



INDIAN  
PRAIRIE  
SCHOOL  
DISTRICT 204

2011

HIGH SCHOOL  
COURSE CATALOG  
& PLANNING GUIDE

METE A VALLEY  
NEUQUA VALLEY  
WAUBONSIE VALLEY

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This Course Catalog & Planning Guide reflects the most up-to-date information as of January 2011. Depending upon class, changes and requirements vary. Sophomores through seniors should consult with a guidance counselor. An on-line version of this catalog will be maintained and updated on the district website as the official Course Catalog and Planning Guide.

## DEAR PARENTS OF INCOMING FRESHMEN,

The transition between 8<sup>th</sup> and 9<sup>th</sup> grade is a significant one. It is normal to feel some anxiety about moving from middle school to high school. Students and parents often experience the same emotions: Excitement, tempered by curiosity and caution. Every year high school leaders look at what we do to make that transition successful and confer with the middle schools to try to improve the process. We have asked parents who have one or more students at District 204 high schools to think about what advice they would give to parents of incoming freshmen or to the freshmen themselves. Here is what they said:

*“Even though the school seems big, don’t be afraid to call the teachers or their department chairs with a concern. They really want to help with your personal concern and will appreciate the call.”*

*“It really helped my three kids to get involved in a fall sport or activity. In sports they start before the school year and it gives them a chance to make friends and break the ice.”*

*“I tried to be aware of my kids’ friends and help them pick positive influences. Peer influence makes a big difference.”*

*“Communication. Call the school because no question is too small. Talk with other parents, too, and network with them.”*

*“Clear your schedule because you need time and emotional energy for what’s going on with your teen.”*

*“Parents should stay involved and engaged with their kids even though teens are more independent.”*

*“Don’t be naïve or over-accusatory. Your kids face the same temptations as everybody else’s. It’s easy to break a trust and hard to rebuild it.”*

*“Kids should be involved in activities at school, not preoccupied with working. Working doesn’t teach them how to manage money. It often allows them to learn how to waste it.”*

*“Don’t believe stories about how lenient other parents are. If in doubt, call other parents.”*

*“If students have the ability, they should take the challenging classes. Be realistic. Don’t take the easiest path.”*

We wish you well in your own adjustment to the high school experience and hope these bits of practical advice from fellow parents will help you.

Sincerely,

**James A. Schmid**, Principal, *Metea Valley High School*

**Robert McBride**, Principal, *Neuqua Valley High School*

**Kristine Marchiando**, Principal, *Waubonsie Valley High School*

## DEFINITIONS AND PROCEDURES

**CREDIT EARNED** All credit is awarded on a semester basis. A student must pass each semester of a year-long course to receive full credit. Students may not sign up for only one semester of a full year course unless they are repeating due to failure.

**COURSE LOAD** The maximum course load per semester will be seven courses. The minimum course load is six courses per semester. The State requires that all students receive three-hundred minutes of seat time per day. Course loads of less than the minimum are not approved except when students are beyond their eight semesters of attendance or in case of serious student or family illness.

**EARLY DISMISSAL/LATE ARRIVAL** Seniors who have sufficient credits, and whose courses can be arranged during *initial scheduling* to fit these special requests, may elect to have early dismissal or late arrival. Written parental permission and counselor approval are required for these options.

**WITHDRAWAL FROM A COURSE** All high schools encourage students to complete the courses they start; however, in the event a student wishes to withdraw from a course, the following guidelines will be used.

### DAY 1-12

*Students may withdraw from a course and replace it with an Option Period, Study Hall, or Access. No notation will appear on transcript.*

### DAY 13 – WEEK 8

*Student may withdraw from course with parent permission. The transcript will reflect a NG (no grade). Student will receive an Option period, Study hall or Access.*

### WEEK 9 – END OF SEMESTER

*Student may withdraw from course with parent permission. The transcript will reflect an “F” grade. Student will receive an Option period, Study hall or Access.*

**REPEATING A COURSE** A student may elect to repeat a course for which he or she has already earned credit in order to increase mastery of the material. The course must be retaken prior to taking the next course in the department’s sequence.

When a student retakes the identical class in District #204, including summer and on-line offerings, the better grade will be calculated as part of the student’s GPA. The lesser grade will be given a No Grade designation. In the event the student enrolls in a course offered by an accredited institution outside of District #204, the class must be pre-approved as a substitute by the Director of Guidance. These courses may be substituted for credit replacement, but the grade will not be calculated as part of the student’s GPA.

### CORRESPONDENCE AND OUTSIDE

**COURSES** Students may take *accredited* correspondence and/or outside coursework for graduation requirements and electives from institutions other than District #204. Directors of Guidance at each high school will verify the accreditation status of each course. Indian Prairie District #204 will accept a maximum of 2.0 credits of correspondence or other outside coursework toward graduation requirements; however, the courses must be from an accredited institution and be pre-approved by the Director of Guidance. Courses taken outside of #204 and approved will receive credit, but will not be counted toward the student’s GPA. This limitation does not include online coursework a student may take from District #204. District #204 offers online coursework that is aligned with the curriculum and course content of currently offered courses. These District #204 online courses will not be limited to the 2.0 credit criteria. Private school credit will be evaluated using the criteria established in Board Policy 705.2-R. Parochial and home school will be considered private school.

**LATE ENROLLMENT** Students enrolling without current transfer grades from the 21st attendance day through the end of the semester will earn no credit.

**EARLY GRADUATION** The opportunity for early graduation is provided for students in the senior year and at the end of the junior year. Seniors must apply for early graduation before November 15, which, if approved, allows for non-attendance in the eighth semester of high school. Mid-year graduates must complete the first semester. Juniors must apply for early graduation before January 15, which, if approved, allows for non-attendance in their senior year of high school. Written application must be made to the student’s counselor, stating reasons for the

request for early completion. Requests for early graduation submitted at winter break will not be honored. The application must include a parent’s signature. Students graduating early must complete all graduation requirements. Only students who complete the 8th semester are eligible for senior honors (e.g. Departmental Outstanding Senior).

**ADVANCED COURSES** District 204 offers a comprehensive curriculum that includes Advanced Placement courses. Because we have high achieving students, on occasion there are students who exhaust even our comprehensive course sequences before entering the senior year. A student wishing to continue in a subject with an advanced college-level course should discuss that with his or her counselor. It is important to begin planning early for advanced-level courses beyond the core sequences offered in the high school curriculum.

**ADVANCED PLACEMENT (AP) AND HONORS COURSES** Honors and Advanced Placement course work is accelerated, more sophisticated, and demands a high level of independent effort within a compacted time frame; therefore, each department that offers courses with weighted grades has developed recommendations for student success. These benchmarks are indicators of performance levels or standards for the courses and are available from departments offering classes with weighted grades. These benchmarks often include standardized test scores at the 90th percentile and above, teacher recommendation, and grades in previous courses.

As a general rule, students meeting all three benchmarks should definitely take the AP/honors course. If the student meets two, the student probably will be successful, and we encourage the student to enroll. If the student meets fewer than two, the student should consider his or her motivation, study skills, and interest in the field before enrolling. For an incoming freshman in these situations, we encourage the student to review his or her progress with the eighth grade staff.

**WEIGHTED GRADES** In order that class rank and the cumulative grade point average reflect the nature of academic work involved, Indian Prairie School District weights the grades earned in certain high school classes. Grades from the

following courses are given extra weight:

English I Honors	Honors Biology
English II Honors	Honors Chemistry
English III AP	Honors Physics
English IV AP	AP Physics
	AP Chemistry
Honors Chambers Strings	AP Biology
Honors Varsity Singers	AP Environmental Science
Honors Wind Ensemble	
AP Music Theory	Honors World History
	AP U.S. History
AP Micro Economics	AP European History
AP Macro Economics	AP Psychology
Honors Accounting II	AP Government & Politics
	AP Human Geography
Honors Geometry	AP World History
Honors Algebra II/Trig	
Honors Precalculus	AP Foreign Languages (Level IV)
AP Statistics	Honors Chinese IV
AP Calculus	AP French
AP Computer Science	AP German
JAVA	AP Spanish
Calculus III	
	AP Studio Art
	AP Art History
	Auto Servicing

**COURSE AVAILABILITY** Since courses are offered based on economic factors and sufficient enrollment, the semester in which a ½ unit course shall be offered will be determined after pre-enrollment.

**GRADE TRANSFER POLICY** When a student transfers from another high school, only courses that we currently weight in our curriculum will be weighted. We accept the previous school’s letter grades as the official grades; we will not convert the letter grades to our grading scale. If a student transfers in with numerical grades accompanied by scaled letter grades, we will use the school’s scale. If there are no scaled letter grades, then we will use our grading scale. For student’s entering from a foreign country, all grades will be noted as P/F and comparable credit given for each course. No GPA or rank will appear on the transcript until the student completes a semester of course work in our high school. Home school and private school credit will be evaluated using the criteria established in Board Policy 705.2-R.

**SCHEDULE CHANGES** Staffing decisions are based on students’ course requests made during the registration process. For that reason, students are urged to consider their selections carefully. No

changes will be made to accommodate requests for specific teachers or periods. *The deadline for schedule changes is printed on the registration form.* Only changes that impact the student's ability to graduate on time will be made after that date.

**GRADING SCALE** All three high schools use the above grading scale based on percentages.

- A = 91–100%
- B = 81–90%
- C = 71–80%
- D = 65–70%
- F = BELOW 65%

## INDIAN PRAIRIE SCHOLAR PROGRAM

Any student with a cumulative grade point average of 3.60 or above, after his or her sixth or seventh semester of school, will be named an Indian Prairie Scholar. In order to qualify for the award, students must be full-time students in District 204. Students who receive significant modifications to course work that substantially change course standards are ineligible for this award.

In order to enhance chances for college entrance and scholarships, students are encouraged to give service to the community and take advantage of leadership opportunities.

## GRADUATION REQUIREMENTS

Under normal circumstances, a student will be expected to spend four years in meeting graduation requirements. In order to graduate, a student will be required to earn the following units of credit during his secondary school experience in grades 9-12. The overall school program fulfills the requirements of the State of Illinois, the recommendations and requirements of the North Central Association and the Illinois State Board of Education.

District 204's graduation requirements should not be confused with nor considered as college admission requirements.

### GRADUATION REQUIREMENTS

English <sup>1</sup> .....	4 credits
Mathematics <sup>2</sup> .....	3 credits
Science.....	3 credits
World Geography or World History <sup>3</sup> .....	1 credits
U.S. History <sup>3</sup> .....	1 credits
Government <sup>3</sup> .....	.5 credits
Consumer Education <sup>4</sup> .....	.5 credits
Physical Education <sup>1</sup> .....	3.5 credits
Health.....	.5 credits
Driver Education.....	.5 credits
Elective <sup>5</sup> (ART, MUSIC, FOREIGN LANG, ETC).....	.5 credits
Vocational <sup>5</sup> .....	.5 credits

<b>BASIC REQUIREMENTS SUBTOTAL</b> .....	18.5
Additional Elective Credits.....	5.5

### TOTAL CREDITS REQUIRED ..... 24 (CLASS OF 2014)

For the classes of 2012–2013 the total number of credits required is 23. This reflects a 2-year rather than a 3-year science credit.

- 1) To meet the physical education requirement and English requirement, a student must be registered in physical education and English for each semester of attendance.
- 2) The state requirement for mathematics includes one year of Algebra I and one year of Geometry content.
- 3) The social studies requirement includes 1 unit of either Honors World History or World Geography, 1 unit of U.S. History (this includes four options: American Society, American Studies, U.S. History or AP U.S. History), and 1 semester of U. S. Government.
- 4) The consumer economics State requirement is fulfilled by taking Consumer Economics (including Online Consumer Economics), or AP Macroeconomics.
- 5) State graduation requirement is one credit (two semesters) chosen from music, art, foreign language, or career and technical education.

### STATE AND FEDERAL CONSTITUTION

**EXAM REQUIREMENTS** Students must pass these exam requirements in social studies in order to graduate.

### COMMUNITY SERVICE GRADUATION

**ENDORSEMENT** All students are encouraged to complete an approved practicum of community service. Those who complete 30 hours of community service will have that accomplishment noted on their official transcript. See counselors for verification forms, details, and ideas for service opportunities and to have service noted on the transcript.

*Indian Prairie School District takes pride in the outstanding achievements of its students. Students are encouraged to enroll in elective courses in any of the subject areas offered, above and beyond the minimum graduation requirement.*

## COLLEGE ENTRANCE REQUIREMENTS

### STATEWIDE ADMISSION REQUIREMENTS

The Illinois State Board of Higher Education has adopted minimum subject requirements for public colleges and universities in an effort to help high school students improve their academic preparation for baccalaureate degree programs. *We strongly recommend that students take courses to meet these requirements.* Students who have not taken the required subjects but wish to enter a baccalaureate degree program may be admitted to public colleges and universities on a provisional basis. Each institution determines its own policies for provisional admission. Such policies include requirements to make up preparation not completed in high school or provisions for opportunities to demonstrate competency in the required subject areas.

Individual public universities and community colleges may have other subject requirements in effect as well as requirements involving test scores and grade point averages. Fundamental level courses may not meet college entrance requirements. Applicants must contact each college or university individually for details about all of its requirements.

The following high school subjects are typically required of freshmen entering community college transfer programs and public universities. Research has shown that students who take courses that match such a pattern generally have higher ACT or SAT scores.

### MINIMUM PUBLIC COLLEGE/ UNIVERSITY REQUIREMENTS

SUBJECT	UNITS
English .....	4.00
Emphasizing written and oral communications and literature	
Social Studies .....	3.00
Emphasizing history and government	
Mathematics .....	3.00
Introductory through Advanced Algebra, Geometry, Trigonometry, or Fundamentals of Computer Programming	
Science.....	3.00
Laboratory sciences	
Foreign Language, Music, Art, or Vocational Education.....	2.00
Requirements vary. Check with the University	

## NCAA GUIDELINES

In order to earn a scholarship and actually play an interscholastic sport at a Division I or II college, a high school student must earn a certain grade point average in a core curriculum of 16 core academic courses for Division I and 14 core academic courses for Division II:

### FOR 2008 GRADUATES AND LATER:

- Four years in English
- Three years in Math (algebra I or higher)
- Two years in Social Studies
- Two years in Science (starting with biology)
- Four additional academic courses
- One year of an additional course of English, Math, or Natural/Physical Science

In addition, students must meet the guidelines for the composite score on the ACT or SAT exams. The NCAA accepts national and state official test scores. The school does not send testing information. Your student must code #9999 on the test grid for the official score to be mailed to the Eligibility Center. Students should see their coach and/or counselor for further details. Not all course work at the high school level is accepted as core under NCAA purview. Please check for your courses on the 48-H approved courses roster located in the NCAA Eligibility Center website.

### ONCE AT THE WEBSITE ENTER THE APPROPRIATE SCHOOL CODE:

Metea Valley High School.....	140-187
Neuqua Valley High School.....	143-108
Waubonsie Valley High School.....	140-184

*Please refer to the NCAA clearinghouse for further details at [www.eligibilitycenter.org](http://www.eligibilitycenter.org).*

## EDUCATION TO CAREERS

Indian Prairie's Education to Careers (ETC) and Tech Prep initiatives provide students with a competitive edge. The overall purpose is to prepare for career success in a changing, highly technical, dynamic work place. Participating high schools, community colleges and area employers are jointly offering ETC/Tech Prep Programs.

Beginning with ninth grade, students can choose a general career cluster and educational paths designed to support that choice. As the student progresses, more specific occupational areas can be chosen, and an educational path can be planned for high school courses and the student's continuing education. ETC/Tech Prep experiences integrating courses are increasingly occurring in our curriculum.

### ETC/TECH PREP HELPS STUDENTS:

- See connections between academic and vocational courses;
- Learn thinking and problem-solving skills that make them more valuable employees;
- Start career preparation while in high school by taking courses related to a future college major or field of work;
- Explore general fields to learn where their abilities and interests lie;
- Choose a rewarding career path;
- See a link between school and work; and,
- Acquire a lifelong learning foundation.

For further information about linking high school career prep courses to the College of DuPage, Waubensee Community College, or the Technology Center of DuPage, students should see their guidance counselor. College credit may be earned during high school by completing certain course sequences.

## FRONTIER CAMPUS

**OPTIONAL SENIOR CAMPUS** The Frontier Campus offers an entirely different option for seniors who are interested. It is an attempt to expose high school students to a college venue of classes. Classes are scheduled on a block schedule. There are four blocks that meet on Mondays and Wednesdays and four blocks that meet on Tuesday and Thursday. Each class meets for 90

minutes. Students may take up to seven high school credits (which would be seven blocks each semester.)

### MONDAYS AND WEDNESDAYS\*

Block A	7:40-9:10am	Block A
Block B	9:25-10:55am	Block B
Block C	11:10-12:40pm	Block C
Block D	12:55-2:25pm	Block D

### TUESDAYS AND THURSDAYS

Block A	7:40-9:10am	Block A
Block B	9:25-10:55am	Block B
Block C	11:10-12:40pm	Block C
Block D	12:55-2:25pm	Block D

*\*Time is adjusted due to professional development scheduling on Wednesdays*

Frontier operates as an "Open Campus" meaning when students are not in classes they may go on or off campus wherever they choose. Other school rules (dress, attendance, tardies, grades) all apply. For weeks where there is no school on one of the days Monday through Thursday, classes will meet on Friday of that week. Other Fridays are referred to as Flex Fridays. On Flex Fridays, students whose cumulative grade in a class is below "C" must come in for extra help during the regular class time. Any student wishing extra help may also come in on a Flex Friday during an instructor's office hours. Each teacher, just as in college, may set rules for the class that require students who were absent for a regularly scheduled block during the week or who have incomplete work to come in on a Flex Friday to make up or complete the work. Students with good grades who have no absences or unfinished work may have no school on some Flex Fridays.

**COLLEGE CREDIT** One of the most exciting aspects of Frontier is that students taking high schools classes, may also take college classes through COD at Frontier during the regular day. It is possible for a student to complete his or her high school graduation requirements by taking a minimum of five COD classes during the year and also complete his/her first semester of college work. Therefore students may have a high school class during some blocks and college classes during others.

**COURSE OFFERED** The actual high school classes offered at Frontier every year will be determined by student choices made during



registration during the spring enrollment of the junior year. COD will continue to offer what are termed “General Education” classes – the foundation courses that almost every college requires for graduation. A list of classes available are listed on the Frontier website.

### WHO SHOULD BE INTERESTED IN ATTENDING FRONTIER?

Students wishing to enroll at the Frontier Campus for their senior year must have earned a minimum of 18 semester credits, and have passed all classes required for graduation through the 11th grade.

Juniors who register for Frontier, then fail a required second semester class, will no longer be considered eligible for placement at Frontier. The deficiency may be made up during the summer. However, students must understand that their final placement will only be determined after they have shown proof of passing the course, at which time there may no longer be room for them in the program.

**ON-LINE COURSES** District 204 offers on-line classes as part of an initiative to prepare students for future learning opportunities in college, the military, or the workplace. Along with dual credit courses and Advanced Placement courses, on-line courses offer students opportunities to excel in unique opportunities. The district’s on-line courses are taught by district teachers, and they mirror traditional courses in content, activities, and examinations. Daily or weekly homework may be assigned, yet they offer flexibility for learning that meets the student’s need to personalize when and where they study. For specific courses offered in this electronic format, see the course descriptions in this guide or visit the web site (<http://frontier.ipisd.org/Subpage.aspx/Institute>). Indian Prairie District #204 will accept a maximum of 2.0 credits of correspondence or other outside coursework toward graduation requirements; however, the course(s) must be from an *accredited institution* and be pre-approved by the Director of Guidance.

