issue-oriented themes. Self-expression will be encouraged through individual and group activities, oral presentations, and writing assignments.

IB LATIN V (535050)**Grade: 12****Prerequisite: Successful completion of IB Latin IV****Credit: 1**

IB Latin V is the second in a two-year sequence that fulfills the Group VI elective requirement for the IB Diploma Programme. Students may enroll in this course during their junior or senior year after successful completion of IB Latin IV or demonstration of equivalent proficiency. Students will demonstrate advanced interpretive and analysis skills in working with Latin texts. Students will take the IB Latin V examination at the end of the course.

IB SPANISH A2 SL (551522)**Grades: 11-12****Prerequisite: IB Native Speakers of Spanish or equivalent****Credit: 1**

This course is designed for native Spanish-speaking students at the high school level in the IB Program. It recognizes the natural skill of native speakers and emphasizes expansion and not replacement of the student's existing language. Students will use the language for purposes and situations involving sophisticated discussion, argument and debate. The course will tap the natural potential of native speakers to fill the gap of skill acquisition, enhance natural oral and aural skills, instill pride in a rich heritage, and allow students to succeed to their full potential. The course is based on the study of both language and literature.

IB SPANISH A2 HL (556250)**Grades: 11-12****Prerequisite: IB Spanish A2 SL****Credit: 1**

The IB Spanish for Fluent Speakers HL course is a two-year course of study which meets the requirements of the IB program. Students focus on the study of language and literature according to the prescribed IB guidelines. At the same time students further develop their creative and critical thinking abilities, increasing skills and knowledge necessary for them to be contributing world citizens and life-long learners. This course prepares students for the required Higher Level IB examination to be taken at the end of the senior year. Successful completion of this course and an additional Language A course qualified the student for the Bilingual IB Diploma.

Health & Physical Education

HEALTH AND PHYSICAL EDUCATION I (7300)**IBMYP PE I (730050)****Grades: 9-12****Prerequisite: None****Credit: 1**

Students will participate in classroom instruction and in individual and team activities designed to develop attitudes, knowledge, and skills necessary to maintain personal fitness for a lifetime. Fifty percent of the course focuses on classroom instruction in fitness, nutrition, mental health, the functioning body, family relationships, disease prevention and control, and substance abuse prevention. The curriculum for IBMYP physical education will incorporate the MYP five Areas of Interaction, strategies and criteria.

HEALTH, PHYSICAL EDUCATION AND CLASSROOM DRIVER EDUCATION II (7405)**IBMYP HPE II (740550)****Grades: 9-12****Prerequisite: Successful completion of Health and Physical Education I****Credit: 1**

Students continue to participate in classroom instruction and in individual and team activities designed to develop attitudes, knowledge, and skills necessary to maintain personal fitness for a lifetime. Fifty percent of the course focuses on classroom instruction in family life education, first aid including CPR, and classroom driver education. Classroom driver education consists of a minimum of 36 periods of structured learning experiences aimed at developing safe and efficient drivers. Completion of driver education through private instruction does not exempt the student from completing all course objectives. The curriculum for IBMYP physical education will incorporate the MYP five Areas of Interaction, strategies and criteria.

ADVANCED PHYSICAL EDUCATION/PERSONAL FITNESS (764023)**Grades: 11-12****Prerequisite: Successful completion of Health and Physical Education I and II with a "B" or better and/or recommendation from the Department Chair****Credit: 1**

Advanced Physical Education/Wellness places emphasis on why exercise and fitness are important, what one's own fitness needs are, and how to attain and maintain personal fitness for a lifetime. Additional emphasis is placed on the five health-related components of fitness including cardiovascular fitness, muscular strength and endurance, flexibility, and body fat control. Individual student fitness levels are assessed. Instruction includes emphasis on health risk factors related to lifestyles and how nutrition affects wellness. The course may include classroom instruction as well as physical activity. This course may be taken more than once for credit.

**ADVANCED PHYSICAL EDUCATION/WEIGHT TRAINING
Emphasis on weight training and conditioning (765000)****Grades: 11-12****Prerequisite: Successful completion of Health and Physical Education I and II with a "B" or better and recommendation from the Department Chair****Credit: 1**

This Advanced Physical Education/Wellness section places emphasis on weight training and conditioning. The student will understand how and why weight training and conditioning benefits the student's ability to perform athletically. The student will learn to assess one's own fitness needs and how to attain and maintain personal fitness for a lifetime. Additional emphasis is placed on the five health-related components of fitness including cardiovascular fitness, muscular strength and endurance, flexibility, and body fat control. Individual student fitness levels will be assessed and the students will formulate personal goals and develop individual fitness programs. Instruction includes emphasis on health risk factors related to lifestyles and how nutrition affects wellness. This course may be taken more than once for credit.

PREVENTION AND CARE OF ATHLETIC INJURIES I (766020)**Grades: 11-12 (10th grade with permission from instructor)****Prerequisite: Successful completion of Health and Physical Education I and II, and/or teacher recommendation****Credit: 1**

These courses, taught by the school's certified athletic trainer, place emphasis on recognition, prevention, and treatment of common sports injuries. In addition, students learn anatomy and physiology of the human body, first aid, nutrition, and career opportunities. Students will

be required to participate in 9 hours per 9-week grading period of after school practicum for successful completion. Completion of both Athletic Training courses may be taken as part of the sequencing requirement for graduation.

PREVENTION AND CARE OF ATHLETIC INJURIES II (766120)

Grades: 11-12

Prerequisite: Successful completion of Prevention and Care of Athletic Injuries I with at least a “B”, and teacher recommendation
Credit: 1

These courses, taught by the school’s certified athletic trainer, continue to place emphasis on recognition, prevention, and treatment of common sports injuries. In addition to classroom instruction, students in this course will be required to complete 75 hours of practical ATC work with one team during the school year. Completion of both Athletic Training courses will fulfill the course sequencing requirement for graduation.

MATHEMATICS

Graphing calculators are an integral part of all mathematics courses.

ALGEBRA I, PART 1 (3131)

Grades: 9-10

Prerequisite: Successful completion of Pre-Algebra, teacher recommendation, passing score on 8th grade Math SOL

Credit: 1

Algebra I, Part 1 covers approximately one-half of the Algebra I curriculum and employs an interactive, hands-on approach to teaching algebra concepts. The course uses the graphing calculator and real-world and workplace applications as the platform for learning algebra. Emphasis is placed on making connections in algebra to arithmetic, geometry, and statistics. The course is designed to meet the needs of the contextual learner and those who may have difficulty covering the complete Algebra I curriculum in a single year.

