



ORONO PUBLIC SCHOOLS 2018-2019

ORONO HIGH SCHOOL COURSE CATALOG

REGISTRATION INFORMATION FOR STUDENTS ENTERING 9TH-12TH GRADE



**WHERE EXCELLENCE IS A
TRADITION AND A GOAL.**



ORONO HIGH SCHOOL REGISTRATION GUIDE

2018 – 2019

David Benson, Principal

Producing graduates who lead the nation and compete globally

SCHOLARSHIP GOAL

We will collaboratively develop critical thinking and problem-solving skills that empower students to apply their learning in a global and ethical framework.

CHARACTER GOAL

We will examine and improve school culture and climate through an understanding of character development theory and practice.

RELATIONSHIP GOAL

We will model, invite and honor personal responsibility and citizenship in and to the community.



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CONTENTS

A Message for Students and Parents	3
Registration Process/ Policies	4
Graduation Requirements	5
General Information	6
School Counseling Resources	7
Advanced Placement, College in the Schools and Other Learning Opportunities	8
Post High School Planning.....	11
Departments:	
Business & Marketing	14
English	16
Fine Arts (Visual Arts, Drama, Media Arts, Music).....	19
Hennepin Technical College	23
Mathematics	25
Physical Education & Health	27
Science	29
Social Studies	31
Technology and Engineering Education	34
World Languages	37

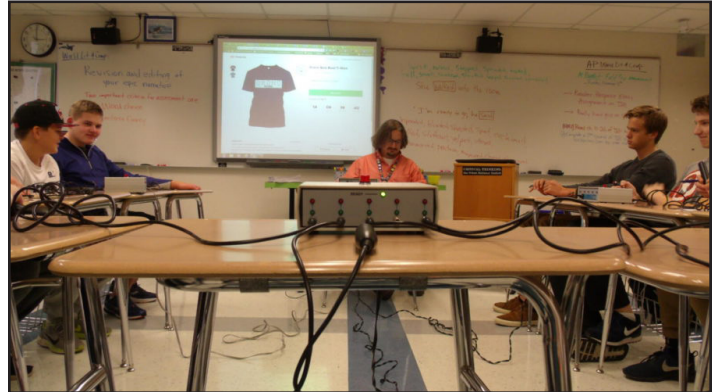
A MESSAGE FOR STUDENTS AND PARENTS

This guide is a catalog of courses and programs offered during the 2018-2019 school year at Orono High School. Please refer back to it throughout the year.

For the first many years of your education, almost all of your courses were required. However, in high school you have a chance to branch out with electives. Electives provide the opportunity to explore special fields of interest. These courses also make it possible for you to prepare for college as well as the world of work. These

opportunities place greater responsibilities on both parents and students to plan wisely. In this guide you will find electives offered within each department.

Carefully read the information in the next few pages and browse through the course offerings, then begin planning a course of study for the next four years. Serious thought about an overall educational plan that will meet your post-secondary plans is essential. It is important that course selections for next year are made carefully.



Photos in this registration guide were taken by newspaper and yearbook staff members.

REGISTRATION PROCESS AND POLICIES

REGISTRATION TIPS

To take full advantage of the educational opportunities offered at Orono High School, all students are required to register for seven courses. 9th-11th grade students may elect to take no more than one study hall per semester as part of their seven courses. Seniors may elect to take no more than two study halls per semester as part of their seven courses.

Students should not count on being able to request/enroll in a specific class after the initial registration period. Therefore, students should register for courses they really have an interest in taking.

Choose with your future in mind.

SOME POINTS TO CONSIDER

What kinds of interests do you have for beyond high school? Ask people in the professions in which you have interests what kind of preparation they would recommend.

Make yourself attractive to the colleges you are interested in attending. Make contact with an admissions representative to see what they are looking for in candidates for their schools, particularly if you are interested in highly selective schools. Check out their websites for a profile of their freshman class as well as required and recommended high school courses.

Ask your counselor, teachers or parents to help. We are all here to assist you.

COURSE CHANGE POLICIES

Schedule change requests will only be processed prior to the start of the school year. The counselors will be available for walk-in hours in August. (Students and parents will be notified of the dates and times). Schedule changes will not be allowed after the beginning of the semester.

Schedule changes will only be made based on the following parameters:

- Seniors who need a course to meet a graduation requirement
- An inappropriate level or sequence placement
- Prerequisites have not been taken
- Any student who has been scheduled into a course they have already taken and passed

On a space-available basis, schedule changes will be made for:

- Any student who has failed a course and needs to retake the course
- Scheduling conflicts that have left an open period in a student's schedule

Schedule changes will NOT be made to:

- Switch sections of the same course to get a different teacher
- Switch sections of the same course to change the semester
- Requested change would exceed class size capacity of a section or cause greater imbalance between sections of the same course

FINAL SCHEDULES

In mid-August all final schedules will be available Online in StudentVue. Students will be responsible for printing a copy of their schedule to bring with them on the first day of school. At this time seniors will receive a copy of their transcript in order to review their progress towards graduation. Freshmen will receive a copy of their schedule at New Student Orientation the week before school begins.

As students begin to review their final schedule they may find alternative courses or study halls were added to their schedule that they hadn't registered for. Please remember that after all course selections are tallied administration bases decisions regarding staffing and scheduling from those initial requests.

There could be several reasons for a student schedule to have different courses or study halls:

1. Two requested courses are offered at the same time and only one can be scheduled. Not all classes are offered every period of the school day leading to scheduling conflicts for some students.
2. Students might have registered for a course in which the number of requests exceeds the number of seats available.
3. Students might have registered for fewer than 14 courses.

GRADUATION REQUIREMENTS

In order to graduate from Orono High School students must meet both credit and state testing requirements. Graduation credit requirements include credits earned in grades 9-12.

Academic Area	Grade	Courses	Credits
ENGLISH (4 credits)	9	English IA & IB - or - Enriched English IA & IB	1.0
	10	American Literature & Composition A & B - or - Enriched American Literature & Composition A & B	1.0
	11	World Literature & Composition A & B - or - AP Literature & Composition A & B	1.0
	12	Senior English Electives	1.0
SOCIAL STUDIES (3.5 credits)	9	American Government	.5
	10	American History - or - AP U.S. History	1.0
	11	World History/Geography or AP World History	1.0
	12	Senior Social Studies Electives	1.0
MATHEMATICS (3 credits)	9-12	See the Math section for information on your specific math sequence	3.0
SCIENCE (3 credits)	9-12	See the Science section for information on your specific science sequence	3.0
PHYSICAL EDUCATION (.5 credit)	9-12	Physical Education I	.5
HEALTH (.5 credit)	9-12	Health	.5
FINE/PERFORMING ARTS (1.0 credit)	9-12	Fine Arts Electives	1.0
ELECTIVES	9-12	See Registration Guide	8.5
		TOTAL CREDITS	24

MINNESOTA STATE ASSESSMENTS

Class of 2019 & Beyond

Students will have the opportunity to participate in a district-provided ACT exam in 11th grade.

Standards-Based Accountability Assessments

The Minnesota Comprehensive Assessments (MCA) are the state tests that help districts measure student progress toward Minnesota's academic standards and also meet the requirements of the Elementary and Secondary Education Act (ESEA).

- 9th grade – Civics test
- 10th grade – MCA Reading Test
- 10th grade – MCA Science Test
- 11th grade – MCA Math Test

GENERAL INFORMATION

CREDIT

Courses are designated as semester or year-long courses. Credit is awarded on a semester basis. A half (.5) credit is granted for successful completion of a semester's work. 24 total credits are required for graduation.

NUMBER OF COURSES REQUIRED/RECOMMENDED

A minimum of six credits, unless you are a senior, must be earned during each of the four years of high school. Only those credits earned in grades 9-12 may be applied toward meeting graduation requirements.

CREDIT OUTSIDE OF ORONO

Students planning to have outside credit applied to their Orono transcript must have their coursework approved by an administrator. Students must complete a credit request form and submit a course description prior to approval for credit. Students planning to complete coursework over the summer must have these forms submitted in the spring prior to enrollment.

EARLY GRADUATION

A student may be certified for early graduation by completing a form requiring signatures of the applicant, applicant's parent(s) or guardian(s), counselor and principal. The forms are available in the guidance office. Applications for early graduation must be completed by November 1 of the year you plan early graduation.

SHORTAGE OF CREDITS

If a student fails a required course, it is the responsibility of the student to make up the deficiency. Students who fail a course should consult with their counselor to discuss credit recovery options. A student may not participate in graduation nor receive a diploma until the required deficiencies are completed.



GRADE POINT AVERAGE

Grade point averages are calculated on an un-weighted 4-point scale for all purposes in the school. A grade point average is calculated by dividing the number of grade points by the number of credits earned.

The weighted average is calculated on a 5-point scale for courses that have honors, accelerated, enriched, Advanced Placement, or College in the Schools as a part of the course title.

Both the standard (un-weighted) and weighted grade point average will be recorded on the student's transcript.

COMPARING GRADING SCALES

Standard Scale	Weighted Scale
A = 4.000	A = 5.000
A- = 3.666	A- = 4.666
B+ = 3.333	B+ = 4.333
B = 3.000	B = 4.000
B- = 2.666	B- = 3.666
C+ = 2.333	C+ = 3.333
C = 2.000	C = 3.000
C- = 1.666	C- = 2.666
D+ = 1.333	D+ = 2.333
D = 1.000	D = 2.000
D- = .666	D- = 1.666

CLASS RANK

Orono High School does not report a class rank on transcripts. Therefore, a student's GPA, college admissions test scores, courses selected in high school, teacher recommendations, and a record of school and community activities form the basis for college admissions decisions. When necessary for scholarships or for admissions decisions made by some colleges, a class rank can be calculated.

MIDDLE SCHOOL STUDENTS & HIGH SCHOOL CREDIT

Middle School students who are assigned to courses at the high school will earn high school credit. They do not earn high school credit for courses that are available at both the middle school and high school.

SCHOOL COUNSELING RESOURCES

Orono High School counselors strive to deliver a proactive and personalized comprehensive guidance curriculum to all students through classroom meetings, small group seminars and individual student/counselor meetings. Over a student's four years at OHS, counselors serve as partners, advisors and advocates, helping each student to accomplish their academic goals. This includes the following:

- Create and implement a four-year college readiness plan
- Set and meet academic and personal goals and help work through challenges
- Take time to reflect on ability, personality, and strengths and match those to post-secondary and career plans
- Build a target list of colleges that are a strong fit for each student and guide students through the application process
- Prepare for personal and academic success during and after high school

You can find more information on the OHS Guidance webpage: <http://sites.google.com/a/orono.k12.mn.us/oronohsguidance/>

Orono High School Counseling Office: 952-449-8412 and 952-449-8413



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ADVANCED PLACEMENT (AP)

AP courses offered at Orono High School:

AP English Lang & Comp
AP English Lit & Comp
AP Psychology
AP US History
AP World History
AP Human Geography
AP Biology

AP Chemistry
AP Physics I
AP Physics C
AP Environmental Science
AP Calculus (AB) I
AP Calculus (BC) II
AP Statistics

AP Spanish Language
AP German Language
AP Music Theory
AP Computer Sci. Principles
AP Seminar
AP Research

The first and most important thing that college admission representatives consider when reviewing a student's application is the rigor of the coursework and the grades earned in those courses. Schools want to see challenging courses that will help a student grow academically. Successfully completing an AP course shows colleges that the student is ready for the rigor of college.

Students earning a qualifying score on an AP exam may be able to earn college credit for introductory coursework and move into advanced studies or pursue a second major or minor.

Students enrolled in AP courses are strongly encouraged to take the corresponding AP exam in May. There will be a fee for each AP exam a student takes. The state generally reimburses the school for the cost of the exams to an extent that varies from year to year. Students will need to pay the difference between the cost of the exam and the amount reimbursed by the state.

AP CAPSTONE

AP Capstone is a College Board program that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions. AP Capstone is comprised of two AP courses - AP Seminar and AP Research - and is designed to complement and enhance the discipline-specific study in other AP course. AP Capstone gives first-time AP students exposure and practice with argument-based writing skills necessary to be successful in college-level coursework. Experienced AP students benefit from the unique research opportunities, allowing them to deepen learning in their content areas of interest.

In the 2018-2019 school year, OHS will offer **AP Seminar**, a year-long course that has students investigate real-world

issues from multiple perspectives. Students learn to synthesize information from different sources, develop their own lines of reasoning in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team.

The second course in the series, **AP Research**, will be offered in the 2019-2020 school year. AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question. Students will further develop their skills by practicing research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic paper of 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.



COLLEGE IN THE SCHOOLS (CIS)

College in the Schools (CIS) courses are college courses offered at OHS in partnership with the University of Minnesota. The curriculum is identical in content to the U of MN equivalent course and is taught by an OHS teacher. Students who successfully complete CIS courses generate both high school and U of MN credit. These credits can be applied to a degree at the U of MN or transferred to many other colleges around the country. Students will want to ask their prospective colleges if they will accept the credit and what documentation will be needed.

CIS courses offered at OHS:

Honors Political Science

College credit may also be earned at specific colleges in the following OHS courses:

Computer Applications for College

College Accounting

Introduction to Engineering Design

Computer Integrated Manufacturing

Principles of Engineering

Engineering Design and Development

OTHER LEARNING OPPORTUNITIES

POST-SECONDARY ENROLLMENT OPTIONS (PSEO)

Postsecondary Enrollment Options (PSEO) is a program that allows 10th-, 11th- and 12th-grade students to earn both high school and college credit while still in high school, through enrollment in and successful completion of college-level, nonsectarian courses at eligible participating postsecondary institutions. Most PSEO courses are offered on the campus of the postsecondary institution; some courses are offered online. Each participating college or university sets its own requirements for enrollment into the PSEO courses. Eleventh and 12th-grade students may take PSEO courses on a full- or part-time basis; 10th graders may take one career/technical PSEO course. If they earn at least a grade C in that class, they may take additional PSEO courses.

