

Curriculum Committee

Thursday, October 5, 2017 4:30 PM

Curriculum Committee, L.P. Wilson Community Center, Room 17, 601 Matianuck Avenue, Windsor, CT 06095

1. **Call to Order, Pledge to the Flag and Moment of Silence**
2. **Audience to Visitors**
3. **Robotics I**
4. **Robotics II**
5. **Early Global Studies**
6. **Modern Global Studies**
7. **WHS Program of Studies 2018-2019**
8. **Adjournment**

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► **ART**

- **COURSE DESCRIPTION CHANGE:**
 - **Jewelry Design 2** - Not offered 2018/2019

► **CAREER & TECH ED**

- **DEPARTMENT DESCRIPTION CHANGE:**
 - Combining Family & Consumer Science, Business, and Technology Education into the Career and Technical Education Department (CTE). Each program will be listed alphabetically.
- **COURSE DESCRIPTION CHANGES:**
 - **Computer Aided Drafting and Design** - *During the first semester, students utilize a professional Computer-Aided Drafting and Design software package to develop an understanding of three-dimensional design. As the semester progresses, students design more and more complex solid models. Once students have a good handle on the CADD software this course becomes project based. Students will work individually and on teams to design and create solutions to a variety of different engineering design problems for real clients. Students will use 3D printing technology, a laser engraver, and CNC machines to create prototypes and then solutions to these problems.*
 - **Advanced Drafting and Design** - *Students electing this course will be asked to select an area of interest either architectural or mechanical. Using an independent study approach, students will solve problems of increasing degrees of difficulty requiring use of theories and knowledge of design concepts covered in previous courses. Students electing the mechanical drawing emphases will prepare higher-level mechanical drawings to include assembly drawings. Also students may import their drawings into a CAM software package and prepare a toolpath. Those students electing architectural design will produce a complete set of floor plans and may build a ¼" scale model of the home of their design. All students in this course will work with real clients to design and modify their designs to meet the needs of the client. Students will use a Laser engraver, 3D printers, and CNC machines to produce a product for their clients.*
 - **The S.T.E.A.M. guitar project a sampling of Technology Education and the Arts** - *This entry-level course links S.T.E.A.M. (Science, Technology, Engineering, Art, Math) concepts and manufacturing principles together, culminating in a product – a custom-made electric guitar. Each student enrolled in this class will build their own customized electric guitar as they are introduced to all that the Technology Education department has to offer. Students will learn to use CADD software, a Laser Engraver, 3D printers, and CNC Machines to design customizations. Students will add a custom swirl-dip or other finished to their instrument. Finally, there will be time allotted to learn how to play the*

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instrument. Students who enroll should have a strong interest in math, science and technology.

- **Introduction to Manufacturing** - Course name change to "Introduction to Precision Manufacturing" - New Course Description: *This course will give students a well-rounded experience in manufacturing processes and activities. Students will develop their knowledge and hands-on skills in the lathe and milling manufacturing processes. A systems based approach will be used to solve problems, build a strong engineering knowledge base, and learn to interpret technical drawings. The lab portion introduces common metal cutting tools, lathe and milling machine set-ups and machine operation while emphasizing safety. In addition, the lab includes the associated use of measuring tools and instruments used in the inspection of student machined projects.*
- **Applied Manufacturing** - Course name change to "Precision Manufacturing" - Now listed as Honors. New Course Description: *Prerequisite: Introduction to Precision Manufacturing or permission of instructor. This course focuses on the modern computer numeric control (CNC) machining operator. Through the use of interactive virtual simulators and hands on experience students learn the essentials of CNC machining. Students will be introduced to CNC topics including setup and tooling, programming simple parts, and modification of programs to compensate for process variation, utilization of canned drilling cycles, circular interpolation, special milling cycles, looping and special features. Upon completion students will be able to set up CNC Vertical Machining Center and CNC Lathe; locate, load and proof the CNC program; execute the program; inspect parts; and modify program instructions via G&M code.*
- **Advanced Manufacturing** - Course name change to "Precision Manufacturing II" - New Course Description: *Prerequisite: Precision Manufacturing I, CADD/CAM or permission of instructor. A further study of CNC programming and productions for the Lathe and Vertical Machining Center. This course provides additional concepts of CNC and the importance of fixtures and tooling and how they interface with Mastercam software. CNC programs will be developed to perform contouring operations for milling machine centers. Application of more complex features will be used to develop CNC programs to produce Climb, Pocket and Contour milling. Tooling interface, speed and feed rates will be developed along with X, Y, Z data using the Cartesian coordinate system. Students will experience lecture, demonstration, and online simulation to prepare for NIMS certification as a CNC operator.*
- **Intro to Photography** - Course name change to "Intro to Digital Photography". New Course Description: *This is a beginning course in the field of visual communications utilizing our state of the art Mac computer systems and software to create and understand digital photography. Students will learn how to use a smartphone digital camera or compact camera to produce images*

