# North Hunterdon-Voorhees Regional High School District
# EIGHTH GRADE SCHEDULING INFORMATION

You will shortly be selecting courses for your freshman year at North Hunterdon or Voorhees High School. This form will provide you with a brief overview of how the scheduling process works at the high school. <u>You will be receiving all the necessary information you need for this process from your own school.</u> This will include an overview of course options at the high school, an overview of post-graduation options, an academic assessment form, and a scheduling form for course selection. Our course offering guide is available on our district webpage, [www.nhvweb.net](www.nhvweb.net), under Quick Links (Course Selection).

**FACTS YOU SHOULD KNOW:**

1. There are 8 periods of time to use in the NHV schedule. You are *required* to fill 7 of these with classes. If you have an extra period with no class, you will have that time for a study hall. All students will have the same lunch period.

2. Each period of time is worth 5 credits for a year-long course, and 2.5 credits for a 2-marking period course (one semester).

3. You must sign up for at least 35 credits (7 full-year courses, or 5 full-year courses plus elective courses to equal 35 credits).

4. Almost all freshmen begin with 4 full-year courses: English, Math, Social Studies and Science. The 2 semester courses freshmen must take are: Health 9 and Physical Education. Most students usually add a World Language course. You then add the rest of your courses to equal 35 to 40 credits.

5. The remaining courses that you wish to sign up for will come from the selection in the Course Guide. The elective courses for freshmen include the following (click on subject area header to view those course descriptions):

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| **Art** | Electronic Music I & II |
| Color and Design | Freshman Band |
| Color and Design II | String Ensemble |
| Ceramics I | Jazz Ensemble |
| Ceramics II | Instrumental Lessons – Beginning & |
| Drawing I |    Advanced |
| Drawing II | Voice Lessons |
| Video I | Piano Lessons (VHS only) |
| Video II | Freshman Choir (All Females) |
| Photography I | Concert Choir (Freshmen Males) |
| Photography II | Beginning Guitar |
| **Business** | Guitar II |
| Intro to Business | **Technology Education** |
| Business & Sports Management | Drafting and Design |
| Business Computer Applications I & II | Introduction to STEM |
| Fashion Media and Communications (NHHS | Arch. Drafting & Design |
| only) | Applied Technology (NHHS Only) |
| **English** | Engineering Drawing/CAD |
| Digital Media and Communication | Robotics and Automation |
| **Family and Consumer Sciences** | Web Page Design I & II |
| Fashion Design/Merchandising | Graphing Communications - Technology |
| Sewing for Fashion I & II |    I & II |
| Interior Design | Power Technology (NHHS only) |
| Pre-School Education (VHS Only) | Landscape Design |
| Early Childhood Education (VHS Only) | Introduction to Engineering Design |
| **Mathematics** | **World Language** |
| Intro to Computer Programming | Spanish CP |
| Computer Science Basics Through Gaming | French I ADV |
| Python Programming | Spanish I ADV |
| **Music & Performing Arts** | Spanish II ADV |
| History of Rock and Roll | German I ADV |
| Music Theory CP | Latin I ADV |

You should speak to your teachers at school and with your parents in order to decide what the best course selections for you will be for next year. **You must keep in mind that the level of the selection for your academic course is not only determined by what you wish to take, it is also dependent on your past achievement.**

## ART

**103 COLOR AND DESIGN Gr. 9-12 2.5 cr., 18 wks**
This introductory art course focuses on basic drawing and design principles through the use of a variety of art media including pencil, pen and ink, paint and more. Students increase their technical skills while learning to recognize and solve visual problems. Some basic digital image manipulation will be explored.

**104 COLOR AND DESIGN II Gr. 9-12 2.5 cr., 18 wks**
*Prerequisite: Color and Design I*
This secondary level art course builds on the foundation created in Color and Design I. The course will continue to focus on basic design principles and their application to the creative process through the use of various art media. Students learn to use the elements and principles of design to recognize and solve visual problems while continuing to grow and refine their artistic skills.