## OFF-CAMPUS COURSES

### CAREER AND TECHNICAL COURSES

#### 4072 TECHNOLOGY CENTER OF DUPAGE

*Grade 11-12* Three units, two semesters. District 204 is a member of the DuPage Area Occupation System (DAOES). This membership allows us to access the services of the Technology Center of DuPage (TCD). TCD provides a comprehensive vocational-technical education for high school students whose career objectives are related to vocational-technical fields. This course of study requires a year-long commitment by the student. Transportation is provided by the district. Fees for programs may be applicable billed through the Technology Center of DuPage.

Participation in TCD courses is limited due to enrollment and financial factors. Not all students who request these classes will be admitted to the program. Since the district is making an additional financial expenditure, those students with the greatest likelihood of successfully completing the program will be selected. Applicants will be screened with regard to normal progress toward graduation, regular attendance, punctuality, self-discipline, demonstrated motivation, and teacher-counselor recommendations. Students should see their counselors for details.

#### PROGRAMS OFFERED THROUGH TECHNOLOGY CENTER OF DUPAGE ARE:

Construction Trades	Fire Science
Landscape Design & Management	Medical and Health Care Careers
Manufacturing Technology	Auto Body Repair
Pre-Architectural CAD	Automotive Technology
Pre-Engineering CAD	Cosmetology
Computer Information Systems	Culinary Arts
Data Entry Occupations	Pastry Arts
Office Systems Technology	Hospitality Management
Graphic Communication	Early Childhood Education
Multi-Media & Television Production	Electronics & Pre-Engineering Tech
Certified Nurse Assistant	HVAC & Refrigeration
Criminal Justice	Residential Wiring & Home Tech

**EAST AURORA BUILDING TRADES  
PROGRAM****4070 CONSTRUCTION TRADES**

*Grade 11-12* This 3 hour course will consist of on-site construction of a house. Students will participate in all phases of carpentry, wiring, plumbing, concrete work, heating, and other aspects of house construction. Transportation to the work site is not provided. 4034 Introduction to Construction is a prerequisite to this course. This course is offered through a partnership with Aurora East High School District 131. Construction sites will be in the Aurora area. Students must have their own medical insurance or purchase a school insurance plan. The student will be required to provide a hammer, tape, tool belt, work boots, utility knife, and other tools.

**COURSE NUMBERING**

In this guide, all courses are listed in the 4000's. The only time that number will be altered is in the following two cases:

Any time a student is registering for a course at the freshmen level, the course number will be indicated by a 9000 preface instead of a 4000 preface.

FOR EXAMPLE: **4205 Honors English I** when taken at the Freshman building will be listed as **9205 Honors English I**.

Any time a student is registered for a class at the Frontier Campus rather than at any of the high schools, then the course number will be indicated by an 8000 preface rather than a 4000 preface.

FOR EXAMPLE: **4249 English IV – AP** when taken at the Frontier Campus will be listed as **8249 English IV – AP**.

## ART

Don Devany, *Department Chairperson – MVHS*  
Charles Staley, *Department Chairperson – NVHS*  
Will Burck, *Department Chairperson – WVHS*

The District 204 Art Program seeks to provide a variety of experiences in the visual arts that enable our students to appreciate and enjoy art; to help guide life and career choices they will make during their high school tenure; to prepare them for further study in art; and to increase their understanding of an increasingly visual world. In most art classes, students will make projects that can be taken home. There is a material fee associated with such classes payable at the start of class. All dual opportunities are pending final agreement between IPSD and COD. To qualify for dual credit, students must complete appropriate paperwork and testing as required by COD.

### ART COURSE LISTINGS

#### PERSONAL COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4301	2D Art and Design	Sem. 9-12	None
4303	3D Art and Design	Sem. 9-12	None
4304	Printmaking	Sem. 10-12	Minimum of one semester of art
4306	Computer Graphics I	Sem. 10-12	None
4308	Computer Graphics II	Sem. 10-12	Computer Graphics I
4310	Drawing I	Sem. 9-12	None
4312	Drawing II	Sem. 10-12	Drawing I
4314	Drawing III	Sem. 10-12	Drawing II
4320	Painting I	Sem. 10-12	Drawing I plus one additional semester of art
4322	Painting II	Sem. 10-12	Painting I
4330	Ceramics I	Sem. 9-12	None
4332	Ceramics II	Sem. 10-12	Ceramics I
4334	Ceramics III	Sem. 10-12	Ceramics II
4340	Jewelry	Sem. 10-12	Minimum of one semester of art
4360	Art Independent Study (AIS)	Sem. 11-12	Minimum of 4 semesters of art, and Instructor's approval with portfolio review
4364	AP Studio Art	Yr. 12	Mandatory Teacher Recommendation
4365	AP Art History	Yr. 9-12	None

#### DUAL CREDIT WITH COLLEGE OF DUPAGE

Students enrolled in the following courses may apply to earn dual credit with COD. High school students who wish to take the course listed below for dual credit will receive college credit and a COD transcript regardless of whether or not they continue at College of DuPage. These credits may be transferable to other institutions.

#### COURSE COMPLETED AT MVHS, NVHS, WVHS

##### COMPUTER GRAPHICS I: COURSE 4306

In order to be eligible for dual credit, students must complete this course in addition to Visual Media Course 4138 offered through the Business Department. Courses do not have to be taken concurrently.

#### CREDIT AT COD

##### GRAPHIC ARTS TECHNOLOGY 1102

Intro to Graphic Publishing Applications (3 hrs. credit)

## ART COURSE DESCRIPTIONS

All Art Courses are one semester with the exception of AP Studio Art and AP Art History which are year long. Level II or III courses require successful completion of a previous level.

### **4301 2-D ART AND DESIGN** *Grade 9-12*

This is a semester introductory level course for high school art. Students will learn how to utilize the elements and principles of design, while being exposed to a variety of materials and techniques. Students will focus on developing and refining these skills in the areas of drawing, painting, printmaking and a variety of other two-dimensional art media. This course is a preferred starting point for freshmen. A project fee is charged.

### **4303 3-D ART AND DESIGN** *Grade 9-12*

This is a semester introductory level course for high school art. Students will learn how to utilize the elements and principles of design, while being exposed to a variety of materials and techniques. Materials may include but are not limited to: clay, wire, plaster, and a variety of other three-dimensional art media. This course is a preferred starting point for freshmen. A project fee will be charged.

### **4304 PRINTMAKING** *Grade 10-12*

*Prerequisite is at least one semester of art (2D Art Encounters or Drawing I).* This course allows students to expand their knowledge of art-making into the realm of multiple copies, known as “prints”. Printmaking touches upon both painting and drawing with processes such as silkscreen, etching and relief printing. In addition to producing original artworks having a completely unique look; students may be introduced to the commercial aspects of printing via T-shirt or greeting card projects. A project fee will be charged

### **4306 COMPUTER GRAPHICS I** *Grade 10-12*

This semester course exposes students to the skills and concepts necessary to utilize Adobe Photoshop in a comprehensive manner. In addition, students receive instruction in Adobe Illustrator. Image editing, creation, printing, typography, scanning, and color correction will also be included. This foundation course allows for future

study of the individual software programs used in the graphic, imaging, and publishing industries. This course is eligible for dual credit through COD when taken in conjunction with Desktop Publishing with Graphics through the Business Department. \* This course can be used for a vocational credit. A project fee will be charged.

### **4308 COMPUTER GRAPHICS II** *Grade 10-12*

This semester course is a course with emphasis on creative problem-solving and visual literacy/communication skills of a commercial art nature. Students will add the vector-based Adobe Illustrator software program to their bank of skills while continuing to create original art products. \*This course can be used for a vocational credit. A project fee will be charged.

### **4310 DRAWING I** *Grade 9-12*

This semester course provides the student with the basic understanding of the elements of art and principles of design. Emphasis will be placed on basic drawing skills and perception while creating artwork in a variety of media. A project fee will be charged.

### **4312 DRAWING II** *Grade 10-12*

This semester course provides the student with exposure to different media while continuing technical skill development, perception, skills, and creative problem solving. A project fee will be charged.

### **4314 DRAWING III** *Grade 10-12*

This semester course is for the advanced student and places emphasis on increasing drawing skills and expanding creative ideas. This course will also help students create projects for future portfolio review. A project fee will be charged.

### **4320 PAINTING I** *Grade 10-12*

*Prerequisite is Drawing I plus one additional course in art.* This semester course provides the student with the basic understandings of the tools, techniques, processes, and language associated with water-based paint media, including watercolors and acrylics. Students will synthesize these understandings into individual paintings and media studies. A project fee will be charged.

**4322 PAINTING II** *Grade 10-12*

This semester course provides the continuing student with further study of paint media including watercolor, acrylics, and oils. It will introduce new materials and approaches and provide contexts for individual projects. Emphasis is placed on design composition, color theory, and conceptual thought processes involved in creating complex, interesting paintings. A project fee will be charged.

**4330 CERAMICS I** *Grade 9-12*

This semester course focuses on creative problem solving through the manipulation of clay. It stresses understanding the nature of clay through basic hand-building techniques and methods; use of ceramic finishes such as glazes, and also includes firing processes, equipment, and vocabulary. A project fee will be charged.

**4332 CERAMICS II** *Grade 10-12*

This semester course introduces students to basic wheel throwing and more advanced hand-building and glazing techniques. A project fee will be charged.

**4334 CERAMICS III** *Grade 10-12*

This is an advanced course stressing problem-solving using advanced wheel-throwing and hand building techniques. Emphasis is placed on developing the student as an artist who communicates ideas through the medium of clay. A project fee will be charged.

**4340 JEWELRY** *Grade 10-12*

*Prerequisite is a minimum of one semester of any art course.* This course covers the basic techniques of jewelry making using a variety of materials possibly glass, wood, plastic, clay and metals. Students will become familiar with vocabulary terms and tools while creating small sculptures. A project fee will be charged.

**4360 ART INDEPENDENT STUDY (AIS)**

*Grade 11-12 Sem.* Prerequisites are four semesters of art courses and portfolio review by staff. This course is designed to meet the continuing artistic needs of the advanced art student. It is an individually directed study in a particular area of art agreed upon by both the student and teachers. This course requires a high degree of motivation and self-discipline and is to be offered only to students who qualify. A project fee will be charged.

**4364 AP (ADVANCED PLACEMENT)**

**STUDIO ART** *Grade 12. Year-long. Teacher recommendation is mandatory.* This course is designed for students who are seriously interested in the practical experience of art. The course is organized as an intensive, year-long class requiring commitment in *quality* and *quantity* of work from the art student. AP Studio Art is not based on a written examination; instead, students focus on portfolio development, breadth of work and thematic concentration for evaluation at the end of the school year. It is vital that students plan far enough in advance to complete the portfolio on time. Students will be expected to work outside the classroom and beyond scheduled periods. Students will work independently in their area of concentration. Two-dimensional and three-dimensional artist portfolios are accepted. A project fee will be charged.

**AP (ADVANCED PLACEMENT)**

**ART HISTORY** *Grade 9-12. Year-long. Weighted grade.* AP Art History is a chronological survey of artistic styles, artists, architecture, painting, sculpture and photography primarily of the western tradition with periodic introductions of non-western work from Africa, the Americas, Asia, the Near East, Oceanic and Islamic traditions. Emphasis is placed on the study of the development of style within cultures, eras and artists' careers. Students will develop knowledge of specific stylistic characteristics of various cultures as well as the terminology necessary to communicate a scholarly analysis of the works. In order to understand the similarities and differences that exist in our visual world, we will explore the symbolism, artistic processes and political, social, economic and scientific background of the artwork. Formal analysis using the art elements and design principles are specifically referenced to each art form. Central to the AP Art History course is the development of visual literacy, oral and written skills of comparative analysis, and the understanding of those works in historical and sociological context. This course requires a high degree of commitment and academic work as students should be engaged at the same level as a college level art history survey. Students who have done well in the history courses or studio arts are especially encouraged to enroll. This is a year-long course and prepares students for taking the AP Art History exam.

## BUSINESS

Jill Hlavacek, *Department Chairperson – MVHS*  
 Jennifer Yavorski, *Department Chairperson - NVHS*  
 Andrea Hendrickson, *Department Chairperson - WVHS*

The Business Department offers a variety of courses to prepare students for continued education and for development of personal and business skills. A modest materials fee will be assessed in those classes requiring extensive computer usage.

### BUSINESS COURSE LISTINGS

#### PROFESSIONAL COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4100	Business Orientation	Sem. 9-12	None
4142	Advertising**	Sem. 9-12	Business Orientation or Computer Marketing Technology, Visual Media, Multimedia Innovation
4130	Management	Sem. 11-12	Business Orientation recommended
4144	Entrepreneurship**	Sem. 11-12	Business Orientation (Management & Accounting Recommended)
4192	Marketing**	Yr. 11-12	Business Orientation and/or Advertising recommended
4197	Business Internship	Yr. 11-12	Approval of Business Internship Coordinator or Business Education teacher

#### COMPUTER COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4132	Essential Technology	Sem. 9-12	None
4136	Marketing Technology	Sem. 9-12	None
4138	Visual Media	Sem. 9-12	None
4160	Emerging Technology	Sem. 9-12	None
4134	eBusiness & Financial Technology	Sem. 9-12	None
4168	Web Design	Sem. 9-12	None
4166	Multimedia Innovations	Sem. 9-12	None

**BUSINESS COURSE LISTINGS (CONT'D)****FINANCIAL COURSES**

<b>COURSE#</b>	<b>TITLE</b>	<b>LEVEL</b>	<b>PREREQUISITE</b>
4104	Business Mathematics	Sem. 10-12	Algebra I or 2 yrs. General Math
4114	Accounting I**	Yr. 10-12	None
4116	Honors Accounting II**	Yr. 11-12	Accounting I
4148	Finance	Sem. 11-12	None

**PERSONAL SKILLS**

<b>COURSE#</b>	<b>TITLE</b>	<b>LEVEL</b>	<b>PREREQUISITE</b>
4102	Notetaking & Study Skills **	Sem. 9-12	None
4103	College Test Prep**	Sem. 11-12	None
4140	Business Law**	Sem. 11-12	None
4110	Consumer Economics	Sem. 12	None, fulfills graduation requirement
4111	On-line Consumer Economics	Sem. 12	None, fulfills graduation requirement
4152	AP Macroeconomics**	Sem. 12	None, fulfills graduation requirement
4112	AP Microeconomics**	Sem. 12	AP Macroeconomics

*\*\*These classes require a materials or workbook fee.*

**DUAL CREDIT WITH COLLEGE OF DUPAGE**

Students enrolled in the following courses may apply to earn dual credit with COD. High school students who wish to take the course listed below for dual credit will receive college credit and a COD transcript regardless of whether or not they continue at College of DuPage. These credits may be transferable to other institutions. All dual credit opportunities are pending upon agreement between IPSD and COD. To qualify for dual credit, students must complete appropriate paperwork and testing as required by COD.

**COURSE COMPLETED AT MVHS, NVHS, WVHS****VISUAL MEDIA COURSE 4138**

In order to be eligible for dual credit, students must complete this course in addition to Computer Graphics I: Course 4306 offered through the Art Department. Courses do not have to be taken concurrently.

**CREDIT AT COD****GRAPHIC ARTS TECHNOLOGY 1102**

Intro to Graphic Publishing Applications (3 hrs. credit)

## BUSINESS COURSE DESCRIPTIONS

### **4100 BUSINESS ORIENTATION** *Grade 9-12.*

This one-semester course introduces students to the world of business. Topics covered include types of business organization, marketing, advertising, accounting, human resources, management decision making, investing, finance, international business, and economics. The course is recommended for students who wish to further study business (Management, Accounting, Marketing, and Advertising) and is required for those who wish to take Entrepreneurship in their junior or senior year.

### **4102 NOTETAKING & STUDY SKILLS**

*Grade 9-12.* This course is designed for students desiring to learn a more efficient and effective way of studying. Reading and note taking strategies are main focuses of the course as well as techniques provided to develop listening skills, study skills, test-taking skills, improve memory and vocabulary. Synergy, organizational skills, and time management techniques are discussed and applied throughout the course (such skills can be used by all students whether they are career or college bound).

### **4103 COLLEGE TEST PREP** *Grade 11-12*

This course is designed for junior and senior students desiring improvement in reading, vocabulary, grammar, math, and science skills. Emphasis is placed on improving test-taking skills and learning techniques to improve success on standardized tests such as the ACT. A workbook fee will be charged.

### **4104 BUSINESS MATHEMATICS** *Grade 10-12*

This course develops and strengthens mathematical skills needed for business careers and business financial management. Units of work include problem-solving procedures involving purchasing, sales, marketing, banking services, investments, taxes, and data analysis. The importance of proper accounting is stressed.

### **4138 VISUAL MEDIA**

*Grades 9-12.* Students will learn technology skills related to visual layout and design for business application and personal use. This project-based course will incorporate digital photography, im-

age manipulation, design principles, and typography. Current design software programs include Adobe Photoshop and InDesign will be explored in depth. Students interested in Advertising, Marketing, and Web Design should take this course. A material fee will be charged.

### **4110 CONSUMER ECONOMICS** *Grade 12*

Consumer Economics, a required course, will integrate economic concepts with consumer skills, a combination necessary for added satisfaction in the use of personal resources. Instruction will center on the student's role in the economy as a citizen, consumer and worker. Topics will include: money management, buying goods and services, housing, banking and the Federal Reserve System, financial institutions and the use of credit and loans, consumer protection, insurance, savings and investing; pricing of products, supply and demand, taxation, government, and the free enterprise system. The capstone project of the course is a real-life consumer simulation.

### **4111 ONLINE CONSUMER ECONOMICS**

*Grade 12.* This course offers students an alternative to the traditional classroom consumer course, while still meeting the graduation requirement. The course is completely run through Blackboard (easily accessed on the Internet) and consists of units, a written midterm and final. Success will require students to manage their time and communicate with classmates and the instructor on a regular basis in order to make consistent progress and meet deadlines. Strong technology skills are not a requirement, but comfort using Blackboard will be necessary. High-Speed Internet connection is recommended. See counselor for details.

### **4152 AP (ADVANCED PLACEMENT)**

**MACROECONOMICS** *Grade 12.* Weighted grade. This course is a college-level course with topics pertaining to macroeconomics. Topics include the principles of economics that apply to the functions of the whole economic system such as the Fiscal and Monetary policy, GDP, inflation, unemployment, and the global economy. Studies include consumer topics to satisfy the state requirement for Consumer Economics. Students may also receive college credit in macroeconomics by qualifying on the advanced placement exam at the end of the school year. A workbook fee will be charged.



**4112 AP (ADVANCED PLACEMENT)**

**MICROECONOMICS** *Grade 12. Weighted grade.* Prerequisite is AP Macroeconomics. This course is a college-level course dealing with topics pertaining to microeconomics. Topics include the study of the market system, pricing, resource allocation, distribution and current domestic economic problems. Students may also receive college credit in microeconomics by qualifying on the advanced placement exam at the end of the school year. A workbook fee will be charged.

**4114 ACCOUNTING I** *Grade 10-12 Year-long.* Accounting I tracks the flow of money into and out of a business. It is the study of preparing business records for the purposes of making management decisions. Generally Accepted Accounting Principles (GAAP) are applied to the financial data needed to understand businesses organized as sole proprietorships and corporations. Accounting is the language of business and is strongly recommended for any student interested in business as a career. A workbook/simulation fee will be charged.

**4116 HONORS ACCOUNTING II**

*Grade 11-12. Year-long. Weighted grade. Prerequisite is Accounting I.* This is an advanced course for students interested in furthering their career exploration in accounting or related business occupation. Study includes corporate and cost accounting for merchandising and manufacturing businesses. Management decisions through the analysis of financial statements are an integral part of the curriculum. Automated accounting using computer simulation is integrated throughout the course. A workbook and simulation fee will be charged.