ALGEBRA I, PART 2 (3147)

Grades: 10-11

Prerequisite: Successful completion of Algebra I, Part 1

Credit: 1

Algebra I, Part 2 employs an interactive, hands-on approach to teaching algebra concepts. The course uses the graphing calculator and real-world and workplace applications as the platform for learning algebra. Emphasis is placed on making connections in algebra to arithmetic, geometry, and statistics. The course is designed to meet the needs of the contextual learner and the student who needs additional time to complete the Algebra I curriculum. **Students must take the Virginia SOL test for Algebra I.**

ALGEBRA I (3130)

Grades: 8-9

Prerequisite: “C” or better in Pre-Algebra, passing score on 8th grade Math SOL

Credit: 1

This course extends students’ knowledge and understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and analysis of data derived from real-world phenomena. Emphasis is placed on making connections in algebra to arithmetic, geometry, and statistics. Critical thinking skills, calculator and computer technologies are essential components in this course. **Students must take the Virginia SOL test for Algebra I.**

GEOMETRY (3143)

Grades: 9-11

Prerequisite: Successful completion of Algebra I or Algebra I, Part 2

Credit: 1

Students investigate properties of triangles, quadrilaterals, polygons, circles, and solids using inductive and deductive reasoning. Conjectures about properties and relationships are developed inductively and then verified deductively. Transformations, algebra, and technologies are used as tools to solve geometry problems. **Students must take the Virginia SOL test for Geometry.**

ALGEBRA II (313500)

Grades: 10-12

Prerequisite: Grade of “C” or better in Algebra I and Geometry

Credit: 1

Algebra II expands and clarifies concepts introduced in Algebra I. New topics include sequence and series, polynomial functions, logarithms, quadratic systems, and conics. Emphasis is on algebraic processes and their use in problem solving. The course will enhance the student’s understanding of the function concept and deductive reasoning in algebra. Students must take the Virginia SOL test for Algebra II. Algebra II is required for an Advanced Studies Diploma.

INTERNATIONAL BACCALAUREATE COURSES

IBMYP ALGEBRA I (313050)

Grades: 7-9

Prerequisite: Teacher recommendation and “B” or better in Pre-Algebra

Credit: 1

Algebra I includes all objectives in the PWCS Algebra I curriculum and the Virginia Standards of Learning. In addition, enrichment and extension topics such as linear programming, absolute value functions, and real-life math applications are emphasized. Critical thinking skills and use of graphing calculator technology are also important components in this course. Alternative assessments such as projects, oral and written communication and cooperative learning activities are a regular part of this course. **Students must take the Virginia SOL test for Algebra I.**

IBMYP GEOMETRY (314350)

Grades: 8-10

Prerequisite: A grade of “B” or better in IBMYP Algebra I and teacher recommendation

Credit: 1

Geometry is an accelerated program of study for students interested in pursuing the IB level math courses. The course includes all objectives from the Geometry curriculum with particular emphasis on algebraic connections. Additional topics in trigonometry and transformational graphing are included and the graphing calculator is used throughout the course. **Students must take the Virginia SOL test for Geometry.**

IBMYP ALGEBRA II (313551)

Grades 9-11

Prerequisite: A grade of “B” or better in IBMYP Algebra I and IBMYP Geometry, and teacher recommendation

Credit: 1

Algebra II is the pre-requisite for IB Math Studies and IB Mathematics SL I. The course incorporates and expands the knowledge from both IBMYP Algebra and Geometry. The course includes all objectives from the PWCS Algebra II curriculum with particular emphasis on the development and completion of projects emphasizing the areas of interaction of the Middle Years Program and internationalism. A graphing calculator is used throughout the course. As in all courses, students will acquire technical writing skills within the mathematics curriculum. **Students must take the Virginia SOL test for Algebra II. Algebra II is required for an Advanced Studies Diploma.**

IBMYP ALGEBRA II/TRIGONOMETRY (313755)**Grades: 10-11****Prerequisite: A grade of “B” or better in IBMYP Algebra I and IBMYP Geometry and teacher recommendation****Credit: 1**

Algebra II/Trigonometry is an accelerated course including all objectives in the Algebra II curriculum and Trigonometry curriculum as stated in the Virginia Standards of Learning. This course is the prerequisite for IB Mathematics HL I. **Students must take the Virginia SOL test for Algebra II. Algebra II is required for an Advanced Studies Diploma.**

IB MATHEMATICS SL I (319851)**Grades: 10-11****Prerequisite: Successful completion of IBMYP Algebra II / Trigonometry****Credit: 1**

IB Mathematics SL I is the first year in a two-year mathematics course that fulfills the Group 5 requirement in the IB Diploma Program. The course is designed for strong math students who are preparing for studies in subjects such as chemistry, economics, psychology and business administration. The goal of this course is to provide students with a solid foundation of vectors, matrices, statistics, probability and pre-calculus topics. Students will use technology as a tool for learning and develop an awareness of global contributions to the field of mathematics sciences. Students wishing to study subjects such as physics, engineering and technology should take the Mathematics HL course.

IB MATHEMATICS SL II (319852)**Grades: 11-12****Prerequisite: Successful completion of IB Mathematics SL I****Credit: 1**

IB Mathematics SL II is the second year of the two-sequence in mathematics that meets the requirements of the IB Diploma Program. Students who have successfully completed IB Mathematics SL I may enroll in this course. This course builds on and extends the knowledge base of IB Mathematics SL I. IB Mathematics SL II is the study of concepts, techniques, and applications of calculus. Students in this course will complete two portfolio projects and will take the IB Mathematics SL examination.

IB MATHEMATICAL STUDIES (SL) (319650)**Grade: 12****Prerequisite: Successful completion of IBMYP Algebra II****Credit: 1**

IB Mathematical Studies (SL) is intended to provide a realistic mathematical course for students with varied backgrounds and abilities. The skills needed to cope with the mathematical demands of a technological society are developed but no great technical expertise is required. Students likely to need to use mathematics in the pursuit of a science or mathematics career are advised to consider IB Mathematics SL. A substantial piece of work in the form of a project is required for this course. Topics include sets, logic, probability and statistics, functions, simple sequences, linear programming, vectors, matrices, geometry, and trigonometry.

IB MATHEMATICS HL I (319751)**Grade: 11****Prerequisite: A grade of “B” or better in IBMYP Algebra II/ Trigonometry and teacher recommendation****Credit: 1**

IB Mathematics HL I is the first year in a two-year mathematics course that fulfills the Group 5 requirement in the IB Diploma Program. The course is designed for the strong math student whose next formal experience with mathematics will be college level courses in calculus, linear algebra, finite mathematical structures or probability and statistics. The goal of this course is to provide students with a strong

foundation of pre-calculus concepts, techniques, and applications. Students will use technology as a tool for learning and develop an awareness of global contributions to the field of mathematics sciences.