**113 CERAMICS I Gr. 9-12 2.5 cr., 18 wks**
In this introductory ceramics class, students will explore various construction techniques and learn the properties of clay. Students are taught the fundamentals of hand-building and wheel throwing; students also learn how to plan for and glaze their finished pieces.

**114 CERAMICS II Gr. 9-12 2.5 cr., 18 wks**
*Prerequisite: Ceramics I*
Students continue to develop techniques and skills learned in Ceramics I. Although students will continue to improve hand building techniques, emphasis will be on developing skill on the pottery wheel. Craftsmanship, design and specialized throwing techniques will be emphasized.

**118 DRAWING I Gr. 9-12 2.5 cr., 18 wks**
In this introductory drawing class students will learn the fundamentals of drawing. Techniques, materials, subject matter, and skills will be taught while students learn the Elements of Design.

**119 DRAWING II Gr. 9-12 2.5 cr., 18 wks**
*Prerequisite: Drawing I*
This course is for students with an interest in drawing beyond an introductory level. In this course students explore techniques, materials, subject matter, and skills at a more advanced level. Students develop more confidence in their skills through in depth projects using more advanced drawing skills including figure drawing, landscape, still life and more.

**139 VIDEO PRODUCTION I Gr. 9-12 2.5 cr., 18 wks**
In this course students become familiar with the television studio and the video format. Movement, lighting, editing and video techniques are emphasized and explored through the live action projects.

**140 VIDEO PRODUCTION II Gr. 9-12 2.5 cr., 18 wks**
*Prerequisite: Students must complete Video Production I or be admitted by permission of instructor.*
Students will continue to explore and experiment with the video medium through individual video projects. Special attention will now be given to the development of more involved live action, creative video projects.

**146 PHOTOGRAPHY I Gr. 9-12 2.5 cr., 18 wks**
In this course students will learn to use both digital and film cameras, they will learn the concept of developing and printing 35 MM film in the darkroom. Students will also learn to edit digital photos using Adobe Photoshop. Basic photographic techniques, with an emphasis on composition, craftsmanship, and the elements of design, will be explored through a variety of projects.

**147 PHOTOGRAPHY II Gr. 9-12 2.5 cr., 18 wks**
*Prerequisite: Photography I.*
Using the basic elements of photography learned in Photography 1, students will further explore photography as an expressive art making medium. Both digital and darkroom photography will be explored through a variety of projects.

## BUSINESS

**158     INTRODUCTION TO BUSINESS and MARKETING Gr. 9-12 2.5 cr., 18 wks**
This marketing course is for students who are preparing for careers in marketing, merchandising, and management.  The students will study basic marketing concepts such as promotion, advertising, merchandising, salesmanship, event planning and more.  The marketing course is project based which will allow students the opportunity to develop marketing plans, advertising campaigns, and event planning in one of the following specialized areas: sports and entertainment marketing, fashion marketing, travel, tourism, and hospitality marketing, or entrepreneurship and management. Students are encouraged to develop leadership skills, good citizenship traits, social intelligence, and career understanding through participation in Future Business Leaders of America and other organizations.

**156     BUSINESS AND SPORTS MANAGEMENT Gr. 9-12 2.5 cr., 18 wks**
The course will focus on the importance of management, marketing and the developing of strategies in business and sports-related industries. The students will analyze the nature, structure and impact of professional and amateur sports organizations in a business environment. This includes developing a marketing plan for a professional team such as designing names, and logos, segmenting the fan market, pricing tickets, designing a team stadium and implementing a team promotional strategy.

**171     BUSINESS COMPUTER APPLICATIONS I Gr. 9-12 2.5 cr., 18 wks**
This course will develop skills to be successful in college and in the workplace. Learn to key touch, format reports and presentations, and increase your ability to communicate rapidly on the Internet. An introduction of the Microsoft Office Suite software package is taught in this course. The reports and presentations taught will focus on software in the Microsoft suite. It is highly recommended that all students take this course. Use Business Computer Applications I as a stepping stone to the next level-Business Computer Applications II.

