

Western Wayne High School



Curriculum Guide
2018-19

We can't hide ...that Wildcat Pride!

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*****Courses, course availability and course requirements may be subject to change*****

GUIDANCE

The purpose of the guidance program is to help individual students throughout the school year. Since the school is preparing students to take their place in the world of work, or continued education, one major function is to assist students in selecting courses which are best suited to their needs, abilities, and interests. A computer-based guidance information program is also available in our Career Guidance Center. Information is available in the guidance office regarding various occupations, part-time and summer jobs, as well as the armed services.

School counselors assist students with course selections and vocational/educational planning. Counselors help students improve their study habits and counsel them regarding personal problems.

Students who need to see their school counselors must make appointments through the guidance secretary. This should not be done during class time unless it is an emergency.

PROMOTION AND GRADUATION

All students MUST select a career path each year and schedule prescribed courses within the program. Students must carry a minimum of 7 credits per year. Students are required to pass 22.5 credits in order to graduate.

The following courses are required:

- English..... 4 credits
- Social Studies 4 credits
- Math 3 credits (including a minimum of Algebra I - can be achieved through Algebra A /Algebra B)
- Science 3 credits (one of which must be Biology)
- Physical Education 4 years
- Health ½ credit
- **Consumer Skills ½ credit
- Senior Project Successful completion required for Graduation
- Keystone Exams Successful completion of Algebra, Biology, and Literature Keystone Exams

Required for graduation beginning with the class of 2020. Any student not passing a Keystone Exam will be required to receive remediation.

**Students must take this course, but it is not a graduation requirement.

WEIGHTED GRADING

The Western Wayne High School has chosen to reward students for taking more challenging courses. Students who take the following courses will receive a 5% or 3% weighted grade.

Art Department

** 963 – Advanced Studio Art

English Department

- **130A- English 9 Honors
- **140A- American Lit. Honors
- *156- AP Eng. Lang. & Comp.
- *165- AP Eng. Lit. & Comp.

Foreign Language Department

* 365-AP Spanish Language & Culture

Mathematics Department

- **430- Geometry Honors
- **440- Algebra II Honors
- **453- Statistics
- **450A- Pre-Calculus Honors
- **460- Calculus
- *465- AP Calculus
- *970- AP Computer Sci. Prin.

Social Studies Department

- **230A- American Cultures I Honors
- *240A- AP U.S. History
- *255- AP World History
- *265- AP U.S. Gov. & Politics

Science Department

- **541A- Inq. Bio. w/Lab Honors
- **551A- Chem. w/Lab Honors
- *563- AP Biology/Lab
- *565- AP Chemistry w/Lab
- *570- AP Physics1:Alg-Based
- *571- AP Physics2:Alg-Based

Technology Department

- **742- Precision Production I
- **752- Precision Production II
- **754- Auto Mechanics III
- **755- Construction Trades I
- **765- Construction Trades II

- | |
|----------------|
| * = 5% Weight |
| ** = 3% Weight |

Note: The grade that is represented on the student's report card DOES NOT INCLUDE the attached weight of 5% or 3%. The computer program that runs our grading system will automatically add the 5% or 3% and calculate the WEIGHTED GRADE into the student's cumulative grade point average. EXAMPLE: A student who earns a "97%" in AP Government would have an additional 4.85 points (which is 5% of the grade) added to his or her quarter average. Therefore, a grade of 101.85% would be calculated into the cumulative grade point average.

NUMBER	COURSE	CREDIT
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10.....	Project Based Assessment	1/2
101.....	Transition.....	1/2

 **ART**

920.....	Introduction to Ceramics	1/2
935.....	Art Foundations	1
940.....	Studio Art I.....	1
943.....	Ceramics I.....	1/2
944.....	Ceramics II	1/2
945.....	Watercolor Painting.....	1/2
946.....	Mixed Media Design.....	1/2
950.....	Studio Art II.....	1
960.....	Three-Dimensional Design.....	1/2
962.....	Studio Art III	1
963.....	Advanced Studio Art	2

 **BUSINESS**

640.....	Computer Apps.-Microsoft Word/Keyboarding.....	1
642.....	Introduction to Business	1
643.....	Business and Personal Law	1
648.....	Computer Apps.- Microsoft PowerPoint/Excel.....	1
651.....	Accounting I	1
654.....	Entrepreneurship.....	1
655.....	Marketing.....	1
661.....	Accounting II.....	1
664.....	Business Communications & Procedures	1
669.....	Dynamics of Work.....	1
681.....	School-to-Work Experience	1-3

NUMBER**COURSE****CREDIT****ENGLISH**

130.....	English 9	1
130A.....	English 9 Honors	1
140.....	American Literature.....	1
140A.....	American Literature Honors.....	1
144.....	English as a Second Language	1
155.....	Multicultural Literature	1
156.....	AP English Language & Composition	1
165.....	AP English Literature & Composition	1
166.....	British Literature in the Modern World.....	1
980.....	SAT Prep Writing and Critical Reading.....	½

**FAMILY & CONSUMER SCIENCE**

821.....	Nutrition & Wellness.....	1
825.....	Consumer Skills.....	½
833.....	Introduction to Sewing	1
835.....	Basic Foods.....	1
840.....	Culinary Pastry Arts	1
843.....	Textile and Design.....	1
844.....	Child Development.....	1
851.....	Gourmet Foods	1
852.....	Family and Consumer Science Lab Technician	½
855.....	Early Childhood Education I.....	1
861.....	Advanced Cooking	1
862.....	Family Development	1
863.....	Fashion I	1
864.....	Fashion II.....	1
865.....	Early Childhood Education II.....	3

**FOREIGN LANGUAGE**

330.....	French I.....	1
331.....	Spanish I	1
332.....	German I	1
333.....	German II.....	1
340.....	French II	1
341.....	Spanish II.....	1
351.....	Spanish III.....	1

361.....	Spanish IV	1
365.....	AP Spanish Language & Culture.....	1

NUMBER	COURSE	CREDIT
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 **MATHEMATICS**

430.....	Geometry Honors	1
431.....	Algebra I.....	1
432.....	Algebra (A).....	1
440.....	Algebra II Honors.....	1
441.....	Geometry	1
442.....	Algebra (B).....	1
443.....	Applied Geometry	1
450.....	Pre-Calculus.....	1
450A.....	Pre-Calculus Honors.....	1
451.....	Algebra II.....	1
453.....	Statistics.....	1
460.....	Calculus	1
461.....	Trigonometry & Advanced Algebra.....	1
465.....	AP Calculus	1
970.....	AP Computer Science Principles.....	1
975.....	Computer Programming I.....	1
976.....	Computer Programming II.....	1
977.....	Computer Programming III	1
978.....	Computer Programming IV	1
981.....	SAT Prep Math.....	½
985.....	Keystone Algebra	½

 **MUSIC**

925.....	Band.....	1
926.....	Chorus.....	1
927.....	Chorus.....	½
928.....	Theater Arts	½
931.....	Stage Crew.....	½
971.....	Music Theory I	½
974.....	Music Theory II.....	½
979.....	Music Theory III.....	½

NUMBER**COURSE****CREDIT****PHYSICAL EDUCATION AND HEALTH**

40.....	Boys 9 Gym	1/2
41.....	Girls 9 Gym.....	1/2
40.....	Boys 10 Gym	1/2
41.....	Girls 10 Gym.....	1/2
60.....	Boys 11 Gym	1/2
61.....	Girls 11 Gym.....	1/2
60.....	Boys 12 Gym	1/2
61.....	Girls 12 Gym.....	1/2
92.....	Adaptive Gym.....	1/2
99.....	Advanced Gym	1/2
52.....	Health Education.....	1/2

**SCIENCE**

531.....	General Science 9	1
541.....	Inquiry Biology w/Lab.....	1 1/2
541A.....	Inquiry Biology w/Lab Honors.....	1 1/2
542.....	Applied Biology w/Lab.....	1
551.....	Chemistry I w/Lab	1 1/2
551A.....	Chemistry I w/Lab Honors.....	1 1/2
552.....	Applied Chemistry w/Lab.....	1
556.....	Anatomy & Physiology w/Lab	1
561.....	Physics w/Lab	1 1/2
562.....	General Keystone Science	1/2
563.....	AP Biology w/Lab	1 1/2
565.....	AP Chemistry w/Lab.....	1 1/2
566.....	Chemistry Lab Technician.....	1/2
567.....	Biology Lab Technician.....	1/2
568.....	General Science Lab Technician	1/2
569.....	Physics Lab Technician	1/2
570.....	AP Physics 1 – Algebra Based.....	1 1/2
571.....	AP Physics 2 – Algebra Based.....	1 1/2

NUMBER**COURSE****CREDIT****SOCIAL STUDIES**

230	American Cultures II	1
230A	American Cultures II Honors	1
240	American Cultures III	1
240A	AP US History	1
250	World Cultures	1
255	AP World History	1
260	American Government/Economics	1
261	Psychology	1/2
265	AP United States Government & Politics	1

**TECHNOLOGY & ENGINEERING**

719	Robotics and Automation	1/2
721	Metal Technology Lab Technician	1/2
722	Introduction to Metal Technology	1
723	Visual Communications I	1
724	Introduction to Automotive Technology	1/2
732	Metal Technology I	1
733	Visual Communications II	1
734	Auto Mechanics I	1
735	Construction & Manufacturing Technology I	1/2
736	Automotive Lab Technician	1/2
742	Precision Production I	2
743	Wood Technologies Lab Technician	1/2
744	Auto Mechanics II	2
745	Construction & Manufacturing Technology II	1
752	Precision Production II	2
754	Auto Mechanics III	2
755	Construction Trades I	2
759	Engineering Technologies Lab Technician	1/2
765	Construction Trades II	2
771	Architectural Drawing & Design	1
772	3D Mechanical Drawing and Design	1/2
781	Foundations of Electronics	1
782	Video Production	1
783	Visual Communications Technology Lab Tech	1/2
786	Video Broadcasting	2
790	Engineering Technologies I	2
791	Engineering Technologies II	2

10 PROJECT BASED ASSESSMENT ½ CREDIT
The Pennsylvania Department of Education (PDE) has developed a project based assessment system (PBA) that is aligned with the modules for each Algebra I, Biology, and Literature Keystone Exam for students who are unable to demonstrate proficiency on a Keystone Exam or Keystone Exam module. Successful completion of a PBA aligned to the Keystone Exam or Keystone Exam module on which a student did not demonstrate proficiency shall satisfy the Chapter 4 Keystone Exam graduation requirements. (Note: This requirement applies to students in the class of 2020 and beyond.) School administration reserves the right to determine eligibility for this course.

101 TRANSITION ----- ½ CREDIT
This class is required for 10th grade students with transition goals. This course will assist students to master their transition goals. The class will be divided into three units: post-secondary education/training, employment and independent living. Services and activities will be designed to meet the needs of each student.

ART DEPARTMENT

Since our Art Department offers a variety of half-credit and full-credit courses that are designed to meet the needs and interests of all students, we encourage each student to select an art course at least once during his/her high school career. Some courses require prerequisites. Please refer to course descriptions.

920 INTRODUCTION TO CERAMICS----- ½ CREDIT
This course is intended for students studying ceramics for the first time and is a comprehensive introduction to the craft of clay working. This course is primarily a studio class, which means we will spend the majority of our time involved in the creative process (making things). In order to augment creative production and discover how the creative process works, we will also be spending time learning techniques, watching demonstrations, reading, discussing, viewing PowerPoints, and critiquing our work. (No prerequisite needed. Open to freshmen and sophomores)

935 ART FOUNDATIONS----- 1 CREDIT
This course is for students who are interested in learning how to draw from life experiences. Designed for first year art students, this course will cover drawing techniques in pencil, charcoal and pastel. Students will learn how to shade using highlights and shadows and use the grid method for certain projects. Other forms of art will be studied as well. There will be sketchbook assignments and independent projects along with daily in-class projects. This course is for students who love art and want to learn more. This one-credit course is a prerequisite for all other art courses, with the exception of **920-Introduction to Ceramics**.

940 STUDIO ART I----- 1 CREDIT
This full-credit course is available to students who have successfully completed **Art Foundations**. Students who sign up for **Studio Art I** will experience a continued, yet more intense, study of art. This course has been designed to help students strengthen their basic drawing skills, and further challenge them with a variety of two- and three-dimensional media. Aesthetics, art appreciation and color theory will also be studied. [Prerequisite: **935-Art Foundations**]

943 CERAMICS I----- ½ CREDIT
This course is intended for students who have completed a comprehensive introduction to the craft of clay working. **Ceramics I** is designed to enhance the skills that were previously learned in Introduction to Ceramics. This course is primarily a studio class, which means we will spend the majority of our time involved in the creative process (making things). In order to augment creative production and discover how the creative process works, we will also be spending time learning techniques, watching demonstrations, reading, discussing, viewing PowerPoints, and critiquing our work. [Prerequisite: **920-Introduction to Ceramics**. Open to sophomores and juniors]

944 CERAMICS II----- ½ CREDIT
This course is geared to the student who is motivated to undertake very ambitious work in clay and further their understanding of ceramic art as a means of artistic expression. **Ceramics II** is intended as an opportunity for continued growth in art involving clay as a primary medium. This course is primarily a studio class, which means we will spend the majority of our time involved in the creative process (making things). In order to augment creative production and discover how the creative process works, we will also be spending time learning techniques, watching demonstrations, reading, discussing, viewing PowerPoints, and critiquing our work. [Prerequisites: **920-Intro to Ceramics** and **943-Ceramics I**. Open to juniors and seniors]

945 WATERCOLOR PAINTING----- ½ CREDIT
This course will study various techniques in watercolor painting such as flat washes, wet on wet, blended washes, and dry brushing. The students are required to take ART FOUNDATIONS before taking this course to allow the concentration to stay primarily on painting and not on drawing skills. The projects will include landscapes, portraits, and still life paintings. [Prerequisites: **935-Art Foundations**. Open to sophomores, juniors, and seniors]

946 MIXED MEDIA DESIGN ----- ½ CREDIT
This course will study various forms of Mixed Media through the use of collage material such as paper, felt, wood, plastic, and metal. The students will learn how to incorporate photo transfers and photo lifts into their artwork. Issues of craftsmanship as well as narrative and formal content will be addressed. Students will be encouraged to investigate and experiment the physical and aesthetic possibilities and limitations of a range of media and materials. This course will also include the study of famous mixed media artists. [Prerequisites: **935-Art Foundations**. Open to sophomores, juniors, and seniors]