**4132 ESSENTIAL TECHNOLOGY**

*Grades 9-12.* Students will learn skills to expand their knowledge in basic technology and its application in academics and the workforce. This course will focus on developing 21st Century technology skills by incorporating study in keyboarding, Internet research, and computer literacy. Through the use of integrated projects, Microsoft Office, and various design programs, we will focus on building a student's essential technology skills. Students who desire improvement in keyboarding and basic software application skills will benefit from this course and be better prepared for further study in the computer

sequence. A materials fee will be charged.

**4134 E-BUSINESS & FINANCIAL TECHNOLOGY**

*Grades 9-12.* Students will gain an understanding of how to use technology to help them manage financial resources that are essential for success in college, career, and personal finance. With a focus on financial spreadsheets and reports, students will learn business and personal financial management using Excel, Access and various online resources. Students interested in Finance, Accounting, Honors Accounting II, and Economics should take this course. A materials fee will be charged.

**4136 MARKETING TECHNOLOGY**

*Grades 9-12.* This course will expand a student's abilities to work creatively and communicate effectively while exploring how technology supports businesses in the field of Sports and Entertainment, Travel and Tourism, Hospitality Finance, and others. Through the use of technology and project-based learning, students will further their skills in Microsoft Office, Adobe Creative Suite, and various online tools to a variety of business applications. Students interested in Advertising, Marketing, Management, Entrepreneurship, Business Internship, or Technology-related fields should take this course. A materials fee will be charged.

**4130 MANAGEMENT** *Grade 11-12. Prior completion of Business Orientation recommended.*

Business Management is designed to facilitate students' conceptual and practical understanding of issues related to management principles, practices, and organizational behavior. The topics explored include leadership, human resource management, motivation, organizational behavior, social responsibility, organizational culture, and communication. Each unit will require a project/activity to assess student learning. A systematic approach has been created with the intention of providing a process for evaluating students' performances in their development and presentation of class projects for the Business Management course.

**4140 BUSINESS LAW** *Grade 11-12*

This course is designed for students preparing for both the business world and personal life in order to understand the legal environment in which we live. This course will give students insight into the legal rules and regulations that benefit mankind and will promote understanding of the importance of law

to both society and the individual. Topics studied include: ethics, criminal and civil law, the court system, contracts, law and the minor, law and the consumer, employment law, bankruptcy, wills, and career exploration. Mock trials and a field trip to the county courthouse are utilized in this course to provide authentic learning experiences. A workbook fee will be charged.

**4142 ADVERTISING** *Grade 10-12*

*Business Orientation or Computer Applications II or Desktop Publishing recommended.* This course will focus on advertising principles and practices. Students will learn the history of advertising, its role in today's society, how the advertising industry works, careers in advertising, and the principles and techniques used to create ads for a variety of media. Emphasis is placed on planning and designing print ads, radio and TV commercials, and other specialty ads that appeal to certain target markets. Moderate computer use will be required. A materials fee will be charged.

**4144 ENTREPRENEURSHIP** *Grade 11-12*

Prerequisite is Business Orientation. Prior completion of Management and/or Accounting I is highly recommended. This course gives students the opportunity to learn about entrepreneurship as they develop a workable business plan that could be used in starting up and running a small business. Areas covered include financing, planning and research, market analysis, site location, pricing, promotion, staffing and training, and legal issues. By looking at successful entrepreneurs in history and through exposure to current entrepreneurs from local businesses, students will understand the opportunities and challenges entrepreneurs face and their importance to our economy. This is a capstone class recommended for students giving serious consideration to a career running their own small business. An entrepreneurial simulation software program is used throughout the semester. A lab fee will be charged for this course.

**4148 FINANCE** *Grade 11-12*

This course is designed to be a capstone course in the business curriculum pertaining to the financial sequence. The course will focus on four areas of finance: financial institutions, the Federal Reserve System, international markets, and the US stock and commodities markets. The course will emphasize "real-world" business and investment situations for student analysis and decision-making strategies.

**4168 WEB DESIGN**

*Grades 9-12.* Students will learn to design and create websites and optimize digital resources. An understanding of visual appeal, effective communication, functionality, and site organization and maintenance will be gained. Course resources include Dreamweaver, XHTML, Flash, and various online services. Students interested in Entrepreneurship, Management, Marketing, and Business Internship should take this course. A materials fee will be charged.

**4192 MARKETING** *Grade 11-12. Yea-long. Business Orientation and Advertising recommended.* This course examines the field of marketing and its essential role in all aspects of business. Topics covered include the role of marketing in today's society, marketing careers, product planning and development, pricing strategies, distribution methods, sales techniques, promotion, visual merchandising, and marketing math skills. Marketing principles learned will be applied through industry-specific units on sports, entertainment, travel/tourism, and fashion marketing. A workbook/materials fee will be charged for this course.

**4166 MULTIMEDIA INNOVATIONS**

*Grades 9-12.* Students will learn skills to enhance their communication through various forms of multimedia. Editing, animating, and digital publishing will be emphasized. Using various software programs and online resources, students will design and create audio and visual projects. Students interested in Entrepreneurship, Management, Advertising, Marketing, and Web Design should take this course. A materials fee will be charged.

**4197 BUSINESS INTERNSHIP** *Grade 11-12*

*Two credits. Year-long. Approval of Business Internship Coordinator or Business Education teacher.* This is a cooperative work program between the school and the employers. Students work outside of school and also attend class on a daily basis. Topics discussed in class pertain to work related and career issues. A student will receive one credit for classroom instruction and one credit for on-the-job training. The internship instructor will assist with job placement and monitor students' progress throughout the year. Early dismissal is NOT a requirement for this program. Students must provide own transportation.

## ENGLISH

Diane Tancredi, *Department Chairperson - MVHS*

Karen Pierros, *Department Chairperson - NVHS*

Mike Dwyer, *Department Chairperson - WVHS*

A student must be registered in a core English course each semester. The curriculum builds language skills sequentially from freshman through senior levels. Writing-based courses introduce, develop, and refine student skills in all aspects of the writing process including literary analyses, personal essays, and creative writings. In addition, reading development is approached through the various literature studied in each course.

### THE FIRST TWO YEARS OF ENGLISH COURSE WORK CONSIST OF TWO FULL-YEAR CORE COURSES:

English I and II.

### IN THE JUNIOR YEAR THE STUDENT MUST TAKE:

1. One semester of English III (British Literature I) AND
2. A minimum of one semester choice from the five choices offered from the junior choices

### IN THE SENIOR YEAR THE STUDENT MUST TAKE:

3. A minimum of two semester choices from the list of senior choices

If any student takes a year-long course his junior or senior year, then he or she need not select any of the junior or senior options, since he or she has already fulfilled the graduation requirement.

The Communication Electives (special interest courses) may be taken in addition to the core curriculum but do not count toward fulfillment of English requirements for graduation.

Because Honors and Advanced Placement (AP) course work is accelerated and more sophisticated, upper level work of high quality in a compacted time frame is demanded of students. The English Department has developed recommendations for student success. These criteria are indicators of performance levels or standards for the Honors or A.P. courses and are available from the English Department.

## ENGLISH COURSE LISTINGS

### FRESHMAN COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
9286	English I-Academic Literacy and Composition	Year 9	Placement
4204	English I-Literature, Language and Composition	Year 9	None
4205	English I-Honors Literature, Language and Composition	Year 9	None

**ENGLISH COURSE LISTINGS (CONT'D)**

**SOPHOMORE COURSES**

<b>COURSE#</b>	<b>TITLE</b>	<b>LEVEL</b>	<b>PREREQUISITE</b>
4286	English II-Academic Literacy and Composition	Year 10	Placement
4206	English II-American Literature and Composition	Year 10	
4207	English II-Honors American Literature and Composition	Year 10	
4929	English II-American Society (2 period block with social studies)	Year 10	

**JUNIOR COURSES**

<b>COURSE#</b>	<b>TITLE</b>	<b>LEVEL</b>	<b>PREREQUISITE</b>
4226	English III-British and Contemporary Literature and Composition	Year 11	Placement
4229	English III-Advanced Placement Language and Composition	Year 11	

Juniors not in 4226 or 4229 must take 4228 and one additional course from the Junior choices list.

4228	English III-British Literature I and Composition	Year 11	
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JUNIOR CHOICES

4227	English III-Contemporary Literature and Composition	Sem. 11	English II
4235	English III-Mythology and Composition	English II Sem. 11	
4239	English III-Dramatic Literature and Composition	Sem. 11	English II
4247	English III-British Literature II and Composition	Sem. 11	English II
4258	English III-Cultural Studies and Composition	Sem. 11	English II

**ENGLISH COURSE LISTINGS (CONT'D)****SENIOR COURSES**

<b>COURSE#</b>	<b>TITLE</b>	<b>LEVEL</b>	<b>PREREQUISITE</b>
4236	English IV – Communication and Composition	Year 12	Placement
4249	English IV-Advanced Placement Literature and Composition	Year 12	
14249	Online English IV- Advanced Placement Lit. and Composition	Year 12	

Seniors not in 4236 or 4249 must take two courses from the following seven choices.

**SENIOR CHOICES**

4238	English IV- Composition and Media	Sem. 12	Does not meet NCAA requirement
4246	English IV-20th Century Literature and Composition	Sem. 12	
14246	Online English IV-20th Century Literature and Composition	Sem. 12	
4266	English IV-Poetry and Composition	Sem. 12	
4276	English IV-World Literature I and Composition	Sem. 12	
4277	English IV-World Literature II and Composition	Sem. 12	
4282	English IV-Philosophy through Literature and Composition	Sem. 12	
4283	English IV- Communication and Composition	Sem. 12	

**ENGLISH COURSE LISTINGS (CONT'D)**

**COMMUNICATION ELECTIVES**

<b>COURSE#</b>	<b>TITLE</b>	<b>LEVEL</b>	<b>PREREQUISITE</b>
4220	Public Speaking	Sem. 10-12	None
4222	Theatre Arts I	Sem. 10-12	None
4224	Theatre Arts II	Sem. 10-12	Theatre Arts I
4230	Creative Writing I	Sem. 10-12	None
4232	Creative Writing II	Sem. 11-12	Creative Writing I
4240	Newspaper Journalism	Year 10-12	Instructor Approval
4242	Yearbook Journalism	Year 10-12	Instructor Approval
4287	Reading - Academic Literacy	Year 9	Placement
4280	College Prep Reading	Sem. 10-11	None
4284	Reading Workshop I	Year 9	Placement required
4284	Reading Workshop II	Year 10	Placement required
4285	Reading Workshop III	Year 11	Placement required

**ENGLISH COURSE DESCRIPTIONS**

All English courses are year-long unless noted.

**FRESHMAN LEVEL CORE COURSES**

**9286 ENGLISH I ACADEMIC LITERACY AND COMPOSITION** *Year-long.* This course focuses on the development of reading skills through the analysis of fiction, nonfiction, short story, novel, poetry, and drama. Descriptive, expository, persuasive, and narrative writing, as well as basic research techniques and communication skills are addressed. In addition, students refine grammar and usage skills through the writing process and effective composition strategies. This full-year course meets for two consecutive periods providing time for practice and growth in reading. This course is not NCAA core approved.

**4204 ENGLISH I LITERATURE, LANGUAGE AND COMPOSITION** *Year-long.* This course focuses on literary analysis through study of myth, short story, novel, poetry, and drama. Descriptive, expository, persuasive, and narrative writing, as well as basic research techniques and speaking skills are emphasized. In addition, students will refine grammar and usage skills through the writing process and effective composition strategies.

**4205 ENGLISH I HONORS – LITERATURE, LANGUAGE AND COMPOSITION** *Year-long.*

This course emphasizes analytical consideration of mythology, short story, novel, poetry, and tragic drama. Refinement of the principles of grammar, usage, and precision of expression is taught through emphasis on effective composition skills. Through the study of literature and composition, the course begins to prepare the student for the Advanced Placement test as juniors and seniors.

**SOPHOMORE LEVEL CORE COURSES**

**4286 ENGLISH II – ACADEMIC LITERACY AND COMPOSITION** *Year-long.*

This course focuses on the development of reading skills through the analysis of fiction, nonfiction, short story, novel, poetry, and drama. Descriptive, expository, persuasive, narrative, and literary analysis writing, as well as basic research techniques and communication skills, are addressed through instruction. In addition, students refine their grammar and usage skill through the writing process and the application of essential composition strategies. The class provides an effective bridge from the practice and application of reading strategies, especially inferring, evaluating, and synthesizing, to nonfiction text to the practice and application of reading strategies to fiction text, which is necessary for a successful

junior year. This full-year course meets for two consecutive periods providing time for practice and growth in reading and writing. This course is not NCAA core approved.

**4206 ENGLISH II – AMERICAN LITERATURE AND COMPOSITION**

*Year-long.* This course includes the study of American Literature from colonial through contemporary periods using thematic strands. Students will read journals, biographies, essays, novels, short stories, plays, and poetry representing American authors and authors of various ethnic backgrounds. The literature will promote students' analytical abilities and will encourage critical thinking through the writing of expository, persuasive, and narrative essays. In addition, the literature will service as models and material for speaking in persuasive, informative, and entertaining forums.

**4207 ENGLISH II HONORS – AMERICAN LITERATURE AND COMPOSITION**

*Year-long.* This course includes the study of American Literature from colonial through contemporary periods using thematic strands. Students will read journals, biographies, essays, novels, short stories, plays, and poetry representing American authors and authors of various ethnic backgrounds. The literature will promote students' analytical abilities and will encourage critical thinking through the writing of expository, persuasive, and narrative essays. In addition, the literature will serve as models and material for speaking in persuasive, informative, and entertainment forums. Through the study of literature and composition, the course continues to prepare the student for the Advanced Placement test as juniors and seniors.

**4929 AMERICAN SOCIETY – 2 PERIOD BLOCK OF ENGLISH II & AMERICAN STUDIES**

*Two periods. Year-long.* This course provides a two-credit alternative to separate American Studies and English classes. Students will receive individual grades for each course and will fulfill the graduation requirements for both Sophomore English and U.S. History. The linkage between the two courses allows for many opportunities to emphasize the connections between American literature, history, art, music and architecture through team-teaching, joint assignments and projects. The course demands active student participation, intensive outside reading, and experiences beyond the classroom (i.e. field trip, projects). Students

who are interested in studying English and history through this creative humanities emphasis will enjoy this option. One credit of English and one credit of Social Studies is awarded upon successful completion of this course.

JUNIOR LEVEL CORE COURSES

**4226 ENGLISH III – BRITISH AND CONTEMPORARY LITERATURE AND COMPOSITION**

*Year-long.* This course surveys British literature in thematic units. It is designed to reinforce valuable principles and usage of reading along with an emphasis on improving composition skills. Students complete a research project during the second semester. This course is not NCAA approved for core.

**4228 ENGLISH III – BRITISH LITERATURE I AND COMPOSITION**

*One semester.* This required one-semester course (except for students taking 4226 [above] or 4229 [below]) continues college preparation of language and composition skills through concentration on the study of works such as Beowulf, The Canterbury Tales, and Macbeth. Emphases on written skills continue primarily based on critical analyses of works studied as well as on the writing of personal essays.

**4229 ENGLISH III – ADVANCED PLACEMENT LANGUAGE AND COMPOSITION**

*Year-long.* This course emphasizes the genres of British literature and continues the writing of critical literary analyses as well as the writing of personal essays. The course prepares students for the Advanced Placement English Language and Composition examination, which is administered in May of the junior year. Students in this course often take an additional junior choice to their second semester studies.

JUNIOR LEVEL CHOICES

The following are second semester junior classes. Juniors enrolled in English 4228 must choose one of the following electives to complete the high school four-year English requirement. Juniors in Practical Reading and Writing (4250) or AP (4229) English classes may opt to take English 4247, 4239, 4227, 4228 or 4235 as electives only.

**4227 ENGLISH III – CONTEMPORARY LITERATURE AND COMPOSITION**

*One semester.* This class provides the opportunity for students to experience current issues through contemporary fiction and non-fiction. Through analysis of novels, short stories, and nonfiction, students will examine the relevance of the literature to their experience. While reading high-interest literature, students will continue building their writing, thinking, and vocabulary skills.

**4235 ENGLISH III – MYTHOLOGY AND COMPOSITION**

*One semester.* This course is designed to acquaint students with world myths, legends, and folklore that form a people's literary heritage, gaining an appreciation for literature of other cultures and time periods, including African, Celtic, and Middle and Far East. Students will work toward mastery of writing, speaking, cooperative learning, and higher-level thinking. Through the study of mythology and its influence in modern literature, students will increase their global appreciation and insight into the human experience.

**4239 ENGLISH III – DRAMATIC LITERATURE AND COMPOSITION**

*One semester.* This course offers a study of drama from various theatrical genres and historical periods. Students will examine plays as literature, not play production. The reading and accompanying discussions and activities will provide a basis for expository and analytical writing. Through the study of dramatic literature, students will continue to enhance their reading, writing, and thinking skills.

**4247 ENGLISH III – BRITISH LITERATURE II AND COMPOSITION**

*One semester.* This course offers a thematic and chronological approach to the continued study of British literature through essays, poetry, novels, and short stories found in the Age of Reason, the Romantic Era, the Victorian Era, and the Modern Era. This course continues the emphasis on critical thinking, composition, and the interpretation of literature.

**4258 ENGLISH III – CULTURAL STUDIES AND COMPOSITION**

*One semester.* This course exposes students to literary works from a variety of cultures. The emphasis is on reading novels that are the products of the society in which they were produced. The similarities and differences among the various cultures studied will provide students with

a historical and social perspective. By looking at the cycle through which society impacts literature which, in turn affects future society, students will gain an awareness of how multi-cultural literature affects and reflects today's society.

## SENIOR LEVEL CORE COURSES

**4236 ENGLISH IV – FILM STUDIES, COMMUNICATION AND COMPOSITION**

*Year-long.* This course focuses on various aspects of film study including the technical viewpoint, the historical significance, and the visual approaches used to demonstrate thematic ideas in film. Also, students will focus on communication skills needed to effectively connect with others in their environment, personal relationships, daily activities, and professional settings. Students will focus on logically developing ideas with appropriate evidence, clear and precise language, and varied sentence structure. In this course students will utilize and refine their reading, writing, listening, and speaking skills. This course is not NCAA approved for core.

**4249 ENGLISH IV – ADVANCED PLACEMENT LITERATURE AND COMPOSITION**

*Year-long.* This course emphasizes various genres of World literature and continues the writing of critical analyses of works studied as well as the writing of personal essays. The course prepares students for the Advanced Placement English Literature and Composition examination, which is administered in May of the senior year. Students in this course also frequently add a senior choice to their semester studies.

**14249 ONLINE ENGLISH IV – ADVANCED PLACEMENT LITERATURE AND COMPOSITION**

*Year-long.* This course emphasizes various genres of World literature and continues the writing of critical analyses of works studied as well as the writing of personal essays. The course prepares students for the Advanced Placement English Literature and Composition examination, which is administered in May of the senior year. Students in this course also frequently add a senior choice to their semester studies.

## SENIOR LEVEL CHOICES

The following are semester long senior classes. Seniors may choose two of the following electives to complete the high school, four-year English



requirement. Seniors in English IV Film Studies, Composition and Communication (4236) or English IV Advanced Placement (4249) may opt to take these Senior Choice courses as electives only.

**4238 ENGLISH IV – COMPOSITION AND MEDIA** *One semester. Does not meet NCAA requirements.* This semester course teaches seniors literature to media, the study of historical periods in media development, and the technology of media production, in order to have seniors become visually literate, critical thinkers, and evaluative writers when interpreting media. To show mastery, students will respond through a variety of venues such as written analyses and class presentations. This class will hone critical thinking and composition skills learned in previous English course while instructing students on the concept of visual literacy.