**172     BUSINESS COMPUTER APPLICATIONS II Gr. 9-12 2.5 cr., 18 wks**
*Sug. Pre: Business Computer Applications I*
A hands-on approach gives students the skills needed to meet the demands of today's technological world. The core of this course is building on skills taught in Business Computer Applications I to more advanced levels. Students will be learning to integrate Google Drive with the Microsoft Office Suite. Students prepare a portfolio of assignments using Word, Access, Excel, etc. This course is ideal for students using the computer at home, in college, or in business. Skills and knowledge acquired can be used immediately.

**159   FASHION MEDIA AND COMMUNICATIONS Gr 9-12 2.5 cr., 18wks** *(NHHS Only)*
This course is designed to acquaint the student with different activities in fashion media, promotion, and communication technology tools related directly to creating specific strategies used in fashion environments.  With advancing technology and the importance of digital communications, students will develop appropriate technology and digital citizenship skills.   Students learn to develop an integrated marketing plan through a combination of communication tools using different advertising media, direct mail, sales promotion, publicity, public relations, direct selling, special events, and visual merchandising.


## ENGLISH

**216     DIGITAL MEDIA AND COMMUNICATIONS  Grade 9-12, 2.5 cr., 18 wks**
Digital Media and communications encourages students to develop basic skills across the curriculum, including basic literacy in reading, writing, speaking, listening, informational literacies, economics, technology, visual, global, 21st Century and multicultural studies. Students will gain the skills and knowledge necessary to become lifelong learners. The methods of instruction will include collaboration, consensus building, and cooperative learning. This course will focus on identifying a social issue or a challenge within the community and providing a research-based solution.  The purpose of this course is to provide students with real world experiences through project-based learning that develop a foundation for community involvement, critical thinking, cooperative learning, and public speaking to prepare students for college and career readiness.

## FAMILY AND CONSUMER SCIENCES

**412  FASHION DESIGN AND MERCHANDISING Gr. 9-12 2.5 cr., 18wks**
This course will deal with basic concepts in the fashion industry and their specific application. Major units in this course include: Fashion trends and design, fabrics and care, technology in fashion, merchandising, and the fashion industry. Projects will be completed utilizing the sewing techniques covered in class.

**413  SEWING FOR FASHION Gr. 9-12 2.5 cr., 18wks**
The focus of this course is to learn to sew clothing to extend your wardrobe as well as creative applications of sewing. Students select patterns and fabrics and construct garments. Students learn to work independently and collaboratively on sewing projects. No prior sewing experience is required.

**414  SEWING FOR FASHION II Gr. 9-12 2.5 cr., 18 wks**
The Sewing for Fashion II course will advance the sewing skills learned in the Sewing for Fashion I course while expanding the working knowledge of pattern making and reading. This course will allow students interested in fashion design to seek personal inspiration and apply it to his or her design.

**424  INTERIOR DESIGN Gr. 9-12 2.5 cr., 18 wks**
This course is an introduction to techniques of decorating and furnishing a home to meet individual needs.  Students will learn principles and elements of design, use of color schemes, drawing, and evaluating floor plans. Types and styles of housing and career opportunities will be included. Students will produce items that can be used in a future portfolio.

**429  PRE-SCHOOL EDUCATION Gr. 9-12 2.5 cr., 18 wks (VHS only)**
Students gain hands-on experience participating in Little Vikes Pre-School Programs. This course introduces students to the world of children through lessons about ages, stages, and appropriate activities to present to children. Employment opportunities in childcare and education are explored. Students have hands on experiences observing and teaching children in a preschool setting. Students in this program prepare for a career in childcare and/or teaching.