There is no charge to PSEO students for tuition, books or fees for items that are required to participate in a course. Students must meet the PSEO residency and eligibility requirements and abide by participation limits specified in Minnesota Statutes, section 124D.09. Funds are available to help pay transportation expenses for qualifying students to participate in PSEO courses on college campuses. Schools must provide information to all students in grades 8-11 and their families by March 1, every year. Students must notify their school by May 30 if they want to participate in PSEO for the following school year. For current information about the PSEO program, visit the Minnesota Department of Education's Postsecondary Enrollment Options (PSEO) webpage.

Interested students can find more information by going to the guidance website or to <http://education.state.mn.us/MDE/StuSuc/CollReadi/PSEO/index.html>.

HENNEPIN TECHNICAL PATHWAYS

Juniors and seniors have the opportunity to take technical pathways courses at Hennepin Technical College in Eden Prairie. Intermediate District 287's Career Courses focus on career skill development experiences and exploration. Career courses are designed to assist students in making career decisions. Hands-on instruction is emphasized. Each course offers a broad array of information from similar careers within an industry. From here, students could branch off into a major for their college career choice. OHS provides transportation to the 12:10 p.m. section. Students, with parent permission, can drive themselves. Students who are interested should see their counselor. For course descriptions please go to the Hennepin Technical Pathways section of the registration book.

Pathways courses OFFERED:

- Construction
- Culinary Arts
- Law Enforcement
- Nursing Assistant
- Health Careers
- Auto Body Repair
- Advanced Auto Body Repair
- Automotive Technology
- Outdoor Motorsports/Power Equipment
- Intro to Technology Integration

PROJECT LEAD THE WAY (PLTW)

The PLTW Innovation Zone (aka the classroom) is an engaging and thought-provoking place where students develop critical thinking skills through hands-on project-based learning, preparing them to take on real-world challenges. Students will have the opportunity to create,

OTHER LEARNING OPPORTUNITIES

design and build things like robots and cars, applying what they are learning in math and science to the world's grand challenges.

PLTW's comprehensive curriculum emphasizes critical thinking, creativity, innovation, and real-world problem solving. The hands-on, project-based program engages students on multiple levels, exposes them to subjects that they typically would not pursue, provides them with a strong foundation for achieving their academic goals in any chosen field of study, and establishes a proven path to college and career success in STEM (Science, Technology, Engineering and Math) related industries.

On completion of all PLTW courses, students with a minimum grade of a B and a score of 5 or higher on the final are eligible for 3 semester credits from SCSU.

PLTW courses offered at OHS:

- Introduction to Engineering Design (IED)
- Principles of Engineering (POE)
- Computer Integrated Manufacturing (CIM)
- Engineering Design and Development (EDD)

For course descriptions and information, please go to the Technology section of the registration guide.

ONLINE LEARNING

Online learning provides a unique way for students to continue, expand or enhance their education. Online learning offers students the ability to engage in learning opportunities they have not had access to before. Orono High School offers its own online learning programs, but others are available through approved providers, including colleges and universities. Check with the counselors to learn more about Online learning options.



TESTING FOR CREDIT

Students who are interested in testing for credit must apply in the guidance office at least four weeks prior to the start of that course. A written contract between student, teacher, and counselor must be completed prior to approval. Depending on the subject a written, oral and/or a practical exam may be required. Successful completion of all course objectives is expected. More information is available from your counselor.

INDEPENDENT STUDY

Independent study programs provide the opportunity for students to enhance their learning programs, or to otherwise meet particular learning needs. Independent Study courses require cooperation and approval from a faculty member. Students are allowed to take no more than one Independent Study course per semester. Check with your counselor with any questions.

HONORS MENTOR CONNECTION

Honors Mentor Connection (HMC) is a rigorous academic course offering by Intermediate District 287's Gifted Education Services. HMC provides talented high school students the opportunity to participate in advanced study in an area of interest under the guidance of a professional in the field. Students who are accepted in the program must be able to free up the last two periods of their day. 2.0 high school credits are awarded for a full year of participation.

NOTE: This program is particularly suited to students with research interests in math, science, and/or engineering, as it may provide them the opportunity to enter into national competitions. Past OHS students have also pursued mentorships in the area of fine and performing arts. For more detailed information about the program go to: www.district287.org and search for HMC.

SILC – SENIOR INSTRUCTIONAL LEADERSHIP CORPS

This is an opportunity during spring semester of senior year. Selected students work with a teacher in an instructional capacity, designing lessons, leading discussions, preparing materials, helping individual students, and the like. To be considered for this semester course, students must complete an application form. An assessment of candidates' attendance and citizenship records, along with their academic profiles and status with regard to graduation, will be factors considered when selecting students for this course.

PLANNING FOR AFTER HIGH SCHOOL

FOUR-YEAR COLLEGES AND UNIVERSITIES

Four-year colleges and universities offer courses and programs leading to Bachelors, Masters and advanced degrees.

On average, 80-84 percent of OHS graduates attend a four- year institution after graduation. Being ready for college study means adequate preparation in English, social studies, mathematics and science. Most colleges require study of a second language. The more selective the college, the more preparation they expect in these academic disciplines.

Students and parents are encouraged to research the colleges and universities in which they have an interest. This research can be done via Family Connection as well as visiting the college websites directly.

Other reference materials are available in the College Resource Room of the Media Center and in the Guidance Office. The examples in the chart to the right are intended to show the differences between colleges in terms of their respective admission requirements.

NCAA ELIGIBILITY CENTER

Students who plan to participate in Division I or Division II athletics need to be certified by the NCAA Eligibility Center. To be certified as an amateur student athlete high school students must meet core course, GPA and ACT/SAT requirements as set by the Eligibility Center. A list of OHS courses that have been approved by the NCAA Eligibility Center can be found at www.eligibilitycenter.org. Our high school code is 241-410.

Students are responsible for assuring that they meet the Eligibility Center's academic requirements in order to participate in intercollegiate athletics. Please notify your counselor as soon as possible of your intent to participate in college-level athletics and they can help ensure you are taking approved courses.

Prospective student athletes can register and find helpful information at: www.eligibilitycenter.org.

COLLEGE ADMISSION REQUIREMENTS

OHS Graduation credit requirements		MN State Universities (Mankato, St. Cloud)	U of MN out state campuses (Duluth, Crookston)	Private Colleges & Universities (Gustavus)	U of MN (Twin Cities) or UW (Madison)
4	Language Arts	4	4	4	4
3.5	Social Studies	3	3	3	4
3	Math	3	3	3	4
3	Science	3	3	3	3
-	World Language	2	2	2	2*
.5	Physical Education	-	-	-	-
.5	Health	-	-	-	-
1.0	Fine Arts	1	1	-	1

*While world language is not a graduation requirement, it is however, an admission requirement for the majority of four-year colleges/universities.

You are recommended to take at least 2 years of a single world language to satisfy that college admission requirement.

PLANNING FOR AFTER HIGH SCHOOL

COMMUNITY AND TECHNICAL COLLEGES

Technical and community colleges offer numerous one- and two-year programs. As a full-time student, you can graduate in two years or less with a certificate, diploma or degree in a career area. Or you can earn an Associate degree and then transfer to a university to finish a Bachelor's degree. Admission requirements at a technical or community colleges are less demanding (typically they require your high school diploma or GED) and tuition costs may be lower than at some four-year colleges and universities.

GAP YEAR

A Gap Year is a period of time between completing high school and beginning college when a student steps outside the traditional classroom experience. This is a time to explore the world, reflect on their personal values and goals, and prepare to take the next purposeful step in life. For many students, a Gap Year provides them with time to develop independence and confidence as well as pursue various fields of interest. Almost all Gap Year programs

have a focus on education, service and personal growth. Many colleges allow students to defer their enrollment for one year if a Gap Year experience is planned, check with your college or university to see if this option is available.

MILITARY SERVICE

For some students, the military offers them an opportunity to serve their country, obtain job training, and pursue a college education. Each branch has specific regulations and requirements to enlist. Students should research options thoroughly and understand the legal ramifications before signing a contract. Students can also meet with military recruiters when they visit OHS.

CAREER/ WORK

Some students plan to enter the work force immediately following graduation. Students can find career information in Family Connection. They can also talk with their counselor about completing a job search, creating a resume and finding other job related resources.



DEPARTMENTS

BUSINESS & MARKETING

INTRODUCTION TO BUSINESS – GRADES 9 & 10 (SEMESTER)

This course is designed to provide students with an introduction to the world of personal financial management. Topics include: stock market and investment options, consumer credit, banking services, budgeting, personal record keeping and economics. The course will be most helpful to you as an individual and as a background course for future business courses.

COMPUTER APPLICATIONS FOR COLLEGE – GRADES 9, 10, 11 & 12 (SEMESTER)

This course develops computer literacy and emphasizes its importance in today's society. Through hands-on experience, students will gain an understanding of computer concepts, capabilities, and applications, and will be able to implement this knowledge in their professional and personal lives. Computer applications include word processing, spreadsheets, presentation graphics, databases, Windows/operating system, email use and management, folder and file organization, and use of the internet. Computer concepts include understanding the basic hardware components of a computer, how a computer works, computer files and storage, application programs, input and output devices, how we store information, and internet basics. Hands-on experience will be provided on networked computers in the Windows environment using the most current version of Microsoft Office Suite, including Word, Xcel, Access, and PowerPoint. Knowledge of the keyboard is recommended for this course. Check with your instructor for the software edition that will be used. *This class is offered concurrently with the CIS1101 Business Computer Systems I from North Hennepin Community College. Students will be earning credit*

both from Orono High School and at North Hennepin Community College.

INTRODUCTION TO PROGRAMMING – GRADES 9, 10, 11 & 12 (SEMESTER)

This course is designed to introduce students to the fundamental concepts of programming, including language syntax, control structures, and the structure of a program. This course provides students with a basic foundation in planning and creating interactive windows applications using the task-driven, object-oriented programming language, Java. A variety of languages will be introduced, including HTML and Java.

ACCOUNTING A & B – GRADES 10, 11 & 12 (YEAR)

This course is for any student interested in how businesses maintain their financial records or in maintaining their own personal financial records. It is especially pertinent for students with the following career objectives: Business Administration, Computer Science, Law, Accounting, Marketing, Self-Employment/Entrepreneurship, International Business, Banking and Finance, Administrative Assistant, and many entry-level positions in business. In the second semester, students will learn computerized accounting in a networked lab setting.

AP COMPUTER SCIENCE PRINCIPLES A & B – GRADES 10, 11 & 12 (YEAR)

Computing affects almost all aspects of modern life and all students deserve access to a computing education that prepares them to pursue the wide array of intellectual and career opportunities that computing has made possible. Computer



BUSINESS & MARKETING

Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics, such as programming, algorithms, the Internet, big data, digital privacy, and the societal impacts of computing.

COLLEGE ACCOUNTING – GRADES 11 & 12 (YEAR)

This course uses an integrated approach to teaching accounting. Students first learn how businesses plan for and evaluate their operating, financing, and investing decisions and then how accounting systems gather and provide data to internal and external decision makers. This course covers all the learning objectives of a traditional college level financial accounting course, plus those from a managerial accounting course. Topics include an introduction to accounting, accounting information systems, time value of money, and accounting for merchandising firms, sales and receivables, fixed assets, debt and equity. Other topics include statement of cash flows, financial ratios, cost volume profit analysis and variance analysis. Students will take an exam in May. Students may earn transferable 4 college credits for Financial Accounting from North Hennepin Community College. This course may replace most financial accounting courses required for a business degree.

CONSUMER ECONOMICS – GRADES 11 & 12 (SEMESTER)

People are faced with more problems than ever before in being an ordinary consumer. Many find out the answers to questions too late and make serious mistakes that cost them a great deal of money and inconvenience. It is hoped that this course will help students make decisions and adjustments in consumer techniques, which help them meet the problems and responsibilities of adult life. Consumer study units include: (1) banking services, such as checking and savings accounts and loans; (2) personal and family protection through auto, home, health and life insurance; (3) budgeting and money management; (4) consumer protection and assistance; (5) consumer credit; (6) new and used car buying; (7) various economic systems; (8) other current consumer topics.

MARKETING IA & IB – GRADES 11 & 12 (YEAR)

Marketing 1 offers the student the opportunity to explore career possibilities and gain knowledge and skills in the areas of marketing, merchandising, business etiquette, salesmanship, advertising and promotion, business ownership, management, human relations, and leadership. Students are given an opportunity to apply classroom principles by operating the student store throughout the school year. Membership in this class enables students to participate in DECA competitive events. This is an excellent course for students who would like to explore the options that exist in business or have decided to pursue a career in business and marketing. Students who enroll in this course will become more effective and comfortable when speaking to and interacting with others. Students in this



course have the option of participating in DECA competitive events. DECA is an international organization for students enrolled in Marketing. All DECA participants must be enrolled in a Marketing class.

MARKETING IIA & IIB – GRADE 12 (YEAR)

Prerequisite: Marketing IA and Marketing IB

Marketing 2 offers the student interested in a business career added exposure to the fields of marketing, merchandising, entrepreneurship, and management. The course puts the student in the management viewpoint for making basic business decisions. This is an excellent course for students planning to major in business fields. Topics covered include entrepreneurship, management principles, merchandising, sales promotion, market research, business applications with computers, and a career project that includes the development of the necessary paperwork to seek employment. A major project is an entrepreneurship project through which the student creates a plan to start a business or a community-based project. This project is completed during the 1st semester and students are expected to participate in DECA competition.

MARKETING & MANAGEMENT SEMINAR INTERNSHIP – GRADE 12 (SEMESTER/YEAR)

Prerequisite: Currently enrolled in Marketing II and Instructor approval required.

Marketing & Management Seminar Internship is a program that provides students with the opportunity to explore a marketing-based career field or interest through a paid or non-paid internship. Students will develop a professional portfolio that includes samples of their work and information gathered from the internship experience. Students are eligible to be dismissed from school after 4th period classes to attend their internship. All internship positions must be approved by the course instructor. Students are required to maintain a minimum of 15 working hours per week.