IB MATHEMATICS HL II (319750)**Grade: 12****Prerequisite: A grade of “B” or better in IB Mathematics Higher Level I and teacher recommendation****Credit: 1**

IB Mathematics HL II is the second year of the two-year sequence in mathematics that meets the requirements of the IB Diploma Program. Students who have successfully completed IB Mathematics HL I may enroll in this course during their senior year. This course builds on and extends the knowledge base of IB Mathematics HL I. IB Mathematics HL II is the study of concepts, techniques, and applications of calculus including derivatives, integrals, vectors, sequences, and series. Students in this course will complete three portfolio projects and will take the IB Mathematics HL examination.

MATHEMATICS ELECTIVES**ADVANCED PLACEMENT STATISTICS (3192)****Grades: 11-12****Prerequisite: Successful completion of Algebra II and teacher recommendation****Credit: 1**

The Advanced Placement Statistics course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- Exploring Data: observing patterns and departures from patterns, anticipating patterns
- Planning a Study: deciding what and how to measure
- Producing models using probability theory and simulation,
- Inference: drawing conclusions from sample data.

Students who successfully complete the course and the Advanced Placement Statistics Examination may receive credit for a one-semester introductory college statistics course

ALGEBRA, FUNCTIONS, AND DATA ANALYSIS (313400)**Grades: 11-12****Prerequisite: Algebra I and Geometry****Credit: 1**

This course is designed for students who have completed Algebra I and Geometry but need time to further develop algebraic and geometric concepts to ensure success in Algebra II. Students will model real world phenomena using algebra; analyze and represent algebraic relationships and functions using tables, equations, and graphs; and select and use appropriate statistical methods to analyze data.

ADVANCED MATHEMATICS (316001)**Grades: 11-12****Prerequisite: Successful completion of Algebra II****Credit: 1**

Advanced Mathematics extends both algebra and trigonometry topics. Emphasis is on functions and their inverses, equations and inequalities, graph theory, matrices, sequences and series, conic sections, and logarithms. Trigonometry topics include triangular and circular definitions of the trig functions, trig identities, and solutions of trig equations. This course is designed for students who do not plan to continue with math studies. It does not meet the prerequisite for Calculus AB or BC.

DISCRETE MATHEMATICS (3154)

Grades: 11-12

Prerequisite: Successful completion of Algebra II

Credit: 1/2

This elective mathematics course provides students with the opportunity to combine previously learned mathematics with selected concepts of recent mathematics to solve problems created by modern society. In this course, the main focus is problem solving in a discrete setting. Techniques that are not considered in the current traditional courses of algebra, geometry, and calculus will be utilized. As students solve problems, they will analyze and determine whether or not a solution exists (existence problems), investigate how many solutions exist (counting problems), and focus on finding the best solution (optimization problems).

PROBABILITY AND STATISTICS (3190)

Grades: 11-12

Prerequisite: Successful completion of Algebra II

Credit: 1/2

The Probability and Statistics course includes theory of probability, description of statistical measurements, probability distributions and statistical inference. The course is designed for the student who plans to enter such fields as business, economics, education, psychology, sociology, medicine, etc., which require statistics for their effective pursuit. Successful completion of this course will be adequate preparation for the usual college courses in these fields. In addition, any student who is preparing for study in mathematics, physical sciences or engineering will eventually find a need for one or more courses in statistics. This course will provide the student the necessary fundamental background in probability and statistics.

COMPUTER MATHEMATICS (318400)

Grades: 9-12

Prerequisite: Completed or currently enrolled in Geometry

Credit: 1

The computer mathematics course is intended to provide students with experiences in using the computer/calculator to solve problems that can be set up as mathematical models. Programming concepts, problem-solving strategies, and mathematical applications are integrated throughout the course. This course is designed for students who want only one Computer course

ADVANCED COMPUTER MATHEMATICS (318480)

Grades: 9-12

Prerequisite: "B" or better in Algebra I and completed or currently enrolled in Geometry

Credit: 1

The computer mathematics course is intended to provide students with experiences in using the computer/calculator to solve problems that can be set up as mathematical models. Programming concepts, problem-solving strategies, and mathematical applications are integrated throughout the course. The advanced course covers all topics in the regular Computer Math class as well as others. This course prepares students for Computer Science

IBMYP COMPUTER SCIENCE (319950)

Grades: 10-12

Prerequisite: Successful completion of Geometry with a "B" or higher in Algebra I with teacher recommendation

Credit: 1

Computer Science is the first course of a two-year sequence. The focus of this course is to provide the student with a conceptual background in computer science. Topics include computer architecture, data representation, operating systems, computing systems in society, and software development. Students will implement the major stages of software development using the high level language JAVA. Topics in JAVA will include loops, selections, and arrays.

IB COMPUTER SCIENCE (SL) (318551)

Grades: 11-12

Prerequisite: Successful completion of IBMYP Computer Science

IB Computer Science (SL) is the second year of a two-year curriculum. Arrays, records, and file manipulation are addressed and the software development process is implemented. System life cycle, network topologies, and computers in society are covered. Students are required to produce a dossier demonstrating the knowledge of the software development cycle and mastery of the basic constructs of the programming language. Students are also required to sit for the SL examination.

IB COMPUTER SCIENCE (HL) (318552)

Grades: 11-12

Prerequisite: Successful completion of IB Computer Science (SL)

Credit: 1

This course covers advanced topics in computer science. Advanced topics in software development include sorting and searching algorithms, dynamic data structures, stacks and queues, recursion, and algorithm evaluation. Additional topics in Boolean logic, data representation, and system life cycles will be taught. Students are required to produce a dossier and to take the IB Computer Science (HL) examination.

MUSIC

Class Piano (9255)

Grades: 9-12

Prerequisite: None

Credit: 1/2 or 1

Students who enroll in the guitar class or the piano class will be taught the necessary music fundamentals required to successfully play these instruments. Scales, music vocabulary, dynamics, technique, rhythmic skills and improvisation will be emphasized. All students will learn the beginning level technical and ensemble skills necessary for performance. Students enrolling in the guitar class will be required to furnish their own textbook and acoustic (non-electric) guitar. Piano students will be required to furnish their own text and headphones. Some limited performance opportunities may be provided in these classes. These courses may be taken more than once for credit.