**430  EARLY CHILDHOOD EDUCATION Gr. 9-12 2.5 cr., 18 wks  (VHS only)**
Students gain hands-on experience participating in Little Vikes Pre-School Programs, observing and teaching children in a preschool setting. Students will explore child growth and development with a focus on infants and toddlers and apply this knowledge in a hands-on environment. Students in this program prepare for a career in childcare and/or teaching.


## MATHEMATICS

**545  INTRO TO COMPUTER PROGRAMMING (ADV)  Gr. 9-12 2.5 cr. in Practical Arts, 18 wks**
*Pre/co-requisite: 512 Algebra I ADV*
The course is designed to introduce the student to the computer approach to solving problems. The Java language will be taught that will directly transfer to future coursework in computer science. The students will get "hands-on" experience with the computer from the earliest stages of the course. They will work on a wide variety of problems, many of which will reflect the students' backgrounds and interests, as they cover the topics in the course outline.

**544  COMPUTER SCIENCE BASICS THROUGH GAMING 2.5 cr in Practical Arts, 18 wks**
*Pre: 512 Algebra I ADV*
This STEM based course engages students with project-based learning to introduce students to programming and design concepts through the development of computer games.  Students will learn technical skills like programming, graphic design, and animation, testing/debugging and other computer programming skills.  They will also learn how to form and work in project development teams, and how the same engineering cycle used to design bridges and buildings is used to design games and solve many types of problems. In addition to the programming aspect of this class, students will be provided with an "Overview" framing the bigger picture of Computer Science fundamentals including career opportunities. There are no programming prerequisites for students who take this course but they should have a strong background in algebra and experience in problem solving.

**550  PYTHON PROGRAMMING  ADV Gr. 9-12 2.5 cr. in Practical Arts, 18 wks**
*pre/Co-requisite: 512  Algebra I ADV*

Python is a language with a simple syntax, and a powerful set of libraries. It is an interpreted language, with a rich programming environment, including a robust debugger and profiler. While it is easy for beginners to learn, it is widely used in many scientific areas for data exploration. This course is an introduction to the Python programming language for students with limited programming experience. We cover data types, control flow, object-oriented programming, and graphical user interface-driven applications. The examples and problems used in this course are drawn from diverse areas such as text processing, simple graphics creation and image manipulation, HTML and web programming, and genomics.

## MUSIC & PERFORMING ARTS

**580    HISTORY OF ROCK AND ROLL Gr. 9-12 2.5 cr., 18 wks**
Students in this course study rock and roll music beginning with its roots in 1900. Students listen to a variety of musical examples from the earliest popular music forms through the progression of contemporary rock and roll. They research the music, the technology used to make it, the people responsible for creating it, and the political and social motivation for the birth and evolution of rock and roll music.

**585    MUSIC THEORY Gr. 9-12 2.5 cr., 18 wks**
Get involved in the language of music! Students interested in pop/rock performance as well as serious musicians interested in improving their knowledge of music and their musical skills should take this course. Sight reading, ear training, listening, and analysis will help you to better understand the complex language of music.

**588    ELECTRONIC MUSIC I Gr. 9-12 2.5 cr., 18 wks**
Learn to create music like the professionals! You will learn to use the software programs and be able to compose your own music. Entrance in this course requires a desire to create music and use technology to do so.

**589    ELECTRONIC MUSIC II Gr. 9-12 2.5 cr., 18wks.**
*Prerequisite: Electronic Music I or permission from instructor.*
The focus of this course includes: modern musical applications, such as composition for video and film, digital recording and editing techniques, and score/parts generation. Students will master the above musical applications as well as advanced MIDI editing not covered in Electronic Music I.

**591    *FRESHMAN BAND Gr. 9 5 cr., 36 wks**
Freshman band is a large performing ensemble open to all students who play a woodwind, brass, or percussion instrument. Formal concerts are held at various times throughout the year. Freshman band students will learn basic and advanced concepts in musicianship, instrumental techniques, theory, and performance practice. The freshman band performs both traditional and contemporary music.