ENGLISH

MINIMUM HIGH SCHOOL GRADUATION REQUIREMENTS:

FRESHMAN: English IA, IB (YEAR) - **or** - Enriched English IA, IB (YEAR)

SOPHOMORE: American Literature & Composition A, B (YEAR) - **or** - Enriched American Literature & Composition A, B (YEAR)

JUNIOR: World Literature & Composition A, B (YEAR) - **or** - AP Literature & Composition (YEAR)

SENIOR: AP Language & Composition (YEAR) - **or** - Two SEMESTER English electives

Juniors and seniors may carry more than one English class per semester if class size permits.

COLLEGE REQUIREMENTS:

Some colleges have restrictive requirements. Please check with your college or counselor for specifics. If you have any questions about the level of difficulty of these classes, please see an English teacher or counselor. Some courses are designed for students with difficulties in English. PLEASE CHECK individual course descriptions for this information.

REQUIRED COURSE SELECTIONS:

ELL (ENGLISH LANGUAGE LEARNERS)/ESL (ENGLISH AS A SECOND LANGUAGE) IA & B – GRADES 9, 10, 11 & 12 (YEAR)

Prerequisite: Admission and placement in the ELL program is by means of a formal process involving the Home Language Questionnaire (HLQ) and testing, which may include the IDEA Proficiency Test (IPT), the Minnesota Test of Emerging Academic English (TEAE), and the Minnesota Student Oral Language observation Matrix (MNSOLOM).

This course is designed for students whose home language is other than English. The primary goals are the acquisition of listening, speaking, reading and writing skills, including basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). Cultural adjustment and success in mainstream classes are also emphasized. A student may enroll in this class for up to four years, depending on his/her level of English proficiency and individual needs. The ultimate goal of ELL is to help students acquire the ability to participate fully in the total school program.

ENGLISH IA & IB – GRADE 9 (YEAR)

This course will emphasize the development of thinking, reading, and writing skills through the study of short stories, Harper Lee's novel *To Kill a Mockingbird*, the play *Romeo and Juliet*, and contemporary nonfiction books. As students write expository, analytical, and creative compositions, they will further their understanding of grammar, punctuation, usage, and spelling. Vocabulary and literary terms will be studied in context. Students will learn effective research skills, and will write an investigative report after finding credible sources and researching the best information from those sources. Nonfiction writing is emphasized and will be analyzed for author's purpose and style. Students will write for a variety of purposes and audiences, and will be expected to complete a number of independent reading projects.

ENRICHED ENGLISH IA & IB – GRADE 9 (YEAR)

This course fosters the thoughtful examination of literature through the theme of ethics and decision-making. Students study novels such as *To Kill a Mockingbird* and *Frankenstein*, Shakespearean dramas, nonfiction literature, a variety of short stories, and poetry. Students spend considerable time analyzing

literature through discussions, creative projects, presentations, and formal essays. Research skills are taught and practiced, including how to evaluate the credibility of sources. Nonfiction writing will be analyzed for author's purpose and style, and students will write their own nonfiction pieces. Vocabulary building and ongoing development of proficiency in grammar, punctuation, and usage are also featured. A significant amount of independent reading is expected throughout the year.

Note: Summer preparatory work is required for this class.

AMERICAN LITERATURE & COMPOSITION A & B – GRADE 10 (YEAR)

This course is designed to build on the reading, writing, thinking and speaking skills developed in English I through the study of American literature. The genres of speeches, essays, poetry, and novels will be explored while promoting critical thinking and analysis of these American works. Exposure to analysis of this literature will provide valuable literary background, cultural and media literacy, and historical perspective in relationship to content studied in American history courses in the Social Studies Department. The course will focus on a variety of analytical perspectives that will encourage critical thinking, discussion, and writing about literature. Major works of study include: *The Adventures of Huckleberry Finn*, *The Great Gatsby*, short stories, essays, speeches and poems by well-known American authors, and contemporary American literature circles on both nonfiction books and novels. Writing and mastery of composition will be heavily emphasized throughout the course, including emulation, personal narrative, poetry, and inquiry/researched argumentative and literary essays. Vocabulary, grammar, and usage are also areas of study.

ENRICHED AMERICAN LITERATURE & COMPOSITION A & B – GRADE 10 (YEAR)

Prerequisite: High School recommendation based on grades earned in Grade 9 English courses and standardized test scores.

This accelerated and expanded course is designed to build on the reading, writing, thinking, and speaking skills developed in English I or Enriched English I through the study of literature from the United States. It will be assumed that students have successfully completed Enriched English I or English I and retain core knowledge from one of those courses. This course

ENGLISH

will be both rigorous and challenging. It will require serious commitment. A clear understanding of the basic elements of composition and a familiarity with literary elements will be assumed. The genres of short story, essays, poetry, novels, and drama will all be explored while promoting critical thinking and analysis of these works. Exposure to analysis of this literature will provide valuable literary background, cultural and media literacy, and historical perspective in relationship to content studied in U.S. history courses in the Social Studies Department. The course will focus on a variety of analytical perspectives that will encourage critical thinking and writing about literature. Major works of study include: *The Crucible*, *Huckleberry Finn*, and *The Great Gatsby*, and independent readings of contemporary American novels. Writing and mastery of composition will be heavily emphasized throughout the course, including response writing, personal narrative, poetry, and inquiry/researched argumentative and literary essays. Vocabulary, grammar, and usage are also areas of study. *Note: Assigned coursework will need to be completed over the summer and handed in on the first day of class in the fall.*

WORLD LITERATURE & COMPOSITION A & B – GRADE 11 (YEAR)

This course is designed to build on the reading, writing, thinking, and speaking skills developed in English I and American Literature and Composition through the study of world literature. The genres of epic, short story, essays, poetry, novel and drama will all be explored while promoting critical thinking and analysis of these global works. Exposure to analysis of world literature will provide valuable literary background, cultural and media literacy, and historical perspective in relationship to content studied in world history courses in the Social Studies Department. The course will focus on a variety of global perspectives that will encourage critical thinking, discussion, and writing about world literature and global issues. Major works of study include: *The Odyssey*, *Antigone*, British literature circles, *Candide*, post-colonial literature circles, and *1984* and *Brave New World*. Writing and mastery of composition will be heavily emphasized throughout



the course, including narrative, argumentative and literary essays. Vocabulary, grammar, and usage are also areas of study.

AP LITERATURE AND COMPOSITION A & B – GRADE 11 (YEAR)

Prerequisite: High school recommendation based on grades earned in English courses & standardized test scores.

This course, suitable for college-bound students who have a strong interest in literature, focuses on close, critical readings of complex works of fiction, poetry, epic poetry, and drama. Students will read approximately 9-10 major works of literature, plus sections of short stories and poems, and will analyze these works in extensive class discussions and numerous critical essays. The course library is drawn from world literature and the curriculum will generally follow the chronology of history so that students have opportunities for richly rewarding interdisciplinary learning experiences with the world history courses most students take concurrently in the Social Studies Department. Students must enroll in both semesters of the course in the same year. The course prepares students both for college literature and composition classes and for the AP Exam in May. Students who perform well on the exam may earn college credit.

Note: Summer preparatory work is required for this class.

ELECTIVE COURSE OFFERINGS:

All fall senior-level English elective courses will contain a three-week Senior Seminar dedicated to assisting students with writing a college admissions essay and a professional resume in time for the early action and early decision dates many colleges/universities require by November.

AP LANGUAGE AND COMPOSITION A & B – GRADE 12 (YEAR)

Prerequisite: High school recommendation based on grades earned in English courses & standardized test scores.

This course, suitable for college-bound students, engages learners in becoming more skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Students will read 5-6 works of non-fiction and will analyze these works in extensive class discussions and numerous critical essays. Students must enroll in both semesters of the course in

the same year. The course prepares students both for college language and composition courses and for the AP Exam in May. Students who perform well on the exam may earn college credit. *Note: Summer preparatory work is required for this class.*

CREATIVE WRITING – GRADE 12 (SEMESTER)

Creative Writing is a single-semester elective in English that is designed to not only enrich students' ability to both recognize and understand different perspectives or viewpoints but to also provide them opportunities and skill-sets to express varying perspectives. The class is built upon the truth that most of the

ENGLISH

time we learn of distinct perspectives and are able to express our individual perspectives through narrative, which is essentially story-telling. Focusing questions for the class include: How does narrative work? What makes different narratives work differently? How does the creative writing process work? The class will include exercises in writing poetry, fiction, and personal nonfiction. Students will read exemplary stories, poems, and plays.

FILM STUDIES: THE WESTERN – GRADES 11 & 12 (SEMESTER)

This course studies film through the lens of the Western genre. We will study how these particular films reflect the time period in which they were created, as well as the change that art can stimulate in a culture. This class is resource rich, with many articles and several movies. Successful students are self-directed, able readers and writers, and fluent with technology. This semester-length course can be taken for either a Fine Arts or English credit.

HUMANITIES – GRADES 11 & 12 (SEMESTER)

Any course in the Humanities aspires to an integrated study of the art, literature, music, drama, philosophy and history, as well as other fields of study that comprise human culture. This course is a semester-long elective for English credit that seeks to enrich our understanding of human nature, our understanding of human roles and behavior, and our understanding of human ideals through a critical study of some of the most significant cultural benchmarks in Western civilization from the Renaissance to the era of Romanticism, from Dante to Voltaire. Through the critical study of the era's art, music, literature, and philosophy we can better know our society and ourselves.

INTRODUCTION TO ANTHROPOLOGY: INTERPRETATIONS OF HUMANITY– GRADES 11 & 12 (SEMESTER)

A college level, lecture-based course, Anthropology seeks to utilize various sciences in the exploration of what it means to be human. Incorporating films, guest speakers, poetry, mythology, scientific nonfiction, and varied readings from pop culture and media, the course is designed to challenge assumptions and create multiple perspectives about who we are, where we came from, and where we are going as a species. The development of a disciplined mind and one's own confidence in reason will be a consistent emphasis. Students should anticipate a rigorous intellectual environment, including daily readings. As per the nature and size of the class, individuals will be completely accountable for their own academic success. Intrinsic effort and motivation are required. Seniors may opt to take this course as a Social Studies or an English credit. Once a student registers for one we cannot at a later date switch it to the other.

JOURNALISM I: MEDIA STUDIES & NEWS WRITING – GRADES 11 & 12 (SEMESTER)

Journalism I is designed for students to learn about the many components of the media, as well as practice journalistic



reporting and writing. This class will focus on informative article writing, but students will also study the history of journalism, evolution of mass media, and ethical principles that guide journalists. Besides developing their own journalistic skills, students will learn to become critical consumers of media. The class will discuss the functions of journalism in society today and evaluate whether journalists fulfill these roles. Students will practice organization and time-management skills while they investigate and write articles of different genres (news, sports, reviews, opinions, features). Students will propose article ideas, then complete research and interviews to be used in writing a variety of newsworthy articles relevant to the Orono community.

Note: Students will need to successfully complete this course as a prerequisite for Journalism II.

JOURNALISM IIA & IIB: NEWSPAPER, BROADCAST & ONLINE MEDIA – GRADES 11 & 12 (YEAR)

Prerequisite: Grade of B or higher in Journalism I and instructor approval required.

Journalism II engages students in all the aspects of creating and publishing the OHS school newspaper, *The Spartan Speaks*, both print and online at www.spartanspeaks.com. Students will hone their journalistic skills while deciding what stories need telling, then informing students, staff and the Orono community. They will be editors, designers, writers, broadcasters and photographers for the newspaper, website and on social media sites. In this course, students will develop their organization and time-management skills while investigating, writing and producing interesting stories in several formats including articles, infographics, photo slideshows, broadcasts and videos. Students will learn and use Google Apps, InDesign, Photoshop, Piktochart, and Word Press. This course will also discuss careers in the journalism industry and how to prepare for these careers. Students who are accepted in this course should be advised that it requires a significant commitment outside of class. This course may be taken as a Fine Arts or English credit.

ENGLISH

PHOTOJOURNALISM – GRADE 12 (SEMESTER)

Prerequisite: Instructor approval required.

In this course, students will learn about all that goes into the development of the **2018 Spartan Annual**. They will develop story ideas and angles while studying journalistic styles of writing and producing articles for the **2019 Spartan Annual**. Students will also complete technical writing in relation to the technology and equipment utilized in producing this publication. Additionally, students will design advertisements and write business letters to local businesses. Purpose and audience will be a primary focus as students determine appropriate and inappropriate material for publication. Editing and proofreading are heavily emphasized. Beyond writing, students will also engage in photography, design, and marketing. Students who are accepted in this course should be advised that it requires a significant commitment outside of class. This course may be taken as a Fine Arts or English credit.

PUBLIC SPEAKING AND COMMUNICATION – GRADES 11 & 12 (SEMESTER)

This course is an introduction to speech communications

with a focus on freedom of speech, group and interpersonal communications and formal public speaking. Students will research, prepare, and give a variety of timed formal speeches. Along with this, they will learn about critical communication sessions in small group communication and interpersonal skills. This class is for all levels of communicators. This class provides an excellent opportunity for students to build confidence in lifetime communication skills needed for social and work settings.

VISUAL LITERACY/GRAPHIC NOVEL – GRADES 11 & 12 (SEMESTER)

This class will focus on the importance of seeing and understanding the icons and symbols around us. We will examine strategies for reading images, and then practice them. We will use these tools to study images used in our world, such as advertising, and then read and interpret two or three graphic novel works as a class, as well as a graphic novel free-choice project. There will be daily work, and at least two tests. This course may be taken as a Fine Arts or English credit.

FINE AND PERFORMING ARTS

ART FUNDAMENTALS – GRADES 9, 10, 11, & 12 (SEMESTER)

This course is an excellent way to experience a variety of media for beginning art students. Students will learn about the post modern art principles through art production, aesthetics, art history, and discussion.

DRAWING I – GRADES 9, 10, 11, & 12 (SEMESTER)

Students will work in a wide variety of media using both traditional and non-traditional methods. This class is recommended for those that like to draw and wish to enhance their skills through observation, practice and experimentation.