950 STUDIO ART II ----- 1 CREDIT
This course is open to all students who have taken **935-Art Foundations** and **940-Studio Art I**. The curriculum will cover various media, such as acrylic and colored pencil. The students will sharpen their skills in drawing, painting, and various mixed media techniques. This course is suited for students planning to pursue art as a career as well as students who enjoy art as a hobby. [Prerequisites: **935-Art Foundations** and **940-Studio Art I**]

960 THREE-DIMENSIONAL DESIGN ----- ½ CREDIT
Three-Dimensional Design seeks to expand your understanding of design theory as it relates to the Three Dimensional World. This course will emphasize the making of 3-D Design through additive and subtractive processes as an ongoing endeavor, involving the student in informed critical and creative decision making. We will examine the function of space, volume, mass, plane, and line. Sculptural issues will be explored through the solution of design problems. This course will cover a wide variety of three-dimensional works. Wood, cardboard, plastic, metal, plaster, paper and wire will be used to create different design pieces. The emphasis will be on sculpture and painting techniques. [Prerequisite: **935-Art Foundations**]

962 STUDIO ART III ----- 1 CREDIT
This course is designed for students who wish to continue their study of art, but do not wish to pursue art as a career. Students will complete numerous two- and three-dimensional studio pieces while developing distinct individual styles. Emphasis will be placed on developing displays for the annual art exhibit. [Prerequisites: **935-Art Foundations**, **940-Studio Art I**, and **950-Studio Art II**]

963 ADVANCED STUDIO ART ----- 2 CREDITS
Advanced Studio Art is a college preparation course for the gifted art student who plans to pursue art as a career. The course is designed to provide students with ample opportunities to develop their creative potential in various media, as well as their understanding of visual communication and appreciation. The course work in the first semester is devoted to preparing a college entrance portfolio. During the second semester, along with continued instruction in a variety of media, each student will complete numerous two-and three-dimensional studio pieces while developing distinct individual styles. Emphasis will be placed on developing senior displays for the annual art exhibit. [Prerequisites: **935-Art Foundations**, **940-Studio Art I**, and **950-Studio Art II**] {Summer work is required. *Student must have a grade point average of 90 or higher in ART*}



BUSINESS DEPARTMENT

In today's world, technology is everywhere and affects everyone. Therefore, the business curriculum offers a variety of courses which enable students to get a job and/or to become better prepared to survive as consumers and citizens.

640 COMPUTER APPLICATIONS-MICROSOFT WORD/KEYBOARDING----- 1 CREDIT
Proper keyboarding technique has become an invaluable skill in the workforce today. In this course, students will learn touch-typing in order to improve upon their existing typing skills. This course also provides students the opportunity to learn a variety of concepts using Microsoft Word. Using Word, students will learn to format a variety of business documents as well as develop a deeper understanding of digital computer file management. With the skills students master in this course, they will become faster and more confident at the keyboard and on the computer. [Student proficiency may lead to software certification.]

642 INTRODUCTION TO BUSINESS----- 1 CREDIT
The **Introduction to Business** course tackles careers in our global economy, small business management, types of financial institutions, banking services, savings and investment strategies, and personal financial management.

643 BUSINESS & PERSONAL LAW ----- 1 CREDIT
Students will be introduced to the laws that affect their daily lives. The course will focus on criminal and civil law and the court systems that enforce the laws. Other topics to be covered include contracts, employment law, corporate law, and consumer protection. (Open to sophomores, juniors, and seniors)

648 COMPUTER APPLICATIONS-MICROSOFT POWERPOINT/EXCEL ----- 1 CREDIT
This course is designed to develop proficiency in both Microsoft PowerPoint and Microsoft Excel. In the first half of the school year, students will learn how to make powerful and effective presentations through the use of basic and advanced PowerPoint applications. The second half of this course is devoted to learning the basic and advanced functions that are available in Microsoft Excel. The topics covered in this portion of the course include working with and formatting Excel worksheets, understanding functions, creating formulas, absolute cell referencing, and what-if analysis.

At the conclusion of this course, interested students will be able to take the Microsoft Specialist (MOS) certification test (Basic level). This is a test recognized internationally by employers. This course is required for all students enrolled in the Office Management sequence of the Business & Technology career pathway. (Open to all grades)

651 ACCOUNTING I ----- 1 CREDIT
Accounting I, a one-year course for 10th, 11th, and 12th grade students, offers students an opportunity to learn the language of business, analyze transactions, maintain journals and ledgers, and prepare financial reports. Students will be expected to complete a business simulation of the accounting cycle during the 4th marking period. [Students may earn college credit through arrangements with Lackawanna College] (Accounting I can serve as a math credit as long as it is beyond the minimum 3 credit math requirement.)

654 ENTREPRENEURSHIP ----- 1 CREDIT
This course seeks to prepare students to be responsible, enterprising individuals who become entrepreneurs or entrepreneurial thinkers. Students will study the attitudes and skills that characterize entrepreneurs. They will learn the enterprising skills related to creativity, initiative, problem solving, flexibility, and adaptability. This course will also provide framework for understanding the entrepreneurial process and expose the student to challenges, problems and issues faced by entrepreneurs who start new ventures. (Open to juniors and seniors)

655 MARKETING----- 1 CREDIT
Marketing provides an introduction to the theory and practice of marketing and explains the core functions of marketing. Topics such as economics, business and international marketing, selling, and promotion will be discussed in this course.

661 ACCOUNTING II----- 1 CREDIT
A review of the principles of accounting is followed by an emphasis on such areas as payroll systems, special journals, sales tax, uncollectible accounts, depreciation, partnership, and corporation accounting. A simulation set is completed in this course. [Prerequisite: **651-Accounting I**] (**Accounting II** can serve as a math credit as long as it is beyond the minimum 3 credit math requirement)

664 BUSINESS COMMUNICATIONS & PROCEDURES ----- 1 CREDIT
In this one-credit course for juniors and seniors, the focus will be on developing effective oral and written communication skills, as well as a focus on customer service, files, management and answering telephones properly. An integral part of the course is the career unit in which students prepare their resumes and letters of application, complete job application forms, and participate in mock interviews. Students will also complete various Internet-related projects, slide presentations, etc. These activities are aimed at preparing students for the world of work and/or postsecondary education.

669 DYNAMICS OF WORK----- 1 CREDIT
This course is taken in conjunction with cooperative education/work experience. This course is designed to develop and improve students' attitudes on the job, knowledge level, and employability skills. There will be an emphasis on real-world work situations which will help prepare the student for the rapidly changing workplace

681 SCHOOL-TO-WORK EXPERIENCE ----- 1-3 CREDITS
This course allows the student to perform tasks of an actual job in an approved job situation.

ENGLISH DEPARTMENT

The English Department offers a varied program in all areas of communication skills, with special attention to research, writing skills, and literature. Course content focuses on research and problem-solving skills. Four credits of English are required for graduation.

130 ENGLISH 9-----1 CREDIT
A literature-based course, **English 9** introduces students to various literary genres typically required by colleges. Students will learn the basics of research, including: library usage techniques, note-taking, outlining, use of technology in research, alternative research strategies, and writing in accordance with the writing process. Students will experience various genres of classical and contemporary literature. They will complete applicable group activities and individual projects. In addition to narrative, persuasive, and expository writing, each student will be expected to write a serious, in-depth research report. The course will include reading instruction, study skills and vocabulary/grammar review as needed.

130A ENGLISH 9 HONORS-----1 CREDIT
A literature-based course, **English 9 Honors** introduces students to various literary genres typically required by colleges. Student will read various genres of classical and contemporary literature with a strong focus on literary analysis. Students will learn and apply the research skills by completing at least one formal research paper. Writing skills will be sharpened through students' compositions. **Summer reading and writing assignments are required.** Enrollment will be based on teacher recommendation and the student should have earned at least a 90% in 8th Grade Language Arts.

140 AMERICAN LITERATURE-----1 CREDIT
The course is designed to improve the students' understanding of American writers through a consideration of U.S. history and culture. Students will discuss and write about literary themes and display an understanding of the application of literary elements. Grammatical study will examine sentence variety, clarity, and diction through the use of the student's own written work. Students will continue to develop writing process techniques and test taking skills. This course prepares students to take the Keystone exam.

140A AMERICAN LITERATURE HONORS ----- 1 CREDIT
Students will analyze literary themes and elements with a correlation to American history and culture. Students will read various genres of classical and contemporary literature with a strong focus on literary analysis. Writing skills will be sharpened through students' compositions. **Summer reading, written analysis, and other assessments are required.** This course also prepares students to take the Keystone exam. Enrollment will be based on teacher recommendation and the student should have earned at least a 90% in English 9. (**130A-English 9 Honors** or **130-English 9**).

144 ENGLISH AS A SECOND LANGUAGE----- 1 CREDIT
The purpose of this course is to provide students whose primary language is not English with support in content-area classes and English instruction, when deemed necessary by the student's entry-level skills in English. Instruction will be administered in group and individual settings at a time determined by classroom availability and time constraints. Students will be evaluated by their progress in oral and written communication, as well as progress in their content-area classes.

155 MULTICULTURAL LITERATURE ----- 1 CREDIT
This course is a rich mix of classic, contemporary and multicultural literature that explores a range of ideas and experiences. It presents students with opportunities to analyze and interpret written works. The process of literacy is stressed. Literary study through written responses will help students develop strong reading/writing and public speaking skills. Students will complete a research paper or public speaking project. Students will engage in SAT prep. (Open to juniors)

156 ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION ----- 1 CREDIT
AP Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. To reflect the increasing importance of graphics and visual images in text published in print and electronic media, students will analyze how such images both relate to written texts and serve as alternative forms of texts themselves. In addition, the informed use of research materials in a researched argument paper and the ability to synthesize varied sources—to evaluate, use, and cite sources - are integral parts of the course. Students will become skilled writers who compose for a variety of purposes. Students will be expected to move beyond such programmatic responses as the five-paragraph essay, placing their emphasis on content, purpose, and audience and allowing this focus to guide the organization of their writing. They will use grammatical conventions appropriately and develop stylistic maturity in their prose. **Summer reading and writing assignments are required.** This course prepares students to take the national AP exam in May, which may result in college credit. [Open to juniors and seniors; recommended prerequisite: 90+ average in English courses, PSAT or SAT Reading & Writing score of 500+, self-discipline and motivation.]

166 BRITISH LITERATURE IN THE MODERN WORLD----- 1 CREDIT
British Literature includes the study of novels, short stories, drama, and poetry. The nonfiction aspect of this course focuses on global, cross – cultural nonfiction. Here students will research, read, present, and discuss nonfiction writing which includes essays, letters, debates, biographies, and autobiographies. Emphasis is placed on reading, writing, and interpreting poetry. Course work will emphasize the student’s ability to understand, explain, and evaluate a literary work. Students will be exposed to 21st century learning and writing skills through project-based assessments utilizing modern technology and skills. [Open to seniors only]

165 ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION ----- 1 CREDIT
The **AP Literature** course emphasizes the study of literature from various genres (poetry, short story, novel, and drama) and periods, concentrating on works of recognized literary merit. A work’s structure, style and themes, as well as literary conventions such as the use of figurative language, imagery, symbolism, and tone are studied. Frequent writing will emphasize the student’s ability to understand, explain, and evaluate a literary work. Readings will include works by British and American writers from the sixteenth century to contemporary times. **Summer reading and writing assignments are required.** This course prepares students to take the national AP Exam in May, which may result in students earning college credit. More details are available in the AP pamphlet available from the Guidance Department. [Open to seniors who have passed AP English Language; recommended prerequisites: 90+ average in English courses, PSAT or SAT Reading & Writing score of 500+, self-discipline and motivation.]

980 SAT PREP WRITING & CRITICAL READING----- ½ CREDIT
The **SAT Writing and Critical Reading** course is designed to strengthen the problem-solving and testing skills of students who are preparing for the writing and critical reading sections of the Scholastic Aptitude Test (SAT) and SAT II. It is taught concurrently with **981-SAT Prep Math**. [Prerequisite: 1 credit in English]

THE GRADUATION PROJECT

To meet the Graduation Project requirements to obtain a diploma from the Western Wayne School District, students must showcase their abilities in a particular area, using their academic and creative abilities in a cross-curricular manner. Students are encouraged to complete a career-based project that will allow them to better understand the skills they may be using in the future. See your English teacher or Senior Project Coordinator for details.

FAMILY AND CONSUMER SCIENCE DEPARTMENT

Family and Consumer Science courses will introduce our students to a gainful and useful background in various aspects of life, including the physical, social, and economical aspects of everyday living.