**4246 ENGLISH IV – 20TH CENTURY LITERATURE AND COMPOSITION** *One semester.* This course allows seniors the opportunity to read a variety of contemporary novels, plays and short stories. Building on textual knowledge, critical thinking, and composition skills developed in previous English classes, students will question and determine the role of contemporary literature in society through a variety of written analyses, class presentations and quarterly projects.

**14246 ONLINE ENGLISH IV – 20TH CENTURY LITERATURE AND COMPOSITION** *One semester.* This course allows seniors the opportunity to read a variety of contemporary novels, plays and short stories. Building on textual knowledge, critical thinking, and composition skills developed in previous English classes, students will question and determine the role of contemporary literature in society through a variety of written analyses, class presentations and quarterly projects.

**4266 ENGLISH IV – POETRY AND COMPOSITION** *One semester.* This course allows seniors the opportunity to enhance their creative expression by developing the skills and commitment essential for reading and writing poetry. Through the study of classical, modern, and contemporary poetry, students will be asked to respond to a wide variety of poetic prompts, and, in a workshop setting, to analyze and learn from one another's writing. Students will be encouraged to submit their writing for publication.

**4276 ENGLISH IV WORLD LITERATURE I AND COMPOSITION** *One semester.* This one-semester course will provide students with an overview of timeless literary works from around the world. Students will read and respond to selected novels, plays, short stories, essays, and poetry. Students will gain an understanding of works of literary merit from other cultures and the universality of the human condition.

**4277 ENGLISH IV – WORLD LITERATURE II AND COMPOSITION** *One semester.* This course offers a continuation of the curriculum and intent of World Literature I, although World Literature I is NOT a prerequisite. The course provides students with a further exploration of timeless major literary works from around the world. Students will read and respond to selected novels, plays, short stories, essays, and poetry, gaining an understanding of works of literary merit from other cultures and the universality of the human condition.

**4282 ENGLISH IV – PHILOSOPHY THROUGH LITERATURE AND COMPOSITION** *One semester.* In this course students will analyze the cultural roots of civilization through an examination of selected literature and its philosophies, preparing students for further study and enhancing their understanding of broader profound concepts such as knowledge, truth, the difference between right and wrong, justice, evil, fate, freedom, and beauty. Through this study students will hone critical thinking skills, study the basic principles of argumentation, creating cogent arguments in both discussion and writing.

**4283 ENGLISH IV – COMMUNICATION AND COMPOSITION** *One semester.* This course concentrates on communicating effectively in the academic environment, personal relationships, daily activities, and professional settings. In this course, students will utilize and refine their reading, writing, listening, and speaking skills. Students will focus on logically developing ideas with appropriate evidence, clear and precise language, and varied sentence structure. They will learn how to effectively communicate in different settings through instruction on teamwork, problem solving, technological application, leadership skills, and interaction with people in various roles and work situations, all to help them become successful communicators in the world beyond high school.

## COMMUNICATION ELECTIVES

These courses count toward graduation as general electives, but NOT as fulfillment of the four-year English graduation requirement.

**4220 PUBLIC SPEAKING** *Grade 10-12. One semester.* This course develops essential oral communication skills introduced previously in the language arts experience. Individual speeches, such as children's stories, prose reading, award acceptance, impromptu speaking, radio speaking, and original essays are performed in this semester program. Special attention is given to acquiring poise, confidence, and dignity as a speaker.

**4222 THEATRE ARTS I** *Grade 10-12. One semester.* This course is a student-oriented class that focuses on the theory of acting, the process of directing, and the elements of technical theatre. Theory will be interlaced with opportunities for hands-on involvement at all levels of the theatrical experience.

**4224 THEATRE ARTS II** *Grade 10-12. One semester. Theatre Arts I is a prerequisite for this course which builds upon concepts learned in Theatre Arts I while still centering on student participation and involvement.* The focuses will be on more advanced styles of acting and more specific responsibilities inherent to the directing process, including technical aspects of theatre.

**4230 CREATIVE WRITING I** *Grade 10-12. One semester.* This course enhances creative and imaginative expression by developing the skills, style, and commitment essential for effective writing. Students will create within a variety of genres: journals, short stories, poetry, essays, and drama.

**4232 CREATIVE WRITING II** *Grade 11-12. One semester. Prerequisite is Creative Writing I.* This course significantly extends the writing experiences introduced in Creative Writing I. Its primary focus will be on poetry and short story writing. Students will create a portfolio for both their poetry and their short stories and will submit some of their work for publication.

**4240 NEWSPAPER JOURNALISM** *Grade 10-12. Prerequisite is instructor's permission based on teacher recommendations regarding the student's writing ability, creativity, and dependability.*

*A test of basic writing skills and an interview may also be administered.* This course develops writing, interviewing, and design skills which are applied when students produce the school newspaper. NOTE: This course may be repeated from the sophomore through the senior year with permission of the instructor.

## 4242 YEARBOOK JOURNALISM

*Grade 10-12. Prerequisite is instructor's permission based on teacher recommendations regarding the student's writing ability, creativity, and dependability. A test of basic writing skills and an interview may also be administered.* This course develops skills such as writing copy, designing spreads, and desktop publishing. Students develop computer literacy skills and meet specific deadlines in order to produce the annual high school yearbook. NOTE: This course may be repeated from the sophomore through the senior year with permission of the instructor.

**4280 COLLEGE PREP READING** *Grade 10-11. One semester.* This course will address the reading strategies required for comprehension of text materials and sophisticated fiction selections, etymology, and logic strategies. Test preparation will also be an element of this course: students will learn how to deal with the different test constructions (e.g. ACT, SAT) for improved test performance. This course will have a reading list and will require work outside class time.

## 9284/4284 READING WORKSHOP I, II

*Grade 9-10, Year-long. Placement required.* Reading Workshop is a year-long course designed to improve student's reading skills. Reading Workshop will emphasize comprehension strategies, vocabulary development, study skills, transference of reading strategies to content-area classes, enjoyment of reading, and written response to text.

**4285 READING WORKSHOP III** *Grade 11, Year-long. Placement required.* Reading Workshop is a year-long course designed to improve student's reading skills. Reading Workshop will emphasize comprehension strategies, vocabulary development, study skills, transference of reading strategies to content-area classes, enjoyment of reading, and written response to text.

# ENGLISH LANGUAGE LEARNING PROGRAM

Rafael Segarra, *Director ELL Programs*  
Ann Paternostro, *District ELL Program Coordinator*  
Tammie Black, *Department Chairperson, MVHS*  
Tom McManemen, *Department Chairperson NVHS*  
Laura McAran, *Department Chairperson, WVHS*

The high school ELL program offers English Language Learners a series of courses to assist them in attaining English language proficiency and in meeting state learning standards. Students are referred to, and placed in, this program based upon the district Home Language Survey, classroom performance, and/or assessment by the ELL teacher.

## ENGLISH LANGUAGE LEARNING COURSE LISTINGS

### ELL COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4016	ESL Resource	Year	Placement
4261	Intensive ESL Resource	Year	Placement
4262	English I for ESL Students	Year	Placement
4263	English II for ESL Students	Year	Placement
4264	Intensive ESL English II (2 periods)	Year	Placement
4265	Spanish for Spanish Speakers I	Year	Placement
4267	Bilingual Resource		Year Placement
4269	Intensive ESL English I (2 periods)	Year	Placement
4275	English III for ESL Students	Sem.	Placement
4565	Spanish for Spanish Speakers II	Year	Placement

## ENGLISH LANGUAGE LEARNING PROGRAM DESCRIPTIONS

**4016 ESL RESOURCE** This class provides academic support to English language learners to enable them to be successful in their core academic classes. Students receive assistance with the development of cognitive academic language as well as with reading and writing skills. Students receive elective credit for this class.

**4261 INTENSIVE ESL RESOURCE** This class is for the students in the Intensive English I class. It provides them with academic support to enable them to succeed in their core academic classes. Students receive assistance with the development of cognitive academic language as well as with reading and writing skills. Students will receive elective credit for successful completion of this class.

**4269 INTENSIVE ESL ENGLISH I** This is an English class for students who are new to the United States and for whom English is a new language. The focus of this class is on listening,

speaking, reading, and writing. Vocabulary and grammar development, as well as basic reading and writing skills, are emphasized. Students also learn about the history and culture of the United States. This class meets for two periods a day. Students enrolled in this class must also enroll in either Intensive ESL Resource or Bilingual Resource. Students will receive 1 English credit and 1 English elective credit for this class.

**4262 ENGLISH I FOR ELL STUDENTS**

This is an English class for English language learners who have completed Intensive ESL English II or who have a comparable level of English language proficiency. The focus of this class is on further developing the student's listening, speaking, reading and writing skills. Vocabulary and grammar development, reading strategies, literature interpretation, and basic research techniques, as well as descriptive, narrative, persuasive, and expository writing are emphasized. Students enrolled in this class should also be enrolled in either ESL Resource or Bilingual Resource. Students will receive English credit for this class.

**4263 ENGLISH II FOR ESL STUDENTS**

This is an English class for English language learners who have completed English I for ESL students or who have a comparable level of English language proficiency. The focus of this class is on the continuing development of the student's listening, speaking, reading, and writing skills. Emphasis is on vocabulary and grammar development, reading strategies, literature interpretation, advanced research techniques, and writing expository, narrative, and persuasive essays. Students enrolled in this class should also be enrolled in ESL Resource. Students will receive English credit for this class.

**4264 INTENSIVE ESL ENGLISH II** This is an English class for students who have completed Intensive ESL English I or who have a comparable level of English language proficiency. It focuses on further development of vocabulary and grammar along with reading and writing skills. This class meets for two periods a day. Students enrolled in this class must also enroll in either ESL Resource or Bilingual Resource. Students will receive English credit for this class. Students will receive 1 English credit and 1 English elective credit for this class.

**4265 SPANISH FOR SPANISH SPEAKERS I**

This class is designed to develop the native language literacy skills of English language learners whose first language is Spanish. The focus of this class is on reading, writing, and grammar skills. Students will also learn about the history and culture of countries where Spanish is spoken. Students will receive elective credit for successful completion of this class

**4565 SPANISH FOR SPANISH SPEAKERS II**

This class is designed to further develop the native language literacy skills of English language learners whose first language is Spanish. This class will focus on expanding the students' knowledge of reading, writing, and grammar skills as well as their knowledge of history and culture. This class is for students who have successfully completed Spanish for Spanish Speakers 1 or who have tested at an equivalent proficiency level in Spanish. Students will receive elective credit for successful completion of this class.

**4267 BILINGUAL RESOURCE** This class provides native language academic support to English language learners whose first language is Spanish. Spanish-speaking English language learners may choose to take Bilingual Resource instead of ESL Resource. Students will receive elective credit for successful completion of this class.

**4275 ENGLISH III FOR ESL STUDENTS**

This is a one-semester English class for English language learners who have completed English II for ESL students. The focus of this class is on strengthening the student's listening, speaking, reading, and writing skills. Strong emphasis is placed on reading strategies, literature interpretation/analysis, and writing expository, narrative, and persuasive essays. Students enrolled in this class should also be enrolled in ESL Resource. Students will receive English credit for this class

## FAMILY AND CONSUMER SCIENCE

Jill Hlavacek, *Department Chairperson – MVHS*

Lisa Traut, *Department Chairperson – NVHS*

Andrea Hendrickson, *Department Chairperson – WVHS*

The Family and Consumer Science Department offers students an opportunity to select from a range of courses in this area. These courses can be chosen to prepare the student for continued education, employment after graduation, or just for personal satisfaction. In many of these classes, students complete projects that can be taken home. There are material fees associated with such classes.

### FAMILY AND CONSUMER SCIENCE COURSE LISTINGS

#### CLOTHING & FASHION COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4400	Apparel Constr. I	Yr. 9-12	None
4410	Apparel Constr. II	Yr. 10-12	Apparel Construction I
4416	Fashion Merchandising Sem. 10-12 & Marketing		None
4440	Independent Study	Sem. 11-12	Apparel Construction II; Instructor approval
4497	Professional & Technical Internship	Yr. 11-12	Instructor approval

#### CULINARY ARTS COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4420	Introduction to Culinary Arts *	Sem. 9-12	None
4422	Senior Foods*	Sem. 12	No previous high school Foods class
4426	Pastry Arts *	Sem. 9-12	Introduction to Culinary Arts or Senior Foods
4428	Catering and Hospitality*	Sem. 11-12	Three previous foods classes; Instructor approval
4432	International and Regional Foods*	Sem. 10-12	Pastry Arts
4440	Independent Study	Sem. 11-12	Catering and Hospitality; Instructor approval
4497	Professional & Technical Internship	Yr. 11-12	Instructor approval

#### CHILD DEVELOPMENT COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4440	Independent Study	Sem. 11-12	Early Learning Lab; Instructor approval
4460	Child Development	Sem. 10-12	None
4470	Early Childhood Teaching Lab	Sem. 11-12	Child Development; Instructor approval
4497	Professional & Technical Internship	Yr. 11-12	Instructor approval

**FAMILY AND CONSUMER SCIENCE COURSE LISTINGS (CONT'D)**

**HOUSING & DESIGN COURSES**

COURSE#	TITLE	LEVEL	PREREQUISITE
4440	Independent Study	Sem. 11-12	Instructor approval
4450	Interior Design	Sem. 10-12	None
4497	Professional & Technical Internship	Yr. 11-12	Instructor approval

**INDEPENDENT LIVING COURSES**

COURSE#	TITLE	LEVEL	PREREQUISITE
4422	Senior Foods*	Sem. 12	No previous high school foods classes
4452	Individual & Family Relationships	Sem. 11-12	None
4472	Parenting	Sem. 11-12	None

*\*All culinary courses require a lab fee.*

**FAMILY AND CONSUMER SCIENCE DUAL CREDIT WITH COLLEGE OF DUPAGE**

Students enrolled in the following courses may apply to earn dual credit with COD. High school students who wish to take the course listed below for dual credit will receive college credit and a COD transcript regardless of whether or not they continue at College of DuPage. These credits may be transferable to other institutions. All dual credit opportunities are pending upon agreement between IPSD and COD. To qualify for dual credit, students must complete appropriate paperwork and testing as required by COD.

**COURSE COMPLETED AT MVHS, NVHS, WVHS**

APPAREL CONSTRUCTION I: COURSE # 4400 OR 9400  
APPAREL CONSTRUCTION II: COURSE # 4410

**CREDIT AT COD**

FASHION MERCHANDISING & DESIGN 1155  
CLOTHING CONSTRUCTION I (3 HRS. CREDIT)  
FASHION MERCHANDISING & DESIGN 1156  
CLOTHING CONSTRUCTION II (3 HRS. CREDIT)

## FAMILY AND CONSUMER SCIENCE COURSE DESCRIPTIONS

### 4400 APPAREL CONSTRUCTION I

*Grade 9-12. Year-long.* Whether for personal use or a career in clothing and fashion, this course provides an opportunity to develop basic skills for clothing construction. Techniques used to construct four projects including: a skirt/pants, dress/top, shirt, and a knit garment are covered. Students are encouraged to select pattern and materials according to their needs and abilities. Materials and supplies for the four projects are to be furnished by the student. COD Dual Credit available.

### 4410 APPAREL CONSTRUCTION II

*Grade 10-12. Year-long. Prerequisite: Apparel Construction I.* Students who have successfully completed Apparel Construction I will be ready for the advanced pattern and fabric study in this course. Projects include fitting pants, working with sheer fabrics, plaids and lined projects. Other topics include the principles and elements of design, textiles and career opportunities. Materials and supplies for the four projects are to be furnished by the student. COD Dual Credit available.

### 4416 FASHION MERCHANDISING & MARKETING

*Grade 10-12. One semester.* This course is designed for the student to explore and understand the various facets of today's fashion industry. Areas included are fashion design, fashion buying, merchandising and the retail function. Career exploration in related fields of study will be explored. This course may be taken for enrichment or as preparation for further training in fashion-related occupations.

### 4420 INTRODUCTION TO CULINARY ARTS

*Grade 9-12. One semester.* This course offers students the opportunity to explore and prepare foods from each food group included in the food guide pyramid. The nutrition of each type of food within the framework of a healthy diet, the purchasing and proper storage of all types of food, and food preparation concepts are studied. Students will complete this course with a basic set of life long culinary skills. Career exploration in related fields of study will be explored. A lab fee will be charged.

**4422 SENIOR FOODS** *Grade 12. One semester. One semester.* This course may not be taken if a student has already taken another high school foods class. Senior Foods is designed for students who are preparing for college or independent living. The course is designed to give students a sampling of the following areas of study: simple food preparation, nutrition, basic meal planning, purchasing of food, time management, and care and use of cooking equipment and appliances. A lab fee will be charged.

**4426 PASTRY ARTS** *Grades 9-12. One semester. Prerequisite is Intro to Culinary Arts or Senior Foods.* This course offers students an opportunity to experience the delights of baking using various techniques and flours to prepare pies, quick breads, yeast breads, cookies, cakes, and other specialty items. This course is one of three courses available to the student who is interested in continuing his/her foods experiences. A lab fee will be charged.

**4428 CATERING AND HOSPITALITY** *Grade 11-12. One semester. Prerequisite is completion of three foods classes or instructor approval.* Units in this course combine lecture and laboratory work to provide an introduction to the food service industry. Students will have the opportunity to improve their skills and expand their culinary expertise in the areas of food preparation, quantity food production and food management. Careers in the food service industry will be explored. A lab fee will be charged.

**4432 INTERNATIONAL AND REGIONAL FOODS** *Grade 10-12. One semester. Prerequisite is Pastry Arts.* This course will provide the student the opportunity to experience how food and its preparation varies by region and by country. They will learn about different ingredients and techniques to broaden their culinary horizons. Due to the scope of study, students may enroll in this class for a second semester. A lab fee will be charged.

**4440 INDEPENDENT STUDY IN FAMILY AND CONSUMER SCIENCE** *Grade 11-12. Requires instructor approval.* This course provides the student an opportunity for advanced work in clothing and fashion, food service, interior design or early childhood. A contract between student and teacher will be jointly developed specifying

goals and objectives. A portfolio will be created by the student. It is an individually- directed study and requires a high degree of motivation and self-discipline. See a teacher in the department for an application.

**4450 INTERIOR DESIGN** *Grade 10-12. One semester.* This course explores concepts and career choices of Interior Design. Students are introduced to architectural styles, alternative housing styles, basic blueprint reading, principles and elements of design and the use of color. Students make choices in decorating and furniture arrangement. Hands-on projects enable the student to link concepts with visual images.

**4452 INDIVIDUAL & FAMILY RELATIONSHIPS** *Grade 11-12. One semester.* This course is designed to help students to develop a greater understanding of self and others in order to enhance future relationships. An empathic approach to intellectual, emotional and physical relationships is taken, using statistically-sound research as a basis for discussions. Topics include self-awareness, decision-making, communication, gender roles, dating, marriage, and family issues.

**4460 CHILD DEVELOPMENT** *Grade 10-12. One semester.* This course is designed to provide the student with an introduction to the intellectual, physical, emotional and social development of a child from prenatal through preschool. It is beneficial both to the future parent and those interested in child-related careers. This class is the prerequisite for Early Childhood Teaching Lab and the student must receive instructor approval to be eligible for the Lab.

**4470 EARLY CHILDHOOD TEACHING LAB** *Grade 11-12. One semester. Prerequisite is Child Development and instructor approval.* This is a capstone course for the highly motivated student interested in education or a child-related career such as pediatric medicine, child psychology, speech pathology, or social work. Strong academic achievement in Child Development is a requirement and an excellent predictor of success in this course. The students will be responsible for planning, preparing and teaching three and four year old children in a preschool lab contained within the department. This is a repeatable elective.

**4472 PARENTING** *Grade 11-12. One semester.* This course is designed to give the student an overview of parenting and the knowledge necessary for effective parenting. Developing healthy family relationships is emphasized. Some of the parenting skills included are decision-making, family resource management, and child guidance techniques. Throughout the course, interactions between parent and child will be explored. The needs, concerns, joys, and responsibilities of parenting are emphasized.

