

Grade 12 - Program of Studies Supplement 2012-2013 School Year

The Program of Studies Supplement contains information regarding new courses, course changes, and much, much more. The supplement should be used concurrently with your Program of Studies.

Applied Science and Technology:

Woodworking – 810 1 Credit – Semester

Woodworking will include an introduction to basic forestry, lumbering, drafting and design, construction and finishing practices. Students will learn to identify, care for, respect and properly use hand and power tools. Students will design and build several projects as well as be introduced to basic wood turning techniques. Safe working procedures will be stressed throughout the course. This course is required before taking Advanced Woodworking. **Course meets graduation requirement for ½ fine art credit. Open to grades 9, 10, 11, and 12.**

Intro to Drafting and Woodworking – 811 – will not be offered during the 2012-2013 school year.

Business and Information Technology:

Web Design – 705A 1 Credit – Semester

This Web Design course is an introduction to the design, creation, and maintenance of web pages and websites through project-based experiences. Students learn how to critically evaluate website quality, learn how to create and maintain quality web pages, learn about web design standards and why they're important, and learn to create and manipulate images. The course progresses from introductory work on web design and the use of basic tags and elements to more advanced sites through numerous web site creation projects. Students will be able to use a variety of strategies and tools to create websites. Additional topics include the history of the internet, ethical and legal issues regarding web page and site creation, copyright issues, online safety, and career opportunities in web page design and construction. To ensure student success, we recommend you possess the following: experience with Windows or Mac OS operating systems, mouse and word processing skills, and previous use of the Internet. **Note: USB memory stick required for transportation of project. Fulfills computer credit requirement. Open to grades 9, 10, 11, and 12.**

Web Design II – 706 – no longer offered at Keene High

Business and Information Technology:

Android APP Programming - 707

1 Credit – Semester

This is the newest and hottest programming area in Computer Science. The course will teach students to use the Eclipse programming language to develop APPS for Android and Blackberry devices. Along with learning the language students will also learn how to use computer based smart-phone emulators to test their applications. This course will expand the knowledge of the KHS students looking towards a career in computer programming. **Prerequisite: Successful completion of Visual Basic.**

Open to grades 10, 11, and 12.

Fulfills computer credit requirement.

Business Math - 711

1 Credit – Semester

This course demonstrates ways in which basic math concepts are applied in specific business contexts with emphasis on developing the skills necessary to analyze business situations critically and to identify the math questions that underlie them. Mastery of the concepts looked at in this course will prepare students to determine the situations in which mathematical analysis can help improve business decision making. Basic math computations of addition, subtraction, multiplication, and division of whole numbers, fractions and decimals will be thoroughly reviewed. Specific business topics looked at range from simple and compound interest, annuities, promissory notes, purchase discounts, markups, markdowns, inventory valuation, depreciation, cost allocation and financial statements as well as some other topics. **Prerequisite: Successful completion of Introduction to Business and a working knowledge of Microsoft Word and Excel.**

Open to grades 10, 11, and 12.

This course can be used as a math credit.

The following courses will be offered on an every other year rotation:

**2012-2013 International Business - 733
 Desktop Publishing – 721**

**2013-2014 Microsoft Office - 720
 Entrepreneurship - 731**

Please plan ahead so that you can take advantage of the many course offerings that the Business and Information Technology Department has to offer.

English:

The following courses will be offered on an every other year rotation:

**2012-2013 Mythology - 192
2013-2014 Shakespeare on Your Feet - 190**

Please plan ahead so that you can take advantage of the many course offerings that the English Department has to offer.

English:

Mass Media – 165

This course is no longer offered at Keene High School.

Fine and Performing Arts:

Advanced Digital Media: Design, Animation & Video - 917 ½ Credit Computer and ½ Credit Fine Arts 1 Credit – Semester

The emphasis of this course is on visual communication through advanced design concepts. Students will be exposed to a variety of digital media: PhotoShop, iPhoto, Illustrator, InDesign, Flash, Final Cut, Garage Band, iTunes, and Dreamweaver. Students will gain the independence and confidence to use a combination of traditional materials along with the in-depth use of technology. Students will develop creative solutions to today's design problems. Projects will include: photo manipulation, packaging design, advertising, two-color screen-printing, animation, video shorts, and web page design. Students who are interested in art related professions such as architecture, engineering, graphic design, industrial design, animation, game design, advertising, photography, and illustration will find that this course will help them develop their portfolios for college admissions and scholarship opportunities.

Prerequisite: Successful completion of Digital Media: Design, Animation, & Video.

Open to grades 11 and 12.

Lab Fee: \$10.00

Eclectic Art and Design – 918

Will not be offered during the 2012-13 school year.

Strings Ensemble – 938 1 Credit – A/B Full Year

Strings Ensemble is an instrumental performance ensemble that offers group instruction of violin, viola, cello, and string bass instruments as relates to performance experience through the study of scales, technical exercises, and a variety of music from a contemporary and traditional string ensemble repertoire. Development of musicianship skills includes music reading; individual playing techniques; critical listening as related to tone, intonation, balance and blend; musical interpretation regarding creative expression of music; ensemble playing techniques; and analysis of the performances through class activities. **Note: Students are required to participate in special rehearsals and performances scheduled outside of the school day. Performances include concerts and special events determined by the instructor to be beneficial to the student's musical education and to the program as a whole. The performance schedule is subject to change.**

Open to grades 9, 10, 11, and 12

The following courses will be offered on an every other year rotation:

2012-2013 Music History - 967

2013-2014 Music Theory - 966

Please plan ahead so that you can take advantage of the many course offerings that the Fine and Performing Arts Department has to offer.