**592    *STRING ENSEMBLE Gr. 9-12 5 cr., 36 wks**
A performing ensemble, String Ensemble will provide an opportunity for experienced string players to hone their skills while preparing challenging literature. Not intended for beginners, the course will provide instruction in warm-up materials, scales, sight-reading and ensemble playing. The course is limited to students who perform on violin, viola, cello or upright bass. Students must provide their own instruments. The ensemble will be featured in performances throughout the year.

**599    *JAZZ ENSEMBLE Gr. 9-12 2.5 cr., 36 wks**
*Prerequisite: Audition*
Students pursue the jazz idiom by rehearsing and performing in this ensemble. The Jazz Ensemble is open to students who play trumpet, trombone, saxophone, drums, keyboard, guitar and bass.

**600    BEGINNING INSTRUMENTAL LESSONS Gr. 9-12 Each 1 cr., 36 wks**
*Prerequisite: Enrollment in an instrumental ensemble.*
Individualized or small group lessons for all instruments. Lessons are scheduled individually at the convenience of both the student and the teacher.

**601    ADVANCED INSTRUMENTAL LESSONS Gr. 9-12 Each 1 cr., 36 wks**
*Prerequisite: Successful completion of 600.*
Individualized or small group lessons for all instruments. Lessons are scheduled individually at the convenience of both the student and the teacher.

**609    VOICE LESSONS Gr. 9-12 1 cr., 36 wks**
*Prerequisite: Enrollment in vocal ensemble*
Students will learn the physiology of the vocal mechanism and study proper vocal techniques. Additionally, students will sing classical, jazz, and/or popular solo literature.

**602    PIANO LESSONS  Gr. 9-12 1 cr., 36 wks (VHS Only)**
Individualized lessons for piano.  Lessons are scheduled at the convenience of both the teacher and the student.  Students will learn basic musicianship skills and proper piano technique.  Repertoire will be selected by the teacher from the classic piano repertoire.

**611    *FRESHMAN CHOIR Gr. 9 5 cr., 36 wks**
Freshman Choir is a large performing ensemble for all female freshmen students who enjoy singing. Students receive instruction in the basic elements of music. Musicianship, choral and performance skills are covered.  Students explore vocal music from light classical to modern. An introduction will be given to proper diction in English and other languages.

**610    *CONCERT CHOIR Gr. 10-12 5 cr., 36 wks**
Concert Choir is a large performance ensemble for students who enjoy singing. Students receive instruction in musicianship, choral skills, and performance skills. Choral music ranging from the classics to the contemporary is explored. At times the choir sings in Latin,

German, French, Italian and other languages. The ensemble performs multiple times throughout the year. Freshmen males who are interested in singing should sign up for Concert Band.

### 618    BEGINNING GUITAR Gr. 9-12 2.5 cr., 18 wks
Students in this introductory guitar course will learn how chords are structured and how to play the guitar. Tuning, strumming, and finger-picking patterns, note-reading and melodic playing will be addressed. Students must provide their own acoustic guitar.

### 619    GUITAR II Gr. 9-12 2.5 cr., 18 wks
*Prerequisites: Beginning Guitar and/or instructor approval*
This course is designed for the more serious guitar student. Students will continue to develop their guitar skills with a more in-depth study of chords, tuning, note reading, finger picking, and solo performance. Students in this course will be given the opportunity to work both on guitar solos as well as working as part of a guitar ensemble. Classical, jazz, and rock music will be performed in addition to original student compositions. Students must provide their own acoustic guitar.


## TECHNOLOGY EDUCATION

### 499    INTRODUCTION TO STEM
**Grade 9-12, Credits 2.5 cr., 18 weeks**
Introduction to STEM encourages students to develop basic skills across the curriculum, including basic literacy in reading, writing, listening, speaking, informational literacies, economics, science, technology, mathematics, and visual studies. Students will gain the skills and knowledge necessary to become lifelong learners. The methods of instruction will include collaboration, consensus building, and cooperative learning. This course will focus on developing literacy through the fields of science, technology, engineering and mathematics. The purpose of this semester long course is to introduce students to Science, Engineering and Technology in a real-world context. Starting with a foundational investigation of the engineering process, students will explore how their world is affected by Science, Engineering and Technology. Students will collaborate on projects and build critical 21st Century and College and Career Readiness skills.