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which show conceptual and technical skill. Topics include basic operation of a digital smartphone or compact camera, composition, camera control apps, exposure and image editing and manipulation using Adobe Photoshop CC and Lightroom apps. The school has compact cameras available for student use.

- **Advanced Photography** - Course name change to "Advanced Digital Photography". New Course Description: Prerequisite: Intro to Digital Photography. *This course will offer students opportunities to demonstrate an understanding of the elements of photographic composition and development of a "photographic eye." The course will allow students to use technology such as Adobe Photoshop and Lightroom applications as tools to create individual works of photographic art to create special effects. Students will demonstrate competency using digital cameras and equipment. Students should be prepared to present their work and create a photography portfolio. The school has digital SLR cameras available for student use.*
- **Child Development 1** - *This course provides an introduction to the responsibility of parenting and the importance of early childhood. Students will explore the key aspects growth and development including physical, cognitive, emotional, and social development. Throughout the semester topics will include theories of development, bonding, parenting, pregnancy, labor and delivery, and families. Each student will be required to participate in a parenting simulation.*
- **Child Development 2** - *This semester course continues the work that began in Child Development I. Students will focus on the care of infants, toddlers, and preschoolers. Topics of study include promoting positive development through nutrition, discipline, play, and literacy. Students will have the opportunity to plan and implement developmentally appropriate activities for young children.*
- **Baking & Pastry Arts** - *This introductory course focuses on ingredients and their role in the science of baking. Students will begin the semester with a focus on baking basics such as sanitation, measurement, role of ingredients, and tools of the trade. Additional areas of study include cookies, quick breads, yeast doughs, and specialty desserts. Throughout the semester students will create a personalized recipe portfolio to analyze the baking process.*
- **Fashion & Clothing 1** - *This one semester course will provide students with an introduction to the world of garment construction. Students will acquire and expand basic sewing skills the use of commercial patterns. As part of this process students will: learn how to safely setup and use a sewing machine; use a variety of sewing tools; create a sewing sample portfolio; learn about the anatomy of fabric; learn how to use a commercial pattern; & how it all comes together to construct garments. Students will construct at least 2 garments, each of increasing difficulty. In addition, 21st century learning skills as well as*

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reading, writing, and math are applied in this course. Students will also have the opportunity to participate in the annual fashion show held near the end of May.

- **Fashion & Clothing 2** - *In this course students will begin to refine their sewing skills. Students will be introduced to more advanced sewing techniques and will add to their sewing sample portfolio. Students will construct at least two garments reflective of their new skills. In addition, 21st century learning skills as well as reading, writing, and math are applied in this course. Students will also have the opportunity to participate in the annual fashion show held near the end of May.*
- **Fashion & Clothing 3** - *Prerequisite: Fashion & Clothing 1 & 2. This course is designed for students who are interested in further refining their sewing skills. Advanced sewing skills will be introduced and compiled into their sample portfolio. These new skills will be reflected in construction of four garments. Emphasis will be placed on individual creativity through the creation of a mood board and mini collection. Students will use state of the art sewing machines. In addition, 21st century learning skills as well as reading, writing, and math are applied in this course. Students will also have the opportunity to participate in the annual fashion show held near the end of May.*
- **Applied Graphics** - *Change course level to Honors. Add "Prerequisite: Introduction to Graphics or permission of instructor." This course emphasizes the graphic design process. The use of graphic arts in advertising, packaging, and business are explored along with techniques in computer based design. In this course, students will utilize our state of the art Mac computer systems and software such as the latest Adobe Creative suite including including Illustrator, InDesign and Photoshop used for graphic design along with a set of mobile applications and also some optional cloud services to work on projects which include the design of logos, flyers, posters, brochures, advertisements, product packaging, email and banner ad designs, and websites. Students will engage in projects that start with the design stage and follow through to the finished product.*
- **Introduction to Graphic Communications** - *Change course name to Introduction to Graphics. This is a semester course that introduces students to the exciting field of graphic design and visual communication. As a participant in the program, students will utilize our state of the art Mac computer systems and software such as the latest Adobe Creative suite including Illustrator, InDesign and Photoshop that will allow them to develop design and artistic skills. In addition student projects will emphasize visual communications through hands-on activities. Traditional means of illustration, color study, and elements of art and principles of design are taught on the drawing board to further implement the necessary skills needed to be successful in the graphic arts industry.*

