New Courses for 2013-2014 Program of Studies

Course Title	Grade	Prerequisite(s)	Course Description
Career & Technical Education			
Digital Imaging Technology IV	10, 11, 12	Digital Imaging Tech I, II, III, IV	This course is designed for students who plan to pursue a career or hobby in the field of Arts, Technology and Design. Emphasis will be placed on individual assignments as well as completing projects for actual clients to get experience in the field. Students will have the opportunity to become an Adobe Certified Associate in Visual Communications with Adobe Photoshop. Students will also work to finalize their digital portfolio which will include their best work from all levels.
Business Law	10, 11, 12	None	Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens. Students gain practical knowledge and life skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminatl law, tort law, international law, family/domestic law, employment law, and careers in the legal profession.
PVCC Culinary Arts	11, 12	Introduction to Culinary Arts	Provides students an opportunity to refine skills in serving, dining room management, and other skills learned in Intro to Culinary Arts. Students prepare for occupations such as chef/cook, baker/pastry helper, pastry decorator, hospitality worker, dietetic aide/assistant, food demonstrator, and entrepreneur. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Teachers highlight the basic skills of mathematics, science and communication when appropriate in content
Social Studies			
World Geography	9	None	World Geography provides a rigorous curriculum that introduces students to the study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. The content and perspectives of the course are centered on the world's peoples and their cultural characteristics, landforms, climates, economic development, migration, and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Students will also learn about the methods and tools geographers use in their science and practice. The skills of analytical reading, writing, and research will be key components of this course and will be practiced daily.
AP Micro Economics and Virginia Personal Finance	10, 11, 12	None	In this year-long course, students will complete the curriculum for both AP Micro Economics and Virginia Personal Finance. Students will develop an understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within larger economic systems. Economic studies will place primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Personal Finance studies will focus on how individuals navigate financial decisions in an informed manner. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success.
Science			
HMSA Honors Biology/Principles of Biomedical Sciences/Health	9	Acceptance into the Health and Medical Sciences Academy	The course curriculum is integrated and will explore content from the core areas through the lens of Health and Medical Sciences. The goal of the integrative course is to provide an opportunity for students to pursue their interests and prepare for a career in health and medical sciences. Students will be exposed to various professions in the health care field, participate in field trips and case studies as they explore opportunities of interest. Students are taught concepts of human physiology, medical innovation, water contamination, public health issues, molecular biology, and forensic autopsy. Students complete an independent project as a culminating activity.

New Courses for 2013-2014 Program of Studies

HMSA Medical Research Laboratory 1	9 or 10	Acceptance into the Health and Medical Sciences Academy	In Medical Laboratory Technology I, students gain foundational knowledge and skills appropriate for STEM research to include a variety of medical-related career paths in the field of medical technology. Students will address problems that can be tested using the scientic method. The scientific method is an inquiry process used to systematically study, investigate, and provide explanations for observed phenomenon in the natural world. Students are introduced to diagnostic and therapeutic laboratory procedures that support medical research and practice, and investigate safety, quality assurance, and ethical concerns associated with the field of medical technology.
HMSA Honors Chemistry	10	Acceptance into the Health and Medical Sciences Academy	Students are introduced to basic chemical concepts including composition of matter, atomic structure, periodic table, chemical bonding, formulas and equations, reacting quantities, gas laws, and acid base theory. The investigative skills used by practicing scientists are emphasized. This course is taught through the lens of medical science in order to further familiarize students to new opportunities of interest.
HMSA Honors Anatomy and Physiology	10	Acceptance into the Health and Medical Sciences Academy	Students explore the human body systems of communication, power, and movement. To do this, students are taught the body's components, tissues, molecules and cells, as well as concepts of homeostasis and body system defenses. Students will complete case studies, particpate in field trips and will continue to explore career opportunities in Health and Medical Sciences.
Chemistry Science Investigation	11, 12	Chemistry I, Honors or Advanced; Co-Requisite AP Chemistry	This course compliments the AP Chemistry program and seres as an optional corequisite to AP Chemistry. This course provides students with opportunities to focus on specialized laboratory investigations that are integal parts of the AP Chemistry course. Students will gain practical experience in laboratory techniques which will increase their ability to design and conduct scientific research. Furthermore, this course will provide instructional support to develop the critical thinking, problem solving, communication, and literact skills required for success on the AP Chemistry exam.
Advanced Biology Investigations	10, 11, 12	Biology I, Chemistry, Algebra II; Co-Requisite AP Biology	This course compliments the AP Biology program and serves as a co-requisite for that course. It supports the inquiry lab requirements for this course by providing students the opportunites to focus on the specialized laboratory investigations that are integral parts of the course. Students will gain practical experience in laboratory techniques that will increase their ability to design and conduct scientific research. Furthermore, this course will provide instructional support to develop the critical thinking, problem solving, and communications skills required for success on the AP Biology exam.
Fine Arts			
Adaptive Art	9, 10, 11, 12	Students must have an IEP	Students will use a variety of Art materials and create drawing, painting, ceramic, basketry, weaving and photography artworks. Students will learn to communicate ideas with their projects and develop fine motor skills needed in jobs. In addition, students will develop social skills and communicate verbally while working.
AP Studio Art 2-D Design	11, 12	Two years of art and teacher recommendation.	The emphasis of the AP Studio Art course is for students to produce high quality, original pieces of art that meet the AP Art Portfolio guidelines for 2-D design. Design involves purposeful decision making about how to use the elements and the principles of art in an integrative way. In the 2-D portfolio, students demonstrate mastery of an desgin through and 2 dimensinal medium or process, including, but not limited to graphic design, digital imaging, photography, collagen fabric design, weaving, fashion design, illustration, painting and printmaking. In early May, work is digitally submitted to the AP Board along with a written statement. In addition five mounted or matted works are sent to the AP Review Board to complete the digital admission. This work is returned during the summer. Creating art outside the classroom setting is required. Students are expected to submit portfolios to the AP Review Board. One half to three quarters of the work for this class is done outside the classroom setting.
American Music	9,10, 11, 12	None	This course is designed to enable students to participate in varied aspects of musical theather. Topics will include fundamentals of voice production, stage movement, characterization, dance and technical aspects of music. Lessons will include, but are not limited to, performance and auditioning techniques, character analysis, technical theater skills, performance analysis and evaluation, careers and vocational pursuits in musical theater, and role and influence of musical theater.