### 450    DRAFTING AND DESIGN 2.5 cr., 18 wks
This exciting introductory course to Drafting and Engineering Design introduces students to basic graphic communication techniques that are broad in scope and exploratory in nature. Students are introduced to engineering, drafting and design skills necessary for effective technical communication found in today's top industries and businesses. Fundamental drafting techniques are covered including: technical sketching, traditional drafting, orthographic projection, pattern making, isometric and perspective drawings, and CAD. This course is for students interested in design, engineering, architecture, mathematics or science as well as other related careers.

### 457    ARCHITECTURAL DRAFTING & DESIGN I 2.5cr., 18 wks
*Prerequisite: Drafting and Design #450*
The Architectural Design I course introduces students to the fundamental skills and concepts used by architects, civil engineers, and builders. Through the use of architectural design software and hands-on design challenges, students will produce architectural house plans, CAD drawings, and presentations of their designs. Emphasis is placed on the planning and design of residential structures with the efficient use of space and room layout. Site development, construction techniques, historical style periods and aesthetic considerations are also explored. Students will develop their own floor plans, cross sections, elevations, and two-point perspective drawings.

### 484    APPLIED TECHNOLOGY AND DESIGN 2.5 cr., 18 wks   (NHHS Only)
This course is designed to give students the opportunity to try new ideas and generate creative solutions to technical problems. The problem-solving design process is used along with the application of basic skills related to math, science and other related subjects to try new ideas and solve *"real world"* problems. Group and individual hands-on activities will be used that encourage creative and critical thinking skills. Modeling and prototyping will be used to present solutions to problems.

### 453    ENGINEERING/CAD I Gr. 9-12 2.5 cr., 18 wks
This is a half year course where students acquire the basic skills necessary to discover solutions to design problems using hands-on activities. Students will explore engineering design concepts using two dimensional and three-dimensional CAD software as well as hands-on modeling, product aesthetics, and the ergonomics of product design. An individual approach will be used to enable students to express their ideas with creativity, clarity, and precision. Students interested in design, engineering, architecture, mathematics or science should consider taking this course.

### 495    ROBOTICS AND AUTOMATION  Gr. 9-12 2.5 cr., 18 wks
This course provides an introduction to automatic control and computerized systems. Students will analyze and construct remote and computer controlled electronic systems, program a robot, operate computer controlled manufacturing equipment and learn about the power systems that make robotics possible. Each student will design, build, and test a robot or automated system. Additionally, they will explore the principles and issues related to the use of automation in contemporary society.

### 492    WEBPAGE DESIGN/ANIMATION 2.5 cr., 18 wks, Gr 9-12

This is an introductory course to the software, techniques, and theory of building a web site for school, personal use, or for employment opportunities. Students also learn several basic methods used to animate graphics. Hands-on experience will involve using cutting-edge software such as FrontPage, Dreamweaver, Fireworks, Flash, Adobe Photoshop, and other related products. Web Page Design and Animation are skills that will benefit any student going to college or starting their own business.

### 494    WEBPAGE DESIGN/ANIMATION II 2.5 cr., 18 wks

*Prerequisite: Webpage Design/Animation I*

This course is a continuation of Webpage Design/Animation. It is an area of instruction that addresses the technology, knowledge and skills required for college bound students and for the workplace. The course explores presentations and Web pages utilizing text, graphics, sound, video, and 2D and 3D animations. This course simultaneously examines both the theory and the practice of new media.