DRAWING II – GRADES 9, 10, 11, & 12 (SEMESTER)

Prerequisite: Drawing I (Students must have obtained a C+ or higher in Drawing I)

Students will further develop their drawing skills by exploring the human form and nature using both wet and dry media. Emphasis will be placed on each student developing their “artistic voice” through experimentation and abstraction. The work of 20th and 21st century art and artists will be examined, discussed and explored as it relates to drawing and painting.

PAINTING – GRADES 10, 11 & 12 (SEMESTER) — Offered 2017-2018

Course is offered every other year, alternating with Ceramics III.

Prerequisite: Drawing I and II (Students must have obtained a C+ or higher in both prerequisites).

Painting students will refresh their drawing skills and learn about color. Painting will be explored through a wide variety



of media such as watercolor, acrylic, ink, and mixed media. Art history, art criticism, and aesthetics will be covered in the class as it relates to painting.

CERAMICS I – GRADES 10, 11 & 12 (SEMESTER)

This course is designed to introduce students to hand building functional and decorative art via the use of slab, coil, sculpture, pinch. The historical and cultural origins of ceramics will be studied.

CERAMICS II – GRADES 10, 11 & 12 (SEMESTER)

Prerequisite: Students must have earned a minimum of B- in Ceramics I
Students will continue their study of ceramics with further expansion and refinement of hand building techniques to

FINE AND PERFORMING ARTS

include tile-making and mosaic design. They will learn beginning wheel-throwing techniques to enable them to create functional forms such as cups, mugs, bowls, and more. Emphasis is placed on skill development and creative expression.

CERAMICS III - GRADES 11-12 — Offered 2018-2019

Course is offered every other year, alternating with Painting.

Prerequisite: Ceramics I and II (Must have a B- in Ceramics II)

In this course students will be expanding upon wheel throwing skills begun in Ceramics II, and hand building and sculptural skills begun in Ceramics I for creating both functional and non-functional ware. Students will examine both contemporary and historical ceramic art with regards to form, function and expression. They will reinvent historical forms and create original ceramic works that demonstrate their skill, imagination and interests.

ADVANCED STUDIO ART IA & IB – GRADES 11 & 12 (SEMESTER)

Prerequisite: Students must have earned a B+ or higher in all art courses offered and obtain instructor written permission.

This course is designed for juniors and seniors who have

completed at least three of the art course offerings with a B+ or higher grade and are planning to study some type of art at the college level. Students will work independently in the media of their choice on three major projects they have designed. In addition, there are requirements such as attending exhibitions, participating in contests, and assisting with art related events during the semester. A digital portfolio will be created for contests, scholarships and college applications.

INDEPENDENT ART – GRADES 11 & 12 (SEMESTER)

Prerequisite: Art Fundamentals or Drawing (B+ or higher) and written permission from the instructor.

Students must have earned a B+ or higher in their prerequisites and obtain written permission from the instructor. This course is designed for art students who are already advanced in a particular medium or who are working in a medium not offered at OHS. Students must arrange to take an advanced class outside of OHS in their field of expertise during the semester prior, and must obtain instructor approval. There are additional requirements such as exhibition attendance, contest participation, and assistance with art-related events.

DRAMA

Acting classes fulfill graduation requirements related to Fine and Performing Arts. They are not considered English electives.

ACTING I – GRADES 9, 10, 11 & 12 (SEMESTER)

This course will introduce students to the theatre, acting, and the interpretation of dramatic literature. Content includes relaxation and concentration techniques, stage movement and sensory awareness, improvisation, the acting process, characterization, and the development of performance techniques. Course work will include daily homework, reading, memorization of scripts, rehearsal, and writing a 3-5 page essay.

ACTING II – GRADES 9, 10, 11 & 12 (SEMESTER)

Prerequisite: Acting I

This course is an in-depth exploration of the acting process and the interpretation of major periods in dramatic literature. Content includes the Stanislavski/Method technique, voice, movement, gesture, characterization, and the following major genres of dramatic literature: Classical Greece, Commedia del Arte, Shakespeare, Moliere, and Modern Realism. Course work will include daily homework, reading, memorization, rehearsal and several written assignments.

TECHNICAL THEATER – GRADES 9, 10, 11 & 12 (SEMESTER)

This course will introduce students to stagecraft, the technical aspects of producing a play, and the organization of a theater's technical staff. Sound design and production, lighting design and technique, and scene painting will be covered. Students will receive hands-on experience and will create projects in scene



painting, lighting design and sound. Good time management skills are important.

DIRECTOR'S WORKSHOP – GRADES 10, 11 & 12 (SEMESTER)

Prerequisite: Acting II and instructor's permission.

Experienced theatre students will learn the fundamentals of directing a play for the stage. The course will cover choosing a play for production; studying and preparing a script; working with actors, designers and technicians; and directing for proscenium theaters, arena theaters, and thrust theaters. Students will direct short scenes and, as a final project, a one-act play.

MEDIA ARTS

FILM STUDIES: THE WESTERN – GRADES 11 & 12 (SEMESTER)

This course studies film through the lens of the western genre. We will study how these particular films reflect the time period in which they were created, as well as the change that art can stimulate in a culture. This class is resource rich, with many articles and several movies. Successful students are self-directed, able readers and writers, and fluent with technology. This semester-length course can be taken for either a Fine Arts or English credit.

JOURNALISM IIA & IIB: NEWSPAPER, BROADCAST & ONLINE MEDIA – GRADES 11 & 12 (YEAR)

Prerequisite: Grade of B or higher in Journalism I and instructor approval required.

Journalism II engages students in all the aspects of creating and publishing the OHS school newspaper, *The Spartan Speaks*, both print and online at www.spartanspeaks.com. Students will hone their journalistic skills while deciding what stories need telling, then informing students, staff and the Orono community. They will be editors, designers, writers, broadcasters and photographers for the newspaper, website and on social media sites. In this course, students will develop their organization and time-management skills while investigating, writing and producing interesting stories in several formats including articles, infographics, photo slideshows, broadcasts and videos. Students will learn and use Google Apps, InDesign, Photoshop, Piktochart, and Word Press. This course will also discuss careers in the journalism industry and how to prepare for these careers. Students who are accepted in this course should be advised that it requires a significant commitment outside of class. This course may be taken as a Fine Arts or English credit.

PHOTOJOURNALISM – GRADES 9, 10, 11 & 12 (SEMESTER)

Prerequisite: Application and instructor approval required.

Students will design yearbook page layouts and advertisements using desktop publishing software, learn digital photography techniques and basic elements of graphic design, and determine appropriate and inappropriate material for publication of the **2019 Spartan Annual**. Students will learn and use appropriate terminology and concepts as they relate to desktop publishing. This course may be taken as a Fine Arts or English credit.

VISUAL LITERACY/GRAPHIC NOVEL – GRADES 11 & 12 (SEMESTER)

This class will focus on the importance of seeing and understanding the icons and symbols around us. We will examine strategies for reading images, and then practice them. We will use these tools to study images used in our world, such as advertising, and then read and interpret two or three graphic novel works as a class, as well as a graphic novel free-choice project. There will be daily work, and at least two tests. This semester-length course can be taken for either a Fine Arts or



MUSIC

Teachers will recommend placement in the proper course.

ADVANCED PLACEMENT MUSIC THEORY – GRADES 10, 11, 12 (YEAR)

The AP Music Theory course is a study of advanced music literacy, focusing on aural and written musical skills. This course covers material typically taught at a college freshman level. For students who plan to continue musical studies at the college level, and for those who desire to learn more about music literacy, this course offers an essential opportunity for in-depth study and preparation. Current technological developments are used in the class to provide “state of the art” learning opportunities. It is the goal of this course to gain knowledge of musical elements (melody, harmony, form, rhythm, meter, texture, timbre, etc.) and use this knowledge through various listening, singing, writing, analytical, and creative activities to develop various speaking, listening, reading, and writing skills associated with the language of music. Students will take the AP Music Theory exam in May.

GUITAR STUDIO – GRADES 9, 10, 11, 12 (SEMESTER)

This course provides students an opportunity to explore the basic fundamentals of guitar performance. Students in this class may have little or no prior music experience. During the course, students will learn both the melodic side of the guitar, as well as how to use the guitar as an accompaniment instrument. They will learn how to read and play standard music notation and tablature in first position, how to strum in several different styles, and how to play many standard chord progressions. Students will also gain knowledge in music history and basic music theory in order to enhance their guitar playing skills. School-owned guitars are used for this course, so it is not necessary that students have their own.

BAND – GRADES 9, 10, 11, & 12 (YEAR)

Prerequisite: Audition and instructor approval

Band is an ensemble of musical instruments consisting of

MUSIC

woodwinds, brass, percussion, piano and/or harp, no guitars. Key elements taught in band are music interpretation, performance skills, and music content. The primary objective of the course is excellent performance of music. Students will be required to 1) prepare for weekly lessons, 2) attend required performances, and 3) complete a performance evaluation each quarter. Private lessons outside the school are strongly encouraged. The band performs at least four major concerts each year, as well as at assemblies and commencement. There are three sections of band. Placement will be based on the student's audition. Members of all bands make up the marching band and pep band. All bands share concerts and other band activities.

WIND ENSEMBLE A & B

Wind ensemble is a performance class consisting of standard woodwind, brass, and percussion instruments. Students learn to perform a varied repertoire of music (difficulty level 3-6 on a scale of 1-6) with others and alone. Students learn to read and play music notation, culminating in series of concert performances. Students develop critical evaluation of their performances. Students learn music's relation to its context (i.e., history and culture).

SYMPHONIC BAND A & B

Symphonic Band is a performance class consisting of standard woodwind, brass, and percussion instruments. Students learn to perform a varied repertoire of music (difficulty level 2-5 on a scale of 1-6) with others and alone; learn to read and play music notation, culminating in a series of concert performances. Students develop critical evaluations of their performances. Students learn music's relation to its context (i.e., history and culture).

CONCERT BAND A & B

Concert Band is a performance class consisting of standard woodwind, brass, and percussion instruments. Students learn to perform a varied repertoire of music (difficulty level 2-4 on a scale of 1-6) with others and alone; learn to read and play music notation, culminating in series of concert performances. Students develop critical evaluations of their performances. Students learn music's relation to its context (i.e., history and culture).

CHOIR – GRADES 9, 10, 11, & 12 (YEAR)

Choirs at Orono High School include a mixed ensemble of men and women, and gender-based ensembles of men and women. Students in choir will be able to demonstrate correct singing techniques and skills, exhibit proper rehearsal and concert etiquette, gain a greater independence in performing music, and will sing a wide variety of choral repertoire.

SPARTAN CHOIR A & B – GRADES 9, 10, 11, & 12 (YEAR)

Spartan Choir is an ensemble of tenor and bass voices that includes students who want the opportunity to experience singing in a large group. While this course is designed for the 9th grade tenor/bass voice, it is open to older students with little to no prior singing experience. Members of this group must be willing to explore their singing voices and choral literature. Students will develop their singing skills and will learn the basics of music notation and sight singing. Spartan Choir will perform four concerts per year. All performances are mandatory.

TREBLE CHOIR A & B – GRADES 9, 10, 11, & 12

Treble Choir is an ensemble of soprano and alto voices that



MUSIC

includes students who want the opportunity to experience singing in a large group. While this course is designed for the 9th grade soprano/alto voice, it is open to older students with little to no prior singing experience. Members of this group must be willing to explore their singing voices and choral literature. Students will develop their singing skills and will learn the basics of music notation and sight singing. Treble Choir will perform four concerts per year. All performances are mandatory.

CONCERT CHOIR A & B – GRADES 9, 10, 11 & 12

Prerequisite: Audition and Instructor Approval

Concert Choir is an auditioned ensemble of mixed voices. Students should have enrolled for at least one year in a choir. Students will study, rehearse, and perform music of varying styles and will develop sight singing skills and music theory

knowledge. Concert Choir will perform four concerts per school year and will participate in the Minnesota State High School League events. All performances are mandatory.

CHAMBER CHOIR A & B – GRADES 10, 11 & 12

Prerequisite: Audition and Instructor Approval

Chamber Choir is an advanced auditioned ensemble of mixed voices. Students should have enrolled for at least one year in a choir. Students will study, rehearse, and perform music of varying styles and will further develop sight singing skills and music theory knowledge. Chamber Choir will have many performances throughout the school year at both school-sponsored and community functions. This group will participate in the Minnesota State High School League events and other festivals throughout the school year. All performances are mandatory.

HENNEPIN TECHNICAL CAREER PATHWAYS

CONSTRUCTION (FALL OR SPRING)

The goal of this course is to provide students with experiences and examples of the construction industry that will allow them to assess their own abilities and interests in the various construction disciplines. Students will participate in classroom, shop, and house-project activities. The activities in the shop and house project will allow the students to have hands-on opportunities in many construction disciplines. This experience will allow students to make informed career decisions for the future, while providing them with a useful background in the construction industry.

Note: There is a lab fee for this course.

CULINARY ARTS (FALL)

This course is intended to introduce students to a variety of careers in the food service industry. Students will experience a number of career areas through both technical and hands-on skills. Employment opportunities and career advancement will be discussed and explored. Food preparation experiences will range from the very basic to gourmet. Students will also explore some specialty career areas within the food service industry.

Note: There is a lab fee for this course.

CULINARY ARTS (SPRING)

This course offers a more advanced level of culinary training tailored to the standards of the culinary industry. Students will be expected to perform at entry-level industry standards. Hands-on activities are about 70 percent of the coursework.

Note: There is a lab fee for this course.

LAW ENFORCEMENT (FALL)

This program is designed for students interested in law enforcement careers as a police officer, crime scene investigator, probation officer, etc. This program makes it possible for students to learn through very practical, hands-on training methods. Students will learn such as crime scene investigations, police patrol procedures, fingerprinting, search warrant

application and execution, and Minnesota State Laws and Criminal Code.

Note: There is a lab fee for this course.