- 821 NUTRITION & WELLNESS** ----- 1 CREDIT
This course is designed to help students understand and value the importance of wellness and its components through lifetime nutrition and exercise choices. The course is a personal reflection of their current health practices with further education for future change. This class is taught as an applied science with both lecture and lab formats. The students will be researching and preparing both written and oral papers and presentations. The class is helpful for students preparing to study in the medical field or athletic training beyond high school. **This course is not a cooking class. Students should have an Honors or AP Science class prior to taking this course.** (Open to juniors and seniors only)
- 825 CONSUMER SKILLS** ----- ½ CREDIT
This course is designed to allow students to learn and practice skills to help them be financially self-sufficient. Students work in a real-world simulation format that covers career preparation, job interviews, paychecks and benefits, banking, buying and maintaining a car, renting an apartment, budgeting, insurance, credit cards and many of the financial challenges faced every day. [Required course for all sophomore students]
- 833 INTRODUCTION TO SEWING** ----- 1 CREDIT
This is an introductory course designed to provide a more in-depth look at sewing. Students will learn hand sewing techniques and gain a deeper understanding of the sewing machine and how to troubleshoot problems. Projects will involve basic clothing construction, crafting, quilting, and exploration into other textiles. (Open to all grades)
- 835 BASIC FOODS** ----- 1 CREDIT
In this course, students will apply fundamental culinary techniques, such as knife handling skills, and the recognition, selection and proper use of tools and equipment. An emphasis will be placed on sanitation, mise en place, the management of time, ingredients and equipment. Students will apply standard recipe conversions using a proper scaling and measurement techniques. (Open to freshmen and sophomores)
- 840 CULINARY PASTRY ARTS** ----- 1 CREDIT
This course is an in-depth study of the pastry arts. Labs will include laminated doughs, layer cake construction, shortened and foam cakes, piping skills, frostings, fillings, icings, specialty pie production and yeast breads. This course is designed to mirror a student's first year in a culinary baking and pastry course. [Prerequisite: **835-Basic Food Prep and 851-Gourmet Foods**] (Open to juniors and seniors)
- 843 TEXTILE AND DESIGN** ----- 1 CREDIT
This course is designed to provide an introduction in clothing and design. Students will be exploring the influences of clothing choice, fashion history, fashion styles, characteristics of fabric and fabric care. The students will continue to review sewing skills learned in Introduction to Sewing as well as continue to develop their construction portfolio. Students will sketch often as they explore fashion, illustration and design. Commercial sewing patterns for clothing and accessories will be the main focus. [Pre-requisite: **833-Introduction to Sewing**] (Open to sophomores, juniors, and seniors)

844 CHILD DEVELOPMENT----- 1 CREDIT
Understanding how children grow and develop is an important skill for parents and for people in a growing number of professions and careers. This growth and development begins at birth and continues over the lifespan. This course will take a closer look at caring for an infant (*including use of the mechanical babies), followed by developing parenting and home skills, followed by looking at the physical, cognitive, social and emotional growth of children at various ages and stages. [Prerequisite: **862-Family Living**] (Open to sophomores, juniors, and seniors)

851 GOURMET FOODS----- 1 CREDIT
This course is designed to acquaint students to the art of gourmet cooking. During the 1st and 2nd quarters, students will experience making various types of decadent foods. In the 3rd and 4th quarters, students will compare international cuisines, ingredients, and preferred cooking methods of various cultures. The influence of traditions and regional and cultural perspectives on food choices and culinary practices will be emphasized. Students will examine the issues and conditions that affect the availability and quality of food in the global market, and apply advanced cooking techniques, including the use of specialty and advanced equipment in the preparation of food dishes. [Prerequisite: **835-Basic Food Prep**] (Open to sophomores, juniors, and seniors)

852 FAMILY AND CONSUMER SCIENCE LAB TECHNICIAN----- ½ CREDIT
This is an independent study course in which students are responsible for cooking and sewing laboratory preparations. Students will need knowledge of basic cooking and/or sewing skills and be able to implement all safety and sanitation rules. Students may be required to help other students in class, operate and tear down the dishwasher, and locate equipment and supplies. Students will need to be responsible, self-motivated, and be able to follow written and oral instructions with multiple steps. [Prerequisites: **835-Basic Food Prep** and either **840-Baking and Pastry** or **851-Gourmet Foods** or **833-Introduction to Sewing**; written FCS teacher approval and minimum grade of 85%]

855 EARLY CHILDHOOD EDUCATION----- 1 CREDIT
Many of the growing careers of the present relate to working with children. To be successful in these careers, it takes much skill and knowledge that focus on all aspects of working with children. This course allows the student to learn concepts needed to work with children in various aspects, including required training and skill, child development theories and practices, lesson and curriculum planning, preparing the learning environment and managing an ECE setting. (*includes monthly elementary school observations and conducting an on-site day care program). [Prerequisite: **862-Family Living, 844-Child Development**] (Open to juniors and seniors)

861 ADVANCED COOKING----- 1 CREDIT
This program is designed to acquaint the student with fundamental aspects of commercial cookery, quality customer service to the dining experience, role of food service management, hospitality industry safety & sanitation principles in HACCP applications. The course provides training for entry-level jobs or for those interested in pursuing further education in this field. (This course is open to seniors only. Student must have at least two cooking classes prior to this class.)

862 FAMILY DEVELOPMENT----- 1 CREDIT
Today's families face many challenges as they grow and develop. It is important to have the skills that will help make families strong and able to contribute to society. As families plan to grow, it is important to have the knowledge needed to understand and maintain a healthy pregnancy leading up to childbirth. This course takes a closer look at family structures, the family life cycle, challenges families face and building relationships that lead to marriage. The course then focuses on prenatal development, problems during pregnancy, maintaining a healthy pregnancy, and child birth.

863 FASHION I----- 1 CREDIT
This course is designed to provide and introduce the students to the fashion world. Students will be exploring fashion designers, fashion design portfolios, fabric identification and use, fashion marketing, introduction to fashion illustration, textile industry and apparel. Detailed commercial patterns and accessories will be used as well as an introduction to self-designed draped patterns. Participation in Western Wayne Art Show, Project Runway and Scholastics. [Prerequisite: **833-Introduction to Sewing, 843-Textile and Design**] (Open to juniors and seniors only)

864 FASHION II ----- 1 CREDIT
This course is a senior level course designed to examine a more in depth study of the textile and apparel industry, clothing construction and fashion, pattern draping and fashion merchandising. Students will complete more complex sewing, design their own clothing line, develop patterns with more extensive pattern draping, further develop their portfolio, clothing retail and fabric selection. Participate in Western Wayne Project Runway, Scholastics and prepare for senior Art Show Display. [Pre-requisite: **863-Fashion I**] (Open to seniors only)

865 EARLY CHILDHOOD EDUCATION II-----3 CREDITS
This course is an extension of **Early Childhood Education I** and is primarily a career-oriented course for those thinking about a career in Early Childhood Education or a related occupation. It will focus heavily on fieldwork and observation in our district elementary schools. Students will be completing coursework that prepares them to take the Child Development Associate Credential Assessment at the end of the year. [Prerequisite: **855-Early Childhood Education I**] Requires teacher and guidance approval. **Students will be conducting fieldwork several hours per day.

----- FOREIGN LANGUAGE DEPARTMENT -----

The Foreign Language Department strives to instill in each student an appreciation for and awareness of the language, history, mores, and customs of other countries.

330 FRENCH I – Western Wayne Virtual Academy----- 1 CREDIT
At this level, students are introduced to the basic elements of French as they move through the early stages of language acquisition. They study major vocabulary categories, verb tenses, and other fundamental components of French grammar. The main purpose is to help students communicate in French at a basic level, appreciate the French-speaking world, and develop cultural awareness. **This course is an on-line class offered during the school day.**

331 SPANISH I ----- 1 CREDIT
For the beginning student, **Spanish I** offers short, lively dialogues, related vocabulary supplements and exercises, imaginative structural drills, and increased reading and writing materials. Students are also introduced to the culture and geography of Spain and Latin America. Spanish culture in the United States is emphasized.

332 GERMAN I – Western Wayne Virtual Academy----- 1 CREDIT
At this level, students are introduced to the basic elements of German as they move through the early stages of language acquisition. They study major vocabulary categories, verb tenses, and other fundamental components of German grammar. The main purpose is to help students communicate in German at a basic level, appreciate the German-speaking world, and develop cultural awareness. **This course is an on-line class offered during the school day.**

- 333 GERMAN II - Western Wayne Virtual Academy**----- 1 CREDIT
 At this level, students review the basic elements of German grammar acquired in **German I** and expand their communicative abilities. They advance their knowledge of German grammar and learn additional vocabulary. Their language skills increase to the point where they can participate more fully in general conversations, read more sophisticated passages, and write with a firmer command of syntactical structures. Cultural awareness is further developed. **This course is an on-line class offered during the school day.** [Prerequisite: **330-German I**]
- 340 FRENCH II- Western Wayne Virtual Academy**----- 1 CREDIT
 At this level, students review the basic elements of French grammar acquired in **French I** and expand their communicative abilities. They advance their knowledge of French grammar and learn additional vocabulary. Their language skills increase to the point where they can participate more fully in general conversations, read more sophisticated passages, and write with a firmer command of syntactical structures. Cultural awareness is further developed. **This course is an on-line class offered during the school day.** [Prerequisite: **330-French I**]
- 341 SPANISH II**----- 1 CREDIT
 This course is devoted to the discussion and mastery of the grammatical and fundamentals of the Spanish language. The concepts which are utilized allow the student to converse at the level of an elementary age native speaker. Slang terms and practical idiomatic expressions challenge English speaking students who are learning Spanish as a second language and Eres Tu' Maria Video Series. Eres Tu' Maria provides a motivating experience with Spanish using a storyline. Students will improve listening and reading comprehension as a result of watching and completing the correlating activities. Periodic discussions of the history, culture, and literature of Spain, Mexico, and Latin America are also presented. [Prerequisite: **331-Spanish I**]
- 351 SPANISH III**----- 1 CREDIT
 Spanish III is a course in refinement of oral language skills and the introduction of written and grammatical language skills by using a variety of short dialogues, stories, and histories to increase the student's vocabulary, confidence, and writing ability. LaCatrina Video Series students learn to move beyond the textbook and yet understand what they are hearing at an intermediate level. Mexico is the country of focus in "La Catrina." [Prerequisite: **341-Spanish II** with an average of 80% or above or teacher recommendation.]
- 361 SPANISH IV**----- 1 CREDIT
 After a brief review of all tenses presented in previous levels, the **Spanish IV** student will gain confidence by mastering oral and written skills through topical theme discussions, and conversations. The art, music, cuisine and history of Spain and other Spanish-speaking nations will be highlighted periodically. La Catrina "el ultimo secreto" Video Series is a continuation of the Spanish III series "La Catrina." Mexico is the country of focus in "El Ultimo Secreto." [Prerequisite: **351-Spanish III** with an average of 88% or above]
- 365 ADVANCED PLACEMENT SPANISH LANGUAGE & CULTURE**----- 1 CREDIT
 The AP Spanish Language course should help prepare students to demonstrate their level of Spanish proficiency across three communicative modes (Interpersonal [Interactive communication], Interpretive [Receptive communication], and Presentational [Productive communication]). This course will align with the National Standards for Foreign Language which includes communication, cultures, connections, comparisons, and communities. This course promotes an awareness and appreciation of cultural products, both tangible (tools, books, music) and intangible (laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspective (values, attitudes, and assumptions that underlie both practices and products). This course should be comparable to college and university courses that focus on speaking and writing in the target language at an advanced level. Students may take the AP Spanish exam. [Prerequisite: 90% average or better in **Spanish I, II, III, and IV**]

MATHEMATICS DEPARTMENT

Success in a high school mathematics course requires, among other factors, a proficiency in basic math, and the proper background in mathematical concepts. Many of the courses offered build upon previously-learned material and, therefore, have one or more prerequisites.

A student who wants to take more than one mathematics credit in a year is urged to discuss the possibilities with his or her guidance counselor and mathematics teacher.

Three (3) credits in mathematics are required for graduation. Accounting I & II cannot be used for these 3 credits. Accounting I and II will be counted as additional math credits beyond the required 3 for graduation.

Starting with the Class of 2020, the Algebra Keystone Exam must be passed in order to graduate.

430 GEOMETRY HONORS----- 1 CREDIT
Geometry (9) enables the student to acquire information about geometric figures through the use of intuition, deductive and inductive thinking, and algebra. Included is a thorough study of angle relationships, perpendicular and parallel lines, congruent and similar polygons, constructions, loci, proofs, and other topics in modern geometry. [Prerequisite: Enrollment will be based on teacher recommendation and Algebra I grades.]

431 ALGEBRA I ----- 1 CREDIT
In **Algebra I** the basic relationships of the real numbers are explored, including a thorough study of properties, equations, inequalities, signed numbers, formulas, factoring, applied problems, and graphing in the ordinate system. A proficiency in fractional and decimal computations is necessary for success in **Algebra I**. [Prerequisite: 7th & 8th grade Mathematics]

432 ALGEBRA (A) ----- 1 CREDIT
Algebra (A) is the first-half of a two-year algebra course. The second course is Algebra (B). The topics in **Algebra (A)** are as follows: properties of real numbers, equations, inequalities, and graphing in the coordinate plane. [Prerequisite: 8th grade math, teacher and/or guidance counselor recommendation only! NOTE: **432-Algebra (A)** plus **442-Algebra (B)** is equivalent to one year of **431-Algebra I**]

440 ALGEBRA II HONORS ----- 1 CREDIT
Algebra II Honors is a rigorous, fast paced course designed for highly motivated mathematics students. Students will study common core concepts based on ten functions: linear, quadratic, polynomial (cubic, quarter, quantic), logarithmic, exponential, radical, rational and trigonometric. **Summer work is required.** [Prerequisites: Success in **Algebra I** and **430 - Honors Geometry** with at least an 85% combined average. Teacher recommendation is also a possibility for enrollment in the course.]

441 GEOMETRY ----- 1 CREDIT
Geometry enables the student to acquire information about geometric figures through the use of intuition, deductive and inductive thinking, and algebra. Included is a thorough study of angle relationships, perpendicular and parallel lines, congruent and similar polygons, constructions, loci, proofs, and other topics in modern geometry. [Prerequisite: **431-Algebra I**]

442 ALGEBRA (B)----- 1 CREDIT
Algebra (B) is the second half of a two-year Algebra course. The first course is **Algebra (A)**. The topics in **Algebra (B)** are as follows: functions, formulas, polynomials, radicals, proportions, quadratics, and concepts in Geometry will be covered as well. [Prerequisites: **432-Algebra (A)**. NOTE: **432-Algebra (A)** plus **442-Algebra (B)** is equivalent to one year of **431-Algebra I**]

- 443 APPLIED GEOMETRY** ----- 1 CREDIT
 This course covers the main topics seen in Geometry. Such topics include: angle relationships, perpendicular and parallel lines and congruent and similar polygons. [Prerequisites: **Algebra A**, **Algebra B**, and teacher recommendation]
- 450 PRE-CALCULUS**----- 1 CREDIT
 This course concentrates on areas that provide a solid foundation for the formal study of calculus: trigonometry, functions, logarithms, and exponential functions, and analytic geometry. [Prerequisites: **431-Algebra I**, **441-Geometry**, and **451-Algebra II**. Each student must have a combined average of at least 85% or teacher recommendation in **431-Algebra I**, **441-Geometry** and **451-Algebra II**]
- 450A PRE-CALCULUS HONORS**----- 1 CREDIT
Pre-Calculus Honors is a rigorous, fast paced course designed for highly motivated mathematics students, who are college bound. Students will continue their common core concepts based on the ten functions and will further their knowledge in trigonometry and in sequences and series. **Summer work is required.** [Prerequisites: **431-Algebra I**, **430-Geometry Honors** and **440-Algebra II Honors** with at least an average of 85%. Teacher recommendation is also a possibility for enrollment in this course.]
- 451 ALGEBRA II** ----- 1 CREDIT
Algebra II reviews and further develops the topics covered in **431-Algebra I** and increases the student's knowledge of such topics as quadratic equations, radicals, and logarithms. [Prerequisites: **441-Geometry & 431-Algebra I**]
- 453 STATISTICS** ----- 1 CREDIT
 This is a statistics course for beginners. Topics will be chosen from both descriptive statistics and inferential statistics. Also, topics in probability will be studied. [Prerequisite: **Algebra II**]
- 460 CALCULUS**----- 1 CREDIT
 Calculus includes these topics: limits, derivatives, and integrals of functions and their applications. [Prerequisites: 85% final average or teacher recommendation in **450-Pre-Calculus** or **450A-Pre-Calculus Honors**]
- 461 TRIGONOMETRY & ADVANCED ALGEBRA** ----- 1 CREDIT
Trig and Advanced Algebra expands topics from **Algebra II** and introduces the student to analytic geometry and trigonometry. The course is designed for college-bound students who do not elect **450-Pre-Calculus**. [Prerequisite: **Algebra II**]
- 465 ADVANCED PLACEMENT CALCULUS** ----- 1 CREDIT
AP Calculus is a college level course that students can use to prepare for the AP Exam. To take the AP exam the student must have a 90% or better in the course. Topics includes: limits, derivatives, and integrals of functions and their applications. **Summer work is required.** [Prerequisites: 90% final average or teacher recommendation in **450A-Pre-Calculus Honors**]
- 970 ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES** ----- 1 CREDIT
The AP Computer Science Principles is designed to be the equivalent to a first semester introductory college computing course. In this course, students will develop computational thinking vital for success across all disciplines. Students will use computational tools to analyze and study data. Students will apply creative processes to create computational artifacts and are encouraged to think creatively while using computer software. [Prerequisite: Teacher recommendation and successful completion of **975-Computer Programming I AND 976-Computer Programming II**, 11th and 12th grade only. Successful completion of Algebra I is strongly recommended.]