ORCHESTRA

Intermediate Orchestra (923800; 923820)

Advanced Orchestra (9239)

Orchestra Ensemble (9251)

Chamber Ensemble (925300) (925320)

IBMYP Orchestra (923850)

Grades: 9-12

Prerequisite: None, except for advanced orchestra

Credit: 1

Students who enroll in the high school orchestra develop technical and ensemble skills through the study of related orchestral literature. Students receive fundamental training in the proper playing of a stringed instrument and study literature commensurate with their level of ability. Members of this class form the representative string performing group for the school. Some after-school rehearsals and performances are required of all students as a part of this course. These courses may be taken more than once for credit. The curriculum for IBMYP Orchestra will incorporate the MYP five Areas of Interaction, strategies and criteria.

CHOIR

Varsity Choir (928500; 928520)

Advanced Varsity Choir (9286)

Concert Choir (9289)

Men's Choir (9282)

Treble Choir (9260)

Vocal Ensemble (9280)

IBMYP Choir (928550)

Grades: 9-12

Prerequisite: Auditions expected for all choirs except Varsity and Bass/Men's Choir

Credit: 1

The high school choral program offers various courses to develop the student's musical skills based on his/her level of ability. Classes in varsity choir, concert choir, bass choir, treble choir, or vocal ensemble allow students to learn a variety of vocal skills through the study of related choral literature. Students in these classes develop technical facility and proficient musicianship through a variety of performance experiences. Through group performances, solos, and ensembles, the student is exposed to

standard choral repertoire encompassing various styles and periods of music. Some after-school rehearsals and performances are required of all students as a part of these courses. These courses may be taken more than once for credit. The curriculum for IBMYP chorus will incorporate the MYP five Areas of Interaction, strategies and criteria.

WOMEN'S CHAMBER CHOIR (9284)

Grades: 10-12

Prerequisite: One year of high school choir

Credit: 1

This class offers the opportunity for girls in Grades 10-12 to study and perform three and four-part music for the female voice at an advanced level. Basic vocal skills will be expanded and a high level of music reading will be encouraged. The class will be selected by audition only and is limited to 25-30 singers

BAND

Ninth Grade Band (923200)

Band/Brass (923270)

Band/Percussion (923271)

Band/Woodwind (923272)

Intermediate Band (923300; 923320)

Advanced Band (9234)

Jazz Band (925000; 925020 1 credit) (925021; 925022 ½ Credit)

IBMYP Band (923350)

Grades: 9-12

Prerequisite: Audition required for Intermediate, Advanced, and Jazz Bands (8 requires audition)

Credit: 1

The high school band program offers various courses to develop the student's musical skills. Classes in 9th grade band, intermediate band, advanced band, marching band or jazz band allow students to learn technical and ensemble skills through the study of related literature. Some after-school rehearsals and performances are required of all students as an integral part of these courses. Marching band is offered at all schools as part of the high school band program and is an offering for students who are also enrolled in a concert band class. These courses may be taken more than once for credit. Students must provide their own instruments or make arrangements with the teacher to rent school-owned equipment. The curriculum for IBMYP band will incorporate the MYP five Areas of Interaction, strategies and criteria.

MARCHING BAND

Marching Band (924000)

Credit: 1/2

Marching band is offered at all schools as part of the high school band program and is an offering for students who are also enrolled in another band class offering. This course may be taken more than once for credit.

IB MUSIC I (922750)

Grade: 11

Prerequisite: Two years of high school music

Credit: 1

IB Music I is part one of a two-year program resulting in an International Baccalaureate Certificate or Diploma. The course develops an in-depth understanding of music theory. Study will include intervals, choral development, transposition, composition, analysis, ear training, sight-singing, and basic piano skills. Students will be required to participate in high school performing organizations and take private lessons during the course

IB MUSIC II (922850)

Grade: 12

Prerequisite: Successful completion of IB Music I

Credit: 1

IB Music II is part two of a two-year program resulting in an International Baccalaureate Certificate or Diploma. The course is a continuation of IB Music I, with emphasis on music history. Students will explore all time frames of music history. Topics covered will include Gregorian Chant, baroque music, classical music, 20th Century music, and score reading. Students will be required to keep a composition portfolio and perform a lecture-recital. Depending on their skill and experience, students may prepare for either higher level or subsidiary level examinations. Students will prepare for the IB Music HL exam.

MCJROTC

MARINE JROTC COURSE SEQUENCE

LEADERSHIP EDUCATION I (MCJROTC) (791312)

Grades: 9-11

Prerequisite: Student must be able to participate in physical education program

Credit: 1

The course of instruction is a combined program of classroom instruction and practical application designed to emphasize leadership education, citizenship, self-discipline, and character development. Basic training in leadership tenets, physical fitness, health, drill and ceremonies, military customs and courtesies, general military subjects, grooming standards, uniform wear and care and military organization are taught as part of the cadets' orientation to the Marine Corps and as a means to develop leadership qualities taught in class. Cadets are expected to wear designated Marine Corps uniforms on a weekly basis, and adhere to appropriate grooming standards. Extracurricular activities include Drill Team/Color Guard, orientation trips, community service projects, and social events. The first year also gives the new cadets exposure to personal growth and responsibility, and establishes a foundation of military structure and tradition. Students wishing to enroll in JROTC programs must meet program entry requirements.

LEADERSHIP EDUCATION II (MCJROTC) (791612)

Grades: 10-12

Prerequisite: Successful completion of Leadership Education I, and student must be able to participate in physical education program.

Credit: 1

This course builds upon knowledge and experience attained during Leadership Education I. The course continues to stress classroom instruction and practical application designed to emphasize leadership education, citizenship, personal growth and responsibility, self-discipline, character development, and future career considerations. Training in leadership, physical fitness, drill and ceremonies, military customs and courtesies, general military subjects, and military history are taught as part of the cadets' further orientation to the Marine Corps and as a means to develop leadership qualities taught in class. Cadets are expected to wear designated Marine Corps uniforms on a weekly basis, adhere to appropriate grooming standards, and perform leadership roles within the MCJROTC cadet organization. Extracurricular activities include Drill Team/Color Guard, orientation trips, community service projects, and social events. Students wishing to enroll in JROTC programs must meet program entry requirements.

LEADERSHIP EDUCATION III (MCJROTC) (791812)

Grades: 11-12

Prerequisite: Successful completion of Leadership Education I and II, and student must be able to participate in physical education program.