**4497 PROFESSIONAL AND TECHNICAL INTERNSHIP** *Grade 11-12. Two credits. Year-long. Prerequisite is instructor approval.* This program serves as the final course in our sequence of courses. Sequenced courses include the following: two previous semesters of culinary classes, Apparel Construction II, or Early Childhood Teaching Lab. Other courses may qualify. A student will receive one credit for classroom instruction and one credit for on-the-job training. The Internship instructor will assist with job placement and monitor student progress throughout the year. Early dismissal is not a requirement for this program.



## FOREIGN LANGUAGE

Tammie Black, *Department Chairperson – MVHS*

Yvonne Fawell, *Department Chairperson – NVHS*

Laura McArar, *Department Chairperson – WVHS*

“The main purpose of studying a foreign language is to obtain something approaching a mastery of the language.” (Dr. James B. Conant) This broad and long-range objective implies the need for short-term objectives on each level of instruction. The four communication skills (listening, speaking, reading, and writing) must be emphasized with student involvement at each stage of development. In conjunction with each level of study, the culture from which the specific language emerged will be a vital component of the course of study.

The disciplines of English and Foreign Language are closely related. Therefore, recommendations for Foreign Language students should take into account students’ success in English courses. Courses are geared toward non-native speakers. If a student were linguistically inclined, it would be to his or her advantage to aim at mastering at least one foreign language through level III or IV. A student who is a native speaker may test into a higher level only with departmental approval. Advanced Placement language courses carry a weighted grade. These AP courses are designed to prepare students to earn college credit as determined by their respective college based upon how well they do on the Advanced Placement Language exam offered in May.

### FOREIGN LANGUAGE COURSE LISTINGS

#### CHINESE COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4530	Chinese I	Yr. 9-12	None
4531	Chinese II	Yr. 10-12	Chinese I; Instructor approval
4532	Chinese III	Yr. 10-12	Chinese II; Instructor approval
4533	Honors Chinese IV	Yr. 11-12	Chinese III; Instructor approval

#### FRENCH COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4500	French I	Yr. 9-12	None
4502	French II	Yr. 10-12	French I; Instructor approval
4504	French III	Yr. 10-12	French II; Instructor approval
4506	AP French IV	Yr. 11-12	French III; Instructor approval

#### GERMAN COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4510	German I	Yr. 9-12	None
4512	German II	Yr. 10-12	German I; Instructor approval
4514	German III	Yr. 10-12	German II; Instructor approval
4516	AP German IV	Yr. 11-12	German III; Instructor approval

**FOREIGN LANGUAGE COURSE LISTINGS (CONT'D)**

**SPANISH COURSES**

COURSE#	TITLE	LEVEL	PREREQUISITE
4520	Spanish I	Yr. 9-12	None
4522	Spanish II	Yr. 9-12	Spanish I; Instructor approval
4524	Spanish III	Yr. 10-12	Spanish II; Instructor approval
4525	Spanish IV	Yr. 10-12	Spanish III; Instructor approval
4526	AP Spanish IV	Yr. 11-12	Spanish III; Instructor approval

*Special Note: Spanish V, German V, and French V are not offered but are available. Chinese, French, German and Spanish languages have additional workbook fees at levels I and II; some languages have additional workbook fees at levels III and IV. Please contact department chair for more information.*

**DUAL CREDIT WITH COLLEGE OF DUPAGE**

Students enrolled in the following courses may apply to earn dual credit with COD. High school students who wish to take a course listed below for dual credit will receive college credit and a COD transcript regardless of whether or not they continue at College of DuPage. These credits may be transferable to other institutions.

**COURSE COMPLETED**

FRENCH V, GERMAN V, OR SPANISH V  
(AVAILABLE AT OTHER SITES)

**CREDIT AT COD**

PLEASE SEE FOREIGN LANGUAGE DEPARTMENT  
CHAIR FOR MORE INFORMATION

**FOREIGN LANGUAGE COURSE DESCRIPTIONS**

All Foreign Language courses are year long. They are sequential, requiring completion of the previous level.

**4530 CHINESE I** *Grade 9-12.* Chinese I is designed to introduce the student to a good base in sound, tones and basic concept of characters. It has different tones, pinyin, strokes, etc. than the romance/Germanic languages. The target audience is non-native speakers, but students with native backgrounds can also benefit from this course. This course will demand a high level of commitment from students as they will not become as proficient in the same amount of time as in a romance/Germanic language.

**4531 CHINESE II** *Grade 10-12.* Chinese II builds on the skills developed in Chinese I and continues to focus on an introduction to Chinese sentence patterns and functional use of the language. Students expand their vocabulary

and conversational proficiency by broadening their knowledge of basic language patterns, daily expressions and Chinese culture. Classroom instruction and activities are centered on use of authentic materials and basic communication skills, i.e. listening, speaking, reading and writing in Chinese. The target audience includes non-native speakers and native speakers who want to improve their basic Chinese language skills.

**4532 CHINESE III** *Grade 10-12.* Chinese III expands on the areas of vocabulary, speaking, reading and sentence patterns. Classroom instruction and discussions will be conducted primarily in Chinese. Students will expand their communication skills in Chinese along with their knowledge of the Chinese culture.

**4533 HONORS CHINESE IV** *Grade 11-12. Weighted grade.* Honors Chinese IV focuses on expanding the four communication skills (reading, writing, listening and speaking) by exploring a variety of contemporary and classic topics. Grammar and structure are also reviewed. A selection of projects will be required during the summer preceding the course.

**4500 FRENCH I** *Grade 9-12.* French I introduces the student to practical vocabulary and basic grammatical structures that will enable him or her to communicate in simple French. The course focuses on speaking, listening, reading, and writing, as well as various aspects of francophone (French speaking) culture. Oral communication is stressed.

**4502 FRENCH II** *Grade 10-12.* French II builds on the skills developed in French I. Students expand their vocabulary and begin to study more complex grammatical structures. Cultural exploration continues. Development of all four communication skills is stressed, with special emphasis on oral communication. Most of this class is conducted in French.

**4504 FRENCH III** *Grade 10-12.* French III reinforces and develops the four basic communication skills and allows students to use them at a more advanced level. As time allows, this course introduces students to francophone (French speaking) literature, art, and history. Class discussions and work are conducted almost exclusively in French.

**4506 AP (ADVANCED PLACEMENT) FRENCH IV** *Grade 11-12. Weighted grade.* AP French IV focuses on expanding the four communication skills (reading, writing, listening and speaking) by exploring a variety of contemporary and classic topics. Grammar and structure are also reviewed. A selection of projects will be required during the summer preceding the course. The course will also prepare students for the Advanced Placement exam.

**4510 GERMAN I** *Grade 9-12.* German I emphasizes structure and beginning proficiency; German I introduces the student to basic conversation and self-expression in German. As students continue learning to understand, speak, read, and write German on a basic level, they will also be introduced to aspects of German culture, particularly relating to the everyday life of teenagers.

**4512 GERMAN II** *Grade 10-12.* German II has an increasing emphasis on vocabulary and conversational proficiency. Students also begin to amass a portfolio of written work. A higher level of structural forms is learned while students learn to express themselves in everyday situations in the family and with friends.

**4514 GERMAN III** *Grade 10-12.* German III continues emphasizing basic language skills while students learn the most complex structures and begin to describe, discuss, and express themselves personally in the language. Short stories and a short novel are read.

**4516 AP (ADVANCED PLACEMENT) GERMAN IV** *Grade 11-12. Weighted grade.*

AP German IV focuses on student communication in the form of reports, oral projects, role-playing, essays, and discussions. Speaking, reading, and writing are emphasized. Readings include current articles as well as short stories and a modern drama. A selection of projects will be required of students during the summer preceding the course. The course is designed to prepare students to earn college credit by passing the Advanced Placement examination.

**4520 SPANISH I** *Grade 9-12.* Spanish I is designed to train the student to understand, speak, read, and write basic Spanish, as well as presenting a cultural background of the Spanish-speaking people. Oral communication is stressed.

**4521 SPANISH IA** *Grade 9 ONLY* Spanish IA is for students who took the condensed “Intro to Spanish” class in 8th grade but who feel they would benefit from a full year of Spanish I at the high school level before proceeding to Spanish II.

**4522 SPANISH II** *Grade 9-12.* Spanish II expands the basic skills of the first-year course by broadening the knowledge of vocabulary, basic grammar skills and Spanish culture. The course is also designed to further develop conversational, reading and writing skills. Oral communication is stressed.

**4524 SPANISH III** *Grade 10-12.* Spanish III continues to build proficiency in listening, speaking, writing and reading. It expands upon the material which students have mastered in levels I and II. Language proficiency is developed through a challenging and varied curriculum, including cultural readings, oral presentations utilizing technology, a video telenovela, and a novel study. The class is taught primarily in Spanish.

**4525 SPANISH IV REGULAR** *Grade 11-12.*

The regular Spanish IV class focuses on the four skills: reading, writing, listening, and speaking; however, emphasis is on the conversational skills. The students expand their vocabulary through reading stories, literature, and through various cultural units. The class is conducted entirely in Spanish. This course does not focus on preparation for the Advanced Placement examination.

**4526 AP (ADVANCED PLACEMENT)**

**SPANISH IV** *Grade 11-12. Weighted grade.* AP Spanish IV focuses on further developing the speaking, reading, writing, and listening level of proficiency of the student by reviewing previously covered grammar concepts and learning new vocabulary in context. The students expand this knowledge by watching, listening to, and reading authentic resources of well-known Hispanic literature and film. A selection of projects is required to be completed during the summer preceding the course.

# MATHEMATICS

Jackie Palmquist, *Department Chairperson - MVHS*

Vanessa Liveris, *Department Chairperson - NVHS*

Molly Owles, *Department Chairperson - WVHS*

The Mathematics curriculum is designed to meet the needs of all our students. The curriculum is structured into three distinct sequences based upon student abilities. Any six semesters of Mathematics, successfully completed, will fulfill the three year requirement for graduation.

All Math classes are year-long unless noted. Each course builds on the courses before it. The typical sequence includes some level of Algebra, Geometry, Algebra II/Trigonometry, Pre-Calculus, and Calculus.

AP Computer Science is an elective credit and does not fulfill the three year math credit graduation requirement.

Because Honors and Advanced Placement (AP) course work is accelerated and more sophisticated, upper level work of high quality in a compacted time frame is demanded of students. The Math Department has developed recommendations for student success. These criteria are indicators of performance levels or standards for the Honors or A.P. courses and are available from the Math Department.

## MATHEMATICS COURSE LISTINGS

### SEQUENCE I - GENERAL

COURSE#	TITLE	LEVEL	PREREQUISITE
4651	Math 100	Yr. 9	Teacher recommendation
4652	Math 200	Yr. 10	Teacher recommendation
4653	Math 300	Yr. 11	Teacher recommendation

### SEQUENCE II - COLLEGE PREP

COURSE#	TITLE	LEVEL	PREREQUISITE
4650	Algebra I-Block (2 periods)	Yr. 9, 10	Teacher recommendation
4612	Algebra I	Yr. 9, 10	Teacher recommendation
4620	Geometry Survey	Yr. 10-12	Teacher recommendation
4622	Geometry	Yr. 9-11	Teacher recommendation
4631	Algebra II/ Trigonometry	Yr. 9-12	Teacher recommendation
4632	Algebra II	Yr. 11-12	Teacher recommendation
4634	Trigonometry	Sem.11-12	Teacher recommendation
4635	Probability & Statistics	Sem.11-12	Teacher recommendation
4643	Precalculus	Yr. 10-12	Teacher recommendation
4670	Calculus	Yr. 11-12	Teacher recommendation

**MATHEMATICS COURSE LISTINGS (CONT'D)**

**SEQUENCE III - ACCELERATED COLLEGE PREP**

COURSE#	TITLE	LEVEL	PREREQUISITE
4624	Honors Geometry	Yr. 9-10	Teacher recommendation
4630	Honors Algebra II/Trig.	Yr. 9-11	Teacher recommendation
4636	AP Statistics	Yr. 10-12	Teacher recommendation
4645	Honors Precalculus	Yr. 10-12	Teacher recommendation
4667	AP Computer Science I	Yr. 9-12	Teacher recommendation
4671	AP Calculus BC	Yr. 11-12	Teacher recommendation
4672	AP Calculus AB	Yr. 11-12	Teacher recommendation
4676	Calculus III	Yr. 12	Teacher recommendation

**MATHEMATICS  
COURSE  
DESCRIPTIONS**

All math courses are year-long classes unless otherwise noted.

**4651 MATH 100** *Grade 9. Placement required.* This course is designed to meet the needs of students who have experienced difficulty in learning mathematics in a traditional format. The content of this course develops basic arithmetic and computational skills using a variety of activities and group projects. This is the first course in a three course sequence. A TI-30X calculator (or equivalent) is required. This course is not NCAA approved for core.

**4652 MATH 200** *Grade 10. Prerequisite Math 100.* This course stresses the applications of skills developed in Math 100. Practical applications used in everyday life situations will be emphasized. This course will cover pre-Algebra and some basic Geometry skills. Note-taking and study skills will be stressed. A TI-30X calculator (or equivalent) is required. This course is not NCAA approved for core.

**4653 MATH 300** *Grade 11. Prerequisite Math 200.* Emphasis in this course is on basic Algebra skills including studying and graphing linear and quadratic equations and further exploring Geometry concepts developed from Math 200. An integration of Algebra and Geometry will be covered. Note-taking and study skills will be stressed.

A TI-30X (or equivalent) calculator is required. This course is not NCAA approved for core.

**4650 ALGEBRA 1 BLOCK** *Grade 9, 10. Placement required.* This is a one-year Algebra 1 course meeting in a two-period block of time every day. This course is designed for those students who struggled in pre-Algebra, needing more time to process and develop pre-Algebra skills. It is designed to cover Algebra 1 including solving and graphing linear and quadratic equations and inequalities in one and two unknowns. Students are introduced to exponential growth and decay concepts. There are activity-based units in this course. Note-taking and study skills will be stressed and formalized. Students will be scheduled for two periods of math and will receive two credits. One period will be for Algebra 1 credit and one period will be named math elective for one credit. The math elective will be a pass/fail grade. A graphing calculator is required.

**4612 ALGEBRA I** *Grade 9, 10 Placement required.* Algebra I is a one-year course that develops numerical and graphing systems. Solving and graphing linear and quadratic equations and inequalities in one and two unknowns, and related polynomial functions are covered. Students are introduced to exponential growth and decay concepts. Note-taking and study skills are stressed and formalized. A graphing calculator is required.

**4620 GEOMETRY SURVEY** *Grade 10-12. Placement required.* Geometry Survey covers all the basic geometry concepts, using problem solv-

ing through inductive and deductive reasoning, but with little emphasis on formal proofs. The course includes topics such as distance concepts, angles, triangles, geometric inequalities, parallel and perpendicular lines and planes, polygons, circles and spatial figures and their properties. Right triangle trigonometry is introduced. A graphing calculator is required.

**4622 GEOMETRY** *Grade 9-11. Placement required* Emphasis is placed on problem solving and geometric proofs through inductive and deductive reasoning. The course includes topics such as geometry relative to the real number system, distance concepts, angles, triangles, geometric inequalities, parallel and perpendicular lines in space, planes, polygons and circles. Right triangle trigonometry is introduced. A graphing calculator is required.

**4624 HONORS GEOMETRY** *Grade 9-10. Placement required. Weighted Grade.* In addition to covering the topics listed above for Geometry (#4622), this course provides more rigorous and in-depth approach to covering geometric ideas and formal proofs. A graphing calculator is required.

**4630 HONORS ALGEBRA II / TRIGONOMETRY** *Grade 9-11. Placement required. Weighted Grade.* This course is more rigorous than 4631 Algebra II / Trigonometry. It covers the same topics, but more depth with some additions including sequences and series. Starting with a brief review of some basic axioms and properties in algebra, the course moves quickly to newer topics, integrating real-life applications. A summer packet of Algebra I problems may be required. A graphing calculator is required.

**4631 ALGEBRA II / TRIGONOMETRY** *Grade 9-12. Placement required* This course expands on concepts covered in Algebra I (4612), but develops a deeper understanding, while introducing more advanced algebra topics. Trigonometry topics will be studied beyond what was previously studied in Geometry. A graphing calculator is required.

**4632 ALGEBRA II** *Grade 11-12. Placement required* This course is devoted to providing an understanding of advanced algebra topics and expanding on the concepts of Algebra I (4612).

If the student intends to take Pre-Calculus the following year, it is required that he or she takes Trigonometry during the summer. A graphing calculator is required.

**4634 TRIGONOMETRY** *Grade 11-12. One semester. Prerequisite is Algebra II.* This is a one-semester course which emphasizes an understanding of the theoretical and practical concepts of trigonometry and their relationship to algebra. A graphing calculator is required.

**4635 PROBABILITY AND STATISTICS** *Grade 11-12. One semester. Prerequisite is Algebra II.* This is a semester course which emphasizes basic probability and statistical techniques. A graphing calculator is required.

**4636 AP (ADVANCED PLACEMENT) STATISTICS** *Grade 10-12. Prerequisite is Algebra III/Trig or higher. Weighted Grade.* The Advanced Placement course in statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students who successfully complete the course and AP examination may receive college credit and/or a higher placement in college. A summer reading assignment may be required. A TI-83 plus or a TI-84 plus graphing calculator is required. *NOTE: A TI-89 is not equipped with a statistics package.*

**4643 PRECALCULUS** *Grade 10-12.* This one-year course serves as a prerequisite for Calculus. A major emphasis is on an extended study of various functions, analytic geometry, elementary logic, vectors, polynomials, transcendental functions and an introduction to limits. Trigonometric functions are utilized to solve real-world problems. A graphing calculator is required.

**4645 HONORS PRECALCULUS** *Grade 10-12. Weighted Grade.* This one year course is intended as the next sequential course after Honors Algebra II/Trigonometry and serves as the prerequisite for AP Calculus. In addition to those topics covered in Pre-Calculus, the student will study polynomial and transcendental functions, polar coordinates, vectors and limits. A graphing calculator is required.

**4667 AP (ADVANCED PLACEMENT) COMPUTER SCIENCE I** *Grade 9-12. Prerequisite is Geometry. Weighted Grade.* This one-year introductory course emphasizes structured computer programming Net. Programming is emphasized as a tool to develop problem solving, encourage student creativity, and facilitate discovery learning. Students who successfully complete this course and the AP Computer Science A examination may receive college credit and/or a higher placement for a college course.

**4670 CALCULUS** *Grade 11-12.* This calculus course reviews Pre-Calculus concepts and introduces a study of limits, derivatives, integrals, and functions including trigonometric, exponential, and logarithmic functions. A graphing calculator is required.

**4671 AP (ADVANCED PLACEMENT) CALCULUS BC** *Grade 11-12. Prerequisite is Honors Pre-Calculus. Weighted Grade.* Topics covered will include an in-depth study of a variety of functions and a study of limits. In addition, differential and integral calculus with applications in related rates, area and volume will be covered. Further studies include sequences and series, elementary differential equations and proofs of theorems. This course demands analytical reasoning skills and disciplined study habits appropriate for continued success at the college level. Extensive independent study is required. Students who successfully complete the course and AP examination may receive credit and/or a higher placement in a college Calculus class. A completed summer assignment packet is required on the first day of class. A graphing calculator is required. This course is the equivalent of the traditional college level Calculus I & II courses.

**4672 AP (ADVANCED PLACEMENT) CALCULUS AB** *Grade 11-12. Prerequisite is Pre-Calculus. Weighted Grade.* This course is similar to Calculus BC, with less emphasis on rigorous proofs and excludes some topics. The goal of this class is preparation for the AP Calculus AB Exam for college credit. The demands of this course are similar to Calculus BC and involve analytical reasoning skills and disciplined study habits. Students who successfully complete the course and Calc AB AP examination may receive credit and/or a higher placement in a college Calculus class. Some independent study is required.