975 COMPUTER PROGRAMMING I ----- 1 CREDIT
Computer Programming I introduces the student to the world of computers. We start with Qbasic (a programming language) in order to teach the student logical thinking. The student then is introduced to binary and hexadecimal arithmetic. We also introduce the student to web page development (HTML). Finally, Logic Statements and Truth Tables are introduced. This course is a prerequisite for all other courses in programming.

976 COMPUTER PROGRAMMING II ----- 1 CREDIT
Computer Programming II starts with Visual Basic Programing. The student will use a course on web design which includes both Frontpage and Dreamweaver. Introduction to solid state logic design and single state automata. The student will be required to create many websites, both informational and curricular. [Prerequisite: **975-Computer Programming I**]

977 COMPUTER PROGRAMMING III ----- 1 CREDIT
This is a comprehensive course designed for creating Object oriented programs using console and visual C++. We will develop advanced Internet skills and Internet applications and document creation, using programs such as Visual Basic and Visual C++. The basics of Game Theory will also be introduced. [Prerequisite: **975-Computer Programming II**]

978 COMPUTER PROGRAMMING IV ----- 1 CREDIT
This course will be an introductory course in Java Programming. Students will also be required to enter the State Computer Fair in any one of the eight categories: Graphics, Digital Movie, Animation, Computer Logo, Text Based Publications, Multimedia Presentation, Curricular Website or Information Based Website. [Prerequisite: Teacher recommendation and successful completion of **975-Computer Programming I AND 977-Computer Programming III**, 11th and 12th grade only.]

981 SAT PREP MATH----- ½ CREDIT
This course reinforces concepts taught in General Math, Algebra, and Geometry in order to better prepare the student to take the Scholastic Aptitude Test. Testing strategies are also emphasized for students. It is taught concurrently with the **980-SAT Prep Writing & Critical Reading**.

985 KEYSTONE ALGEBRA----- ½ CREDIT
This course concentrates on Algebra I curriculum with a focus on the topics presented in the Keystone exam. This course is mandatory for any student who does not reach proficiency on the Algebra 1 keystone exam.

MUSIC DEPARTMENT

The Music Department offers several exciting performing groups. Special ensembles such as Jazz Band, Select Chorus, and others will be offered to members of the ensemble classes Band and Chorus. All instrumental ensembles are outgrowths of the basic course in playing techniques called Band. All vocal ensembles are outgrowths of the basic course in vocal technique called Chorus. Anyone considering a career in the musical arts should take both instrumental and vocal training.

925 BAND----- 1 CREDIT

The Band program at Western Wayne has come to be known as one of the finest in Northeast Pennsylvania, having great success over the last 18 years.

Within the Band program there are multiple ensembles such as Concert Band, Marching Band (“The PRIDE of Western Wayne”), Jazz Band, Brass and Woodwind Ensembles. **Band Class** is the backbone of the instrumental music program and rehearses during the scheduled **Band** period. All students in **Band** class are automatically accepted as members of the Concert and Marching Bands. Selection to Jazz Band, Brass and Woodwind Ensembles and other special performing groups will be established by the Band Director.

The Band performs in two formal concerts annually. These are traditionally a holiday concert and a spring concert. The Band also performs for special school functions, such as assemblies, graduation and pep rallies. The Band performs at football games and in parades, cavalcades and community events. Transportation costs associated with all away football games and up to 5 (five) community events will be the responsibility of the District; travel costs for other band events is subject to transportation funding rules, whatever they may be at the time. An annual schedule of performances will be provided to students and their families on the WWBAND website and in print if requested. Additional performances may be added during the year but students will be given notice of performances well in advance or they will not be expected to perform.

Performance and Rehearsal Schedule and Requirements for Band Class.

1. The marching band will rehearse after school one day a week and also the day of any Friday football game. All rehearsals are considered part of the class participation grade. WW Varsity Sports students will be excused from these rehearsals early to allow students to participate in both the Band and sports.
2. All performances are graded and will be treated as tests. As such, a student will have the opportunity to make up any missed performance by completion of a test or assignment assigned by the band director. This make up will only be offered if the absence is excusable by school attendance policy.

926 CHORUS----- 1 or ½ CREDIT

Chorus is offered as either a one-credit or ½-credit course. This course is designed to give students an opportunity to improve vocal technique and musicianship through choral singing. From the hesitant music learner to the highly skilled, gifted musician, we will learn and perform together to create beautiful choral music.

927 Performance Requirements The Chorus will perform in two formal concerts annually, a traditional holiday performance and a spring performance. The concert attire is a formal attire of black and white. Other performance opportunities include small ensembles and vocal solo work as well as special school functions and community service. The chorus will rehearse during scheduled school hours during the year. [Prerequisite: Current enrollment in Chorus or teacher approval]

928 THEATER ARTS ----- ½ CREDIT

This course studies several aspects of theater arts, including:

1. Intermediate acting, movement, and vocal techniques
2. History of the theater and its cultural purposes
3. Anatomy of a production and
4. Understanding of theater as students will explore basic acting skills including pantomime and improvisation, create and perform plays, and critique performances.

The purpose of this year long, repeatable course is to give the student an increased appreciation of an additional experience in theater as an art form. Students taking the course for a 2nd, 3rd, or 4th year will review previous aspects of theater arts and will be offered more intensive and highly individualized instruction in acting, with rigorous, performance-oriented training in singing and acting techniques, with a secondary emphasis on dance. Students continuing training in theater arts will also be offered a study of stage technology and theatrical design. This course has been crafted for the beginning theater art student or the student who is seriously interested in pursuing the theatrical arts as a major or minor at the university level. (Open to all)

Performance Requirements – Students are required to perform in a formal theatrical production during the school year. (School Production or Community Production)

931 STAGE CREW ----- ½ CREDIT

This is an introductory course for students interested in the technical aspect of theater. Units of study include: Safety, Professionalism, Theater Electricity, Lighting Design, Sound Design, and Basics of Theater. This course requires after school hours as part of the student’s grade. (Open to students in grades 9, 10, 11, and 12 with teacher approval.)

971 MUSIC THEORY I ----- ½ CREDIT

Music Theory I is offered to all students with basic music skills. This course will explore the foundational elements for writing music, including but not limited to: Music Notation, Music Terms, ear training/dictation, sight singing, improvisation, and composition. [Experience on an instrument or voice, as well as, basic note-reading skills are required.]

974 MUSIC THEORY II ----- ½ CREDIT

Music Theory II is offered to all students who have completed Music Theory I or who have passed a proficiency exam with the teacher. This class will explore advanced written music notation, music terms, scale structure, ear training/dictation, sign singing, and composition. [Experience on an instrument or voice, as well as, basic note-reading skills are required.] [Prerequisite: **971-Music Theory I** or teacher permission]

979 MUSIC THEORY III----- ½ CREDIT

Music Theory III is offered to all students who have completed Music Theory II or who have passed a proficiency exam with the teacher. This course will explore advanced written harmony, keyboard harmony, ear training/dictation, sight singing, Chord Structure, music forms and composition. All students will be required to write an arrangement suitable for performance. [Experience on an instrument or voice, as well as, basic note-reading skills are required.] [Prerequisite: **971-Music Theory II** or teacher permission]

ELECTIVE CREDIT

The Western Wayne School District has an agreement with the local fire companies to provide elective credit for the following courses sponsored by the fire companies:

1. Firefighting I
2. Emergency Medical Technician

The following criteria must be met for this elective credit to be awarded:

1. Proof of membership in the fire company
2. Description of their course
3. Number of hours of instruction
4. Copy of certificate of completion

Upon receipt of this information, one elective credit per course will be entered on the student's transcript with an indication of a "P" (passing) grade. This grade will not be part of the computed grade point average.

PHYSICAL EDUCATION DEPARTMENT

The objective of the Physical Education curriculum is to provide the student with skills and knowledge for active participation in and enjoyment of physical activity. We believe that physical education should prepare our students for a healthy lifestyle with the knowledge of wellness, fitness, and physical activity. Our program emphasizes an understanding of the reasons why it is physiologically important to maintain a healthy body. Activities include team sports, lifetime sports, rhythmic, and personal fitness.

- 40 BOYS 9 GYM/GIRLS 9 GYM**----- ½ CREDIT
Ninth grade physical education introduces the student to weight lifting techniques, muscles involved in the various lifts, and an understanding of the target heart rate. It is also a basic course in team sports combined with an understanding of rules, concepts and strategies, and low-level team play. Students are also introduced to individual and dual racquet sports with a strong emphasis on skill development. [Required]
- 41**
- 40 BOYS 10 GYM/GIRLS 10 GYM**----- ½ CREDIT
Tenth grade physical education is a continuation of the ninth-grade philosophy with a greater emphasis on individual skill development, increased awareness of team concept play, and an understanding of the enjoyment derived from these activities, as well as a continuation of strength, core, and cardiovascular development. [Required]
- 41**
- 60 BOYS 11 GYM/GIRLS 11 GYM**----- ½ CREDIT
Eleventh grade physical education emphasizes the aforementioned goals, with greater appreciation for lifetime leisure enjoyment through individual and some team-oriented physical activities and an understanding of the "good sportsmanship" attitude. [Required]
- 61**
- 60 BOYS 12 GYM/GIRLS 12 GYM** ----- ½ CREDIT
Twelfth grade physical education is the culmination of skill development, team concept, shared goals, appreciation for the spirit of the competition and not necessarily the "win-at-all -costs" philosophy. The course addresses an overall attitude to be carried into all aspects of life. It also emphasizes lifetime activities and gives students more opportunities to develop a personal development program. [Required]
- 61**

92 ADAPTIVE GYM ----- ½ CREDIT
Adaptive physical education is designed for the student with limitations due to developmental concerns, medical conditions, or injuries. More individualized programs will be implemented so as to better utilize activity in meeting the needs of the student. Basic skills, lead-up activities, and small group dynamics will be emphasized.

99 ADVANCED GYM----- ½ CREDIT
The purpose of this course is to give students who play two or more interscholastic sports the opportunity to participate in a safe, yet challenging, strength training program. Students will learn to design and maintain a sport-specific weight training routine which will help prepare them for competition and encourage them to develop a lifetime commitment to physical fitness. This course is graded on participation and effort; therefore, athletes enrolled are expected to show self-motivation. Once the school year begins, no student is permitted to switch Gym classes. Advanced Gym will serve as the student’s gym class. Students can also take a regular gym class if they choose. [Admittance to class must meet with the PE teacher’s approval and with two different sports coaches’ signatures – Grades 9-12]

52 HEALTH EDUCATION ----- ½ CREDIT
Health education is the process by which individuals and groups of people learn to behave in a manner that is conducive to the promotion, maintenance, and restoration of health. The health education course is designed to supplement and enhance previously learned health knowledge. Through a conceptual approach, the students will be provided with a wide scope of general health and health related issues.

Areas to be studied throughout the school year include:

- Introduction to Health
- First Aid and CPR
- Non-communicable Diseases
- Nutrition and Digestive System
- Reproductive Health
- Communicable Diseases
- Physical Activity, Stress, Muscular System and the Skeletal System
- Substance

CPR Certification:

All health education students will have the opportunity to earn their adult, child and infant CPR certification through The American Safety and Health Institute (ASHI). ASHI is an association of professional safety and health educators providing nationally-recognized training program across the United States and in several foreign countries. ASHI’s mission is to continually improve safety and health education by promoting high standards for members, principles of sound research for curriculum development, and the professional development of safety and health instructors worldwide.

Current Events:

The health education field is ever changing. It is very important for students to be aware of the most current health trends and issues. Several class periods throughout the school year will be devoted to current health topics.

SCIENCE DEPARTMENT

The science courses described below have been designed to meet the needs of a diverse student population – college-bound, career-bound, or domestic-bound. Students should be able to find success in one of the career paths available to them. Outstanding student performance can be converted to college credit through an Advanced Placement Chemistry, Advanced Placement Biology, or Advanced Placement Physics course.

531 GENERAL SCIENCE 9----- 1 CREDIT

This course is designed to provide an opportunity to investigate areas of Ecological and Environmental Sciences as well as Biochemistry and how they are an integral part of everyday life. We will investigate the composition, diversity and how living things connected to earth. The fundamental concept of evolution will lead to investigations into explorations of the living world, the physical environment, and the interactions that occur in and between ecosystems. Biochemistry will involve the study of the molecular composition of living cells, the organization of biological molecules within the cell, and the structure and function of these biological molecules. Students will engage in investigations to understand and explain the behavior of living things in a variety of scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications.