Credit: 1

This course builds upon the knowledge and experience attained during Leadership Education I and II. The course continues to stress classroom instruction and practical application designed to emphasize leadership education, citizenship, personal growth and responsibility, self-discipline, and character development. Training in leadership, physical fitness, drill and ceremonies, military customs and courtesies, general military subjects, and military history are taught as part of the cadets' further orientation to the Marine Corps. During this year, there is an increased emphasis on the consideration and exploration of post high school educational and career opportunities. Cadets are expected to wear designated Marine Corps uniforms on a weekly basis, adhere to appropriate grooming standards, and perform leadership roles within the MCJROTC cadet organization. Extracurricular activities include Drill Team/Color Guard, orientation trips, community service projects, and social events. Students wishing to enroll in JROTC programs must meet program entry requirements.

LEADERSHIP EDUCATION IV (MCJROTC) (791912)

Grade: 11-12

Prerequisite: Successful completion of Leadership Education I, II, and III, and student must be able to participate in physical education program.

Credit: 1

The course allows senior cadets the opportunity to serve as both a training facilitator for the MCJROTC instructional staff and as a mentor for junior cadets. Senior cadets are expected to display positive attitudes, requisite leadership ability, and perform in leadership roles within the MCJROTC cadet organization. Senior cadets are assigned to Leadership Education I, II, or III classes to provide leadership, serve as role models, conduct training, and mentor junior cadets as a means to enhance their leadership education and prepare them for a career after high school. Cadets are expected to wear designated Marine Corps uniforms on a weekly basis, adhere to appropriate grooming standards, and perform leadership roles within the MCJROTC cadet organization. Extracurricular activities include Drill Team/Color Guard, orientation trips, community service projects, and social events. Students wishing to enroll in JROTC programs must meet program entry requirements.

SCIENCE

EARTH SCIENCE I (421020)

Grades: 9-12

Prerequisite: None

Credit: 1

Earth Science is a laboratory based, course that provides students with an opportunity to explore the various physical phenomena that affect the earth. This course, which encompasses research design concepts, helps students become more aware of their surroundings through the study of astronomy, space science, meteorology, oceanography, physical geology, and environmental resources. Students are required to take the Earth Science I Standards of Learning assessment at the end of this course.

BIOLOGY I (431020)

Grades: 9-12

Prerequisite: None

Credit: 1

Biology I is a laboratory-based course that includes the study of ecology, taxonomy, cellular chemistry, genetics, microbiology, and physiology. These areas are developed within a framework of principle biological theories with an emphasis on critical thinking and science process skills. *Note: This course may utilize animal dissection techniques as an instructional strategy. Students who conscientiously object to these exercises will participate in Division-approved activities that provide comparable learning experiences.* Students are required to take the Biology I Standards of Learning assessment at the end of this course.

CHEMISTRY I (441020)

Grades: 10-12

Prerequisite: Successful completion of one year of laboratory science; Algebra I with a grade of "C" or better

Co-requisite: Enrollment in Geometry

Credit: 1

Chemistry I emphasizes the qualitative and quantitative study of substances and the changes that occur in them. Students will investigate using various lab techniques and apply mathematical skills with the use of chemical quantities in problem solving. A survey of concepts includes atomic structure, chemical bonding, formulas and equations, stoichiometry, and other calculations based on molar relationships, phases of matter and the kinetic theory, acid-base theory, and simple organic chemistry. This course is intended for college preparatory and general education purposes. Students are required to take the Chemistry I Standards of Learning assessment at the end of this course.

SOL-BASED PHYSICS (451020)

Grades: 10-12

Prerequisite: Successful completion of Algebra I; Geometry with a "C" or better

Co-requisite: Enrollment in Algebra II or higher

Credit: 1

SOL-Based Physics is a standard first year course that covers all topics as required by the Virginia Standards of Learning (SOL) for physics. Students will utilize mathematical calculations while applying scientific methodology to investigate Newtonian mechanics; fluids (hydrostatics and hydrodynamics); wave phenomena; electricity and magnetism; thermodynamics; and selected topics in modern physics. This course is fast paced, and students are expected to have strong study and mathematical skills. Students will be instructed on how to design, conduct, analyze, and interpret data and present results collected from investigation. Written, detailed laboratory reports are required.

INTERNATIONAL BACCALAUREATE SCIENCE COURSES

IB ENVIRONMENTAL SYSTEMS (SL) (451151)

Grades: 11-12

Prerequisite: Completion of Pre-IB Biology; Pre-IB Chemistry with a grade of “C” or better.

Credit: 1

This course enables students to develop a coherent perspective on the environment. The course uses the concepts and terminology associated with a system approach to study. These principles are subsequently applied to the study of natural ecosystems, their component parts, and the functional relationships that maintain their dynamic integrity. Topics include global cycles and physical systems, human population, freshwater ecosystems, conservation and biodiversity, and pollution. Students are required to take the IB Environmental Systems exam. *Diploma candidates taking IB Biology may not use this course as their sixth subject.* Students are required to take the Earth Science Standards of Learning assessment at the end of this course.

IBMYP BIOLOGY I (431050)

Grades: 9-12

Prerequisite: Successful completion of Grade 8 Science; teacher recommendation

Credit: 1

IBMYP Biology is a survey of the animal, plant, and protist kingdoms, including consideration of the classification, distribution, and life processes of the major groups of each kingdom. Students will use scientific research methods to investigate scientific principles. Extensive laboratory work will be a part of the course, and students are required to submit written lab reports. Students will explore the skills used by practicing biologists and how biology can help solve environmental problems. *Note: This course may utilize animal dissection techniques as an instructional strategy. Students who conscientiously object to these exercises will participate in Division-approved activities that provide comparable learning experiences.* Students are required to take the Biology Standards of Learning assessment at the end of this course.

IB BIOLOGY I (HL) (438050)

Grade: 11

Prerequisite: Successful completion of IBMYP Biology; IBMYP Chemistry I; teacher recommendation

Credit: 1

IB Biology is the first year of an overview of the major principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms. Laboratory work is an integral part of this course and students are required to submit written laboratory reports. Key points of the course are structure and function, universality versus diversity, and equilibrium within systems. *Note: This course may utilize animal dissection techniques as an instructional strategy. Students who conscientiously object to these exercises will participate in Division-approved activities that provide comparable learning experiences.*

IB BIOLOGY II (HL) (439050)

Grade: 12

Prerequisite: Completion of IB Biology I with a grade of “C” or better

Credit: 1

IB Biology II is an introduction to advanced anatomy and physiology and plant biology. A review of IB Biology I principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms is included. Students are required to take the IB examination at the end of the course. Laboratory work is an integral part of this course and students are required to submit written

laboratory reports. *Note: This course may utilize animal dissection techniques as an instructional strategy. Students who conscientiously object to these exercises will participate in Division-approved activities that provide comparable learning experiences.*

IBMYP CHEMISTRY (441051)

Grades: 10-12

Prerequisite: Successful completion of one year of laboratory science; Algebra I with a grade of “C” or better

Credit: 1

This course includes the major concepts of chemistry, including atomic structure and bonding, formulas and equations, stoichiometry, oxidation-reduction, thermodynamics, chemical equilibrium, acid-base theory, and simple organic chemistry. Students will use scientific research methods to investigate scientific principles. Laboratory experiments are designed to illustrate major concepts and to reinforce the IB Group 4 rubric. Students will be required to submit written laboratory reports. Students are required to take the Chemistry Standards of Learning assessment at the end of this course.