### 490    GRAPHIC COMMUNICATION TECHNOLOGY I 2.5 cr., 18 wks

Graphic Communication Technology provides students with the knowledge and techniques that will be used throughout their high school years and beyond to present ideas to others using various forms of media. Students will learn about the principles of design, basic color theory, and typography. Students will use these concepts as well as creative and critical thinking skills to solve design problems. Activities include: t-shirt design, web page design, product design, billboards, CD covers, posters, and more. Students will use design software such as Photoshop and Fireworks to create graphics. this course is recommended for students interested in the printing and publishing industry, communications, web design, or other related fields.

### 491    GRAPHIC COMMUNICATION TECHNOLOGY II 2.5 cr., 18wks

*Prerequisite: Graphic Communication Technology I #490*

This course allows students to use advanced presentation techniques to solve practical, real world design problems. Student's present ideas using computer graphics, animation, printing and various forms of media gain skills and knowledge of what effective communication is. Hands-on activities are used that encourage creative and critical thinking skills. Activities include: logo design, resume design, and product design. This course is primarily designed to further students' interests for the many varied careers available in the commercial printing, newspaper and advertising fields.

### 069    POWER TECHNOLOGY I Gr. 9-12 2.5 cr., 18 wks  (NHHS only)

In this Technology Education course, students become familiar with multiple power systems, as well as its components and features. This familiarization is the basis for all engineering and operating activities in power systems. Students will become familiar with various instruments and tools to enhance a piece of equipment.  Students are introduced to the fundamentals of today's technologies in generating transmission and power system management.  They will assemble and test internal combustion engines, and learn about other power technologies, such as rocket and solar powered vehicles.  Each student in this course will inspect, repair, and maintain an engine. An understanding of the basic principles in operating engines and the proper use of tools will be emphasized in this course.

### 072    LANDSCAPE DESIGN Gr. 9-12 2.5 cr., 18 wks

Landscape Design is a course that will direct the student in developing an appropriate landscape plan. The student will also become able to estimate the cost of various landscapes, from planning to completion.

### 470    Project Lead the Way - Introduction to Engineering Design Grade: 9-12 5 cr., 36 wks.

*Co-requisite(s): Geometry, Algebra I (Advanced)*

Learn how to solve complex problems and develop problem-solving skills using the Engineering Design Cycle. Study the design concepts of form and function, and use Autodesk Inventor to translate your conceptual design into 3D computer models. Students develop sketches, design computer models, understand how to use mass property calculations (such as volume and density) to evaluate their model, and learn the concepts of cost analysis, quality control and marketing for production. During the course, students develop a portfolio to display their designs with peers, instructors, and professionals.

## WORLD LANGUAGE

**340    SPANISH CP  5 cr., 36 wks**
College Prep courses are designed for the student with little to no background in world language study or for the student who finds language learning challenging.  Students are introduced to the basics of language study.  They learn the foundational material-vocabulary and structures- necessary for success in the Advanced language courses that follow.  Upon successful completion of Spanish CP, the student will be encouraged to continue the study of that language the next year by taking Spanish I Advanced.

**302    FRENCH I ADVANCED 5 cr., 36 wks**
**311    GERMAN I ADVANCED 5 cr., 36 wks**
**342    SPANISH I ADVANCED 5 cr., 36 wks**
This course is designed to give the beginning language student functional language ability through a variety of communicative activities.  As the year progresses, the students' ability to comprehend and express themselves in the target language is strengthened. Activities integrate the culture and heritage of the language studied.

**321    LATIN I ADVANCED 5 cr., 36 wks**
The first year Latin course guides students to mastery of the fundamentals of Latin vocabulary and use and an understanding of the essential linguistic connection between Latin and English. From the study of Latin I, students gain a new awareness of their native tongue, and understanding of classical civilization and the best possible foundation for learning modern languages.

**343    SPANISH II ADVANCED  5 cr., 36 wks**
As in Level I courses, the Level II courses increase the student's functional ability in speaking, listening, reading and writing.  As the year progresses, students improve their ability to understand and communicate meaningful information in spontaneous interactions, as well as to present new information in both written and spoken situations.  Activities integrate the culture and heritage of the language studied.