541 INQUIRY BIOLOGY W/LAB----- 1½ CREDIT

This biology will cover topics such as ecology, biochemistry, cell biology, photosynthesis and respiration, molecular and Mendelian genetics, evolution and diversity of life. The course uses lecture and laboratory methods and is designed for the student with a strong interest in the sciences. Laboratory activities are used extensively throughout this course. [Restrictions: Students earning a credit in **542-Applied Biology** or **541A Inquiry Biology w/Lab Honors** may not take this course for credit]

541A INQUIRY BIOLOGY W/LAB HONORS----- 1½ CREDIT

This course covers the topics presented in biology at a faster pace and in more detail. The lecture portion of the class will cover topics such as ecology, biochemistry, cell biology, photosynthesis and respiration, molecular and Mendelian genetics, evolution and diversity of life. Laboratory classes are designed to stimulate student interest and encourage problem solving and discovery. This course is designed for highly motivated academic students of exceptional ability who have a strong interest in science and are willing to investigate biology at a deeper level. Students wishing to take **563-AP Biology** must take this course. Summer work is required. [Prerequisites: Successful completion of **431-Algebra I** (may be taken simultaneously). Proficient or Advanced on the 8th Grade Science PSSA and Reading PSSA or successful completion of General Science 9 with a grade of 90% or better.]

542 APPLIED BIOLOGY W/LAB----- 1 CREDIT

This course in general biology will cover topics such as ecology, biochemistry, cell biology, photosynthesis and respiration, molecular and Mendelian genetics, evolution and diversity of life. Students are expected to conduct experiments and explorations on a regular basis.

551 CHEMISTRY I W/LAB----- 1½ CREDITS

This is a first-year course in modern chemistry designed to provide the student with basic knowledge of concepts including atomic structure, quantum mechanics, bonding, behavior of gases, chemical reactions, and an understanding of the “mole” concept. This course has a strong emphasis on the application of mathematical concepts in a scientific setting. Students will learn how to utilize the scientific method coupled with dimensional analysis to solve scientific problems. At the end of the course, students should be creative and competent problem solvers. [Prerequisite: **431-Algebra I**, **441-Geometry** or **430-Geometry Honors** (may be taken simultaneously), **541-Inquiry Biology w/Lab**, **541A-Inquiry Biology w/Lab Honors**, or **542-Applied Biology**, with a grade of 85% or better; **541A-Inquiry Biology w/Lab Honors**, or **541-Inquiry Biology w/Lab** may be taken simultaneously]

551A CHEMISTRY I W/LAB HONORS----- 1½ CREDITS
This is a rigorous, fast-paced course designed for highly motivated students with a strong interest in the math and sciences. This course provides students with in-depth detail of such concepts as matter, atomic structure, quantum mechanics, bonding theory, chemical equations, the periodic table, nomenclature, and the “mole concept”. This class will challenge the student with process and inquiry skills inherent in the study of science. This class will include lecture, as well as, a hands-on laboratory component. Students will be required to maintain a scientific notebook. Students wishing to take **565-AP Chemistry** must take this course. Summer work will be required. [Prerequisites: Successful completion of **421-Algebra I**, with a minimum of 85% or better, **441-Geometry or 430-Geometry Honors** (may be taken simultaneously); **541-Inquiry Biology w/Lab** or **541A-Inquiry Biology w/Lab Honors** may be taken simultaneously. **Students must pass the Biology Keystone Exam and the Algebra Keystone exam if they have taken these courses.**]

552 APPLIED CHEMISTRY W/LAB----- 1 CREDIT
This course presents a general overview of basic chemistry. Topics include the periodic table, chemical properties, chemical structure, compounds, equations, and reactions. This course introduces students to the basic concepts of chemistry such as the mole, molar mass, and Avogadro’s number. Teacher demonstrations, student laboratories, and student-centered activities are regular parts of the instruction. The course is aimed at providing the student with information, scientific principles, applications, and investigations. It is specifically geared toward non-science/non-math majors. Students who have taken or are taking **551-Chemistry w/Lab** or **551A-Chemistry w/Lab Honors** cannot take this course.

556 ANATOMY & PHYSIOLOGY W/LAB----- 1 CREDIT
This course is designed for college-bound students planning to pursue careers in any of the health-related fields. Students will study the structure and function of human biological systems, the basic chemistry of the human body and cell structure. The course will examine body systems in detail. Offered to 11th or 12th grade students with teacher recommendation. May be taken by 10th grade students who are taking AP Biology simultaneously. [Prerequisite: Successful completion of **541-Inquiry Biology** or **541A-Inquiry Biology w/Lab Honors** or **542-Applied Biology**, with a grade of 85% or better and a Proficient or Advanced score on the Biology Keystone Exam.]

561 PHYSICS W/LAB----- 1½ CREDITS
This is a first-year course in modern physics designed to provide advanced students with basics in the mechanics of work, energy, power, mechanical waves, sound, and electricity. Modern Physics and simple machines are also covered in this course. This course prepares the student for college courses by developing cognitive thinking. [Prerequisites: A grade of 80% or better in **431-Algebra I** and **441-Geometry or 430-Geometry Honors**]

562 GENERAL KEYSTONE SCIENCE-----½ CREDIT
In this course students will further their understanding of Biological concepts including basic biological principles, the chemical basis of life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics and the theory of evolution. This course uses a variety of instructional approaches and laboratory activities to further student understanding in preparation of, as well as remediation for, the Biology Keystone exam. This course is mandatory for any student who does not reach proficiency on the Biology Keystone exam.

563 ADVANCED PLACEMENT BIOLOGY W/LAB----- 1½ CREDITS
The **Advanced Placement Biology** course is designed to be the equivalent of a two semester college introductory biology course. Topics covered include in-depth review of cell anatomy and physiology, mitosis and meiosis, cellular energetics, heredity and molecular genetics, the anatomy and physiology of plants and animals, and ecology. Primary emphasis is given to developing an understanding of concepts rather than memorizing terms and technical details. Summer work is required. You must have an 85% or higher in this course to be eligible to take the AP exam. [The course is designed for college-bound students planning to major in any of the biological sciences. Prerequisites: **431-Algebra I; 541A-Inquiry Biology w/Lab Honors** and teacher recommendation; **556-Anatomy & Physiology w/Lab** is recommended but not required. It will help with preparation for the AP exam. **Students must pass the Biology Keystone Exam and the Algebra Keystone Exam.**]

565 ADVANCED PLACEMENT CHEMISTRY W/LAB----- 1½ CREDITS
Advanced Placement Chemistry is a second-year course in chemistry, designed to provide an opportunity for high school students to receive credit for college-level coursework while still in high school. Topics include structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics, acid/base chemistry including buffer solutions, electrochemistry, and the basic concept of thermodynamics. Lecture and laboratory work are key components of this college run curriculum. A strong background in math is highly recommended due to the intensive mathematical problems inherent in chemistry concepts. Students are expected to be independent learners and may need to complete subject matter outside of the classroom. Students will be required to maintain a scientific notebook. This course is designed for the college-bound student with a strong interest in science. Summer work is required. You must have an 85% or higher in this course to be eligible to take the AP exam. [Prerequisites: A grade of 90% or better in **431-Algebra I** and **441-Geometry** or **430-Geometry Honors, 551A-Chemistry w/Lab Honors**. **Students must pass the Biology Keystone Exam and the Algebra Keystone Exam.**]

566 CHEMISTRY LAB TECHNICIAN----- ½ CREDIT
This is an independent study course in which students are responsible for laboratory preparations. Students will need knowledge of basic chemistry and will need to be able to implement all laboratory safety rules. A thorough chemistry vocabulary and understanding of chemical concepts are required. Students will be required to tutor chemistry with lab students, prepare different solutions of varying concentrations, and identify and locate different glassware and equipment. Students will be responsible for all aspects of laboratory preparations, including safety and proper clean-up. Students will need to be responsible, self-motivated, and be able to follow written instruction. Special projects for community outreach could be part of their tasks.[Prerequisites: **551-Chemistry w/Lab** or **551A-Chemistry w/Lab Honors** with a minimum grade of 85%; Chemistry teacher approval required. Students must score Proficient or Advanced on the Biology Keystone Exam. Students may be asked to complete an independent research project.]

567 BIOLOGY LAB TECHNICIAN----- ½ CREDIT
This is an independent study course in which students are responsible for laboratory preparations. Students will need knowledge of basic biology and chemistry and will need to be able to implement all laboratory safety rules. A thorough biology and chemistry vocabulary and understanding of biology concepts are required. Students may be required to tutor biology with lab students, prepare different reagents, and identify and locate different glassware and equipment. Students will need to be responsible, self-motivated, and be able to follow written instructions. Students must be taking a science concurrently with being a laboratory technician. [Prerequisites: **541-Inquiry Biology with Lab** or **541A-Inquiry Biology w/Lab Honors**; Biology teacher approval; student must have received at least a grade of 85% in **541-Inquiry Biology w/Lab** or **541A-Inquiry Biology w/Lab Honors**. Students must score Proficient or Advanced on the Biology Keystone Exam. Students may be asked to complete an independent research project.]

568 GENERAL SCIENCE LAB TECHNICIAN----- ½ CREDIT
This is an independent study course in which students are responsible for laboratory preparations. Students will need a basic knowledge of biological and ecological concepts and be able to implement all laboratory safety rules. Students may be required to tutor General Science and General Keystone Science students, prepare labs and identify and locate all laboratory equipment. Students will need to be responsible, self-motivated and be able to follow written instruction. [Prerequisites: General Science Teacher approval. Completion of 531 General Science with a grade of 85% or higher. Students may be asked to complete an independent research project.]

569 PHYSICS LAB TECHNICIAN----- ½ CREDIT
This is an independent study course in which students are responsible for laboratory preparations. Students will need knowledge of physics and will need to be able to implement all laboratory safety rules. Students will be responsible for all aspects of laboratory preparations, including safety and proper clean-up. Students will need to be responsible, self-motivated, and be able to follow written instruction. Students may be asked to complete an independent research project. [Physics teacher approval required.]

570 ADVANCED PLACEMENT PHYSICS 1: ALGEBRA-BASED----- 1½ CREDIT
This course is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy and power; mechanical waves and sound. It will also introduce electric circuits. Summer work is required. You must have a 90% or higher in this course to be eligible to take the AP exam. [Prerequisites: A grade of 90% or better in **431-Algebra I** and **441-Geometry** or **430-Geometry Honors**, **531-General Science 9** and **541-Inquiry Biology w/Lab** or **541A Inquiry Biology w/Lab Honors**] **450-Pre-Calculus** or **450A-Pre-Calculus Honors** (must be taken simultaneously). **Students must pass the Biology Keystone Exam and the Algebra Keystone Exam.**

571 ADVANCED PLACEMENT PHYSICS 2: ALGEBRA-BASED----- 1½ CREDIT
This course is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics, atomics and nuclear physics. Summer work is required. You must have a 90% or higher in this course to be eligible to take the AP exam. [Prerequisites: A grade of 90% or better in **570-AP Physics 1: Algebra-Based**; **431-Algebra I** and **441-Geometry** or **430-Geometry Honors**] **460-Calculus** or **461-AP Calculus** (must be taken simultaneously). **Students must pass the Biology Keystone Exam and the Algebra Keystone Exam.**

SOCIAL STUDIES DEPARTMENT

The Social Studies Department offers a multi-cultural program in all areas of social studies including history, political science, economics, psychology, and geography. Four credits of Social Studies are required for graduation. Students are expected to become proficient in critical thinking and analysis, and to develop a better understanding of the world around them.

230 AMERICAN CULTURES II----- 1 CREDIT
This course is a survey of the history and culture of the Americas, beginning with the U.S. Constitution through the 1800s. In-depth studies are conducted on important historical concepts, economic foundations, and cause-effect relationships, so that the student will better understand the complexities of historical events. The geography of the Western Hemisphere is also incorporated, as it affects the living patterns of those who live there.

230A AMERICAN CULTURES II HONORS----- 1 CREDIT
This course is a survey of the history and culture of the Americas, beginning with the U.S. Constitution through the 1800s. In-depth studies are conducted on important historical concepts, economic foundations, and cause-effect relationships, so that the student will better understand the complexities of historical events. The geography of the Western Hemisphere is also incorporated, as it affects the living patterns of those who live there. This course has an emphasis on writing and primary source analysis at an accelerated pace and will prepare students for the AP US History class. [Prerequisite: Social Studies teacher recommendation and grades will be considered for admission. Summer reading will be assigned.]

240 AMERICAN CULTURES III----- 1 CREDIT
The course begins in the 20th Century, and continues to the present, with emphasis on the social, political, and economic history of our country. The course includes a study of the rise of big business, the growth of big cities, and organization of labor; then the rise of America as a world power with the Spanish-American War and World War I. The prosperity of the 20's, the Depression, and Roosevelt's New Deal are studied with world problems, leading up to World War II. The national and international problems after World War II are considered, concluding with the present-day conditions in America. [Prerequisite: **230–American Cultures II**]

240A ADVANCED PLACEMENT US HISTORY ----- 1 CREDIT
The course begins in the 20th Century, and continues to the present, with emphasis on the social, political, and economic history of our country. The course includes a study of the rise of big business, the growth of big cities, and organization of labor; then the rise of America as a world power with the Spanish-American War and World War I. The prosperity of the 20's, the Depression, and Roosevelt's New Deal are studied with world problems, leading up to World War II. The national and international problems after World War II are considered, concluding with the present-day conditions in America. This course has an emphasis on writing and primary source analysis at an accelerated pace. Social Studies teacher recommendation and grades will be considered for admission. Summer reading will be assigned.

250 WORLD CULTURES----- 1 CREDIT
In this course the student will acquire knowledge of world history from the Renaissance to the present. Emphasis will be upon topics such as: the Italian Renaissance, Reformation, scientific revolutions, European monarchies, French Revolution, Asian empires, Russian revolutions, British Empire, South American independence movements, imperialism in Africa, African independence, Asian governments and change, Vietnam War, and the modern U.S.

255 ADVANCED PLACEMENT WORLD HISTORY ----- 1 CREDIT
This one-credit course is designed for Advanced Placement juniors seeking college credit in the area of world history. This course is a rigorous, challenging, accelerated study in the following areas: change and continuity from 8,000 BCE to the present; impact of interaction among and within major societies; impact of technology, economics, and demographics on people and the environment; cultural, religious, and intellectual developments among and within societies; and changes in functions and structures of states. [Prerequisite: Minimum 90% average in previous social studies course with teacher recommendation. Required summer work will be assigned.]