IB CHEMISTRY I (HL) (448050)

Grade: 11

Prerequisite: Successful completion of IBMYP Chemistry I; teacher recommendation

Credit: 1

IB Chemistry I is the first year of a survey course of the major principles of chemistry including the structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics, thermodynamics, acid-base theory, and organic chemistry. Emphasis is on problem solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary chemistry to include experimental design. Students will be required to submit written laboratory reports.

IB CHEMISTRY II (HL) (449050)

Grade: 12

Prerequisite: Successful completion of IB Chemistry I with a grade of “C” or better

Credit: 1

IB Chemistry is the second year of a survey course of the major principles of chemistry. Emphasis is on research techniques, advanced laboratory techniques, advanced problem solving and synthesis of prior knowledge to investigate IB option topics. With a satisfactory IB exam score, students may receive credit for introductory college chemistry. Students will be required to submit written laboratory reports.

IB PHYSICS (SL) (458050)

Grades: 11-12

Prerequisite: Successful completion of IBMYP Physics with a grade of “C” or better; IBMYP Algebra II/Trigonometry with a grade of “B” or better

Credit: 1

IB Physics I is an extremely fast-paced, rigorous course following the IB Standard Level curriculum. Building on their background from IBMYP Physics, students will study mechanics, heat, electromagnetism, light, sound, and modern physics in greater depth. Students will design and implement their own laboratory investigations and will be graded using IB assessment criteria. They will participate in the interdisciplinary “Group 4 Project” and will sit for the Standard Level examination at the end of the course.

EARTH SCIENCE II: OCEANOGRAPHY (425020)**Grades: 11-12****Prerequisite: A grade of “C” or better in Earth Science; Biology I or Chemistry I with a grade of “C” or better** *Note: Course work in Chemistry is recommended.***Credit: 1**

Oceanography is a second level Earth Science course designed to be a more in-depth treatment of the oceanography concepts presented in first year Earth Science. It is a broad survey course dealing mainly with physical oceanography and covering such topics as the geology and geography of ocean basins; physical properties of sea water; marine chemistry; salinity and density; circulation of the oceans, waves and tides; and oceanographic instruments, tools, and methods. Emphasis is also placed on marine biology, ocean policy, and ocean ecology.

EARTH SCIENCE II: ASTRONOMY (426020)**Grades: 11-12****Prerequisite: A grade of “C” or better in Earth Science; a grade of “C” or better in Algebra I; a grade of “C” or better in either Biology I or Chemistry I****Credit: 1**

Astronomy is a second level Earth Science course designed to be a more in-depth, mathematical treatment of the astronomical concepts presented in introductory Earth Science. Topics such as the universe, universal laws, galaxies, stellar evolution, the solar system and its motion, and the exploration of space will be discussed.

BIOLOGY II: SURVEY OF ADVANCED TOPICS IN BIOLOGY (432000)**Grades: 11-12****Prerequisite: Successful completion of Biology I and Chemistry I with a “C” or better****Credit: 1**

Biology II: Survey of Advanced Topics in Biology is an academically rigorous, in-depth, second year study of selected areas of biology that allows highly motivated students to delve more deeply into life systems and processes. Extensive laboratory work is part of this course. Emphasis is placed on research skills and techniques. *Note: This course utilizes animal dissection techniques as a major instructional strategy. Students who conscientiously object to these exercises will participate in Division-approved activities that provide comparable learning experiences.*

BIOLOGY II: ECOLOGY (434033)**Grades: 11-12****Prerequisite: Successful completion of Advanced Earth Science and Pre-AP Biology; concurrent enrollment or completion of Chemistry I****Credit: 1**

Ecology is an academically rigorous, in-depth, second year study of biological and ecological principles governing higher levels of organization (populations, communities, ecosystems). Concepts that will be covered include adaptation and natural selection; the physical environment and climate; population ecology, growth models, and life history patterns; communities, competition, parasitism, mutualism, and human interactions; ecosystem productivity, energy flow, nutrient cycling, and biogeochemical cycles; and biogeography, biodiversity, and global environmental change. The science of ecology is dedicated to an understanding of the relationships between organisms and their environment and is often at the center of public policy disputes related to the environment; therefore, students will learn how ecological research is becoming increasingly important and prominent throughout the world.

WORLD HISTORY and GEOGRAPHY from 1500 (2221)**Grade: 9****Prerequisite: Assignment to Grade 9****Credit: 1**

This is a survey of world history from 1500 to the present with a concentration on modern developments in western civilization. Course topics include: the Reformation, the Age of Discovery, Absolutism, the Scientific and Industrial Revolutions, the Enlightenment, the development of nation-states, nationalism, and the Age of Imperialism, 20th Century conflicts, and independence movements and world religions and the contemporary world.

WORLD GEOGRAPHY (2210)**Grade: 10****Prerequisite: Assignment to Grade 10 or above****Credit: 1**

The focus of this course is the study of the world’s peoples, places, and environments, with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world’s population and cultural characteristics, landforms and climates, economic development, and migration and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Using geographic resources, students will employ inquiry, research, and technology skills to ask and answer geographic questions. Particular emphasis is placed on students’ understanding and applying geographic concepts and skills to their daily lives.

U.S. and VIRGINIA HISTORY (2360)**Grade: 11****Prerequisite: Assignment to Grade 11****Credit: 1**

The study of the nation’s history provides the intellectual foundations for responsible citizenship. The origins of American ideals and institutions are examined. A study of major events, issues, and personalities of the past provides a perspective for understanding contemporary issues and problems. The role of Virginia in the development of the United States is included. Topics included for study: Exploration and Colonization, European Economic Influences and Slavery in the Americas, the American Revolution, the Constitution and Early National Period, Civil War and Reconstruction, the Progressive Era, U.S. as Emerging World Power, World War II, the Cold War, Civil Rights Movements and the Contemporary U.S.