A completed summer assignment packet is required on the first day of class. A graphing calculator is required. This course is the equivalent of the traditional college level Calculus I course.

**4676 CALCULUS III - (MATH 241 – 4 SEM. HOURS @ UNIVERSITY OF ILLINOIS) CALCULUS OF SEVERAL VARIABLES**

*Grade 12. Prerequisite is BC Calculus and a 4 or higher on the AP exam. Contact the department for further explanation. Weighted Grade.* This course is the third course in Calculus and Analytic Geometry. Topics include three-dimensional space, functions of several variables, partial derivatives and multiple integrals. This course uses Mathematica software. There is a fee associated with this course through University of Illinois. Qualifications on: <http://netmath.math.uiuc.edu/whoqual.html>



## MUSIC

Don Devany, *Department Chairperson - MVHS*  
Charles Staley, *Department Chairperson - NVHS*  
Will Burck, *Department Chairperson - WVHS*

The Music Department encourages each student to explore his or her own capabilities in the area of Fine Arts. Through the courses listed below, students are offered the opportunity to (1) perform, (2) develop aesthetic awareness and appreciation, and (3) acquaint themselves with various aspects of music theory and history.

### MUSIC COURSE LISTINGS

#### VOCAL COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4370	Cecillian Singers	Yr. 9	None
4373	*Bass Chorus	Yr. 9-12	None
4371	Treble Choir	Yr. 10-12	Audition
4372	*Concert Choir	Yr. 10-12	None
4376	*Varsity Singers	Yr. 10-12	Audition
4366	*Varsity Chamber	Yr. 10-12	Audition
4393	*Honors Varsity Chamber		Yr.12

#### ORCHESTRAL COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4396	*Concert Orchestra	Yr. 9	Previous Orchestra Experience and/or Instructor approval
4384	*Concert Strings	Yr. 9	Audition
4394	*Symphonic Orchestra	Yr. 10-12	Previous Orchestra Experience and/or Instructor approval
4382	*Symphonic Strings	Yr. 10-12	Audition
4368	Chamber Orchestra	Yr. 9-12	Audition
4383	*Chamber Strings	Yr. 9-12	Audition
4395	*Honors Chamber Strings	Yr.12	Audition, Previous HS Orch. Experience & Instructor approval

## BAND COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4391	*Concert Band	Yr. 9	Previous Band Experience and/or Instructor approval
4380	*Concert Winds	Yr. 9	Audition
4398	*Symphonic Band	Yr. 10-12	Previous Band Experience and/or Instructor approval
4385	*Symphonic Winds	Yr. 10-12	Audition
4389	*Wind Symphony	Yr. 9-12	Audition
4386	*Wind Ensemble	Yr. 9-12	Audition
4397	*Honors Wind Ensemble	Yr.12	Audition, Previous HS Band Experience & Instructor approval

## THEORY COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4378	Music Theory	Sem. 10-12	None
4392	AP Music Theory	Yr. 10-12	Music Theory and/or proficiency exam

*\*This is a two-period class (paired with lunch).*

## MUSIC COURSE DESCRIPTIONS

All Music classes are year long, unless noted. Auditioned groups are designated above.

### VOCAL COURSES

**4370 CECILLIAN SINGERS** *Grade 9.* This is the initial choral experience for all freshman girls. Emphases are on fundamentals of vocal technique and music literacy (understanding music notation). Music is selected from all periods. Attendance at concert performances is required.

**4373 BASS CHORUS** *Grade 9-12.* Bass Chorus is a non-auditioned ensemble for grade 9-12 male voices. Emphasis is placed on fundamentals of vocal technique as it applies to the changing voice, as well as music literacy. Through the study of a varied selection of music literature, students enhance their understanding of music notation and other elements of music. Bass Chorus performs at all choral concerts. Participation in concert performances is required.

**4371 TREBLE CHOIR** *Grade 10-12.* This is a choir open to sophomore girls on the basis of

audition only. Entry level expectations include the ability to read musical notation and sight-sing accurately to the satisfaction of the instructor. Literature is selected with the more proficient singer in focus. Treble Choir performs in each choral concert. Participation in concert performances is required.

**4372 CONCERT CHOIR** *Grade 10-12.* Concert Choir is a non-auditioned ensemble open to Grade 10-12 voices. The ensemble meets daily as a treble ensemble and combines in rehearsal with the Bass Chorus (see description below) to perform SATB literature. Emphasis is placed on beginning and intermediate vocal/choral techniques and notational abilities. Literature is selected from all historical periods. Concert Choir performs at all choral concerts. Participation in concert performances is required.

### **VARSITY CHOIRS (4376 – VARSITY SINGERS & 4366 – VARSITY CHAMBER)**

The Varsity Choirs are the most advanced, mixed choral ensembles open to student's grade 10-12. Music reading abilities and the demonstration of advanced vocal proficiencies are a prerequisite for these ensembles. Students in these courses are expected to be self-motivated and leadership

oriented. Students are placed in these ensembles by audition only. Varsity Choirs will meet in two different sections; Varsity Singers and Varsity Chamber (most advanced). These sections will rehearse and perform both separately and together at various concerts as determined by the directors. Combined rehearsal will take place during lunch period.

**4376 – VARSITY SINGERS** *Grade 10-12*

**4366 – VARSITY CHAMBER** *Grade 10-12*

**4393 – HONORS VARSITY CHAMBER**  
*Grade 12*

## ORCHESTRAL COURSES

**4396 CONCERT ORCHESTRA** *Grade 9.* A non-auditioned ensemble that introduces freshmen to the high school orchestra experience. This class provides important formative experiences in musicianship. Students will be expected to develop their talents through completion of technique classes. Members may participate in Solo and Ensemble Festivals. Concert performance is required at a minimum of four concerts.

**4384 CONCERT STRINGS** *Grade 9.* An auditioned group for students with advanced skills. Students will be expected to develop their talents through completion of technique classes. Members may participate in Solo and Ensemble Festivals. Concert performance is required at a minimum of four concerts. Membership is determined by audition and the consent of the instructor.

**4394 SYMPHONIC ORCHESTRA** *Grade 10-12.* A non-auditioned ensemble that builds upon the formative experiences in musicianship of Concert Orchestra. Students will be expected to advance their talents through completion of technique classes. Members may participate in Solo and Ensemble Festivals. Concert performance is required at a minimum of four concerts.

**4382 SYMPHONIC STRINGS** *Grade 10-12.* An auditioned ensemble for students with highly developed skills. Students will be expected to develop their talent through completion of technique classes. Concert performance is required at a minimum of four concerts. Membership is

determined by audition and the consent of the instructor.

**4368 CHAMBER ORCHESTRA** *Grade 9-12.* An auditioned string ensemble which utilizes wind and percussion students from the Wind Symphony. Emphasis will be placed on literature specific to the string ensemble. Students will be assigned to chamber ensembles for technique class. Concert performance is required at a minimum of four concerts. Membership is determined by audition and the consent of the instructor. (Available at Neuqua Valley High School only.)

**4383 CHAMBER STRINGS** *Grade 9-12.* Chamber Strings offers the most advanced orchestral experience through the study and performance of college level works for string and full orchestra. This select string ensemble utilizes the most advanced wind and percussion students from the Wind Ensemble. Students are assigned to chamber ensembles for technique class. Due to the nature of part assignments, there is a strong emphasis on individual preparation for rehearsals and performances. Private study on principal instrument is strongly recommended. Chamber Strings performs at a minimum of four concerts. Members are expected to participate in IHSA Solo & Ensemble Contests. Members will have the opportunity to audition for IMEA district festivals. Membership is determined by audition and the consent of the instructor.

## 4395 HONORS CHAMBER STRINGS

## BAND COURSES

**4391 CONCERT BAND** *Grade 9.* A non-auditioned ensemble that introduces freshmen to the high school band experience. This class provides important formative experiences in musicianship. Students will be expected to develop their talents through completion of technique classes. Members may participate in Solo and Ensemble Festivals. Concert performance is required at a minimum of four concerts.

**4380 CONCERT WINDS** *Grade 9.* An auditioned group for students with advanced skills. Students will be expected to develop their talents through completion of technique classes.

Members may participate in Solo and Ensemble Festivals. Concert performance is required at a minimum of four concerts. Membership is determined by audition and the consent of the instructor.

**4398 SYMPHONIC BAND** *Grade 10-12.*

A non-auditioned ensemble that builds upon the formative experiences in musicianship experienced in Concert Band members will be expected to develop their music skill through completion of weekly technique classes. Members may participate in Solo and Ensemble Festivals. Concert performance is required at a minimum of four concerts. Students without previous band experience need instructor's permission before registering.

**4385 SYMPHONIC WINDS** *Grade 10-12.*

An auditioned ensemble for students with highly developed skills. Members of both bands will be expected to develop their talents through completion of weekly technique classes. Members may participate in Solo and Festivals. Concert performance is required at a minimum of four concerts. Membership is determined by audition.

**4389 WIND SYMPHONY** *Grade 9-12.* This ensemble provides sophisticated instrumental experiences through study and performance of master works for winds and percussion. Members are expected to advance their musicianship through completion of techniques classes. The Wind Symphony performs at a minimum of 4 concerts. Members may participate in IHSA Solo & Ensemble Contests. Members may have the opportunity to audition for IMEA district festivals. Membership is determined by audition and the consent of the instructor. Attendance at performances is required.

**4386 WIND ENSEMBLE** *Grade 9-12.* Wind Ensemble offers the most advanced instrumental experience through study and performance of college level works for winds and percussion. Due to the soloist nature of part assignments, there is a strong emphasis on individual preparation for rehearsals and performance. Private study on principal instrument is strongly recommended. Wind Ensemble performs at a minimum of four concerts. Members are expected to participate in IHSA Solo & Ensemble Contests. Members

will have the opportunity to audition for IMEA district festivals. Membership is determined by audition. Consent of the instructor and attendance at performances are required.

**4393 HONORS VARSITY CHAMBER**

**4395 HONORS CHAMBER STRINGS**

**4397 HONORS WIND ENSEMBLE**

SENIORS enrolled in 4393, 4395, or 4397 may be eligible to take one of these courses for weighted credit. In addition to meeting all the criteria for the standard course, senior students eligible for a weighted grade will create a performance and research portfolio which will include four small ensemble performances with a comprehensive written critique: two evaluations of concert programs; and tangible evidence of leadership activities leading to substantial musical achievement. Students may prepare auditions related to college applications in lieu of the fourth small ensemble performance. Audition and instructor's permission required.

THEORY COURSES

**4378 MUSIC THEORY** *Grade 10-12. One semester.* This music class is an introductory course to the basic building blocks of music. The content includes the following areas of concentration: scales, intervals, chord structure and progressions, beginning harmony, and elementary ear training. This course is especially useful for all serious music students who plan to continue in music beyond high school. Students will have the opportunity to complete assignments using MIDI keyboards and computers.

**4392 AP (ADVANCED PLACEMENT) MUSIC THEORY** *Grade 10-12. Prerequisite is Music Theory 4378 or placement.* Music Theory AP is a continuation of 4378. Students will study four-part writing, harmonic progression, texture, form, non-harmonic tones, and secondary dominants. Ear training and sight singing will be stressed. Students will have the opportunity to complete assignments using MIDI keyboards and computers. Students who successfully complete the course and AP examination may receive college credit and/or a higher placement in college.

# PHYSICAL EDUCATION, HEALTH EDUCATION, AND DRIVER EDUCATION

Michelle Schmidt, *Department Chairperson - MVHS*

David Perry, *Department Chairperson - NVHS*

Kevin Chaffee, *Department Chairperson - WVHS*

The Physical Education programs seek to provide opportunities for each student to develop their individual fitness level through a wide variety of coeducational, fitness-based activities.

## PHYSICAL EDUCATION, HEALTH & DRIVER EDUCATION COURSE LISTINGS

### PHYSICAL EDUCATION COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4701	P.E. I - Freshman	Yr. 9	None
4702	P.E. II - Sophomore	Yr. 10	P.E. I
4703	P.E. III - Junior	Yr. 11	P.E. II
4704	P.E. IV - Senior	Yr. 12	P.E. III
4705	Adapted P.E.	Yr. 9-12	Placement

### HEALTH EDUCATION COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4790	Health Education	Sem. 10	None
14790	Online Health	Sem. 10	None
4796	Advanced Health	Sem. 11-12	"C" or better in Health 4790 AND Instructor approval

### DRIVER EDUCATION COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4198	Driver Education	Sem. 10-12	Minimum 8 classes passed in previous two semesters

## PHYSICAL EDUCATION AND HEALTH EDUCATION COURSE DESCRIPTIONS

PE classes are required every semester, except when taking Health 4790.

### **4701 PHYSICAL EDUCATION I** *Grade 9.*

Emphasis for this course is on physical fitness, fundamental skills and rules of each activity, and knowledge of the importance of fitness for life. Units may include: Personal Fitness, Rock Climbing, Adventure Education, CPR & AED Course, and Fitness Integration Through Sport (FITS).

### **4702 PHYSICAL EDUCATION II** *Grade 10.*

Sophomores will have Health for one semester and Physical Education for the other semester. Units will include: Social Dance, Fitness Consumerism and Swimming.

**4703, 4704 PHYSICAL EDUCATION III, IV** *Grade 11-12.* Physical fitness and knowledge of activities will continue to be developed, along with leadership and teamwork. Students have the opportunity to elect a variety of activities to enhance their fitness level. Units are selected by students in their physical education period. Courses will have maximum capacities. Units may include: BodySculpt, Applied Personal Fitness, Skill and Body Development, Lifetime Motion, Rollerblading, Softball, Golf, Football, Badminton, Lacrosse, Swimming, Indoor Hockey, Volleyball, Pickleball, Team Handball, Basketball, Soccer, Kayaking, Water Polo, Jazz Dance, Tap Dance, Dance of the Decades, Hip Hop Dance, Broadway Dance, Advanced Dance, Self-Defense, Bowling, CPR, Scuba, Jr. Leaders, Peer Partners, Rock Climbing and Adventure Education.

### **4705 ADAPTED PHYSICAL EDUCATION**

*Grade 9-12.* Placement by the department. Physical education must be provided for all public school children. "Adapted" refers to an individual physical education program designed for students with unique needs. Students will be accompanied by Peer Partners. Adapted physical

education gives students who cannot safely and/or successfully participate in the regular physical education program a chance to become all that one can physically be.

### **4790 HEALTH EDUCATION** *Grade 10.*

#### **14790 ONLINE HEALTH EDUCATION**

One semester, required by the State of Illinois to graduate. This course is incorporated into the Physical Education curriculum at the tenth grade level. It includes the following areas of study:

- Wellness
- Stress Management
- Mental Health
- Suicide Prevention
- Coping with Loss
- Aging, Death, and Dying
- Nutrition
- Male & Female Reproductive Anatomy & Physiology\*
- Human Growth & Development\*
- Abstinence\*
- Birth Control\*
- Marriage & the Family\*
- Sexually Transmitted Diseases\*
- Prevention and Control of Disease
- Prevention of Alcohol, Tobacco, and other Drug Abuse
- Injury Prevention and Safety

\*Parents may review course materials used in the instruction of these units and elect to have their child study alternative materials during the time allotted for a unit.

### **4797 ADVANCED HEALTH** *Grade 11-12.*

*One semester. Prerequisite is a C or better in Health 4790 and instructor approval.* This course will provide students with the opportunity to expand on their current level of health and wellness. Students will also study health issues in depth, and further explore health-related concepts. Some topics covered are health promotion, disease prevention, interpersonal communication skills, critical thinking, decision making, health careers, and current health topics. In addition, the students will also have input as to the topics covered in class.

## DRIVER EDUCATION

The State of Illinois requires two phases of instruction to obtain a driver's license. The classroom phase is required for graduation. Both phases may be taken from either the high school or an accredited driver ed. business. If a student attends an outside agency, the student must submit proof of classroom phase completion to the guidance office. The State also requires that a student pass a minimum of 8 classes in the two preceding semesters to take Driver Ed.

**CLASSROOM PHASE** The State of Illinois requires at least 30 hours of instruction if the student desires to obtain his/her legal driver license before 18 years of age. Classroom instruction is required for graduation and must be taken prior to or at the same time as the Behind-the-Wheel Phase.

**BEHIND-THE-WHEEL PHASE** *This part of the program is voluntary.* The State of Illinois requires this phase if students desire their licenses before they reach 18 years of age. At least six hours driving instruction and six hours of observation time is required.

### **4198 - DRIVER EDUCATION** *Grade 10-12.*

*One semester.* The Driver Education program offers both classroom and behind the wheel instruction. The District reserves the right to deny a student behind the wheel instruction if it determines that the student is not capable of completing it safely.

Students will register for driver education like any other subject and will receive credit. Students are scheduled by birthdate priority. A student is not guaranteed driving during the semester he or she takes the classroom phase of Drivers Ed. Any student participating in the behind-the-wheel phase will need to provide the instructor with two checks; one payable to the Secretary of State, for the driving permit; the second check payable to School District #204 which helps to defray the expense of the driving phase, an optional service our district provides.

The State also requires that a student pass a minimum of 8 classes in the two preceding semesters to take Driver Ed.

## SCIENCE

Matt Kirkpatrick, *Department Chairperson - MVHS*

Paul Vandersteen, *Department Chairperson - NVHS*

Ray Hanus, *Department Chairperson - WVHS*

The disciplines of Math and Science are closely related. Therefore, recommendations for science placement do take into account placement in a student's math course. Having the requisite math skills best prepares the student for success.

The science curriculum is designed to meet the needs of all of our students. The curriculum is structured into two distinct sequences based upon students' abilities and a group of electives for any student. Any four semesters of science, successfully completed, may be counted to fulfill the two-year requirement for graduation. The science department believes it is in the best interest of the student to experience two disciplines of science within his/her two-year science requirement. By completing both a life science and a physical science course, a student can have a better appreciation of the scope of science, be more prepared for specific content on standardized tests, and have a solid foundation for further science exploration.

Because honors and Advanced Placement (AP) course work is accelerated and more sophisticated, upper level work of high quality in a compacted time frame is demanded of students. The Science Department has developed recommendations for student success. These criteria are indicators of performance levels or standards for the honors or A.P. courses and are available from the Science Department.

### SCIENCE COURSE LISTINGS

#### SEQUENCE I: COLLEGE PREP COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4804	Earth Science	Yr. 10-12	1 year of science or by permission
4806	Horticulture	Yr. 10 -12	Biology or by permission
4807	Greenhouse Mgmt. & Floral Design	Yr. 11-12	Horticulture
4840	Astronomy: Exploring the Universe	Sem. 10 -12	None
14840	Online Astronomy: Exploring the Universe	Sem. 10 -12	None
4808	Chemistry/Physics	Yr. 10-12	Biology or by permission
4810	Biology	Yr. 9	None
4820	Chemistry	Yr. 10 -12	Biology and concurrent enrollment in Geometry
4832	Physics	Yr. 11-12	Biology, Chemistry, and Geometry
4840	Astronomy: Exploring the Universe	Sem. 10 -12	None
4844	Cosmic Journey	Yr. 10 -12	Geometry or taken concurrently w/teacher permission
4846	Human Genetics, Bioethics & Biotechnology	Yr. 10 -12	Biology and Chemistry or taken concurrently with teacher permission
4848	Anatomy & Physiology	Yr. 10 -12	Biology and Chemistry or concurrently with teacher recommendation



**SCIENCE COURSE LISTINGS (CONT'D)****SEQUENCE II: ACCELERATED & COLLEGE PREP COURSES**

COURSE#	TITLE	LEVEL	PREREQUISITE
4812	Honors Biology	Yr. 9	Placement
4816	*AP Biology	Yr. 11 -12	Biology and Chemistry
4818	Honors Chemistry	Yr. 10 -11	Biology and Geometry
4822	*AP Chemistry	Yr. 11-12	Biology, Chemistry, Algebra II/Trig
4830	Honors Physics	Yr. 11-12	Biology, Chemistry, and Algebra II/Trig
4850	AP Environmental Science	Yr. 10-12	Biology, Chemistry, Algebra II/Trig
4852	AP Physics	Yr. 11-12	Physics & AP Calculus (AB or BC) concurrently

*\*This course meets for 1 and \_ periods (paired with lunch).*

**DUAL CREDIT WITH COLLEGE OF DUPAGE**

Students enrolled in the following course may apply to earn dual credit with COD. High school students who wish to take the course listed below for dual credit will receive college credit and a COD transcript regardless of whether or not they continue at College of DuPage. These credits may be transferable to other institutions. All dual credit opportunities are pending upon agreement between IPSD and COD. To qualify for dual credit, students must complete appropriate paperwork and testing as required by COD.