New Courses for 2013-2014 Program of Studies

Piano/Keyboard I	9, 10, 11, 12	None	Piano class is designed for students of various levels to learn to play the piano. Students will develop a working knowledge of skills and techniques required to play the piano. They will learn music reading skills, correct keyboard fingering and technique. Students work individually, at their own pace, with teacher supervision and instruction. Class time will be used for instruction, practice and performance for peers. Concepts of self-discipline, study strategies and the ability to handle difficult tasks will be incorporated into the lessons. This class is for students who have a serious desire to learn to play the piano.
AP Studio Art: Drawing Portfolio	11, 12	2 years of Art	The emphasis of the AP Studio Art course is for students to produce high quality, original pieces of art that meet the AP Art Portfolio guidelines for drawing. The drawing portfolio is intended to address a very broad interpretation of drawing issues and media. Line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth and mark-making are drawing issues that will be addressed through a variety of means, which include painting, printmaking, mixed media, etc. In early May, work is digitally submitted to the AP Board along with a written statement. In addition five mounted or matted works are sent to the AP Review Board to complete the digital admission. This work is returned during the summer. Creating art outside the classroom setting is required. Students are expected to submit portfolios to the AP Review Board. One-half to three quarters of the work for this class is done outside the classroom setting.
Sculpture I	10, 11, 12	Art 1, Ceramics I or Teacher Recommendation	Sculpture I will allow students to explore and expand upon their knowledge of three-dimensional forms while learning about professional sculptors.Ê Students will apply design principles to create forms using a wide variety of techniques and media.Ê Learning about professional sculptors will provide inspiration and clarify techniques.
English			
CORE+	9, 10, 11, 12	Teacher Recommendation	CORE+ is a full year, full-credit skills based class designed to help support student achievement in the core areas. Small class size allows individual attention to student needs in the areas of reading, vocabulary, spelling, writing skills, foundational math skills, and research skills. The course includes career, college and training exploration and some real-world experiences in those areas, as appropriate for the students in the class. These experiences may include college visits, completion of job applications, practice with interviewing, and strengthening of self-advocacy skills. CORE Plus is open to students in grades 9 - 12 and may be taken in consecutive years.
Writing Center I: Methods	10, 11, 12	Teacher Recommendation, Application, Interview	Students enrolled in this course are responsible for operating the school's writing center as peer tutors. Approximately half of the course will be dedicated to studying the pedagogy of writing instruction and literacy strategies. Students can expect to read a methods text and prepare a literature review and oral presentation. They will also compose a tutoring strategies article. Students will keep a log of their tutoring sessions and relect on their practice. The other half of the course will be devoted to the tutors' own growth as writers. We will practice writing in a variety of disciplines with a particular emphasis on creative non-fiction. Students will compile a portfolio of their revised writing, which will count as their final exam grade. Students in this course will be expected to tutor weekly during school-wide remediation time and/or after school.

New Courses for 2013-2014 Program of Studies

Writing Center II and III: Fellowship	11, 12	Students will have successfully completed the previous courses in the Writing Center sequent and be tutors in good standing. Enrollment is at the discretion of the Writing Center Director.	Students enrolled in Writing Center II and III will continue the work they began in Writing Center I as well as assume greater responsibility for the operation of the center, particularly in mentoring new tutors. They will establish a long-term apprenticeship with a sponsor teacher, who will oversee regular tutoring sessions in his or her classroom. They will also work on several complex projects, including a case study of their long-term work, a writing-across-the curriculum research paper, and a legacy project. These tutors will also focus their portfolios to develop their writing in a genre of their choosing.