U.S. and VIRGINIA GOVERNMENT (2440)**Grade: 12****Prerequisite: Assignment to Grade 12****Credit: 1**

The American system of national, state, and local government, including the role of the United States in global affairs, is analyzed. Basic constitutional principles, rights and responsibilities of citizenship, political beliefs and ideologies, as well as free market economic principles, and the organization and operation of our political institutions are studied. Democratic beliefs and the importance of participation in the democratic process are emphasized.

INTERNATIONAL BACCALAUREATE COURSES

IBMYP WORLD HISTORY and GEOGRAPHY from 1500

(222150)

Grade: 9

Prerequisite: Assignment to Grade 9

Credit: 1

IBMYP World History is a survey of world history from 1500 to present with a concentration on modern developments in western civilization and includes: the Reformation, the Age of Discovery, Absolutism, the Scientific and Industrial Revolutions, the Enlightenment, the development of nation-states, nationalism, and the Age of Imperialism, 20th Century conflicts and independence movements, world religions and the contemporary world. Students are trained in historical analysis by discussion, research, and oral and written presentation. Students analyze documents for their origin, purpose, value and limitations. These skills are the foundation for the four year IB sequence and are a critical component of IB assessments.

IBMYP/AP GOVERNMENT AND POLITICS: COMPARATIVE

(245050)

Grades: 10-12

Recommended prerequisite: IBMYP English 9 and IBMYP World History from 1500

Credit: 1

This college level course includes topics such as: sovereignty, authority, and power; political institutions; citizens, society, and the State; political and economic change; and public policy. Case studies in the governments of Great Britain, China, Iran, Mexico, Russia, and Nigeria provide context for exploring the topics of the course. Analytical writing is required. *In May, students take the AP Examination to qualify for advanced standing and/or credit in college. Students pursuing the IB Diploma take this course as sophomores. IB History certificate candidates take this course during their sophomore or junior year.*

IB HISTORY I: HISTORY OF THE AMERICAS (HL) (236051)

Grades: 11-12

Prerequisite: Successful completion of IBMYP World History,

IBMYP/AP Government and Politics: U.S. or Comparative

Credit: 1

This is a survey course of U.S., Canadian, and Latin American history from early European contacts with American Indians and the people of the First Nation through the 20th Century including analysis of the U.S. Civil War, industrialization, expansion, and the Latin American dictatorships. The course focuses on the American region's historical experience, and political, economic, and social systems. Students will demonstrate historical analysis by discussion, presentation, and written work including the IB History Internal Assessment. *This is the first course in a required two-year sequence of IB diploma level history culminating with a series of external examinations including a full examination on this regional study and may provide college level credit at many colleges and universities.*

IB HISTORY II: TOPICS IN TWENTIETH CENTURY HISTORY (HL) (238750)

Grade: 12

Prerequisite: Successful completion of IB History I

Credit: 1

This survey course of 20th Century World History includes topics such as: causes, practices, and effects of war; the rise and rule of single-party states; East-West relations after 1945; nationalists and independence movements; decolonization; and the emergence and problems of new nations. This course will continue to stress political, economic, and social systems as well as require students to further develop their skills of interpretation and analysis through historiography. The course culminates in a series of external assessments that include document-

based questions, short essay response and research papers which provide the possibility of college credit. *This is the second in a two course sequence for the IB history certificate and is required for the IB diploma.*

SOCIAL STUDIES ELECTIVE COURSES

AP GOVERNMENT AND POLITICS: U.S. (2445)

Grade: 11-12

Prerequisite: Teacher recommendation

Credit: 1

This college level course in U.S. political science includes topics such as: Constitutional underpinnings of U.S. government, political beliefs and behaviors, political parties, interest groups, and mass media, institutions of national government, public policy, and civil rights and liberties. Analytical writing will be required, both in essays developed within the framework of the class and in papers developed as a result of research assignments. *In May, the students will take an Advanced Placement Government Examination to qualify for advanced standing and/or credit in college.*

IB ECONOMICS (280150)

Grade: 12

Prerequisite: IBMYP/AP Government and Politics: U.S. or

Comparative and Algebra II

Credit: 1

This academically rigorous course focuses on the choices that must constantly be made by individuals, firms, and governments, which affect both their own economic well being and that of society as a whole. The questions of "What?" "How?" and "For whom?" are central to the field of economics. Topics will be approached from an international perspective. The course emphasizes the study of economic development as a part of the solution to contemporary real world problems. *The course culminates in an external assessment that provides the possibility of college credit.*

IB GEOGRAPHY (IB2210)

Grades: 11-12

Credit: 1

In this college level course, students will develop a global perspective and a sense of world interdependence by understanding the relationship between people, place, and environment. Additional topics include: environmental quality; planning and management of resources for present and future generations; the relevance of geography in analyzing contemporary world issues; issues of social justice, equality and respect for others and an appreciation of diversity. Students will explore a wide range of geographical methodologies and apply appropriate techniques of inquiry including Geographic Information Systems technologies to develop solutions to geographic related issues and problems. *The course culminates in an external assessment that provides the possibility of college credit.*

IB SOCIAL AND CULTURAL ANTHROPOLOGY (SL) (237450)

Grades: 11-12

Prerequisite: Interest in the subject

Credit: 1

IB Social and Cultural Anthropology is a college level comparative study of human societies and culture. It explores both the universal principals of social and cultural life and characteristics of specific societies and cultures. Topics include small groups, as well as kinship relations, symbolism, exchange, political organizations, social control and gender. The course examines society from the small scale to the complex industrial scale, as well as modern nation states. *The course culminates in an external assessment that provides the possibility of college credit.*

PSYCHOLOGY (2900)

Grade: 12

Prerequisite: Assignment to Grade 12

Credit: 1

Psychology will introduce the students to the study of individual human behavior. Students explore subjects studied by behavioral scientists and apply psychological concepts to everyday human problems and life. Topics will include the scientific methods used in psychology, human growth and development, the study of personality, and mental health and behavioral disorders.

SOCIOLOGY (2500)

Grade: 12

Prerequisite: Assignment to Grade 12

Credit: 1

Problems and issues about social behavior, organizations, and institutions of people are examined. The study includes an examination of the structure and the function of groups, the variations in the social order and the dynamics of change in a social environment. There is focus upon the development of skills for participating more effectively in contemporary society by examining issues and seeking solutions to problems involving the interactions of people.