LAW ENFORCEMENT (SPRING)

This course continues the exploration into a career in law enforcement. Students will learn through hands-on training and practical scenarios such things as drugs and narcotics investigations, gangs and gang investigations, use of police dogs, and ethics in policing. Students will explore post-secondary law enforcement schools, employment with a law enforcement agency, and preparation for oral board panels. No prerequisites required.

Note: There is a lab fee for this course.

NURSING ASSISTANT (FALL)

This course prepares students for entry-level patient care employment. Students will acquire skills in basic nursing, human-needs rehabilitation, and restorative services. Skills are practiced in a supervised laboratory and in a long-term care facility. Upon successful completion, students will be eligible to take the MN State Nursing Assistant Competency exam. Successful completion of this course requires 80 percent or higher scores on each written test, completion of all skill demonstrations, completion of ALL scheduled clinical hours, and 90 percent of better attendance in classroom and lab. A mantoux test within 90 days of clinical is required.

Areas of Study:

- Resident rights
- Safety and infection control
- Death and dying
- Nutrition
- Personal care
- Vital signs
- Emergency procedures including CPR and First Aid
- Mental health rehabilitation

HENNEPIN TECHNICAL CAREER PATHWAYS

HEALTH CAREERS (SPRING)

This exciting course is for students interested in exploring a career in the medical field. In addition to career exploration, students will also develop career goals, identify personal characteristics, learn medical terminology, and be introduced to anatomy and physiology.

Areas of Study:

- Medical terminology
- Safety and infection control
- Personal characteristics, legal and ethical responsibilities
- Career job exploration: emergency medical careers, nursing/doctor, dental, dietary, radiology, biomedical engineering, medical laboratory, and medical office
- Introduction to anatomy and physiology
- Team member and leadership skills
- Health career systems

AUTO BODY REPAIR (FALL)

This introductory course to auto body technology teaches non-structural repair, collision damage estimating, and refinishing. This is a skill-building course that starts students on their way towards becoming proficient in the auto-body industry.

Note: There is a lab fee for this course.

AUTO BODY REPAIR (SPRING)

In this course, students learn MIG welding, dent repair, and alignment of bolts on parts.

Note: There is a lab fee for this course.

ADVANCED AUTO BODY REPAIR (FALL OR SPRING)

Prerequisite: Instructor approval required; Students must have completed both Fall and Spring Semester Auto Body Repair courses. Students hone their skills in repairing today's technologically advanced cars that require knowledge of metals and plastics and proficiency in doing structural repairs using specialized equipment. Students will restore and refinish vehicles, and build trailers and carts using skills learned in class.

AUTOMOTIVE TECHNOLOGY (FALL)

Students learn about basic automotive systems and begin mastering tools, techniques, and maintenance procedures regularly performed on automobiles. Students will perform work on donated vehicles or their own vehicles, and conduct repair and maintenance procedures on tires, steering, suspension, and electrical systems. In addition, students will acquire shop safety habits essential to work in an automotive service shop. Experiences include using on-line automotive resources similar to those at automotive service centers to find information on all mass-produced vehicles.

Note: There is a lab fee for this course.

AUTOMOTIVE TECHNOLOGY (SPRING)

This course continues the study of fundamental automotive theories and operating systems. Students learn about automotive brake systems through lecture and hands-on activities. Students

will learn brake theory, diagnosis, and repair. In addition, basic engine theory, fuel injection, ignition, and engine performance will be covered. (Fall Semester is not a prerequisite for the Spring Semester course.)

Note: There is a lab fee for this course.

INTRODUCTION TO TECHNOLOGY INTEGRATION (FALL)

The goal of this course is to introduce the technology enthusiast to the world of modern day technology. This course will provide entry level base knowledge in technology support. Mobile Apps, Social Media, and computer hardware/software standards for today's fast-paced, ever-changing technology will be the focus of this class and will provide students with the skills needed to enter the technology industry workforce. The world of technology is ever evolving and this course will explore the changing technology landscape and how it affects people today and in the future. Students will receive classroom instruction as well as hands-on opportunities in the lab. Areas of study include: fundamentals of IT support, exploration of Google certification, how to develop mobile apps, computer hardware repair and upgrades, software upgrading, Internet and social media security and safety.

Note: There is a lab fee for this course.

OUTDOOR MOTOR SPORTS/POWER EQUIPMENT I (FALL OR SPRING)

Students will learn how to maintain and repair ATVs, motorcycles, mini bikes, snowmobiles, personal watercraft, and small internal combustion engines used on power equipment such as lawn tractors, generators, trimmers, and leaf/snow blowers. Students will also learn engine maintenance, preventive care, problem solving, minor and major engine rebuilding, and how to achieve customer satisfaction. The curriculum focuses on skill building projects and troubleshooting. Students learn industry standards and current technology using both factory and after-market manuals and text. This series of courses, our facilities, and the instructor are nationally certified by the Equipment & Engine Training Council (EETC).

OUTDOOR MOTOR SPORTS/POWER EQUIPMENT II (FALL OR SPRING)

Prerequisite: Student must have passed Outdoor Motor Sports/Power Equipment I.

Students in this advanced course will focus on skill building, diagnostics, trouble-shooting, preventive care, and minor and major engine rebuilding. A large emphasis will be placed on time management which will include ordering parts, customer communications, invoicing, and computer skills. Electrical components, along with reading schematics and the repair of these items, will also be a component of this course. This series of courses, our facilities, and the instructor are nationally certified by the Equipment & Engine Training Council (EETC).

MATHEMATICS

The Mathematics Department offers a variety of courses to address an array of student needs, abilities and interests. The goals are to ensure that students meet graduation requirements, including passing the state math test, as well as satisfying college admission requirements. Successful students will spend 30-60 minutes each day preparing for their respective math class. Teachers are available to students to review concepts and help them prepare for assessments.

Grade 8	Algebra II	Geometry	Algebra I	Algebra B
Grade 9	Honors Functions & Trig.	Algebra II - or - Honors Algebra II	Geometry	Algebra I
Grade 10	AP Calculus I, Honors Pre-Calculus, - or - AP Stats	Functions & Trig. - or - Hrs. Functions & Trig.	Algebra II -or- Honors Algebra II	Geometry
Grade 11	AP Calculus II	Pre-Calculus, Calculus, AP Calculus, -or- AP Stats	Functions & Trig. -or- Hrs. Functions & Trig.	Algebra II -or- Integrated Math
Grade 12	Multivariable Calculus -or- AP Stats	AP Calculus II, - or - AP Stats	Pre-Calculus, Calculus, AP Calculus, -or- AP Stats	Algebra II -or- Functions & Trig.

PATHWAYS TO AP CALCULUS

ALGEBRA IA & IB (YEAR)

Algebra I is an introduction and prerequisite to all higher mathematics courses. It is a course that covers basic linear algebra concepts. Topics include arithmetic operations, solution of linear equations, problem solving, graphing, properties of exponents, operations with polynomials, and solutions of systems of equations. Algebraic methods are used to model real world situations. This course also offers an introduction to discrete mathematics. There is a significant online component to this class.

GEOMETRY A & B (YEAR)

Prerequisite: Algebra IA and Algebra IB

Previous work in Algebra I will be integrated with Geometry. Polygons, angles, lines, and their relationships are studied along with measurement, area and volume. The idea of proof is introduced and built upon slowly throughout the year. Real world situations are used to motivate geometric ideas and provide the settings for the practice of geometric skills. Students can expect approximately 20-30 minutes of homework for each lesson.

INTEGRATED ALGEBRA IIA & IIB (YEAR)

Prerequisite: Algebra IA & B, Geometry A & B

Math teacher and Guidance Counselor recommendation (other factors considered: PLAN Test Score, 8th math grades). It is a foundational course that will help students gain better understanding, strengthen, and build upon prior Algebra

concepts so they are better equipped for success in all future math courses. Students can expect approximately 20-30 minutes of homework for each lesson.

ALGEBRA IIA & IIB (YEAR)

Prerequisite: Geometry A and Geometry B

Algebra II emphasizes the development of algebraic thinking and form with the study of a variety of functions, their graphs and real world situations. Included functions are linear, quadratic, exponential, powers and roots, logarithmic, polynomial, rational and trigonometric. Other topics introduced and studied are number systems, discrete mathematics, matrices, sequences, series, probability and statistics. It is designed for the student who has mastered the concepts in Algebra I or Algebra B and has also completed Geometry. Recommend an 80% from Algebra I or Algebra B or the student should be placed in Integrated Math and then take the Algebra 2 course. The material is presented in lecture format. Students should expect an assignment each day. Students will have limited class time to work on assignments, and on average will take about 30-40 minutes each night for homework.

FUNCTIONS (SEMESTER I)

Prerequisite: Algebra IIA and Algebra IIB

This course extends many of the concepts introduced in Algebra II. A concentrated emphasis is placed on the basic functions. Topics include general functions, quadratics, exponential, logarithmic, and polynomials.

Note: Functions is a prerequisite for advanced math courses.

MATHEMATICS

TRIGONOMETRY (SEMESTER II)

Prerequisite: Functions

Trigonometry integrates previous work in Algebra and Geometry with a focus on special right triangles, the unit circle, radian measure, the six basic trig functions, identities, and the use of special trigonometric formulas.

Note: Trigonometry is a prerequisite for advanced math courses.

PRE-CALCULUS (YEAR)

Prerequisite: Functions and Trigonometry

(Students must furnish their own graphing calculator – TI-83 or TI-84 are recommended).

This course introduces pre-calculus while maintaining and enhancing algebraic skills and developing mathematical thinking at a high level. It previews Calculus concepts such as limits, derivatives, and integrals. This course is designed for students who aren't prepared for calculus but would like to continue with a 4th year of math during their high school career.

CALCULUS A & B (YEAR)

Prerequisite: Functions and Trigonometry and Department permission required.

(Students must furnish their own graphing calculator. Students may NOT switch to pre-calculus at semester).

Calculus starts with a review of functions, laws of exponents and logarithms, and basic trigonometry. The concept of the derivative of a function is developed from a variety of perspectives including algebraic, numeric and graphical. The second major component of Calculus focuses on the integration of the graphical, algebraic and numeric perspectives, which happens second semester.

Note: Students who enroll in Calculus may NOT take AP Calculus the following year.

ADVANCED MATH OPTIONS:

HONORS ALGEBRA IIA & IIB (YEAR)

Prerequisite: Eighth Grade Geometry and Teacher recommendation.

Honors Algebra II is designed to prepare students for the rigor of AP Calculus. Some Algebra concepts will be reviewed to ensure that each student has the background knowledge to succeed with the difficulty pace of the Honors Algebra II curriculum. This course will emphasize the development of algebraic solving techniques, linear and quadratic expressions, matrices, and being able to graph multiple functions.

Note: Summer homework is required for this class.

HONORS PRE-CALCULUS A & B (YEAR) (Only for students who took Honors Functions in 9th grade)

Prerequisite: Passing Honors Functions with a B- or higher both semesters.

(Students will need a graphing calculator for this course and beyond. Either a TI-83 or TI-84 is recommended.)

Honors Pre-Calculus is the final class students will take to prepare for AP Calculus. This course moves at a very fast pace, and a strong understanding of previous concepts is required to be successful. Students will cover these topics: solving and graphing exponential and logarithmic functions, working with the unit circle, graphing trigonometric functions with stretches and translations, solving/simplifying trigonometric equations/expressions, working with vectors, solving non-square systems, solving linear systems with matrices, fraction decomposition, rotation of conics, polar graphs and equations, and an introduction to limits and how they are used in Calculus.

Note: The next class in the progression is AP Calculus AB.

HONORS FUNCTIONS AND TRIGONOMETRY A & B (YEAR)

Prerequisite: Passing Honors Algebra II with a B- or higher both semesters.

(Students will need a graphing calculator for this course and beyond. Either a TI-83 or TI-84 is recommended.)

Honors Functions and Trigonometry follows Honors Algebra II and builds on the concepts from that class. A strong



MATHEMATICS

understanding of the Honors Algebra II concepts is required to be successful. Topics covered include: linear, quadratic, exponential, and logarithmic functions. Linear systems, matrices, vectors, conic functions, trigonometric properties and equations, and polar coordinates and equations will also be discussed and developed.

Note: The next class in the progression is AP Calculus AB.

ADVANCED PLACEMENT CALCULUS IA & IB (YEAR)

(Students who have taken Calculus may NOT take this course.)

Prerequisite: Honors Functions and Trigonometry and department permission required.

(Students must furnish their own graphing calculator.)

AP Calculus I starts with a review of functions, laws of exponents and logarithms, and basic trigonometry. The concept of the derivative of a function is developed from algebraic, numeric and graphical perspectives. The second major component focuses on the integration of these perspectives. A more detailed list of topics studied will be those included in the Advanced Placement Calculus outline which is available at: www.collegeboard.com/ap. Students will also be assigned Advanced Placement Free Response Questions from previous exams (one each week). Each test has a calculator and a no calculator portion (similar to the format of the AP exam). The course moves quickly to cover all AP topics and allow for review before the exam in May. Additional topics that are not on the AP exam are covered after the AP testing week has concluded.

Note: Summer homework is required for this class.

ADVANCED PLACEMENT CALCULUS IIA & IIB (YEAR)

Prerequisite: To enroll in this class, you must score a 3 or higher on the AP Calculus AB exam and department permission is required.

(Students must furnish their own calculator.)

Advanced Placement Calculus II will start with a basic review of topics from Advanced Placement Calculus AB. Students will further develop an understanding of the derivative and integral concepts. Students learn about the derivative concept by exploring parametric, polar, and vector form equations, as well as using Euler's Method and L'Hospital's Rule. Further development of the integral process will explore substitution of variables, parts, and partial fractions, as well as improper integrals. The second major topic covered will be polynomial approximations and series, ranging from series of constants and Taylor Series. A more detailed list of topics studied is available at www.collegeboard.com/ap. Students will also be assigned



Advanced Placement Free Response Questions from previous exams (one each week). Each test has a calculator and a no calculator portion (similar to the format of the AP exam). The course moves quickly to cover all AP topics and allow for review before the exam in May. Additional topics that are not on the AP exam are covered after the AP testing week has concluded.