260 AMERICAN GOVERNMENT & ECONOMICS ----- 1 CREDIT
This is a full-year course that is required of all seniors. Part of the year is devoted to the study of American government and part is used to explore the world of economics. The government portion of the course will emphasize the foundations of our national government with an in-depth analysis of the three branches of the United States federal government. The economics portion of the course will cover the foundations of capitalism and U.S. economic policy in world affairs. The combined course accounts for one full credit.

261 PSYCHOLOGY ----- ½ CREDIT
Psychology concerns itself with the study of the human mind and attempts to explain why people behave the way they do. The objectives of the course are to introduce students to psychological theories and show how they can relate them to their own lives, instruct students in the use of problem-solving techniques that will aid them in everyday living and demonstrate how human behavior can and does change during various transition periods. The student will develop a future-oriented perspective, as well as increased self-understanding, and be able to relate more effectively to others after taking the course. [Prerequisite – at least an 85% average in two years of Social Studies; open to juniors/seniors only]

265 ADVANCED PLACEMENT UNITED STATES GOVERNMENT & POLITICS ----- 1 CREDIT
This one credit course is designed for senior Advanced Placement students seeking college credit in the area of United States government. Emphasis is placed on an intensive investigation and thorough understanding of the functioning of our national government, its constitutional foundations, civil liberties and civil rights, as well as the role of political parties and interests groups in our society. Students may take the AP United States Government and Politics exam. [Prerequisite: Social Studies Department recommendation. Required summer work will be assigned.]

TECHNOLOGY & ENGINEERING DEPARTMENT

Technology and engineering courses are available to all students on an elective basis. The courses are designed to allow the student to investigate the various areas in STEM (Science, Technology, Engineering, and Mathematics) along with the industrial field with experiences in woodworking, metalworking, graphic processes, building trades, computer-aided drafting, engineering, video production, electrical concepts, robotics, computer-aided machining, and auto mechanics. This includes core academic concepts and computer experiences relative to the trade area throughout the curriculum. The department suggests that students planning careers in this area should follow the career pathways outlined in this book. Students interested in the engineering fields of study, should follow the engineering pathway recommendation(s) along with high level math and science courses including physics and statistics. If students fail a particular course, students will be required to take a year out of that area and reconsider their options.

719 ROBOTICS & AUTOMATION ----- ½ CREDIT

Robotics & Automation is a lab-base, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program, and control robotic devices by applying science, technology, engineering and math concepts. A rigorous study and application of electrical concepts will include: source of energy, electrical safety, use and identification of basic electronic components, sensors and actuators. Engineering concepts will include: mechanical design, prototype development, design testing, programming and documentation. Industrial automation, robotic applications and career opportunities will also be discussed.

721 METAL TECHNOLOGY LAB TECHNICIAN ----- ½ CREDIT

This is an independent study course in which students are to assist the teacher with various classroom activities that can include but are not limited to laboratory preparation and clean-up, as well as assisting with projects, assignments, and tutoring. Students must be self-motivated, responsible and organized. [Prerequisites: Successful completion of **722-Introduction to Metal Technology**, **732-Metal Technology I** and **742-Metal Technology II**, with a minimum grade of 85%. Students will be asked to complete an independent research and/or production project. Appropriate Technology and Engineering department teacher approval.]

722 INTRODUCTION TO METAL TECHNOLOGY-----1 CREDIT

This course is an introductory course designed to provide experiences with basic hand tools, machine operations, sheet metal, forging, foundry, and welding.

723 VISUAL COMMUNICATIONS I----- 1 CREDIT

This introductory course is designed to provide experiences with basic graphic arts process and photography. Students will be introduced to the fundamentals of design/desktop publishing, layout, pre-press operations, offset processes, post-press operations, some of which will relate to academic or business classes, and the skills of photography in camera operation, producing film and prints.

724 INTRODUCTION TO AUTOMOTIVE TECHNOLOGY ----- ½ CREDIT

This course is designed to teach basic internal combustion engine technology by starting with a single cylinder four-cycle engine. Students will be required to disassemble and successfully assemble at least a single cylinder engine. Also, students will be required to do basic auto body work, remove dents, change parts, sand and refinish. The basics of acetylene welding, electric welding, and metal fabrication will also be covered. [This course is a prerequisite for **734-Auto Mechanics I**]

732 METAL TECHNOLOGY I----- 1 CREDIT

This course is designed to provide experiences in metal working, machining operational experience, forging, foundry, sheet metal, machine shop equipment, welding and cutting processes, and the inclusion of CAM (Computer-Aided Machining) and CNC (Computer-Numerically Controlled) theory and processes will be incorporated. [Prerequisite: **722-Introduction to Metal Technology**]

733 VISUAL COMMUNICATIONS II ----- 1 CREDIT
This course expands the experiences found within graphic arts and photography. Design, software utilization in desktop publishing, offset and screen printing processes, some of which will relate to academic or business classes, and skills of photography with camera utilization in relation to producing film and prints. [Prerequisite: **723-Visual Communications I**]

734 AUTO MECHANICS I----- 1 CREDIT
This course introduces the student to the field of auto mechanics through a hands-on experience with mechanical work. The student will develop skills in safety, care and use of hand tools, service station procedures, engine and drivetrain theory/operation, use of automobile test equipment, electrical system services, suspension system, and live work. [Prerequisite: **730-Introduction to Automotive Technology**]

735 CONSTRUCTION & MANUFACTURING TECHNOLOGY I----- ½ CREDIT
This course prepares students in basic woodworking operations and skills along with experiences in residential construction trades. Production methods using cabinet shop tools, joinery, manufacturing theory, safety, masonry, and carpentry are emphasized.

736 AUTOMOTIVE LAB TECHNICIAN ----- ½ CREDIT
This is an independent study course in which students are to assist the teacher with various classroom activities that can include but are not limited to laboratory preparation and clean-up, as well as assisting with projects, assignments, and tutoring. Students must be self-motivated, responsible and organized. [Prerequisites: Successful completion of **730-Introduction to Automotive Technology**, **734-Auto Mechanics I**, and/or **744-Auto Mechanics II**, with a minimum grade of 85%. Students will be asked to complete an independent research and/or production project. Appropriate Technology and Engineering department teacher approval.]

742 PRECISION PRODUCTION I----- 2 CREDITS
This is a capstone course designed to challenge the students to become trades people in metal working and welding/cutting processes. The students will be challenged by completing projects in the areas of safety and orientation, principal of welding, welding drawings and interpretation, visual inspection, examination, testing; Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Manual Oxyfuel Gas Cutting (OFC), Manual Plasma Arc Cutting (PAC), Brazing and Soldering, CNC Plasma Operation. Machining and CAM/CNC processes are also explored.
(Recommended Metal Technology course(s), 3D Mechanical Drawing, and Design, and Algebra)

743 WOOD TECHNOLOGIES LAB TECHNICIAN ----- ½ CREDITS
This is an independent study course in which students are to assist the teacher with various classroom activities that can include but are not limited to laboratory preparation and clean-up, as well as assisting with projects, assignments, and tutoring. Students must be self-motivated, responsible and organized. [Prerequisites: Successful completion of either **731-Manufacturing Systems** and **741-Furniture and Cabinetmaking** or **735-Construction Systems** and **745-Building Construction Technology** with a minimum grade of 85%. Students will be asked to complete an independent research and/or production project. Appropriate Technology and Engineering department teacher approval.]

744 AUTO MECHANICS II----- 2 CREDITS
This is a capstone course designed to challenge the students in the field of automotive mechanics. The students will be challenged by completing projects which relate to safety, suspension/steering, brakes, electrical/electronic systems, engine performance/diagnostic/repair, drivetrain/transaxles, heating/air conditioning related to automotive systems. (Recommended Automotive Technology course(s), and Algebra) [Prerequisite: **734-Auto Mechanics I**]

- 745 CONSTRUCTION & MANUFACTURING TECHNOLOGY II**..... 1 CREDIT
 This course furthers the experiences in woodworking operation with mass production manufacturing/CNC technology, safety, masonry, electrical, plumbing, and carpentry are emphasized. [Prerequisite: **735-Construction & Manufacturing Tech I**]
- 752 PRECISION PRODUCTION II**.....2 CREDITS
 This course furthers the capstone experiences of the metal working and welding/cutting processes. Projects will further include the areas of safety and orientation, principal of welding, welding drawings and interpretation, visual inspection, examination, testing; Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Manual Oxyfuel Gas Cutting (OFC), Manual Plasma Arc Cutting (PAC), Brazing and Soldering, CNC Plasma Operation. Machining and CAM/CNC processes are also explored. Recommended Metal Technology course(s), 3D Mechanical Drawing and Design, and Algebra/Geometry)
- 754 AUTO MECHANICS III** 2 CREDITS
 This course furthers the capstone experiences students in the field of automotive mechanics. The students will be challenged by completing projects which relate to safety, suspension/steering, brakes, electrical/electronic systems, engine performance/diagnostic/repair, drivetrain/transaxles, heating/air conditioning related to automotive systems. (Recommended Automotive Technology course(s), Foundations of Electronics, and Algebra) [Prerequisite: **730 – Introduction to Automotive Technology, 734 – Auto Mechanics I, and 744 – Auto Mechanics II** all passing grades and Automotive Instructor recommendation).
- 755 CONSTRUCTION TRADES I** 2 CREDITS
 This is a capstone course designed to challenge the students to become trades people in residential construction trades. The students will be challenged by completing projects of house estimation and design, carpentry including roof and stair systems, electrical, masonry, plumbing, and safety. (Recommended Construction and Manufacturing Technology course(s), Architectural Drawing and Design, and Algebra)
- 759 ENGINEERING TECHNOLOGIES LAB TECHNICIAN**..... ½ CREDIT
 This is an independent study course in which students are to assist the teacher with various classroom activities that can include but are not limited to laboratory preparation and clean-up, as well as assisting with projects, assignments, and tutoring. Students must be self-motivated, responsible and organized. [Prerequisites: Successful completion of either **772-3D Mechanical Drawing and Design, 771-Architectural Drawing and Design, 781-Foundations of Electronics: Circuits and Devices** or **758-Introduction to Engineering Technology**, with a minimum grade of 85%. Students will be asked to complete and independent research and/or production project. Appropriate Technology and Engineering department teacher approval.]
- 765 CONSTRUCTION TRADES II**2 CREDITS
 This course furthers the capstone experiences of the construction trades. Projects will further include the areas of estimation, carpentry, electrical, masonry, plumbing, and safety. (Recommended Construction and Manufacturing Technology course(s), Architectural Drawing and Design, and Algebra/Geometry)
- 771 ARCHITECTURAL DRAWING AND DESIGN** ----- ½CREDIT
 The student will investigate the various areas of architectural drafting by designing a set of residential plans that include a plot plan, basement plan, floor plan, elevation views, detail drawings, wall sections, and electrical plans. Residential construction theory and estimation is explored extensively in this course.

772 3D MECHANICAL DRAWING AND DESIGN½ CREDIT
Students will begin their experience of drafting with sketching through mechanical drawings. They will then develop and design projects in industry standard software systems of 3-D mechanical shapes, machines, and systems. Three-dimensional drawing (3-D) will be emphasized as it relates to mechanical applications.

781 FOUNDATIONS OF ELECTRONICS ----- 1 CREDIT
This course encompasses the theory and application of electrical and electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices [Prerequisite: **431-Algebra I completed**, 9-12 Limited seating]

782 VIDEO PRODUCTION ----- 1 CREDIT
This course provides an introductory overview of the techniques, editing, and producing of video mediums. This course is an introduction to television studio and field production. The course will acquaint students with the technical and aesthetic concepts involved in successful studio and field production. Students will develop skills through a series of in-class and limited after-class exercises. The course will also require the students to capture, develop, orchestrate, operate, and deliver video mediums within the high school domain. [Prerequisite: **723-Visual Communications I**; Limited seating available; open to grades 11-12]

783 VISUAL COMMUNICATIONS TECHNOLOGY LAB TECHNICIAN ----- ½ CREDIT
This is an independent study course in which students are to assist the teacher with various classroom activities that can include but are not limited to laboratory preparation and clean-up, as well as assisting with projects, assignments, and tutoring. Students must be self-motivated, responsible and organized. [Prerequisites: Successful completion of either **723-Visual Communications I** and **733-Visual Communications II** or **720-Photography** or **782-Video Production** and **786-Video Broadcasting**, with a minimum grade of 85%. Students will be asked to complete an independent research and/or production project. Appropriate Technology and Engineering department teacher approval.]