SPECIAL EDUCATION

SPECIAL EDUCATION COURSES CAN FULFILL THE FOLLOWING GRADUATION REQUIREMENTS:

- **Employ courses can fulfill Sequential Elective requirement**
- **Elective**

COMPENSATORY SKILLS I (7866)

COMPENSATORY SKILLS II (7867)

COMPENSATORY SKILLS III (7868)

COMPENSATORY SKILLS IV (7869)

Grades: 9-12

Prerequisite: Any student whose Individualized Education Program (IEP) indicates the appropriateness of the compensatory skills course offering. Students can take Compensatory Skills each year up to four years.

Credit: 1/4 per semester

Compensatory Skills is designed to provide students with individualized remediation and compensatory skills in their specific academic area(s) of need as identified through the eligibility and IEP process.

EMPLOY I (9083)

Grades: 9-12

Credit : 1

The focus of EMPLOY I is career awareness. Students will have opportunities to learn about their personal preferences, interests, and a variety of careers and occupations, and begin to build their self-advocacy skills.

EMPLOY II (9085)

Grades: 10-12

Prerequisite: It is recommended that a student complete EMPLOY I before enrolling in EMPLOY II.

Credit: 1

The focus of EMPLOY II is the development of employability and life management skills. Students are provided opportunities to develop communication skills, independent living skills, personal/social skills, and job search and retention skills.

EMPLOY III (9087) & EMPLOY IV (9030)

Grades: 10-12

Prerequisite: It is recommended that a student complete EMPLOY I and/or EMPLOY II before enrolling in EMPLOY III & EMPLOY IV

Credit: EMPLOY III – 1 credit and EMPLOY IV – 1 credit

EMPLOY III and IV are taken concurrently during the same school year with classes scheduled back-to-back periods. The focus for EMPLOY III and EMPLOY IV is to reinforce and enrich the goals of EMPLOY I and EMPLOY II, as well as vocational exploration and the development of marketable job skills.

EMPLOY V (9031)

Grades: 10-12

Prerequisite: It is recommended that a student complete EMPLOY I and/or EMPLOY II before enrolling in EMPLOY V

Credit: 1

The focus of EMPLOY V is to provide students with an opportunity to apply their self-awareness, employability, self-advocacy, and life management skills in order to obtain and retain employment. During the school year, students complete a minimum of 540 hours of competitive employment.

LEARNING STRATEGIES I (7897)

Grades: 9-12

Prerequisite: Any student who is receiving special education services whose Individualized Education Program (IEP) indicates the appropriateness of the Learning Strategies I course offering.

Credit: 1

The Learning Strategies classes provide direct instruction utilizing the Strategic Instruction Model (SIM), or Kansas University Strategies, to enable students to experience success in high school. The focus of the course is to provide direct, explicit instruction in academic and cooperative thinking strategies. It is recommended that students take Learning Strategies I in ninth grade, although it is available in Grades 9-12.

LEARNING STRATEGIES II (7898)

Grade: 9-12

Prerequisite: Student must complete Learning Strategies I

The Learning Strategies classes provide direct instruction utilizing the Strategic Instruction Model (SIM), or Kansas University Strategies, to enable students to experience success in high school. The focus of the course is to provide direct, explicit instruction in academic and cooperative thinking strategies. Students must take Learning Strategies I before Learning Strategies II. It is recommended that students take Learning Strategies I in ninth grade, although it is available in Grades 9-12.

SOCIAL SKILLS I (7890)

Grades: 9-12

Prerequisite: Any student who is receiving special education services and whose Individualized Educational Program (IEP) indicates the appropriateness of the Social Skills I course offering.

Credit: 1

This course will provide students with direct instruction in specific social skills using the Skillstreaming and Prepare social skills programs. The purpose of this course is to increase academic achievement through the teaching and remediation of social skills. When completed, students will be able to demonstrate appropriate behavior in changing environments, effective communication skills, positive relationships with others, project a positive self-image, and utilize social skills in the learning process.

**PRINCE WILLIAM COUNTY PUBLIC SCHOOLS
STUDENT ACADEMIC/CAREER PLANNING CARD
ACADEMIC PLANS**

Name _____
Middle School _____
High School _____

Diploma 22 credits – Standard 24 credits - Advanced

Standard Diploma

<u>Discipline Area</u>	<u>Stand.Unit</u>	<u>Ver. Unit</u>
English.....	4.....	2
Mathematics ¹	3.....	1
Lab.Science ²	3.....	1
History & Social Sciences ³	3.....	1
Health & PE.....	2	
Fine or Prac. Arts.....	1	
Electives ⁴	6	
Student Selected Test.....		1
Total.....		6

¹ includes 2 from: Alg. I, Geom., Alg. II or math higher than Alg. and Geometry

² includes 2 from: Ear.Sci., Bio., Chem., Phy.

³ must include: Wld. Hist., US/VA Hist., US/VA Gov't.

⁴ must include at least 2 sequential electives

Advanced Studies Diploma

<u>Discipline Area</u>	<u>Stand.Unit</u>	<u>Ver. Unit</u>
English.....	4.....	2
Mathematics ¹	4.....	2
Lab.Science ²	4.....	2
History & Social Sciences ³	4.....	2
Health & PE.....	2	
Foreign Language ⁴	3	
Fine or Prac. Arts.....	1	
Electives.....	2	
Student Selected Test.....		1
Total.....		9

¹ minimum of 3 courses among: Alg. I, Geom., Alg. II, or high math

² minimum of 3 courses among Ear. Sci., Bio., Chem., Phy.

³ Wld. Hist., Wld. Geog., US/VA Hist., US/VA Gov't

⁴ three years of one lang., two years of two languages

Grade 7	School Yr.		
Course Name	Stand. Unit	Verified Unit	
World Lang.			
Math			

Grade 9	School Yr.		
Course Name	Stand. Unit	Verified Unit	
English 9			
Math			
World History			
Science			
9 HPE			
Foreign Lang.			
Elective			

Grade 11	School Yr.		
Course Name	Stand. Unit	Verified Unit	
English 11			
Math			
US/VA History			
Science			
Elective			
Elective			
Elective			

Grade 8	School Yr.		
Course Name	Stand. Unit	Verified Unit	
World Lang.			
Math			

Grade 10	School Yr.		
Course Name	Stand. Unit	Verified Unit	
English 10			
Math			
Science			
10 HPE			
Foreign Lang.			
Elective			
Elective			

Grade 12	School Yr.		
Course Name	Stand. Unit	Verified Unit	
English 12			
US/VA Gov't.			
Math			
Science			
Foreign Lang.			
Elective			
Elective			

Eleventh Grade Research Paper _____
incomplete, passed, proficient