Health and Human Services:

Relationships Experiences are Life (R.E.A.L) – 637

This course is no longer offered at Keene High School.

Math:

Interactive Math III (IMP III) Comprehensive – 427 1 Credit – Semester

This is the third course of the IMP curriculum. Students will extend their understanding of the material studied in preceding years of the curriculum, while learning about and applying new topics such as quadratic functions, exponential functions, geometric and algebraic representations of circles, and the algebra of matrices. These mathematical concepts are set in varied contexts, such as the launching of fireworks, Alice in Wonderland, the growth of an orchard, and decision making on land usage.

Prerequisite: C or better in IMP II
Open to grades 10, 11, and 12

Interactive Math III (IMP III) Honors – 427H 1 Credit – Semester

Eligible students can earn honors credit for IMP 3 by participating in the comprehensive level IMP class and by completing additional assignments and applying the mathematical concepts in the IMP 3 curriculum. **Prerequisite: A grade of A in IMP II comprehensive with teacher recommendation or a grade of B or higher in IMP II honors with teacher recommendation.**
Open to grades 10, 11 and 12

Interactive Math IV (IMP IV) Comprehensive – 428 1 Credit – Semester

This is the fourth course of the IMP curriculum. Students will extend their understanding of the material studied in preceding years of the curriculum, while learning about and applying new topics such as derivatives, combinations, permutations, and extending trigonometry to the unit circle. These mathematical concepts are set in varied contexts, such as population growth, a baseball pennant series, and a diver on a Ferris wheel. **Prerequisite: C or better in IMP III**
Open to grades 10, 11, and 12

Interactive Math IV (IMP IV) Honors – 428H 1 Credit – Semester

Eligible students can earn honors credit for IMP 4 by participating in the comprehensive level IMP classroom and by completing additional assignments and applying the mathematical concepts in the IMP 4 curriculum. **Prerequisite: A grade of A in IMP III comprehensive with teacher recommendation or a grade of B or higher in IMP III honors with teacher recommendation.**
Open to grades 10, 11, and 12

Math:

Interactive Math V (IMP V) Comprehensive - 429 1 Credit – Semester

This is the final course in the IMP curriculum. Students will extend their understanding of the material studied in preceding years of the curriculum, while learning about and applying new topics such as computer graphics, three dimensional rotations, and antiderivatives. These mathematical concepts are set in varied contexts such as a three dimensional turning cube and a polling problem.

Prerequisite: C or better in IMP IV

Open to grades 11 and 12

Interactive Math V (IMP V) Honors – 429H 1 Credit – Semester

Eligible students can earn honors credit for IMP 5 by participating in the comprehensive level IMP class and by completing additional assignments and applying the mathematical concepts in the IMP 5 curriculum. **Prerequisite: A grade of A in IMP IV comprehensive with teacher recommendation or a grade of B or higher in IMP IV honors with teacher recommendation.**

Open to grades 11 and 12

Calculus Honors

Prerequisite addition: B or higher in IMP V comprehensive or honors

Precalculus Trigonometry Comprehensive

Prerequisite deletion: B or better in IMP IV

Science:

Physics II Honors – 571 1 Credit – Semester

This course is open to students in grades 11 and 12

Social Studies:

No Program of Studies changes for the 2012-13 school year.

World Language:

Spanish for Beginners – 327 1 Credit – Semester

This course will be offered in a semester format for the 2012-13 school year. It will not be offered in the A/B full year format.

Mandarin Chinese III – 336 1 Credit – Semester

In this course, students will continue to develop their fluency through speaking, reading, writing and translation of Chinese language. A transition from vocabulary focused instruction to sentence patterns takes place and more time will be devoted to reading and writing in Chinese. Chinese III class will be conducted almost entirely in Chinese and students should be comfortable with listening to class instructions and conversations in Chinese as well as conversing in the like. There will be a deeper exploration of Chinese culture with discussions on idiosyncrasies hidden within the language. Vocabulary memorization will be equivalent to 2000 words.

**Prerequisite: Grade of C or higher in the final quarter of Mandarin Chinese II.
Open to grades 10, 11, and 12.**

Mandarin Chinese IV – 337 1 Credit – Semester

This course is intended to further develop the four communication skills: listening, speaking, reading, and writing. The emphasis will be on students' conversational and reading skills in Chinese. Students will expand conversational skills on most familiar topics and begin to read authentic materials like Chinese newspapers or short essays. Rigorous practice of spoken and written Chinese will be conducted. Advanced grammar will be introduced. Instruction will be conducted in Chinese.

**Prerequisite: grade of C or higher in the final quarter of Mandarin Chinese III.
Open to grades 11 and 12.**

Latin Prose – 351

This course will be offered during the 2012-2013 school year.

Latin I, Latin II and Latin Poetry will no longer be offered at Keene High School.

The following courses will be offered on an every other year rotation:

**2012-2013 AP French - 321
2013-2014 French V - 322**

Please plan ahead so that you can take advantage of the many course offerings that the World Language Department has to offer.