786 VIDEO BROADCASTING ----- 2 CREDITS
This course provides a more comprehensive overview of the techniques, editing, and producing of video mediums. This course is a continuation of television studio and field production. The course will acquaint students with the technical and aesthetic in-class and limited after-class exercises. The course will also require the students to capture, develop, orchestrate, operate, and deliver an in-house news medium within the high school domain. [Prerequisite: **723-Visual Communications I**; **782-Video Production**; limited seating; open to grades 10-12]

790 ENGINEERING TECHNOLOGIES I ----- 2 CREDITS
This is a capstone course designed to challenge the students in the field of engineering technologies. The students will be challenged by completing projects which relate to safety, teamwork, ethics and problem-solving, engineering graphics (drafting/drawings) with modeling and design processes, manufacturing and industrial systems, manufacturing processes, CAM (Computer-Aided Manufacturing), 3D printing, additive manufacturing, materials, power systems including green energy, quality control, and basic electricity and electronics. (Recommended 3D Mechanical Drawing and Design and Foundation of Electronics course(s) and Advanced Mathematics/Sciences)

791 ENGINEERING TECHNOLOGIES II ----- 2 CREDITS
This course furthers the capstone experiences of the engineering technologies. Projects and theory related to safety, teamwork, ethics and problem-solving, engineering graphics (drafting/drawings) with modeling and design processes, manufacturing and industrial systems, manufacturing processes, CAM (Computer-Aided Manufacturing), 3D printing, additive manufacturing, materials, power systems including green energy, quality control, and basic electricity and electronics. (Recommended 3D Mechanical Drawing and Design and Foundation of Electronics course(s) and Advanced Mathematics/Sciences)

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754.....	2	Auto Mechanics III.....	32
736.....	½	Automotive Lab Technician	31
925.....	1	Band.....	20
835.....	1	Basic Foods	13
567.....	½	Biology Lab Technician	26
40.....	½	Boys 9 Gym.....	22
40.....	½	Boys 10 Gym.....	22
60.....	½	Boys 11 Gym.....	22
60.....	½	Boys 12 Gym.....	22
166.....	1	British Literature in the Modern World.....	12
643.....	1	Business and Personal Law	09
664.....	1	Business Communications & Procedures.....	10

INDEX (Alphabetical Listing)

COURSE NUMBER	CREDITS	COURSE TITLE	PAGE NUMBER
460.....	1	Calculus	18
943.....	½	Ceramics I.....	07
944.....	½	Ceramics II	07
566.....	½	Chemistry Lab Technician	26
551.....	1½	Chemistry w/Lab	24
551A.....	1½.....	Chemistry w/ Lab Honors	25
844.....	1	Child Development.....	14
926/927.....	1 or ½	Chorus	20
648.....	1	Computer Applications – Microsoft PowerPoint/Excel	09
640.....	1	Computer Applications – Microsoft Word/Keyboarding	09
975.....	1	Computer Programming I.....	19
976.....	1	Computer Programming II	19
977.....	1	Computer Programming III	19
978.....	1	Computer Programming IV	19
735.....	½	Construction & Manufacturing Technology I	31
745.....	1	Construction & Manufacturing Technology II.....	32
755.....	2	Construction Trades I.....	32
765.....	2	Construction Trades II.....	32
825.....	½	Consumer Skills.....	13
840.....	1	Culinary Pastry Arts	13
669.....	1	Dynamics of Work	10
855.....	1	Early Childhood Education I.....	14
865.....	3	Early Childhood Education II.....	15
790.....	2	Engineering Technologies I.....	33
791.....	2	Engineering Technologies II	33
759.....	½	Engineering Technologies Lab Technician	32
130.....	1	English 9.....	11
130A.....	1	English 9 Honors	11
144.....	1	English as a Second Language	09
654.....	1	Entrepreneurship.....	14
862.....	1	Family Development	14
863.....	1	Fashion I.....	15
864.....	1	Fashion II.....	15
852.....	½	Family and Consumer Science Lab Technician	14
781.....	1	Foundations of Electronics	33
330.....	1	French I.....	15
340.....	1	French II	16
562.....	1	General Keystone Science	25
568.....	½	General Science Lab Technician	27
531.....	1	General Science 9	24
441.....	1	Geometry	17
430.....	1	Geometry Honors	17
332.....	1	German I.....	15
333.....	1	German II.....	16
41.....	½	Girls 9 Gym	22
41.....	½	Girls 10 Gym	22
61.....	½	Girls 11 Gym	22
61.....	½	Girls 12 Gym	22
851.....	1	Gourmet Foods	14

INDEX (Alphabetical Listing)

COURSE NUMBER	CREDITS	COURSE TITLE	PAGE NUMBER
52.....	½	Health Education	23
541.....	1½	Inquiry Biology w/Lab	24
541A.....	1½	Inquiry Biology w/Lab Honors.....	24
724.....	½	Introduction to Automotive Technology	30
642.....	1	Introduction to Business	09
920.....	½	Introduction to Ceramics	07
722.....	1	Introduction to Metal Technology	30
833.....	1	Introduction to Sewing	13
985.....	½	Keystone Algebra	19
655.....	1	Marketing	10
732.....	1	Metal Technology I	30
721.....	½	Metal Technology Lab Technician.....	30
946.....	½	Mixed Media Design.....	08
155.....	1	Multicultural Literature	11
971.....	½	Music Theory I.....	21
974.....	½	Music Theory II.....	21
979.....	½	Music Theory III.....	21
821.....	1	Nutrition & Wellness.....	13
569.....	½	Physics Lab Technician.....	27
561.....	1½	Physics w/Lab.....	25
450.....	1	Pre-Calculus	18
450A.....	1	Pre-Calculus Honors.....	18
742.....	2	Precision Production I	31
752.....	2	Precision Production II.....	32
10.....	½	Project Based Assessment	07
261.....	½	Psychology	29
719.....	½	Robotics & Automation.....	30
981.....	½	SAT Prep Math.....	19
980.....	½	SAT Prep Writing and Critical Reading.....	12
681.....	1-3.....	School-to-Work Experience	10
331.....	1	Spanish I.....	15
341.....	1	Spanish II.....	16
351.....	1	Spanish III	16
361.....	1	Spanish IV	16
931.....	½	Stage Crew.....	21
453.....	1	Statistics.....	18
940.....	1	Studio Art I.....	07
950.....	1	Studio Art II.....	08
962.....	1	Studio Art III	08
843.....	1	Textile and Design.....	13
928.....	½	Theater Arts	21
960.....	½	Three-Dimensional Design.....	08
772.....	½	3D Mechanical Drawing and Design.....	33
101.....	½	Transition.....	07
461.....	1	Trigonometry & Advanced Algebra.....	18
786.....	2	Video Broadcasting	33
782.....	1	Video Production.....	33
723.....	1	Visual Communications I.....	30

733.....	1	Visual Communications II.....	31
783.....	½	Visual Communications Technology Lab Technician	33
945.....	½.....	Watercolor Painting.....	08
743.....	½	Wood Technologies Lab Technician.....	31
250.....	1	World Cultures	28



MATH/SCIENCE CAREER PATH

SUBJECT	#	9 TH GRADE	#	10 TH GRADE	#	11 TH GRADE	#	12 TH GRADE								
ENGLISH	130	English 9	1	140	American Lit.	1	155 156	<i>Select One:</i> Multicultural Lit. AP Lang. & Comp.	1 1	166 165	<i>Select One:</i> Brit. Lit. In the Mod. World AP Literature & Comp.	1 1				
	130A	English 9 HR	1	140A	American Lit. HR	1										
SOCIAL STUDIES	230	Amer. Cult. II	1	240	Amer. Cult. III	1	250 255	World Cult. AP World History	1 1	260 265	<i>Select One:</i> Am. Gov/Economics AP US Government	1 1				
	230A	Amer. Cult. II HR	1	240A	AP US History	1										
MATH	431	<i>Select One:</i> Algebra I	1	441	<i>Select One:</i> Geometry	1	451 450 450A 453 461	<i>Select One:</i> Algebra II Pre Calculus Pre-Calculus HR Statistics Trig. & Adv. Algebra	1 1 1 1 1	461 453 460 465	<i>Select One:</i> Trig. & Adv. Algebra Statistics Calculus AP Calculus	1 1 1 1				
	430	Geometry HR	1	440	Algebra II HR	1										
	441A	Geometry	1	451	Algebra II	1										
SCIENCE	Option #1 →	531	Gen. Science 9	1	541	Inq. Biology w/Lab or	1 ½	551 551A 563	Chemistry w/Lab or Chemistry w/Lab HR or AP Bio w/Lab	1 ½ 1 ½ 1 ½	563 561 570 571	<i>Select One:</i> AP Biology w/Lab Physics w/Lab AP Physics 1:Alg.-Based AP Physics 2:Alg.-Based	1 ½ 1 ½ 1 ½ 1 ½			
					541A	Inq. Biology w/Lab H (Biology required if not taken in 9 th grade)	1 ½									
	Option #2 →	541A	Inq. Bio. w/Lab HR	1 ½	551	Chem. w/Lab or	1 ½	565 561 570	AP Chem. w/Lab and Physics w/Lab or AP Physics 1:Alg.-Based	1 ½ 1 ½ 1 ½				565	Chemistry w/Lab	1 ½
					551A	Chem. w/Lab HR and/or	1 ½									
					563	AP Biology w/Lab	1 ½									
<i>OTHER SCIENCE OPTIONS SHOULD BE DISCUSSED WITH GUIDANCE AND THE SCIENCE DEPARTMENT</i>																
LANGUAGE	330	<i>Select One:</i> French I	1	333	<i>Select One:</i> German II	1	Students may select additional language credits as electives.			Students may select additional language credits as electives.						
	331	Spanish I	1	340	French II	1										
	332	German I	1	341	Spanish II	1										
	341A	Spanish II	1	351	Spanish III	1										
PHYS. ED	40	Boys PE	½	40	Boys PE	½	60	Boys PE	½	60	Boys PE	½				
	41	Girls PE	½	41	Girls PE	½	61	Girls PE	½	61	Girls PE	½				
	99	Advanced Gym	½	99	Advanced Gym	½	99	Advanced Gym	½	99	Advanced Gym	½				
OTHER				825	Consumer Skills	½	52	Health	½							

ARTS/HUMANITIES CAREER PATH

SUBJECT	#	9 TH GRADE		#	10 TH GRADE		#	11 TH GRADE		#	12 TH GRADE					
ENGLISH	130	English 9	1	140	American Lit.	1	155 156	<i>Select One:</i> Multicultural Lit.	1	166 165	<i>Select One:</i> British Lit.	1				
	130A	English 9 HR	1	140A	American Lit. HR	1		AP Lang. & Comp.	1		AP Literature & Comp.	1				
SOCIAL STUDIES	230	Amer. Cult. II	1	240	Amer. Cult. III	1	250 255	World Cult.	1	260 265	<i>Select One:</i> Am. Gov/Economics	1				
	230A	Amer. Cult. II HR	1	240A	AP US History	1		AP World History	1		AP US Government	1				
MATH	432 431 430 441A	<i>Select One:</i> Algebra A	1	431	<i>Select One:</i> Algebra I	1	441 443 450 451 453 450A 461	<i>Select One:</i> Geometry	1	<i>For Math selections see course descriptions.</i>						
		Algebra I	1	442	Algebra B	1		Applied Geometry	1							
		Geometry HR	1	441	Geometry	1		Pre Calculus	1							
		Geometry	1	440	Algebra II HR	1		Algebra II	1							
				443	Applied Geometry	1		Statistics	1							
				451	Algebra II	1		Pre-Calculus HR	1							
								Trig. & Adv. Algebra	1							
SCIENCE Option #1 → Option #2 →	531	Gen. Science 9	1	541	Inq. Biology w/Lab or Inq. Bio. w/ Lab HR or Applied Bio. w/Lab (Biology required if not taken in 9 th grade)	1 ½	551 551A 552 563	Chemistry w/Lab or Chemistry w/Lab HR or Applied Chemistry w/Lab or AP Bio w/Lab	1 ½ 1 ½ 1 1 ½	<i>For Science selection see course descriptions.</i>						
				541A	Inq. Bio. w/Lab HR	1 ½ 1 ½		551	Chem. w/Lab or				1 ½	565	AP Chem. w/Lab and	1 ½
								551A	Chem. w/Lab HR and/or				1 ½	561	Physics w/Lab or	1 ½
	563	AP Biology w/Lab	1 ½				570	AP Physics 1:Alg.-Based	1 ½							
	<i>OTHER SCIENCE OPTIONS SHOULD BE DISCUSSED WITH GUIDANCE AND THE SCIENCE DEPARTMENT</i>															
	LANGUAGE	330	French I	1	333	German II	1	<i>Students may select credits as electives.</i>					<i>Students may select credits as electives.</i>			
331		Spanish I	1	340	French II	1										
332		German I	1	341	Spanish II	1										
341A		Spanish II	1	351	Spanish III	1										
PHYS. ED	40	Boys PE	½	40	Boys PE	½	60	Boys PE	½	60	Boys PE	½				
	41	Girls PE	½	41	Girls PE	½	61	Girls PE	½	61	Girls PE	½				
	99	Advanced Gym	½	99	Advanced Gym	½	99	Advanced Gym	½	99	Advanced Gym	½				
OTHER				825	Consumer Skills	½	52	Health	½							
				101	Transitions *For students w/Transition Goals.	½										

BUSINESS/TECHNOLOGY CAREER PATH

SUBJECT	#	9 TH GRADE		#	10 TH GRADE		#	11 TH GRADE		#	12 TH GRADE			
ENGLISH	130	English 9	1	140	American Lit.	1	155 156	<i>Select One:</i> Multicultural Lit.	1	166 165	<i>Select One:</i> British Lit. AP Literature & Comp.	1		
	130A	English 9 HR	1	140A	American Lit. HR	1			1			1		
SOCIAL STUDIES	230	Amer. Cult. II	1	240	Amer. Cult. III	1	250 255	World Cult. AP World History	1	260 265	<i>Select One:</i> Am. Gov/Economics AP US Government	1		
	230A	Amer. Cult. II HR	1	240A	AP US History	1			1			1		
MATH	432	<i>Select One:</i> Algebra A Algebra I Geometry HR Geometry	1	431	<i>Select One:</i> Algebra I Algebra B Geometry Algebra II HR Applied Geometry Algebra II	1	441 443 451 453 450 461	<i>Select One:</i> Geometry Applied Geometry Algebra II Statistics Pre-Calculus HR Trig. & Adv. Algebra	1	<i>For Math selections see course descriptions.</i>				
	431		1	442		1								
	430		1	441		1								
	441A		1	440		1								
				443		1								
				451		1								
SCIENCE	531	Gen. Science 9	1	541	Inq. Biology w/Lab or	1 ½	551 551A 552 563	Chemistry w/Lab or Chemistry w/Lab HR or Applied Chemistry w/Lab or AP Bio w/Lab	1 ½	<i>For Science selection see course descriptions.</i>				
				541A	Inq. Bio. w/ Lab HR or	1 ½			1 ½					
				542	Applied Bio. w/Lab (<i>Biology required if not taken in 9th grade</i>)	1			1					
									565				AP Chem. w/Lab and	1 ½
									561				Physics w/Lab or	1 ½
	541A	Inq. Bio. w/Lab HR	1 ½	551	Chem. w/Lab or	1 ½	570	AP Physics 1:Alg.-Based	1 ½					
				551A	Chem. w/Lab HR and/or	1 ½								
				563	AP Biology w/Lab	1 ½								
<i>OTHER SCIENCE OPTIONS SHOULD BE DISCUSSED WITH GUIDANCE AND THE SCIENCE DEPARTMENT</i>														
LANGUAGE	<i>Students may select credits as electives.</i>			<i>Students may select credits as electives.</i>			<i>Students may select credits as electives.</i>			<i>Students may select credits as electives.</i>				
PHYS. ED	40	Boys PE	½	40	Boys PE	½	60	Boys PE	½	60	Boys PE	½		
	41	Girls PE	½	41	Girls PE	½	61	Girls PE	½	61	Girls PE	½		
	99	Advanced Gym	½	99	Advanced Gym	½	99	Advanced Gym	½	99	Advanced Gym	½		
OTHER				825	Consumer Skills	½	52	Health	½					
				101	Transitions <i>*For students w/Transition Goals.</i>	½								