Note: Summer homework is required for this class.

ADVANCED PLACEMENT STATISTICS A & B (YEAR)

Prerequisite: Functions and Trigonometry, Geometry, Advanced Algebra, and department permission required.

(Students must furnish their own graphing calculator, TI-83 or TI-84, are recommended.)

Advanced Placement Statistics (AP Stats) is a course designed for students who plan on making mathematics a major part of their college program. AP Stats will deal with four major topics: Organizing Data, Producing Data, Probability, and Inference. Within each of these main topic areas a variety of subjects will be covered. Some examples of these topics are correlation, line of best fit, simulations, normal distributions, binomial distributions, tests of significance and chi-square. Students will also be assigned Advanced Placement Free Response Questions from previous exams (2-3 each chapter). The course moves quickly to cover all AP topics and allow for review before the exam in May. Additional topics that are not on the AP exam are covered after the AP testing week has concluded.

Note: Summer homework is required for this class.

PHYSICAL EDUCATION

PHYSICAL EDUCATION I – GRADE 9 (SEMESTER)

The course is one semester in length and is a required course of one-half credit toward graduation. Students will develop the knowledge of health related fitness components. They will learn and practice the skills necessary to become healthy for

a life time. Units are usually in season, with weather and time of year influencing activity options. Special emphasis will be placed on applying the FITT formula and fitness testing, as well as skill development to enhance experiences in sport and cooperative play.

PHYSICAL EDUCATION



PHYSICAL EDUCATION—INDIVIDUAL – GRADE 10, 11, & 12 (SEMESTER)

Prerequisite: Physical Education I

Students will participate in class activities that will focus on lifetime participation in individual physical activities. Activities will include tennis, golf, badminton, cross country running, strength training, aerobics, and physical fitness testing.

PHYSICAL EDUCATION—TEAM – GRADE 10, 11, & 12 (SEMESTER)

Prerequisite: Physical Education I

Students will participate in class activities that are team oriented with a focus on lifetime physical activities. Activities will include football, soccer, basketball, team handball, volleyball, broomball, and floor hockey. Additional activities would be tennis, badminton, and strength training.

STRENGTH TRAINING — GRADES 9, 10, 11 & 12 (SEMESTER)

Prerequisite: Physical Education I

Students must have a basic knowledge of weight training. Students must submit a training program to the instructor. The students will follow their program throughout the semester. They will execute and record their progress. Class is limited to 25 students.

LAST CHANCE PHYSICAL EDUCATION—GRADES 11 & 12 (SEMESTER)

Prerequisite: Physical Education I and Health

First semester will give preference to seniors. Second semester will be open to juniors and seniors. Take advantage of your last opportunity to engage in physical activity while you are in high school. Learn more about what you need for a healthy lifestyle as an adult while participating in a variety of physical activities on a daily schedule. Activities will include team activities such as basketball, soccer, team handball, and volleyball. Individual activities will include badminton, tennis and cross country skiing.

YOGA - GRADES 10-12 (SEMESTER)

Prerequisite: Physical Education I and Health

This elective course is designed to provide students with a variety of stress reduction experiences using the practice of yoga, pilates, and other stretching techniques. Core strengthening, flexibility, muscular strength endurance, balance/stability training, breathing, and relaxation techniques will be implemented in the course. A variety of light cardio activities will be included weekly. This is a great option for students who want an alternative physical activity during their school day. The emphasis of this course will be on stress reduction, proper nutrition, and general well-being.

HEALTH

HEALTH – GRADE 9 (SEMESTER)

The course is one semester in length and is a required course of one-half credit toward graduation. This course is about health and how it relates to individuals and society. An emphasis

is placed on the ability to recognize the positive and negative aspects of personal and community health and the ability to apply these aspects to healthful decisions.

SCIENCE

REQUIRED COURSE SELECTIONS:

PHYSICS A & B – GRADE 9 (YEAR)

This course emphasizes a conceptual understanding of the fundamental principles governing the universe. This solid foundation in physics will prepare students for success in all other areas of science. Motion, forces, waves, sound and light, heat, electricity, and magnetism will be covered. Inquiry-based problem-solving and laboratory skills will be emphasized. Credit achieved for this course meets *Minnesota Science Academic Standards in Physics*.

HONORS PHYSICS A & B – GRADE 9 (YEAR)

Prerequisite: *Standardized test data, classroom performance/grades, prior success with accelerated math coursework, and general learning characteristics including interest in math and science will be considered to recommend students for placement.* This course is taught at a pace to ensure all students are continuously challenged. Additional concepts and skills beyond the general section will be covered.

Note: Registering for this course does NOT guarantee placement. Invited Students will be notified by May 15.

Which 9th grade science class should I register for?

Current 8 th Grade Math Course	Register For:
Algebra II	Honors Physics* (AP Physics 1 by dept. rec)
Geometry	Physics or Honors Physics
Algebra	Physics

*NOTE: Assumes you are getting a B or higher in your math class (before retakes). Otherwise, choose Physics.

BIOLOGY A & B – GRADE 10 (YEAR)

Prerequisite: *Physics*

This course will cover a wide variety of topics in the biological sciences including: ecology, cell biology, genetics, evolution, disease and immunity, anatomy and physiology, and plant biology. These topics related to state science standards. Sophomores will take the state science test in the spring.

HONORS BIOLOGY A & B – GRADE 10 (YEAR)

Prerequisite: *Accelerated Physics and Department approval*

A college preparatory course in high school biology, designed for those students who are planning to study science, engineering or a branch of medicine in college or who intend to take the SAT II Biology test. Topics include ecology, cell biology, genetics, evolution, disease and immunity, anatomy and physiology, and plant biology. More biology topics will be covered at a faster pace and

Which 10th grade science class should I register for?

Current 9th Grade Math Course	Current 9th Grade Science Course	Consider your grade in Math & Science (before retakes) 10th GRADE REGISTER FOR:
Functions & Trig	Honors Physics	Honors Biology (if at least 'B' in <u>both</u> Math & Sci)
Algebra II	Honors Physics	1. Honors Biology (if at least 'B' in <u>both</u> Math & Sci) 2. Biology
	Physics	1. Honors Biology (if 'A' in both Math & Sci) 2. Biology
Geometry	Physics	1. Honors Biology (if 'A' in both Math & Sci) 2. Biology
Algebra I	Physics	Biology

Electives: AP Physics 1, Astronomy, and Forensics. See descriptions for prerequisites.

in more detail than the regular biology course. This course has a strong emphasis on problem solving, analytical thinking, critical thinking, and lab work. Successful students in this class are organized, seek assistance when needed, and curious. Students who are most successful typically have taken Honors Physics and are enrolled in advanced math classes for their grade level.

SCIENCE

ELECTIVE COURSE OFFERINGS:

A third year of lab-based science is required. The following choices are third & fourth year options.

ASTRONOMY - GRADES 11 & 12 (SEMESTER)

Prerequisites: Grade of C or better in Algebra II.

This survey course introduces you to the objects and processes in the universe from a physical perspective. Conceptual and mathematical concepts will be covered. The course will examine ordinary matter like planets, stars and galaxies; and more exotic matter like pulsars, black holes and dark matter.

CHEMISTRY A & B – GRADES 11 & 12 (YEAR)

Prerequisite: Algebra IIA and Algebra IIB

This course is designed for college-bound students who need to complete a third year of science to meet graduation and college admission requirements. It is a survey of chemistry and will cover the basics of chemistry.

HONORS CHEMISTRY A & B – GRADES 11 & 12 (YEAR)

Prerequisites: Algebra IIA and Algebra IIB and department approval required. (Accelerated Biology is recommended, but not required)

A college preparatory course in high school chemistry designed for those students who are planning to study science, engineering or a branch of medicine in college or who intend to take the SAT II Chemistry test. More chemistry topics will be covered at a faster pace and in more detail than the regular chemistry course. This will require students to grasp concepts quickly and independently.

FORENSIC SCIENCE – GRADES 11 & 12 (SEMESTER)

Prerequisite: Grade of C or better in Physics, Biology, Algebra II, and Chemistry, or concurrent enrollment in Chemistry.

This is an introductory science course that focuses on practices and analysis of physical evidence found at crime scenes. The fundamental objective is to teach the basic processes and principles of scientific thinking and problem-solving. Students will use critical thinking skills to evaluate evidence. Topics include: Forensic science and the law, types of evidence, crime scene investigation, fingerprinting, hair and fiber samples, drugs,

poisons and alcohol, blood, DNA analysis, firearm/toolmark analysis, and document and handwriting analysis.

ADVANCED PLACEMENT BIOLOGY – GRADE 12 (YEAR)

Prerequisite: It is strongly recommended that you have earned a B+ or higher in both Honors Biology and Honors Chemistry.

AP Biology is designed to be the equivalent of a 2-semester college introductory biology course for biology majors. The course is recommended for all college-bound students who plan on majoring in health sciences or another science-related field. This second-year course has a strong focus on biochemistry across all topic areas. Successful students are curious, motivated, organized, and have a strong background in biology and chemistry. This is a fast paced course that will challenge and develop your problem-solving and analytical thinking skills. Students will spend out-of-class time reading, preparing for exams, and writing lab reports. Students will take the AP Biology exam in May.

Note: There is summer homework for this course.

ADVANCED PLACEMENT CHEMISTRY – GRADE 12 (YEAR)

Prerequisite: Available to seniors who have earned a B+ or better in chemistry (preferably Honors Chemistry).

The purpose of Advanced Placement Chemistry is to provide a second year chemistry course at the college level and to prepare the student to seek credit and/or appropriate placement in college chemistry. As this is a second-year course, successful students will have a previous knowledge of most of the chemistry topics that are covered in accelerated or general chemistry. Students will review those topics and others in more detail and gain more laboratory practice. Students will take the AP Chemistry exam in May.

Note: There is summer homework for this course.

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE – GRADES 11 & 12 (YEAR)

Prerequisites: Available to juniors and seniors earning a B or higher in Biology, Chemistry, and Algebra.

AP Environmental Science is designed to be the equivalent of an introductory college course in environmental science. The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the natural world, to identify and analyze environmental problems, both natural and human-made, to evaluate the risks associated with these problems, and to examine alternative solutions for resolving or preventing them. This course requires the student to use ecological, political, and economic knowledge in order to understand current and future environmental issues.

Note: There is summer homework for this course.



SCIENCE

ADVANCED PLACEMENT PHYSICS I A & B - GRADES 9-12 (YEAR)

Prerequisite: Students should have a strong background in math or concurrent enrollment in Algebra II

This course is the equivalent of a first semester college physics course. It is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Students will take the AP Exam in May.

ADVANCED PLACEMENT PHYSICS "C," A & B - GRADES 11 & 12 (YEAR)

Prerequisites: Students should have completed, or be concurrently be enrolled, in Calculus. This course includes calculus applications. It is strongly recommended that the prospective student has earned a B or better in Functions & Trigonometry, and a B or better in Chemistry (preferably Honors Chemistry) is recommended, but not required.

AP Physics C is designed to be the equivalent of a 2-semester calculus-based college physics course. The course is recommended if you are considering a field in physics and/or engineering, as it delves into concepts in mechanics, electricity, and magnetism at a deeper level than in any physics course at Orono. The course also provides a general foundation in physics for students in the life sciences, pre-medicine, and some applied sciences. If you are considering any of these majors, it may be to your advantage to take AP Physics C as it could eliminate your general college physics requirement. Students can expect to spend time outside

of class doing readings, homework, lab reports, and/or test prep. Students will take the AP exam in May.

Note: There is summer homework for this course.

HUMAN ANATOMY AND PHYSIOLOGY - GRADES 11 & 12 (SEMESTER)

Prerequisite: B or higher grade in Honors Biology and Honors Chemistry OR an A in General Biology and an A in General Chemistry.

This course is an advanced elective designed as a college prep. course. The course is designed to provide a strong foundation for students interested in pursuing college majors in health, life sciences, and physical education. It will be especially helpful to students interested in the biomedical sciences as a career. This course surveys the main organ systems of the human body, placing some emphasis on their relationships to normal and abnormal health. Students will learn to identify and locate many anatomical structures and understand how each works, both alone and in cooperation, to maintain normal functioning of the human organism. At the heart of the course is the concept of homeostasis, which describes both the process of maintaining numerous variables in the body within narrow, physiological limits, and the state achieved by that process. The objective of this course is for students to develop an understanding of, and appreciation for how the body is constructed and how it functions, resulting in an improved ability to make intelligent, healthy choices in daily living and an increased self-advocacy of one's own health and medical care. Pair and group work, discussion, analytical thinking, lab work, and writing are important components of the course.

SOCIAL STUDIES

REQUIRED COURSE SELECTIONS:

CIVICS AND AMERICAN GOVERNMENT – GRADE 9 (SEMESTER)

This course is a semester long social studies class devoted to promoting an enlightened and responsible citizenry committed to democratic principles and actively engaged in the practice of democracy in the United States. The principle goals of this class are to help students develop an increased understanding of the institutions of constitutional democracy and the fundamental principles and values upon which they are founded, the skills necessary to participate as effective and responsible citizens, and the willingness to use democratic procedures for making decisions and managing conflict. We will study the following areas relating to U.S. Government: foundations of American democracy, the three branches of the federal government, state and local government, and aspects of political life including political parties and interest groups. Integrated throughout the curriculum are study skills and vocabulary development. We will use a variety of techniques to facilitate learning. Examples are group simulations, reading, writing, guided classroom discussion, individual activities, presentations (written and oral),

and working with large and small groups. Students will take the Minnesota Civics Test at the end of the semester.

AMERICAN HISTORY A & B – GRADE 10 (YEAR)

This is an overview of the growth and development of the American nation. Emphasis is placed on historical, political, social, economic and cultural institutions as they emerged and played a role in creating the nation and world in which we live. The United States is viewed as an experiment in which many diverse people with many diverse views work to reach a compromise solution to problems, influenced by the central ideas of its political philosophy: freedom of the individual in a democratic framework.