**COURSE COMPLETED**

Anatomy and Physiology: Course 4848

Horticulture: Course 4806

Genetics Block (Frontier): Course 8847

**CREDIT AT COD**

Anatomy and Physiology 1500

Survey of Human Anatomy and Physiology (4 hrs. credit)

Horticulture 1100

Introduction to Horticulture (3 hrs. credit)

Biology 1120

Introduction to Genetics (3 hrs. credit)

**SCIENCE COURSE DESCRIPTIONS**

All Science courses are year-long except Astronomy.

**4804 EARTH SCIENCE** *Grade 10-12. Prerequisite is one year of science or by permission.* This course represents an overview of the Earth. It engages each student in a laboratory study of topics in geology, including rocks and minerals, earthquakes and volcanoes, streams and glaciers. The topics of weather and climate are explored as well.

**4806 HORTICULTURE** *Grade 10-12. Prerequisite is Biology.* This course places emphasis on botany, plant parts and processes, propagation, careers, and plant identification. Students are introduced to greenhouse management, landscape

and floral design. The greenhouse and floral lab are used to give students a firsthand knowledge of concepts. This course is a college preparatory class for students interested in majoring in biological sciences or horticulture. This course is also a dual credit course with the College of DuPage. High school students, who wish, will receive college credit on a COD transcript regardless of whether or not they continue at COD. These credits may be transferable to other institutions. This course currently does not meet NCAA core approval.

**4807 GREENHOUSE MANAGEMENT & FLORAL DESIGN** *Grade 11-12. Prerequisite is Horticulture.* This course will stress greenhouse management, plant production, and floral design. Specific plant growth topics including, but not

limited to, botany, plant identification, plant management, propagation and careers will be stressed. Extensive use of the lab facilities and the greenhouse will be used to demonstrate concepts and supply students with first-hand knowledge of plant growth and management practices. The students will create a greenhouse design and management project.

**4808 CHEMISTRY/PHYSICS** *Grade 10-12. Prerequisite is one year of science.* This course provides students with a solid foundation of physical science and the laboratory techniques used to test and support such knowledge. One semester is an introduction to the principles of chemistry; the other is an introduction to the principles of physics.

**4810 BIOLOGY** *Grade 9.* This laboratory is the traditional biology course. It is organized and conducted to provide the average student with a sound and comprehensive understanding of biology. Strong emphasis is given to understanding fundamental biological processes and how they apply to our daily lives.

**4812 HONORS BIOLOGY** *Grade 9. Weighted grade.* Students in freshman Honors Biology learn biology concepts based on the National Science Standards through creative and critical thinking skills in a hands-on approach. The laboratory experiences emphasize biology as an investigative process based on inquiry. Creating hypotheses by studying the facts and devising an explanation for them is a crucial part of this curriculum. Teaching strategies enable students to learn science through a natural development process. Beginning with exploration and moving through invention to application, students build solid foundations in biological concepts and theories while developing higher-order thinking skills.

**4816 AP (ADVANCED PLACEMENT) BIOLOGY** *Grade 11-12. Prerequisites are Biology and Chemistry. Weighted grade.* This course is a college-level laboratory course dealing with advanced topics in biology. There are twelve mandatory laboratory experiences dealing with such topics as diffusion, osmosis, enzyme catalysis, molecular biology, and genetics. Students may receive college credit in biology by qualifying on an examination administered by the College Entrance Examination Board at the end of the course.

**4818 HONORS CHEMISTRY** *Grade 10-12. Prerequisites are Biology and Geometry. Weighted grade.* This course introduces students to the fundamental concepts and theories of chemistry. The pace and scope of the course are designed for the above average student. This laboratory course emphasizes problem-solving, analysis, critical thinking, and experimentation.

**4820 CHEMISTRY** *Grade 10-12. Prerequisite is Biology.* This course introduces the college bound student to basic chemical principles through lecture, laboratory and group work. The laboratory emphasizes the discovery of key concepts through the analysis of student generated data. An "A" or "B" in Algebra I or Geometry is strongly recommended.

**4822 AP (ADVANCED PLACEMENT) CHEMISTRY** *Grade 11-12. Prerequisites are Chemistry and Algebra III/Trig. Weighted grade.* Advanced Chemistry is a college level laboratory course dealing with advanced topics in inorganic chemistry. Students may receive college credit in Advanced Chemistry by qualifying on an examination administered by the College Entrance Examination Board at the conclusion of the course. This course is weighted and emphasizes problem solving and lab experience. It is a good preparation for chemistry, engineering and medical careers. Honors Chemistry is strongly recommended.

**4830 HONORS PHYSICS** *Grade 11-12. Prerequisites are Biology, Chemistry, Algebra III/Trig. Weighted grade.* This course introduces students to the basic concepts and theories of physics. The pace and scope of this course are designed for the above average student with a sound understanding of algebra, geometry, and trigonometry. This course emphasizes problem-solving and experimentation. Honors Pre-Calculus is strongly recommended.

**4832 PHYSICS** *Grade 11-12. Prerequisites are Biology, Chemistry, Algebra, and Geometry.* Physics presents a practical overview of general classical and modern physics topics. In this introductory course the emphasis will be upon laboratory investigations leading to a firm grasp of conservation of momentum, energy and charge. The math requirement entails proficient use of algebra and plane geometry.

**4840 ASTRONOMY: EXPLORING THE UNIVERSE** *Grade 10-12. Semester course.* This is an introductory course that focuses on observational astronomy. The planetarium is used in order for students to comprehend observational techniques and coordinates that help them observe the heavens. Seasonal stars and constellations, their mythologies, and constellation creation are the main focuses of this class.

**14840 ONLINE ASTRONOMY: EXPLORING THE UNIVERSE** *Grade 10-12. Semester course.* This is an introductory course that focuses on observational astronomy. The planetarium is used in order for students to comprehend observational techniques and coordinates that help them observe the heavens. Seasonal stars and constellations, their mythologies, and constellation creation are the main focuses of this class.

**4844 COSMIC JOURNEY** *Grade 10-12. Prerequisite is geometry (may be taken concurrently).* Students begin their journey at the time of the Big Bang and explore the universe through the eyes of Galileo, Copernicus, Kepler, Newton and other great minds. As they journey into present times, they learn about the extinction of the dinosaurs, the solar system, galaxies, stars, black holes, and the laws that govern the universe. Many laboratory experiences and group projects, along with trips to the planetarium, will be used to reinforce the astronomical concepts learned in class. Each student will also construct his own refracting telescope. A field trip to the Museum of Science and Industry to explore the Henry Crown Space Center and the Omnimax Theatre are also included.

**4846 HUMAN GENETICS, BIOETHICS, AND BIOTECHNOLOGY** *Grade 10-12. Prerequisite is Chemistry (may be taken concurrently).* This college level course introduces students to the fundamental concepts of genetics. It is designed to acquaint students with not only the classical patterns of inheritance but also with the present day findings in molecular genetics. Laboratory experiments provide active participation in demonstrating and applying the concepts and theories of genetics and biotechnology. Present day bioethics issues in biotechnology are addressed.

**8847 GENETICS BLOCK (FRONTIER)** *Grade 12.* This college level course introduces

students to the concepts of heredity and the current use of such information. Topics included are classical and post-classical genetic transmission, the structure and function of the chromosome, chromosomal abnormalities, the chemical nature of DNA, biotechnology, gene expression, mutations, population genetics, and evolution. Special consideration is given to the ethics of societal use of genetic technology today. Students may apply to earn dual credit through COD.

**4848 ANATOMY AND PHYSIOLOGY** *Grade 10-12. Prerequisite is Chemistry (may be taken concurrently).* This college level course introduces students to the fundamental concepts of human anatomy and physiology. Particular emphasis is placed on animal dissections to help the students learn how the human body functions. Students may apply to earn dual credit through COD.

**4850 AP (ADVANCED PLACEMENT) ENVIRONMENTAL SCIENCE** *Grade 11-12. Prerequisite is Chemistry and Algebra II/Trig. (may be taken concurrently). Weighted grade.* The goals of the AP Environmental Science course are to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world; to identify and analyze environmental problems both natural and man-made; to evaluate the relative risks associated with these problems; and to examine alternative solutions for resolving and/or preventing them. Environmental science is interdisciplinary, embracing a wide variety of topics that include ecology, geology, history, sociology, economics, and chemistry. Field experiences may include a four-day trip to northern Wisconsin, and/or one-day trips to a local prairie, stream, and forest. There may be a one-time fee associated with the experiences.

**4852 AP (ADVANCED PLACEMENT) PHYSICS** *Grade 11-12. Prerequisites are Physics and Calculus (may be taken concurrently). Weighted grade.* This calculus-based college style physics course is structured to provide a strong preparation in physics for those intending to major in engineering, mathematics, physics, astronomy, or medicine. Students may receive college credit in Advanced Physics by qualifying on an examination administered by the College Entrance Examination Board at the end of the course.

## SOCIAL STUDIES

Don Pankuch, *Department Chairperson - MVHS*

Tom McManamen, *Department Chairperson - NVHS*

Lorie Cristofaro, *Department Chairperson - WVHS*

Responsible participatory citizenship in our democratic republic is the major goal of the Social Studies program. The basic course offerings should enable the student to develop the necessary skills and understandings to achieve this goal.

### SOCIAL STUDIES COURSE LISTINGS

#### COURSES THAT SATISFY GRADUATION REQUIREMENT

COURSE#	TITLE	LEVEL	PREREQUISITE
4902	World Geography	Yr. 9	None
4910	Honors World History	Yr. 9	None
4912	AP World History	Yr. 9-12	None
4929	American Society (Block with English II)	Yr. 10	World History or World Geography
4936	American Studies	Yr. 10-12	World History or World Geography
4922	U.S. History	Yr. 10-12	World History or World Geography
14922	Online U.S. History	Yr. 11-12	World History or World Geography
4924	AP U.S. History	Yr. 11-12	World History or World Geography
4906	Government	Sem. 12	None
4958	AP Government and Politics	Yr. 11-12	An American History Course
4915	AP Human Geography	Yr. 9-12	None

#### ELECTIVE COURSES

COURSE#	TITLE	LEVEL	PREREQUISITE
4365	AP Art History (also listed in Art Education)	Yr. 9-12	None
4960	AP European History	Yr. 10-12	A Freshman Social Studies Course
4944	AP Psychology	Sem. 11-12	Psychology I
4956	Military History	Sem. 10-12	A Freshman Social Studies Course
4940	Psychology I	Sem. 11-12	A Freshman Social Studies Course
4942	Psychology & Group Behavior	Sem. 11-12	A Freshman Social Studies Course
4930	Sociology	Sem. 11-12	A Freshman Social Studies Course
4952	U.S. Geography	Sem. 10-12	A Freshman Social Studies Course

## SOCIAL STUDIES COURSE DESCRIPTIONS

### **4929 AMERICAN SOCIETY TWO PERIOD BLOCK OF AMERICAN HISTORY/ENGLISH II**

*Grade 10. Year-long. Prerequisite is World History or World Geography.* This is a year-long two-period block-scheduled class in which students receive individual grades for both History and English. The linkage between the two courses allows for many opportunities to emphasize the connections between American history, literature, art, music and architecture through team-teaching, and joint assignments and projects. The course demands active student participation, intensive outside reading, and challenges beyond the classroom setting (i.e. field trips, projects). Students who are interested in studying history and English through this creative, humanities emphasis will enjoy this option. This course satisfies the American History and the English II graduation requirement.

**4936 AMERICAN STUDIES** *Grade 10-12. Year-long. Prerequisite is World History or World Geography.* American Studies is the study of American History as shaped by American culture. This course integrates traditional history topics with art, music, literature, fashion, and architecture. Course activities demand active student participation, intensive outside readings, and challenges beyond the classroom. Students who are interested in studying history through this unique approach will enjoy American Studies. This course satisfies the American History graduation requirement.

**4365 AP (ADVANCED PLACEMENT)  
ART HISTORY** *Grade 9-12. Year-long. Weighted grade.* AP Art History is a chronological survey of artistic styles, artists, architecture, painting, sculpture and photography primarily of the western tradition with periodic introductions of non-western work from Africa, the Americas, Asia, the Near East, Oceanic and Islamic traditions. Emphasis is placed on the study of the development of style within cultures, eras and artists' careers. Students will develop knowledge of specific stylistic characteristics of various cultures as well as the terminology necessary to communicate a scholarly analysis of the works. In order to understand the similarities and differences that exist in our visual world, we will explore the symbolism, artistic processes

and political, social, economic and scientific background of the artwork. Formal analysis using the art elements and design principles are specifically referenced to each art form. Central to the AP Art History course is the development of visual literacy, oral and written skills of comparative analysis, and the understanding of those works in historical and sociological context. This course requires a high degree of commitment and academic work as students should be engaged at the same level as a college level art history survey. Students who have done well in the history courses or studio arts are especially encouraged to enroll. This is a year-long course and prepares students for taking the AP Art History exam.

**4960 AP (ADVANCED PLACEMENT)  
EUROPEAN HISTORY** *Grade 10-12. Year-long. Weighted grade. Prerequisite is a Freshman Social Studies course.* The purpose of this full-year elective is to give students an opportunity to explore in-depth themes of modern European history from the High Renaissance to the recent past. Students who are particularly interested in a more in-depth approach, developing an understanding of the importance of analyzing historical documents, and expressing this understanding in writing would benefit from this course. The AP European History course prepares students for the AP examination and intermediate and advanced college course work. A summer reading and writing assignment must be completed prior to the course. In order to take this course, a sophomore should have an A in World Geography or an A or B in Honors World History. If students plan to take AP European and AP US History, it is recommended that they take AP European first as a sophomore. A summer project and assignments outside of the school day required.

**4958 AP (ADVANCED PLACEMENT)  
GOVERNMENT AND POLITICS** *Grade 11-12. Year-long. Weighted grade. Prerequisite is an American History course.* This introductory college-level course provides students with conceptual tools necessary to develop an understanding of the world's diverse political structure and practices. With a focus on American government and politics during the first semester, and comparative governmental systems during the second semester, the course encompasses the study of specific countries, their governments, and their political climates. Summer project and assignments outside

of the school day are required. Upon successful completion of this course, students may take AP exams in U.S. Government and /or Comparative Politics. This year-long course satisfies Federal and State Constitutional graduation requirements and satisfies the Government graduation requirement.

**4915 AP (ADVANCED PLACEMENT)**

**HUMAN GEOGRAPHY** *Grade 9-12. Year-long. Weighted grade.* This year-long college level course focuses on the impact human populations have on the planet. Units of study include the cultural patterns of religion, ethnicity, and gender; the population patterns of migration, growth, and settlement; and the historical global patterns of economic development, agriculture, and urbanization. Students will develop the ability to think geographically and apply the skills and tools of a geographer to analyze the world. Field studies to local areas are used as learning opportunities. This course is designed to represent an introductory one-semester human geography college course and will prepare students to take the AP Human Geography exam. This course satisfies the world history/ world geography graduation requirement.

**4944 AP (ADVANCED PLACEMENT)**

**PSYCHOLOGY** *Grade 11-12. One semester (2nd sem. only). Weighted grade. Prerequisite is Psychology I.* Building upon the principles of Psychology I, this course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in psychology. The course will prepare students for intermediate and advanced college courses by making demands upon them equivalent to those of full year introductory psychology courses. The content will focus on advanced experimental design, biological functioning, sensation and perception, motivation and emotion, developmental psychology, psychological disorders and their treatments, and social psychology. Intensive reading and writing skills will be a major focus, as will hands-on research and experimentation. This course will prepare the students to take the AP Psychology exam.

**4924 AP (ADVANCED PLACEMENT)**

**UNITED STATES HISTORY** *Grade 11-12. Year-long. Weighted grade. Prerequisite is World History or World Geography.* This course in American history is designed to provide students with the analytic skills and factual knowledge necessary to

deal critically with the problems and materials in American history. The course will prepare students for intermediate and advanced college courses by making demands upon them equivalent to those of full-year introductory college courses. Students could receive college credit in American History by qualifying on an examination administered by the College Entrance Examination Board at the conclusion of the course. A summer requirement involving reading and writing assignments must be successfully completed prior to the first day of class. This course satisfies a graduation requirement.

**4912 AP (ADVANCED PLACEMENT)**

**WORLD HISTORY** *Grade 9-12. Year-long. Weighted grade.* Covering from 8,000 BC to the present, this full-year college level history course requires students to master factual knowledge as well as develop analytical skills necessary to be a historian. Specific themes are used as a framework to analyze regions around the globe including Africa, the Americas, Asia, and Europe. Throughout the year, students will use documents and primary sources, make comparisons across cultures, and develop the vital habits of mind required to be successful on the AP World History exam. This course imposes a heavy reading and writing workload throughout the year. The demands on students are equivalent to a full-year introductory college course therefore AP World History is considered much more rigorous than Honors World History. AP World History covers more topics at a faster pace requiring students to enter the course with very high reading, writing and critical thinking skills. A summer reading and writing project must be completed prior to the course. Any incoming freshmen that wish to enroll in this course must be recommended by their 8th grade English and history teacher. This course satisfies the World History/ World Geography graduation requirement.

**4906 GOVERNMENT** *Grade 12. One semester.*

Government introduces the student to the basic principles of political science. Emphasis is placed on students becoming part of an active citizenry. The semester course covers the foundations of government, the Constitution, political parties, campaigns, and the three branches of American Government. Group and individual projects are utilized. This class is required for graduation. Federal and State Constitutional graduation requirements will be covered in this course. This course satisfies the Government graduation requirement.

**4910 HONORS WORLD HISTORY** *Grade 9. Year-long. Weighted grade.* This year-long course is presented from a geographical, political, and cultural point of view. The first semester begins with Ancient Egypt and concludes with the European Middle Ages. The second semester presents the rise of nation states, age of exploration, western imperialism, the Industrial Revolution, and concludes with the First World War. The course emphasizes analytical thought and is recommended for advanced students. Honors World History is taught at a very fast pace and students are required to master difficult readings, organize and write essays independently, and apply critical thinking skills in all of their work. Independent learning and self-motivation are required. This course satisfies the World History/World Geography graduation requirement.

**4956 MILITARY HISTORY** *Grade 10-12. One semester. Prerequisite is a Freshman Social Studies course.* This course is designed to deal with the various aspects of warfare throughout human history. Topics include the nature of war, concepts of tactics and strategy, technology and methods of warfare, great military leaders, crucial battles and their effect on history, as well as the present and future trends in warfare.

**4940 PSYCHOLOGY I** *Grade 11-12. One semester. Prerequisite is a Freshman Social Studies course.* Psychology is the study of the behavior of living things. This course will provide students with an understanding of their own behavior, as well as the behavior of other individuals in society. Students will receive an overview of the many subfields of psychology including: an introduction to the scientific method, study of the brain, sleep and dreams, learning theory, memory, intelligence, personality, mental health and abnormal behaviors. This is a college-prep course which requires challenging reading. There will be an emphasis on student-centered projects. Opportunities will also be available to work with the “Kid-to-Kid” program.