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- **Advanced Graphic Communications** - Prerequisite: Applied Graphics or approval of instructor. *This course is designed to build upon each student's existing knowledge and graphic and technical skills used in the introduction and applied graphics courses. Students will utilize our state of the art Mac computer systems and software such as the latest Adobe Creative suite including including Illustrator, InDesign, Photoshop, Animate, Muse, and Dreamweaver used for graphic and web design along with a set of mobile applications and also some optional cloud services to create 2D and 3D cartoon animations, video game applications and website development. In addition, students will design and produce printed materials for actual customers and work on individualized and group assignments for our WHS Graphics non-profit business.*
- **COURSE NAME CHANGES:**
 - Computer Apps I to "Microsoft Applications"
 - Computer Apps II to "Advanced Microsoft Applications"
- **PREREQUISITE CHANGE:**
 - **Applied Wood Technology** - Change prerequisite to "Introduction to Wood Technology or permission of instructor."

► **ENGLISH**

- **COURSE DESCRIPTION CHANGE:**
 - **English 9** - Change final sentence to: "Conceptual units include: From Paint to Print, Windows to Within, Search for Utopia, Hero's Journey, From the Classic to the Contemporary."
 - **English 10** - Change final sentence to: "Conceptual units include: Many Stories/Many Voices, Clash of Cultures and Values, And Justice for All?, A Question of Truth, Crossing Borders."

- **ADDITION:**

SAT Prep

1089 College

0.5 Credit. Open to 11th graders only.

This course will provide students with strategies and skills for taking the College Board SAT. Students will study math and English concepts necessary in understanding the questions that they will face on SAT. Students will be applying the test taking strategies that they learn in this course on practice tests embedded in the course curriculum. English and math teachers trained in the Princeton Review SAT preparation model will be teaching the course. Upon successful completion of the course, students will receive .5 elective credit that will not count towards the math and English graduation requirements.

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► **MATH**

• **ADDITION:**

SAT Prep

1089 College

0.5 Credit. Open to 11th graders only.

This course will provide students with strategies and skills for taking the College Board SAT. Students will study math and English concepts necessary in understanding the questions that they will face on SAT. Students will be applying the test taking strategies that they learn in this course on practice tests embedded in the course curriculum. English and math teachers trained in the Princeton Review SAT preparation model will be teaching the course.

Upon successful completion of the course, students will receive .5 elective credit that will not count towards the math and English graduation requirements.

► **SCIENCE**

• **ADDITION:**

AP Physics C

1.0 credit, AP

Prerequisite: Calculus (previously taken or concurrent).

AP Physics C is a nationally-standardized calculus-based course in physics with a curriculum designed by educators who work with the College Board. This course is equivalent to an introductory mechanics course for university students majoring in Physics or Engineering. The emphasis is on understanding concepts and skills through the language of mathematics. Laboratory work is an integral part of this course.

• **REMOVAL:**

- **Meteorology**

► **SOCIAL STUDIES AND HISTORY**

• **COURSE DESCRIPTION CHANGE:**

- **AP Comparative Government** - Not offered 2018/2019
- **U.S. Military History** - change prerequisite to grades 11 and 12 only.

► **DEPARTMENT TBD**

• **ADDITION:**

- **Creative Movement** - *This course is designed to provide all levels of participants with proper training, knowledge, and application in various dance styles. Students will explore dance and movement to enhance their individual physical fitness levels. This is a high-energy class that infuses the latest varieties of Zumba, Hip Hop, Line Dancing, Step Dance, and Improvisational Dancing. Classes are designed for students to make connections between dance and healthy living as they choreograph, perform, analyze, and evaluate movement elements and dance skills. Classes will encourage students to bring their own individual styles and personalities to the movements. Each class will*

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include instruction in proper warm-up techniques, conditioning and stretching exercises, correct execution of basic dance steps and skills, rhythmic combinations, and performance routines.