AP U.S. HISTORY GRADES 10, 11, & 12 (YEAR)

Prerequisite: Guidance Department Recommendation

This is designed to give students a college-level experience and to prepare students for the AP U.S. History exam in May. This is NOT simply an advanced version of the 10th grade American History class, but a class that teaches the historical analysis and essay writing of a college history course. There is an emphasis

SOCIAL STUDIES

on interpreting primary sources and other documents, as well as developing an appreciation for the significance of key facts. The course will also emphasize the writing of essays that show the ability to critically analyze documents and explain them in the context of the facts. This class is best suited for juniors who have the essay writing experience or exceptional sophomores. Students wishing to take the class as sophomores must pick up required summer homework in June to make up for the lack of historical background they would have received in the basic 10th grade American history class.

WORLD HISTORY AND GEOGRAPHY A & B – GRADE 11 (YEAR)

This is a broad-spectrum course beginning with the earliest efforts of humans to develop civilization. Students trace the progressive evolution of social institutions as a result of human interaction and communication. All areas of development will be explored – scientific discoveries, artistic and aesthetic advancement, religious influences, ethnic conflicts, political confrontations, economic and social developments, etc. The influence of geographical and environmental conditions upon the course of history will be a consistent theme. The developments and contributions of Eastern and Western civilizations will be included. Students will learn of the role played by many famous persons who left their imprint, as well as the social history, or lifestyles of average men and women throughout history. The full spectrum of human history will be studied from earliest existence to contemporary times. Students will be expected to develop oral, written, and critical thinking skills along with geography skills.

AP WORLD HISTORY – GRADE 11 & 12 (YEAR)

Prerequisite: Guidance Department recommendation

This is a college level course and is designed to prepare the students for the AP test in May. It is rigorous and fast-paced. Students will develop a greater understanding of the evolution of global processes and contacts in different types of human societies. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. AP World History emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study. A more detailed list of topics studied will be those included in the Advanced Placement World History guide which is available at: www.collegeboard.com/ap. Students will take the AP exam in May. To be successful students must be proficient readers, able to recall and comprehend difficult texts. Students who take AP World history should have a good grasp of English skills such as analysis and comparison which will be used in many essays as practice for the AP exam including document based, comparative, and continuity and change over time questions. Students must be proficient writers.

Note: There is required summer homework for this course.

ELECTIVE COURSE OFFERINGS:

AP HUMAN GEOGRAPHY – GRADE 10, 11, & 12 (YEAR)

Prerequisite: Guidance Department recommendation

This course examines all areas of human life and seeks to understand how they play out across the landscape. Unit topics include population growth, migration, religion, spread of language, political geography, economic development and urbanization. This course goes beyond memorizing maps to understand the underlying processes that explain the global patterns we see. Many connections between course content and everyday life will be made; human geography can be seen everywhere. Daily classwork varies between note-taking, group work, online activities and short research assignments. This course is open to sophomores, juniors and seniors. This is a rigorous college-level course, but one that can be a great first AP course for a hard-working sophomore. Students will be prepared to take the AP exam in May.

Note: There is required summer homework for this course.

DEBATE – GRADES 10 & 11, 12 – (SEMESTER)

Prerequisite: Department approval required.

Debate is an elective offered for social studies credit. Students are encouraged to be a part of the Orono Debate Team as observers or participants – the course is designed to support these students during the debate season. Students will focus on the skills and knowledge required to succeed in competitive Classical Debate. Students must be independent, excited about speaking in front of their peers, and ready for independent work. Debate grades focus heavily on participation and case writing. Students who participate in debate must be ready to write a position case and research independently. They must be intrinsically and academically motivated to succeed. Students will study how to debate both sides of an argument, build a case and conduct research. They will also learn rhetoric, public speaking, and debate tactics. Students may also study other types of Debate such as Policy, Lincoln-Douglas, and Parliamentary. Due to the team nature of participation in Debate and Advanced Debate, only one section of this course will be offered each year.

DEBATE II – GRADES 11 & 12

ACTIVE DEBATE TEAM MEMBERS (SEMESTER)

Prerequisite: Participation in Orono Debate Team, Completion of Debate Course and Instructor Permission

Students must have completed the Classic Debate Course a previous fall semester and must participate in the debate team. Team participation includes attendance at team meetings and participating in tournaments on Saturdays throughout the fall season. Participation in the Debate Team is part of the student's final grade. As an elective credit Debate is intended for students who wish to enrich their debate abilities of speaking, organization, research, and analysis of complex topics. Students in Advanced Debate must be self-directed and leaders in the classroom. Additionally, students in Advanced Debate will use the course to prepare for the competitive debate season and must participate in a minimum of two tournaments. This course DOES NOT fulfill a Social Studies requirement.

SOCIAL STUDIES

PERSPECTIVES IN LEADERSHIP – GRADE 12 AS SOCIAL STUDIES CREDIT (SEMESTER)

Prerequisite: Department Approval Required

The curriculum examines the principles of leadership, goal-setting, ethical decision-making, conflict management, time management and includes material from *Top Twenty for Teens*. Students will take a number of tests to determine their leadership style. Each student will give an inspirational speech. Each student will be part of a leadership book club. Leadership class provides students as members of the Link Crew program.

INTRODUCTION TO ANTHROPOLOGY: INTERPRETATIONS OF HUMANITY – GRADES 11 & 12 (SEMESTER)

A college level, lecture based course, Introduction to Anthropology seeks to utilize various sciences in the exploration of what it means to be human. Incorporating films, guest speakers, poetry, mythology, scientific non-fiction, and varied readings from pop culture and media, the course is designed to challenge assumptions and create multiple perspectives about who we are, where we came from, and where we are going as a species. The development of a disciplined mind and one's own confidence in reason will be a consistent emphasis. Students should anticipate a rigorous intellectual environment, including daily readings. As per the nature and size of the class, individuals will be completely accountable for their own academic success. Intrinsic effort and motivation are required. Students may opt to take this course for as a Social Studies or an English elective credit toward completion of the graduation requirements. However, once a student registers for either, we cannot, at a later date, switch it to the other. Sophomores who demonstrate readiness for this type of content and rigor are also invited to enroll.

PSYCHOLOGY – GRADE 12 (SEMESTER)

This course is an introductory study of human behavior and mental processes. The focus is a modern approach to the major themes in psychology today. A variety of topics will be considered, including: research methods, the brain and nervous system, consciousness (sleep and dreams), classical and operant conditioning, motivation, stress, intelligence, psychological disorders, and social psychology. Various projects, presentations, and experiments will be conducted to assist in learning. Students will be expected to complete out of class readings and amounts of research for projects. Psychology students should be prepared and willing to discuss topics in class on a regular basis.

AP PSYCHOLOGY – GRADE 12 (YEAR)

Prerequisite: Guidance Department recommendation

Students will be introduced to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. A more detailed list of topics studied will be those included in the Advanced Placement Psychology outline which is available at: www.collegeboard.com/ap. Large quantities of reading and out-of-classroom preparation are required for AP Psychology. Students will take the AP exam in May. To be successful, students should possess strong reading comprehension skills and be able to use problem solving strategies, discussion, and critical thinking skills. Students need to be organized, dedicated, and responsible to take this rigorous course. An AP Psychology student should take ownership in their learning, with the majority of responsibility being on the student, and the teacher being a facilitator of the learning.

Note: There is required summer homework for this course.



SOCIAL STUDIES

COLLEGE IN THE SCHOOLS POLITICAL SCIENCE – HONORS – GRADE 12 (SEMESTER)

Four University of Minnesota College Credits (In most cases, credits transfer to another college or university).

Qualified students will be granted approval.

This is a capstone course for seniors in the social studies. The content embodies four major areas of study: the purpose and foundations of American Government, the linking mechanisms to our government, the institutions of government, and finally, civil liberties and civil rights, as well as policy outcomes.

This course is taught in conjunction with the University of Minnesota as part of the “College in the Schools” program. Successful students will earn 4 U of MN credits. Students must be proficient readers and writers and prepared to contribute to a seminar experience. Criteria for admission include the following: senior, upper 20% of the class, minimum B+ average in American and World History, and a recommendation from a history teacher.

Note: Please see Mr. Herring prior to registering to learn about the summer homework.

CONTEMPORARY ISSUES – GLOBAL AND DOMESTIC – GRADE 12 (SEMESTER)

This course is designed to allow students to study the major issues facing our world today. The course will include themes such as politics, poverty, health, war, environment, race, gender,

teenage life, sports and entertainment. Students will research these issues, give presentations, hold class discussions, and attempt to develop their own informed opinions about each. The students will also get the opportunity to explore one issue in-depth and present that issue to the rest of the class. There is no textbook for this class, but each student will receive a subscription to a periodical produced by *The New York Times*.

SENIOR SEMINAR: ECONOMIC TOPICS – GRADE 12 (SEMESTER)

This is a course for students who want to look at the world around them through the lens of economics. In this course, students will explore foundations of micro- and macro-economics, as well as applications to the world around them. Students will examine economic issues on both levels and explore basic concepts like supply and demand, as well as more complex topics such as elasticity and tariffs. Questions such as how economics impacts them, their families, the state, country, and the world will be explored. Texts will include online lessons, textbook, and sources such as *The Economist* that use an economic perspective when analyzing world events. Personal finance will also be a topic in this course. Lessons will include primary documents, graphing, simulations, discussions, and group work. Reading and research will be the responsibility of the student both in and outside of class. Due to its nature as a seminar-style course, only one section will be offered per year.

TECHNOLOGY & ENGINEERING

The Technology and Engineering Program at Orono High School offers students an opportunity to establish a background for future career decision-making. Students will apply Science, Technology, Engineering, Mathematics, Science, and Computer Skills to include programming and or coding as a foundation for studies in design analysis, product development and product design. Students also have the opportunity to learn and demonstrate their creative side. Students will use today's building materials and technology to design and create final products which they can see, project, manipulate, and hold in their hands. This means the final product could be a product created on paper, a poster, a product designed and printed on the 3D printer, a video that is shown on the school TV's, a photograph, a product milled out on a CNC Machine, or a Robot or Machine that you had written the code to operate. Students will be using, state of the art programs such as ADOBE PhotoShop, ADOBE Illustrator, ADOBE Premiere, AutoDesk Inventor, AutoDesk Revit, Microsoft Office, and Google Documents Google Sites, Google Sheets.

PROJECT LEAD THE WAY (PLTW):

INTRODUCTION TO ENGINEERING DESIGN (IED) – GRADES 9, 10, 11 & 12 (YEAR)

Ever wondered how to design something new or draw out an idea to show your friends? Stop wondering and do it, using Autodesk Inventor, one of the industry-leading 3D design software Programs! Discover the role of an engineer in taking an idea from the design process to manufacturing or production. Produce an incredible, working prototype of your project with a state-of-the-art 3D printer. You will work on projects, activities, and problems not only of interest to you, but that have global and human impacts. Work in teams to design and improve products, document your solutions, and communicate them to others. Introduction to Engineering Design (IED) is a high school level

course that is appropriate for students who are interested in Design and Engineering. The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Students work in teams to continually hone their interpersonal skills, creative abilities and understanding of the design process. Teaming also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education. *On completion of all PLTW courses, students with a minimum grade of a B and a score of 5 or higher on the final are eligible for 3 semester credits from SCSU.*

TECHNOLOGY & ENGINEERING



COMPUTER INTEGRATED MANUFACTURING – (CIM) — GRADES 10, 11 & 12 (YEAR) — Offered 2019-2020

Course is offered every other year, alternating with Principles of Engineering.

Recommendation: Enrollees should be averaging a minimum grade of C in math and science courses.

Minimum Math Recommendation: Completion or concurrent enrollment in Geometry.

Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system.

How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How do assembly lines work? How has automation changed the face of manufacturing? While students discover the answers to these questions, they're learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems. *On completion of all PLTW courses, students with a minimum grade of a B and a score of 5 or higher on the final are eligible for 3 semester credits from SCSU.*

PRINCIPLES OF ENGINEERING A & B – (POE) – GRADES 10, 11 & 12 (YEAR) — Offered 2018-2019

Course is offered every other year, alternating with Computer Integrated Manufacturing.

Recommendation: Enrollees should be averaging a minimum grade of C in math and science courses.

Minimum Math Recommendation: Completion or concurrent enrollment in Geometry.

Principles of Engineering will expose students to some of the major concepts in a college level engineering course of study to include some programming. Go beyond “myth-busting” to

solution building! As you master the basic concepts needed to continue your education in engineering or engineering technology and design, you will apply them, tackling real world challenges in the following areas:

- Energy sources and applications
- Machine systems
- Fluid power
- Testing the strength and durability of materials
- Understanding how things move and applying that knowledge to projects
- Programming/Coding

You will not be in this alone: part of this class is teaming up with other students to test and share your developing skills through hands-on projects and presentations. You will learn to document your work and communicate your solutions to others. POE gives students the opportunity to apply math, science, and technology concepts. *On completion of all PLTW courses, students with a minimum grade of a B and a score of 5 or higher on the final are eligible for 3 semester credits from SCSU.*

ENGINEERING DESIGN & DEVELOPMENT – (EDD) – GRADES 11 & 12 (YEAR)

Capstone Course, PLTW Pathway to Engineering; Prerequisite: must have taken at least 2 PLTW courses or get instructor's permission

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career. Collaboration makes things happen! In this capstone course, you will work as part of a team to develop a solution to a technical problem of your choosing. Challenge yourself with one of those “don’t you hate it when...” issues of the world and try to solve it. Or see a need here at TCD, your home high school, or your community and find a way to meet that need. Research, design, test, and construct your solution or recommendations, then present it to industry or community partners. You and your team will use what you’ve already learned to guide you through the process of design and

TECHNOLOGY & ENGINEERING

product development. Who knows? You may solve a problem that has stumped others! *On completion of all PLTW courses, students with a minimum grade of a B and a score of 5 or higher on the final are eligible for 3 semester credits from SCSU.*

COMMUNICATION CLUSTER:

ARCHITECTURAL TECHNOLOGY I – GRADES 10, 11 & 12 (SEMESTER)

When an architect designs a structure, he/she uses the cumulative knowledge of centuries. If you would like to share this knowledge by planning a house, you will be given the opportunity in this course. This course is designed to assist the student in developing basic knowledge and skill in the field of architectural drawing. We will study and discuss the space requirements needed in houses and create working drawings for several residential buildings using AutoDesk Revit. We will learn about building codes, energy requirements, construction methods and materials, and structural systems. Students will learn the basic rules of construction and develop skills to create a set of working drawings for a house of their choosing.