ENGINEERING CAREER PATHWAY

SUBJECT	#	9 TH GRADE		#	10 TH GRADE		#	11 TH GRADE		#	12 TH GRADE	
ENGINEERING (GENERAL)	719	Robotics & Automation	½	781	Foundations of Electronics.	1	790	Engineering Tech. I	2	791	Engineering Tech. II	2
	772	3D Mechanical Drawing & Design	½	771	Arch. Drawing Design	½						
SCIENCE-BASED ENGINEERING (BIOLOGICAL, CHEMICAL, ENVIRONMENTAL, PHYSICAL)	719	Robotics & Automation &	½	781	Foundations of Electronics &	1	790	Engineering Tech. I &	2	790	Engineering Tech. II &	2
	541 A	Inq. Biology Honors	1 ½	563	AP Biology &/Or	1 ½	565	AP Chemistry &/Or	1 ½	571	AP Physics 2	1 ½
				551 A	Chemistry Honors	1 ½	570	AP Physics 1	1 ½			
CIVIL ENGINEERING	719	Robotics & Automation &	½	781	Foundations of Electronics.	1	790	Engineering Tech. I &	2	791	Engineering Tech. II	2
	772	3D Mech. Drawing & Design	½	722	Intro. to Metal Tech.	1	771	Arch. Drawing & Design	½			
		&/Or Construction & Manufacturing Tech. I	½									
COMPUTER ENGINEERING	719	Robotics & Automation &	½	781	Foundations of Electronics	1	790	Engineering Tech. I &	2	791	Engineering Tech. II &	2
	975	Computer Programming I	1	976	Computer Programming II	1	977	Computer Programming III	1	978	Computer Programming IV	1
				977	Computer Programming III	1	978	Computer Programming IV	1	970	AP Computer Science Principles	1

ART CAREER PATHWAY

SUBJECT	#	9 TH GRADE		#	10 TH GRADE		#	11 TH GRADE		#	12 TH GRADE	
DESIGN	935	Art Foundations &	1	940	Studio Art I &	1	744	Studio Art II &	1	754	Studio Art III &	1
	723	Visual Communications I	1	733	Visual Communications II	1	771	Architectural Drawing & Design	1	772	3D Mechanical Drawing & Design	½
FINE ART	935	Art Foundations	1	940	Studio Art I &	1	744	Studio Art II &	1	963	Advanced Studio Art &	2
				946	Mixed Media Design	½	945	Watercolor Design	½	960	Three-Dimensional Design	½
CERAMICS	920	Introduction to Ceramics	½	943	Ceramics I	½	944	Ceramics II	½	960	Three-Dimensional Design	½

FAMILY & CONSUMER SCIENCE CAREER PATHWAY

SUBJECT	#	9 TH GRADE	#	10 TH GRADE	#	11 TH GRADE	#	12 TH GRADE				
HOSPITALITY & FOOD DESIGN	835	Basic Foods & Art Foundations	1	851	Gourmet Foods & Studio Art I	1	840	Culinary Pastry Arts & Visual Communications I	1	861	Advanced Cooking & Entrepreneurship	1
	935		1	940		1	733		1	654		1
HOSPITALITY & CULINARY	835	Basic Foods & Visual Communications I	1	851	Gourmet Foods & Introduction to Business	1	840	Culinary Pastry Arts & Accounting I	1	861	Advanced Cooking & Accounting II	1
	723		1	642		1	733		1	661		1
FASHION	833	Introduction to Sewing & Visual Communications I	1	843	Textile & Design & Visual Communications II &/Or Art Foundations	1	744	Fashion I & Entrepreneurship &/Or Accounting I	1	864	Fashion II & Marketing	1
	723			733		1	945		1	655		1
				935		1			1			
CHILD CARE	862	Family Development & Basic Foods	1	844	Child Development & Accounting I	1	855	Early Childhood Education & Entrepreneurship	1	865	Early Childhood Education II & Marketing	3
	835		1	651		1	654		1	655		1

BUSINESS CAREER PATHWAY

SUBJECT	#	9 TH GRADE	#	10 TH GRADE	#	11 TH GRADE	#	12 TH GRADE				
OFFICE MANAGEMENT	640	Computer Applications – Microsoft Word/ Keyboarding & Introduction to Business	1	648	Computer Applications – Microsoft Powerpoint/Excel & Accounting I	1	664	Business Communications & Procedures & Marketing	1	643	Business & Personal Law & Entrepreneurship	1
	642	Introduction to Business	1	651	Accounting I	1			1	654	Entrepreneurship	1
BUSINESS MANAGEMENT & ACCOUNTING	640	Computer Applications – Microsoft Word/ Keyboarding & Introduction to Business	1	648	Computer Applications – Microsoft Powerpoint/Excel & Accounting I	1	661	Accounting II & Marketing	1	664	Business Communications & Procedures & Entrepreneurship	1
	642	Introduction to Business	1	651	Accounting I	1			1			1
SCHOOL-TO-WORK EXPERIENCE (Senior Year)											School-to-Work Experience & Dynamics of Work	1-3

TECHNOLOGY CAREER PATHWAY

SUBJECT	#	9 TH GRADE	#	10 TH GRADE	#	11 TH GRADE	#	12 TH GRADE				
AUTOMOTIVE	724	Intro to Auto Tech	½	734	Auto Mechanics I &	1	744	Auto Mechanics II &	2	754	Auto Mechanics III &	2
				781	Foundations of Electronics	1	654	Entrepreneurship	1	651	Accounting I	1
MANUFACTURING	722	Intro to Metal Tech.	1	732	Metal Tech I &	1	742	Precision Production I &	2	752	Precision Production II &	2
				772	3-D Mechanical Drawing & Design	½	654	Entrepreneurship	1	651	Accounting I	1
CONSTRUCTION	735	Construction & Manufacturing Tech. I	½	745	Construction & Manufacturing Tech. II	1	755	Constructions Trades I &	2	765	Construction Trades II &	2
	771	Arch. Drawing & Design	½				654	Entrepreneurship	1	651	Accounting I	1
DRAFTING & DESIGN	772	3D Mechanical Drawing & Design	½	771	Arch. Drawing & Design &	½	790	Engineering Tech. I &	2	791	Engineering Tech. II	2
	722	Intro. to Metal Tech.	1	735	Construction & Manufacturing Tech. I	½	781	Foundations of Electronics	1			
VISUAL COMMUNICATIONS	723	Visual Communications I &	1	733	Visual Communications II &	1	782	Video Production	1	786	Video Broadcasting	2
	935	Art Foundations	1	940	Studio Art I	1						

ELECTIVES

9 th Grade	10 th Grade	11 th Grade	12 th Grade
771-Architectural Drawing/Design (1) 935-Art Foundations (1) 925-Band (1) 835-Basic Foods (1) 648-Comp. App. Pwpt/Excel (1) 640-Comp. App. Word/Keyboarding (1) 735-Construction & Manuf. Tech.I (½) 975-Comp. Programming I (1) 926/927-Chorus (1, ½) 862-Family Development (1) 781-Foundations of Electronics (1) 330-French I (1) 332-German I (1) 724-Intro to Auto Tech (½) 920-Intro to Ceramics (½) 722-Intro to Metal Tech (1) 833-Intro to Sewing (1) 971-Music Theory I (½) 719-Robotics & Automation (½) 331-Spanish I (1) 931-Stage Crew (½) 928-Theater Arts (½) 772-3D Mechanical Draw & Design (½) 723-Visual Communications I (1)	9th Grade Electives plus: 651-Accounting I (1) 734-Auto Mechanics I (1) 567-Biology Lab Tech (½) 643-Bus. & Personal Law (1) 943-Ceramics I (½) 844-Child Development (1) 976-Comp. Programming II (1) 977-Comp. Programming III (1) 745-Construction & Manuf. Tech. II (1) 840-Culinary Pastry Arts (1) 759-Engineering Tech Lab Tech (½) 340-French II (1) 568-General Science Lab Tech (½) 333-German II (1) 851-Gourmet Foods (1) 642-Intro to Business (1) 732-Metal Tech I (1) 946-Mixed Media Design (½) 974-Music Theory II (½) 981-SAT Prep Math (½) 980-SAT Prep Critical Reading (½) 341-Spanish II (1) 940-Studio Art I (1) 843-Textile & Design (1) 960-Three-Dimensional Design (½) 733-Visual Communications II (1) 945-Watercolor Painting (½)	9th & 10th Grade Electives plus: 661-Accounting II (1) 563-AP Biology/Lab (1½) 570-AP Computer Science Principles (1) 156-AP English Lang./Comp. (1) 570-AP Physics 1: Algebra-Based 255-AP World History (1) 556-Anatomy & Phys. (1) 744-Auto Mechanics II (2) 664-Bus. Comm. & Procedures (1) 944-Ceramics II (½) 978-Computer Programming IV (1) 755-Construction Trades I (2) 855-Early Childhood Education I (1) 790-Engineering Technologies I (2) 654-Entrepreneurship (1) 863-Fashion I (1) 852-FCS Lab Technician (½) 979-Music Theory III (½) 821-Nutrition & Wellness (1) 742-Precision Production I (2) 261-Psychology (½) 351-Spanish III (1) 655-Marketing (1) 950-Studio Art II (1) 783-Visual Com. Tech. Lab Technician (½) 782-Video Production (1) 743-Wood Technologies Lab Technician (½)	9th, 10th & 11th Grade Electives plus: 861-Advanced Cooking (1) 963-Advanced Studio Art (2) 465-AP Calculus (1) 565-AP Chemistry (1½) 165-AP English Lit./Comp. (1) 571-AP Physics 2: Algebra-Based (1½) 365-AP Spanish Language & Culture (1) 255-AP World History (1) 754-Auto Mechanics III (2) 736-Automotive Lab Technician (½) 566-Chemistry Lab Tech (½) 765-Construction Trades II (2) 865-Early Childhood Education II (3) 791-Engineering Technologies II (2) 864-Fashion II (1) 721-Metal Tech Lab Technician (½) 569-Physics Lab Tech (½) 752-Precision Production II (2) 681-School-to-Work Experience (1-3) 361-Spanish IV (1) 962-Studio Art III (1) 786-Video Broadcasting (2)

Western Wayne School District is an equal opportunity educational institution and will not discriminate on the basis of race, color, national origin, sex, and handicap in its activities, programs, or employment practices as required by Title VI, Title IX, and Section 504.

What are Career Clusters?



The sixteen Career Clusters were developed to relate occupations to broad industries. Within each cluster are several “pathways,” which provide a more focused category within the cluster. These are useful to educators, industry groups, employers, parents, and others. Some occupations will occur in more than one cluster or pathway.

Career Clusters prepare all students
for colleges and careers.

Educators helping students learn career management skills can encourage students to explore a range of career options by focusing attention on broad areas (clusters or pathways), rather than specific occupations. Since each cluster includes occupations with a range of skill and training requirements, students can concentrate on groups of occupations most suitable to their individual needs.

Skills and knowledge required for the occupations in each cluster have been identified. This information can be used by educators to help ensure that students are acquiring the qualifications they need for employment and by industry groups and employers to help structure job descriptions and employee training programs. Parents can use cluster information to learn about qualifications and training and to help their children explore career possibilities.



For more information on Career Clusters, visit the
States' Career Clusters web site at:

<https://careertech.org/career-clusters/>

16 USDOE Career Clusters - Brief Descriptions

	<p>The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.</p>
	<p>Careers in designing, planning, managing, building and maintaining the built environment.</p>
	<p>Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</p>
	<p>Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.</p>
	<p>Planning, managing and providing education and training services, and related learning support services.</p>
	<p>Planning, services for financial and investment planning, banking, insurance, and business financial management.</p>
	<p>Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p>
	<p>Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.</p>
	<p>Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.</p>
	<p>Preparing individuals for employment in career pathways that relate to families and human needs.</p>
	<p>Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.</p>
	<p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p>
	<p>Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.</p>
	<p>Planning, managing, and performing marketing activities to reach organizational objectives.</p>
	<p>Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.</p>
	<p>Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.</p>

81 Pathways within the 16 USDOE Career Clusters

	<p>Food Products and Processing Systems; Plant Systems; Animal Systems; Power, Structural & Technical Systems; Natural Resources Systems; Environmental Service Systems and Agribusiness Systems</p>
	<p>Design/Pre-Construction; Construction and Maintenance/Operations</p>
	<p>Audio and Video Technology and Film; Printing Technology; Visual Arts; Performing Arts; Journalism and Broadcasting and Telecommunications</p>
	<p>Administration; Management; Business Financial Management & Accounting; Human Resources; Business Analysis; Marketing and Administrative & Information Support</p>
	<p>Administration and Administrative Support; Professional Support Services and Teaching/Training</p>
	<p>Financial & Investment Planning; Business Financial Management; Banking & Related Services and Insurance Services</p>
	<p>Governance; National Security; Foreign Service; Planning; Revenue and Taxation Regulation and Public Management and Administration</p>
	<p>Therapeutic Services; Diagnostic Services; Health Informatics; Support Services and Biotechnology Research and Development</p>
	<p>Restaurants and Food/Beverage Services; Lodging; Travel & Tourism and Recreation, Amusements & Attractions</p>
	<p>Early Childhood Development & Services; Counseling & Mental Health Services; Family & Community Services; Personal Care Services and Consumer Services</p>
	<p>Network Systems; Information Support and Services; Interactive Media and Programming and Software Development</p>
	<p>Correction Services; Emergency and Fire Management Services; Security & Protective Services; Law Enforcement Services and Legal Services</p>
	<p>Production; Manufacturing Production Process Development; Maintenance, Installation & Repair; Quality Assurance; Logistics & Inventory Control and Health, Safety and Environmental Assurance</p>
	<p>Management and Entrepreneurship; Professional Sales and Marketing; Buying and Merchandising; Marketing Communications and Promotion; Marketing Information Management and Research; Distribution and Logistics and E-Marketing</p>
	<p>Engineering and Technology and Science and Math</p>
	<p>Transportation Operations; Logistics Planning and Management Services; Warehousing and Distribution Center Operations; Facility and Mobile Equipment Maintenance; Transportation Systems/Infrastructure Planning, Management and Regulation; Health, Safety and Environmental Management and Sales and Service</p>