**4942 PSYCHOLOGY AND GROUP BEHAVIOR** *Grade 11-12. One semester. Prerequisite is a Freshman Social Studies course.* Psychology and Group Behavior is a basic level course combining the theories of psychology and sociology, allowing students to develop a perspective on their own life experiences and their relationship to the structure of our society and its pressures. The content will focus on personality theory, group and family interaction,

mental illness, therapy, cultural awareness, and socialization issues. “Hands-on” learning, class discussions, role-playing, guest speakers, lectures, projects, and paperbacks relevant to the above topics will be incorporated. This course is in lieu of Psychology I (4940) and/or Sociology (4930).

**4930 SOCIOLOGY** *Grade 11-12. One semester. Prerequisite is a Freshman Social Studies course.* Sociology will provide students with the basic concepts and tools necessary for understanding human social behavior in a complex world. The course examines the structures and functions of society from a purely sociological perspective and then examines current social issues in America. Topics to be covered include; culture, socialization, class status, urbanization, religion, family, prejudice, discrimination, and crime. This is a college prep course which requires challenging reading.

**4952 UNITED STATES GEOGRAPHY** *Grade 10-12. One semester. Prerequisite is a Freshman Social Studies course.* This course is designed to provide students with geographical knowledge of the United States studied from both a regional and an urban approach. Various geographic topics are studied such as human geography, environmental issues, cartography skills, and the geography of Illinois. Supplemental reading is required.

**4922 UNITED STATES HISTORY** *Grade 10-11. Year-long. Prerequisite is World History or World Geography.* This course is a comprehensive study focusing on major themes and concepts essential to understanding American economic, political, and social institutions. Learning emphasizes analytical writing, interpreting historical documents, developing both written and oral communication skills, understanding cause and effect relationships, discovering the significance of people, places and events impacting U.S. History, and applying historical principles in today’s world. First semester explores the foundations of the U.S. includes the Constitution, Minorities, Innovations, Chicago History, and Reform. The second semester explores the 20th Century by decades and traces the development of the U.S. both internally and as a global power. Key topics include morality in the 1920’s, the Great Depression, the Homefront during WWII, the struggle for Civil Rights, the Vietnam Era and contemporary issues. This course satisfies the American History graduation requirement.

**14922 ONLINE UNITED STATES HISTORY**

*Grade 10-11. Year-long. Prerequisite is World History or World Geography.* This course is a comprehensive study focusing on major themes and concepts essential to understanding American economic, political, and social institutions. Learning emphasizes analytical writing, interpreting historical documents, developing both written and oral communication skills, understanding cause and effect relationships, discovering the significance of people, places and events impacting U.S. History, and applying historical principles in today's world. First semester explores the foundations of the U.S. includes the Constitution, Minorities, Innovations, Chicago History, and Reform. The second semester explores the 20th Century by decades and traces the development of the U.S. both internally and as a global power. Key topics include morality in the 1920's, the Great Depression, the Home-front during WWII, the struggle for Civil Rights, the Vietnam Era and contemporary issues. This course satisfies the American History graduation requirement.

**4902 WORLD GEOGRAPHY** *Grade 9.*

*Year-long.* The study of world geography provides students with a strong foundation for future social studies courses. Students will learn about the complex interrelation of physical, cultural, and economic geography. An emphasis is placed on the historical and political changes occurring within each region of study and the impact the geographic factors have on the day-to-day lives of people.

Throughout the course students will also analyze and develop a deeper understanding of a wide range of global issues: human rights, genocide, disease, overpopulation, resources, environmental dangers, world trade, emerging nationhood, and independence. The major world religions will also be studied. Students will develop critical thinking, reading, writing, and speaking skills. Regular homework reading beyond the textbook will be required. This course satisfies the World History/World Geography graduation requirement.



# TECHNOLOGY AND ENGINEERING EDUCATION

Jill Hlavacek, *Department Chairperson - MVHS*

Lisa Traut, *Department Chairperson - NVHS*

Andrea Hendrickson, *Department Chairperson - WVHS*

The Technology Department's courses and curriculum revolve around providing students with learning and activities focused on the five areas of technology: manufacturing, communication, transportation, energy and power, and construction. The majority of Technology and Engineering classes require safety glasses that must be purchased by the student. There are materials fees associated with such classes in Technology and Engineering when students make projects to be taken home upon completion.

## TECHNOLOGY AND ENGINEERING EDUCATION (TEE) COURSE LISTINGS

### MANUFACTURING AND CONSTRUCTION TECHNOLOGY

COURSE#	TITLE	LEVEL	PREREQUISITE
4020	Engineering Technology I	Sem. 9-10	None
4023	Engineering Technology II	Sem. 9-10	Engineering Technology I
4030	Woods Fabrication I	Yr. 10-12	None
4032	Woods Fabrication II	Yr. 11-12	Woods Fabrication I
4034	Introduction to Construction	Sem. 10-12	None
4070	Construction Trades (3 period block)	Yr. 11-12	Introduction to Construction
4068	Technology and Engineering Independent Study	Yr. 12	Level I and II courses in specific area and Instructor approval

### COMMUNICATION TECHNOLOGY

COURSE#	TITLE	LEVEL	PREREQUISITE
4020	Engineering Technology I	Sem. 9-10	None
4023	Engineering Technology II	Sem. 9-10	Engineering Technology I
4040	Drafting & Design	Yr. 10-12	None
4042	Architectural Drafting	Yr. 11-12	Drafting & Design
4044	Computer Aided Draft. & Design	Yr. 11-12	Drafting & Design
4270	Media Communication & Production I	Yr. 9-12	None
4272	Broadcast Journalism & Production II	Yr. 10-12	Media Communication I and Instructor approval
4273	Broadcast Journalism & Production III	Yr. 11-12	Broadcast Journalism II and Instructor approval
4068	Technology and Engineering Independent Study	Yr. 12	Level I and II courses in specific area and Instructor approval

**TECHNOLOGY AND ENGINEERING EDUCATION (TEE) COURSE LISTINGS (CONT'D)**

**TRANSPORTATION TECHNOLOGY**

COURSE#	TITLE	LEVEL	PREREQUISITE
4020	Engineering Technology I	Sem. 9-10	None
4023	Engineering Technology II	Sem. 9-10	Engineering Technology I
4050	Power Mechanics	Sem. 9-11	None
4058	Automotive Maintenance	Sem. 10-12	None
4052	Automotive Mechanics	Yr. 11-12	Automotive Maintenance
4054	Automotive Servicing (2 per. block)	Yr. 12	Automotive Mechanics and -Instructor approval
4068	Technology and Engineering Independent Study	Yr. 12	Level I and II courses in specific area and Instructor approval

**ENERGY TECHNOLOGY**

COURSE#	TITLE	LEVEL	PREREQUISITE
4020	Engineering Technology I	Sem. 9-10	None
4023	Engineering Technology II	Sem. 9-10	Engineering Technology I
4060	Electricity	Yr. 10-12	None
4062	Electronics	Yr. 11-12	Electricity
4065	A+ Computer Repair	Yr. 11-12	Electricity or Instructor approval
4067	Computer Networking	Yr. 11-12	Electricity or Instructor approval
4068	Technology and Engineering Independent Study	Yr. 12	Level I and II courses in specific area and Instructor approval
4497	Professional & Technical Internship	Yr. 11-12	Instructor approval

*\*NVHS Sophomores will have to travel to the Gold Building for this course.*

*\*\* TEE courses require a materials and/or workbook fee.*

**PROJECT LEAD THE WAY**

COURSE#	TITLE	LEVEL	PREREQUISITE
44025	Introduction to Engineering Design (PLTW)	Yr. 10-12	Application process applies

**DUAL CREDIT WITH COLLEGE OF DUPAGE**

Students enrolled in the following courses may apply to earn dual credit with COD. High school students who wish to take the courses listed below for dual credit will receive college credit and a COD transcript regardless of whether or not they continue at College of DuPage. These credits may be transferable to other institutions. All dual credit opportunities are pending upon agreement between IPSD and COD. To qualify for dual credit, students must complete appropriate paperwork and testing as required by COD.

**COURSE COMPLETED**

Architectural Drafting: Course #4042  
Electricity: Course #4060  
Computer Aided Drafting & Design: Course #4044

**CREDIT AT COD**

Architecture 1101-Basic Architectural Drafting (2 hrs. credit)  
Electronics Technology 1100 (3 hrs. credit) Electricity & Electronics Fundamentals  
Architecture 1211-Basic Computer Aided Drafting-Auto CAD (3 hrs. credit)

# TECHNOLOGY AND ENGINEERING (TEE) COURSE DESCRIPTIONS

## 4020 ENGINEERING TECHNOLOGY I

*Grade 9-10. One semester.* The course is designed to use Project Based Learning (PBL) as the instructional model. Students will be involved in problem-solving investigations and other meaningful tasks that allow them to work in groups and/or autonomously to solve problems by developing realistic products. Master projects drive the direction of the course and the student learning. The projects cover one of several major technology sectors while employing an enterprise process to design, build, and market an invention or idea. The technologies introduced are AC/DC Power, CNC Milling Technology, Communication Technology, Desktop Publishing & Graphics, Electrical Systems, Engineering Team Building, Manufacturing Tools, Mechanical Systems & Mechanisms, Pneumatics Technology, Quality Control, and Robotics Technology. A lab fee will be charged.

## 4023 ENGINEERING TECHNOLOGY II

*Grade 9-10. One semester. Prerequisite is Introduction to Engineering I.* The course is designed to use Project Based Learning (PBL) as the instructional model. Students will be involved in problem-solving investigations and other meaningful tasks that allow them to work in groups and/or autonomously to solve problems by developing realistic products. Master projects drive the direction of the course and the student learning. The projects cover one of several major technology sectors while employing an enterprise process to design, build, and market an invention or idea. The technologies introduced are AC/DC Power, CNC Milling Technology, Communication Technology, Desktop Publishing & Graphics, Electrical Systems, Engineering Team Building, Manufacturing Tools, Mechanical Systems & Mechanisms, Pneumatics Technology, Quality Control, and Robotics Technology. A lab fee will be charged. This course is only offered second semester.

## 4030 WOODS FABRICATION I *Grade 10-12.*

*Year-long.* This course is the study of manufacturing technology as it applies to the woodworking industry. Students will display the safe operation of hand tools, power tools, and machinery used in industry.

Students will learn to read and draw blueprints and manufacture a product from those prints. Basic math and measuring skills will be taught as they apply to the industry. A study of trees, wood products, furniture design, fasteners, wood joints, and finishing processes will be covered. Students will explore possible careers. A lab fee will be charged.

## 4032 WOODS FABRICATION II *Grade 11-*

*12. Year-long. Prerequisite is Woods Fabrication I.*

This course involves the study of construction and advanced manufacturing technology. Students will be introduced to CAD (computer-aided drafting) to produce blueprints and products. Students will display the safe operation of hand tools and power tools used in the manufacturing industry while completing various projects. Fees are charged for wood and project supplies.

## 4034 INTRODUCTION TO CONSTRUCTION TRADES *Grade 10-12. One semester.*

This preparatory course is designed for any student interested in learning about construction technology and/or related fields such as architecture, contracting, engineering, and so forth. The student will develop a background in design, preparation, construction and maintenance as it relates to a single-family home. Other career opportunities in construction technology will be explored such as: creating blueprints, surveying, concrete, carpentry, roofing, plumbing, heating and air conditioning, electricity, insulation, siding, drywall, and painting. Safe practices in the use of hand tools and power tools used in the industry will be covered. A lab fee will be charged.

## 4040 DRAFTING & DESIGN *Grade 10-12.*

*Year-long.* This is a beginning course for the drafts person or engineering student, introducing him or her to drafting fundamentals. The course covers drafting equipment usage, materials, an introduction to CADD (Computer-Aided Drafting and Design), and techniques used as a means of technical communications. Drafting techniques are studied and drawings are made with emphasis on description through multi-view, pictorial, architectural, and CADD drawings. The course will also focus on product design process and product design cycle. A lab fee will be charged.

## 4042 ARCHITECTURAL DRAFTING *Grade 11-*

*12. Year-long. Prerequisite is Drafting and Design.* This course covers general architectural techniques, history of architecture, home styles, construc-

tion methods, planning and drafting layouts, and perspective drawings. The course will also focus on the design process using traditional and CADD techniques to produce a set of residential drawings. The course will be directed both to non-college and college-bound students. This is a COD dual credit course worth two hours of college credit. A lab fee will be charged.

**4044 COMPUTER AIDED DRAFTING**

*Grade 11-12. Year-long. Prerequisite is Drafting and Design.* This course is designed for engineering students and architectural students using the computer. Auto CAD software will be used. Students will learn to create, store, edit, and plot drawings. They will also learn to set up prototype drawings, create symbol libraries, bills of materials, develop customized screens, and generate 3D models. This is a COD dual credit course worth three hours of college credit. A lab fee will be charged.

**4050 POWER MECHANICS** *Grade 9-11. One semester.* This course is an introductory course in the area of gasoline engine operation and fluid power mechanics. The course of study will be divided into approximately 15 weeks of concentration on small two and four-cycle engine operations. In Power Mechanics, students will also disassemble, inspect, and reassemble small gasoline engines and will learn about the different types of systems. Students will also be introduced to the operations of automotive engines, automotive maintenance and car design for 3 weeks. A lab and workbook fee will be charged. SAFETY GLASSES are required.

**4058 AUTOMOTIVE MAINTENANCE** *Grade 10-12. One semester.* This course is designed for students to gain basic knowledge and skills for maintaining automobiles. This course covers the following areas in automotive maintenance: body maintenance, engine tune-up, lubrication maintenance, electrical maintenance, tires and wheels, drive train maintenance, and seasonal maintenance procedures. Lab and workbook fees will be charged.

**4052 AUTOMOTIVE MECHANICS** *Grade 11-12. Year-long. Prerequisite is Auto Maintenance.* This is a lecture/laboratory course designed primarily to prepare students for job entry or advanced training in automotive service. The students will develop a background in the design, operation, and troubleshooting procedures of the gasoline engine and other related components of

the automobile such as the transmission and drive line, brake and electrical systems. Also stressed will be the disassembly of engines, identification of parts, use of test equipment and service manual, as well as shop safety. Laboratory procedures will be covered. SAFETY GLASSES are required. Lab and workbook fees will be charged.

**4054 AUTOMOTIVE SERVICING** *Grade 12.*

*Two periods. Year-long. Two credits. Weighted grade.* Prerequisite is Auto Mechanics and Instructor Approval. This is a lecture/laboratory class designed to give the automotive student a deeper and enriched background in automotive suspension, alignment, brakes, tires and wheels, drive line, and engine and electrical systems. The use of tools, test equipment, service manuals, shop safety, and laboratory procedures will be covered. This course requires two consecutive periods. SAFETY GLASSES are required. A lab and workbook fee will be charged.

**4060 ELECTRICITY** *Grade 10-12. Year-long.*

This course is designed to acquaint the student with the fundamental theory behind direct and alternating current electricity, common electronic equipment, and electric circuits. Laboratory practice, discussion, and experiments will be part of the course. Simple DC and AC electrical components, motors, generators, inductors, and capacitors will be studied and manipulated to show effects of circuit variables. Each student will be required to construct a simple electrical device. Parts for this device may be purchased through the school or any commercial electronics store. A lab fee will be charged.

**4062 ELECTRONICS** *Grade 11-12. Year-long.*

*Prerequisite is Electricity.* This course is designed to acquaint the student with fundamentals of electronic communication, amplitude modulation, frequency modulation, receivers, and transmitters. Solid-state circuitry and solid-state electronics are also introduced. Laboratory practice, discussion and experiments will be part of the course. In this lab the student will be required to construct an electronic device, the parts for which may be purchased through the school or any commercial electronics store. A lab fee will be charged.

**4065 A+ COMPUTER REPAIR** *Grade 11-12.*

*Year-long. Prerequisite is Electricity or Instructor Approval.* Students interested in building and servicing PC computers should be directed to this class.

The latest software and hardware will be utilized to teach students to troubleshoot computers and repair or upgrade them as well.

**4067 COMPUTER NETWORKING** *Grade 11-12. Year-long. Prerequisite is Electricity or Instructor Approval.* This course will introduce students to the fundamentals of computer networking through lectures and hands-on labs. Students will gain a basic understanding of how a network is built, maintained, and upgraded. Students will have an opportunity to program routers, switches, and set up a wireless network.

**4068 TECHNOLOGY AND ENGINEERING INDEPENDENT STUDY** *Grade 12. Prerequisite is completion of Levels I and II in an area and Instructor Approval.* This course is for seniors who have successfully completed level II courses and have the desire to advance in a specific area such as woods, automotive, electronics, or drafting.

**4070 CONSTRUCTION TRADES** *Grade 11-12. Three periods. Year-long. Off-site. Prerequisite is Intro to Construction.* This course is offered through a partnership with Aurora East High School District 131. Construction sites will be in the Aurora area. This course is designed to provide students hands-on experiences in learning about construction technology and/or related fields, such as architecture, general contracting, and engineering. The course will enable students to enter employment and/or further education and training. Construction includes building a single-family home that will be sold to the public upon completion. Other career opportunities in construction technology, such as surveying, concrete, roofing, plumbing, H.V.A.C., electricity, insulation, siding, drywall, and painting will be covered during the completion of the project. Areas such as soil testing, waivers and liens, safety, legal liabilities, and sales and marketing will also be covered. This year-long course will meet daily for three class periods and will require the student to provide transportation to and from the site. A lab fee will be charged.

**4270 MEDIA COMMUNICATION AND PRODUCTION I** *Grade 9-12. Year-long.* This course is a survey of Mass Media designed to provide students an introduction to the various forms of electronic media. Students will be introduced to instructional areas that include radio, television, film, broadcast journalism and other forms of mass

media. Through the study of these areas students will gain valuable knowledge in developing media literacy and learn skills necessary to produce and create in a changing media environment. In addition to media theory, students will learn the technological, operational and creative aspects of producing for the medium. A lab fee will be charged.

**4272 BROADCAST JOURNALISM AND PRODUCTION II** *Grade 10-12. Year-long. Prerequisite is Media Communication I.* This course is a skill level course for students who have successfully completed Media Communication I. In addition to expanding on the activities explained in the first course, students will work in a team-based environment to create a variety of video and audio related productions using industry standard equipment. Students will develop fundamentals of broadcast journalism and advanced production. A lab fee will be charged.

**4273 BROADCAST JOURNALISM AND PRODUCTION III** *Grade 11-12. Year-long. Prerequisite is Broadcast Journalism and Production II and Instructor Approval.* This course is designed for seniors who have successfully completed Broadcast Journalism and Production II. It seeks to further enhance student's skills and develop media literacy. Students will formally propose and produce various projects throughout the year. Students will also be assigned school related media productions by their instructor. Instructor approval is required before registering for this class. A lab fee will be charged.

**4497 PROFESSIONAL AND TECHNICAL INTERNSHIP** *Grade 11-12. Year-long. Two periods. Individualized program. Prerequisite is Instructor Approval.* This program serves as the last course in a sequence of Technology and Engineering courses. Sequenced courses include the following: Automotive Servicing, Architectural Drafting, Computer Drafting, Electronics, and Woods II. Other course sequences may qualify. A student will receive one credit for classroom instruction and one credit for on-the-job-training. The internship instructor will assist with job placement and monitor student progress throughout the year. Early dismissal is not a requirement for this program.

**4025 INTRODUCTION TO ENGINEERING DESIGN (PLTW)** *Grade 10-12. Year-long.* In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork communication methods and global and human impacts, engineering standards, and technical documentation. A lab fee will be charged.

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