ARCHITECTURAL TECHNOLOGY II – GRADES 10, 11 & 12 (SEMESTER)

Prerequisite: Architectural Technology I

This course will further develop your architectural drawing techniques and problem-solving abilities. Students will learn about site planning, space requirements, housing codes, structure, light-frame construction, solar and earth integrated designs, and HVAC and electrical systems. Students will plan and develop a complete set of working drawings for a house in order to refresh their Revit skills then we will move in the commercial building construction. This course will introduce the students to the use of building models and illustration renderings used in the architecture industry and will 3D print a scaled version of your building(s) using the 3D Printer. If time allows we will build a scaled model of a small rambler house. This class will focus more on commercial building techniques and the related codes for that industry than Architectural Drawing I.

GRAPHIC COMMUNICATION AND WEB PAGE DESIGN I – GRADES 10, 11 & 12 (SEMESTER)

Students will study the concepts of reproducing visual images; design and layout, composition, photo conversion, image carriers, and image transfer using some of the latest software available on the market. Some of the leading areas of employment in the U.S. are graphic communication, desktop publishing, computer graphics, photography, electronic media reproduction and screen printing. Students will be working with Adobe Illustrator, Adobe Photoshop, Adobe Premiere, Adobe In-Design and Adobe Dreamweaver, along with several other design software programs. Students will be creating various projects throughout the class, including business cards, album cover art, posters, greeting cards, various desktop publishing items, and creating web pages using HTML codes and design software. This course may be taken as a Fine Arts credit.

GRAPHIC COMMUNICATION AND WEB PAGE II – GRADES 10, 11 & 12 (SEMESTER)

Prerequisite: Graphic Communication I

Graphic Communication II will offer an in-depth study of Graphic Communications including: color reproduction, half-tone photography, and the new technology in electronic communication. All areas of visual communication will be taught, from electronic media productions and editing to automated packaging, computer illustration graphics, and 3D animation. This class will provide a very strong background for students in journalism, business/marketing and all other industry career areas. In this class, students are given an assignment to work on with a customer and create a project from the beginning design to the finished product. That product may be displayed in and around the school district. This course may be taken as a Fine Arts credit.

VIDEOGRAPHY – GRADES 9, 10, 11 & 12 (SEMESTER)

This course will include learning about the fundamentals of video production and digital photography, including equipment, materials, methods and processes used in production. The activities in this class will help students express their creativity and develop skills as a camera person and a professional photographer both in front of and behind the camera. This class will have numerous video and photo assignments, including various commercial assignments, PSA (public service announcements), and timed productions. Students will learn basic photography techniques which will help them become a better photographer. In this class you will work as a news team in the class to produce, direct, write and perform the Orono Morning Announcements/News Program which will be aired during Spartan Hour. As a professional newsperson/photographer, students will be asked to investigate fun and interesting photo assignments inside and outside of class and then manipulate these photos using Photoshop. Students will be using Adobe Premiere and Adobe Photoshop. This course may be taken as a Fine Arts credit.

VIDEO GAME DEVELOPMENT (GAME:IT) GRADES 9, 10, 11 & 12 (SEMESTER)

Have you ever wanted to make your own video game on the computer and just did not know where to start? If you answered yes; then this is the class for you! This is an introductory level course that engages students with project-based learning. The class not only will cover video computer programming skills but also introduces the math and physics concepts used in game development and use of the engineering design cycle. In this course, you will build 5 games following step-by-step instructions, each program building in complexity and teaching different skills in order to complete the final project. After completing the first 5 games, you will create a final game from the ground up, working in teams to storyboard, and program an original game of your choosing. This is a semester-long class.

WORLD LANGUAGES

INCOMING FRESHMEN:

Students who have successfully completed either Spanish I, German I, or Chinese I at OMS are expected to progress on to Spanish II, German II, or Chinese II at OHS. Those who have completed Spanish Eight may enroll in either Spanish I, German I, or Chinese I.

GENERAL GUIDELINES FOR WORLD LANGUAGES:

For continued success in World Languages, it is strongly recommended that students earn a grade of 'C' or better before registering for the next level. Each student should consult with his/her current world languages teacher prior to enrolling for the following year to be certain of accurate placement. Students who wish to continue to the next higher level against teacher recommendation will be required to sign a continuing study agreement.

COLLEGE RECOMMENDATION:

Most colleges recommend that students earn high school credit in two or more consecutive years of the same language. Some colleges require three or more years. Highly selective colleges generally recommend the completion of at least four years of language study, and often the Advanced Placement language course. Students should check specific college catalogs for current guidelines.

GERMAN

GERMAN IA & IB – GRADES 9, 10, 11 & 12 (YEAR)

Students will learn basic German through oral work, extensive memorization, and homework exercises. An emphasis will be placed on vocabulary development. Students will develop basic listening, speaking, reading and writing skills. Students will explore the culture of the German-speaking countries. Regular visits to the language lab are integrated into the curriculum.

GERMAN IIA & IIB – GRADES 9, 10, 11 & 12 (YEAR)

Prerequisite: German IA & IB

Students will continue to learn basic German through oral work, extensive memorization and homework exercises. An emphasis will be placed on vocabulary development with grammar becoming increasingly important. Students will continue to develop basic listening, speaking, reading and writing skills and to explore the culture of the German-speaking world. Regular visits to the language lab are integrated into the curriculum.

GERMAN IIIA & IIIB – GRADES 10, 11 & 12 (YEAR)

Prerequisite: German IIA & IIIB with a recommended grade of 'C' or higher to be successful in this course.

Students will reinforce basic German grammar and learn advanced structures through oral work, extensive memorization, homework exercises and the reading of graded German literature. There will be continued emphasis on vocabulary development. Students will continue to develop listening, speaking, reading and writing skills. Students will add to their knowledge of the German-speaking countries. Regular visits to the language lab are integrated into the curriculum.

HONORS GERMAN IVA & IVB – GRADES 11 & 12 (YEAR)

Prerequisite: German IIIA & IIIB with a recommended grade of 'B' or higher to be successful in this course.

This is the preparatory year for AP German. Grammar, contemporary literature, composition and culture of the German-speaking countries are emphasized. Students will work with German films and a number of other advanced



listening/speaking activities. Regular visits to the language lab are integrated into the curriculum. Work at this level will be significantly advanced from earlier levels and will include compositions in excess of 150 words, intensive grammar study, and preparation for college placement exams. German IV is conducted at an intermediate college level.

ADVANCED PLACEMENT GERMAN LANGUAGE & CULTURE IA & IB – GRADE 12 (YEAR)

Prerequisite: German IVA & IVB with a recommended grade of 'A' to be successful in this course.

Various types of German literature will be read and studied. Speaking, listening and writing skills emphasized. Students will work with German films and a number of other advanced listening/speaking activities. Compositions will include persuasive essays and email responses. Speaking tests will involve participating in simulated conversations and a two-minute cultural comparison as required by the AP test. Regular visits to the language lab are integrated into the curriculum. Students should expect intensive vocabulary and grammar study along with a good deal of out of classroom preparation. Homework can be expected daily. This class is conducted at an advanced intermediate college level with students and teacher speaking in German the majority of the time. Students who enroll in this class are required to take the AP test in the spring. *Note: College credit is possible depending on the student's choice of college and score achieved on AP exam.*

SPANISH



SPANISH IA & IB – GRADES 9, 10, 11 & 12 (YEAR)

Students begin to understand, speak, read and write basic Spanish in guided practice. Hispanic culture is integrated into conversational scenes from daily life. Grammar and vocabulary development are emphasized. There is nightly homework and considerable memorization in Spanish I. Regular visits to the language lab are integrated into the curriculum.

SPANISH IIA & IIB – GRADES 9, 10, 11 & 12 (YEAR)

Prerequisite: Spanish IA and Spanish IB with a recommended grade of C or higher to be successful in this course.

This course is a continuation of Spanish I with an emphasis on oral and written communication skills, grammar and vocabulary development. Daily/nightly homework is to be expected. Memory work is considerable. Regular visits to the language lab are integrated into the curriculum. Important notes: Most colleges require a minimum of two consecutive years of world language study. If followed by Spanish II at Orono High School, Spanish I taught in middle school generally counts towards the two-year requirement. Selective colleges frequently recommend three consecutive years of world language. Highly selective colleges require four consecutive years of a world language, and most recommend AP Spanish as well.

SPANISH IIIA & IIIB – GRADES 10, 11 & 12 (YEAR)

Prerequisite: Spanish IIA and Spanish IIB and teacher recommendation.

Students will continue to review basic Spanish grammar and learn more advanced structures. They will practice reading, listening, writing, speaking and understanding Spanish at an in-depth level. They will begin the *Destinos* video series, read a short novel, and complete activities that will emphasize culture, vocabulary and comprehension skills. Students earn grades for daily speaking and are expected to use the Spanish language during the entire class period. There is much emphasis on spontaneous speaking activities, and students practice the grammar through oral exercises. This class only partially

fulfills requirements for the next level of study, and a significant amount of summer work would be required in order to continue to Honors Spanish IV.

HONORS SPANISH IIIA & IIIB – GRADES 10, 11, & 12 (YEAR)

Prerequisite: Spanish IIA and Spanish IIB and teacher recommendation.

This course is designed for students who earned a 'B' or higher in 1st semester of Spanish II, as it is a preparatory course for Honors Spanish IV. Select colleges and universities look favorably upon four consecutive years of a language at the high school level. Therefore, students that complete Honors Spanish III are eligible and encouraged to continue Spanish. Students will continue to review basic Spanish grammar and learn more advanced structures. They will practice reading, listening, writing, speaking and understanding Spanish at an in-depth level. They will begin the *Destinos* video series, read a short novel, and complete activities that will emphasize culture, vocabulary and comprehension skills. Students should expect nightly homework and considerable memorization. This class is designed to prepare the student for Honors Spanish IV, and ultimately, AP Spanish.

HONORS SPANISH IVA & IVB – GRADES 11 & 12 (YEAR)

Prerequisite: Honors Spanish IIIA and Honors Spanish IIIB with a recommended grade of B or higher to be successful in this course.

Honors Spanish IV is an in-depth review of grammar learned in previous levels with the addition of new concepts. Impromptu speaking and culture of the Spanish-speaking world are also emphasized. Students will complete the *Destinos* video series and also read some authentic short stories.

ADVANCED PLACEMENT SPANISH LANGUAGE IA & IB – GRADE 12 (YEAR)

Prerequisite: Honors Spanish IVA and Honors Spanish IVB with a recommended grade of A or teacher permission to be successful in this course.

AP Spanish is an extremely rigorous course conducted at an advanced intermediate college level. Composition length will generally exceed 300 words, and students will be required to integrate reading, listening, speaking and writing skills to produce both formal and informal oral and written presentations. They will read and study various types and formats of Hispanic texts. Speaking tests will include both simulated conversations and formal oral presentations, as required by the AP Spanish language exam. Students should expect intensive vocabulary study and grammar reviews along with considerable out-of-class preparation and daily homework. Students who enroll in this class are expected to take the AP Spanish Language exam in May. College credit is possible, depending on the student's college of choice and score achieved on the AP exam.

CHINESE

CHINESE IA & IB – GRADES 9, 10, 11, 12 (YEAR)

This course is designed for beginners with no prior exposure to the Chinese language. It introduces basic Mandarin pronunciation, grammar and orthography (in both Pinyin and characters). In addition to lectures, the students will participate in activities such as games, dramatizations, discussions, and narrations. The main purpose of activities is to reinforce students' understanding and mastery of the teaching materials through practice. By the end of the school year, students should be able to participate in fluent conversations on topics covered in the textbook.

CHINESE IIA & IIB – GRADES 9, 10, 11, 12 (YEAR)

Prerequisite: Successful completion of Chinese I

Chinese II will provide reinforcement and expansion of vocabulary and basic grammatical concepts learned in Chinese I. An emphasis will be placed on communication in simple routine situations. Students will continuously develop the four basic skills: listening, speaking, reading and writing, and will explore more Chinese culture. Regular visits to the language lab are integrated into the curriculum.

CHINESE IIIA & IIIB – GRADES 10, 11, 12 (YEAR)

Prerequisite: Successful completion of Chinese II

In this third level of Chinese, more advanced skills are addressed as students communicate in Chinese and become more knowledgeable about contemporary Chinese life and the

contributions of the Chinese culture. Students demonstrate their speaking skills through dramatizations, discussions, and narrations. They read contemporary short stories and newspaper articles. They also apply structural concepts and new vocabulary to the writing of descriptive passages.

HONORS CHINESE IVA & IVB – GRADES 11 & 12 (YEAR)

Prerequisite: Successful completion of Chinese III

Students in this course will develop reading, writing, speaking, and listening comprehension skills at the advanced level. Students will read short stories and articles from magazines and newspapers and will write summaries, reviews, and letters. Students will develop advanced conversational skills in small-group settings, and comprehension of Chinese through films, TV, and radio programs.

HONORS CHINESE VA & VB – GRADE 12 (YEAR)

Prerequisite: Successful completion of Honors Chinese IV

Students in this course will develop reading, speaking, and listening comprehension skills at the advanced level. Students will read short stories and articles from magazines and newspapers and will write summaries, reviews, and letters. Students will develop advanced conversational skills in small-group settings, and comprehension of Chinese through films, TV, and radio programs.



