

# 2024 2025

## Course Registration Guide

Duluth Denfeld High School  
Duluth East High School  
Academic Excellence Online



### ADDITIONAL INFORMATION

[www.isd709.org/for-new-families/how-to-enroll](http://www.isd709.org/for-new-families/how-to-enroll)



### REGISTER ONLINE

[www.isd709.org/for-new-families/how-to-enroll](http://www.isd709.org/for-new-families/how-to-enroll)

# Duluth

## Public Schools



## **Duluth Public Schools Administration**

*John Magas, Superintendent*

*Anthony Bonds, Assistant Superintendent*

*Jennifer Larva, Director of Secondary Education*

*Dale Uselman, Curriculum Coordinator*

*Danette Seboe, Principal Career & Technical Education*

### **Academic Excellence Online (AEO)**

11 East Superior Street, Suite 140

#### **Principal**

Nathan Glockle  
218-336-8766 x1164  
nathan.glockle@isd709.org

#### **School Counselor**

Paula Williams  
218-336-8756 x 1288

#### **Office Support**

Valarie Wagenbach  
Office Support Specialist - Senior  
218-336-8756  
valarie.wagenbach@isd709.org

### **Denfeld High School**

401 North 44th Avenue West

#### **Principal**

Thomas Tusken  
218-336-8830 x2233  
thomas.tusken@isd709.org

#### **Assistant Principals**

Joanna Sackette, Tanya Jackson

#### **9th & 10th Grade BARR Coordinator**

Jennifer Wellnitz  
218-336-8830 x2050  
jennifer.wellnitz@isd709.org

#### **School Counselors**

##### **9th Grade Counselor**

Dave Bergan  
218-336-8890 x 1345  
david.bergan@isd709.org

##### **Grades 10-11 Last Name with A-G**

##### **Grades 12 Last name with A-He**

Geri Saari  
218-336-8830 x3366  
geraldine.saari@isd709.org

##### **Grades 10-11 Last Name with H-N**

##### **Grades 12 Last name with Hi-Q**

Leah Hamm-Digatono  
218-336-8830 x2264  
leah.hamm-digatono@isd709.org

##### **Grades 10-11 Last Name with O-Z**

##### **Grades 12 Last name with R-Z**

Jessica Anderson  
218-336-8830 x1923  
jessica.anderson@isd709.org

#### **Counseling Office Registrar**

Dena Walczynski-Filipovic  
218-336-8830 x2253  
dena.walczynski-filipovic@isd709.org

### **East High School**

301 North 40th Avenue East

#### **Principal**

Kelly Flohaug  
218-336-8845 x2140  
kelly.flohaug@isd709.org

#### **Assistant Principals**

Jon Flaa, Kyle Rock

#### **School Counselors**

##### **Students with last name A-C**

Jamie Savre  
218-336-8845 x2154  
jamie.savre@isd709.org

##### **Students with last name D-H**

Jessica Forsman  
218-336-8845 x2041  
jessica.forsman@isd709.org

##### **Students with last name I-Mc**

Alaina Attia  
218-336-8845 x2148  
alaina.abraham@isd709.org

##### **Students with last name Me-Sc**

Tory Rock  
218-336-8845 x3346  
tory.rock@isd709.org

##### **Students with last name Se-Z**

Kimberly Flaa  
218-336-8845 x3347  
kimberly.flaa@isd709.org

#### **Counseling Office Registrar**

Jennifer LaBelle  
Counseling Office Registrar  
218-336-8845 x2143  
jennifer.labelle@isd709.org

## Table of Contents

GRADUATION REQUIREMENTS	5
HOW TO REGISTER FOR COURSES	8
CHANGING YOUR SCHEDULE	10
OPTION TO RECEIVE HIGH SCHOOL CREDIT	11
ARTICULATED PARTNERS AND REQUIREMENTS	12
COLLEGE IN THE SCHOOLS (CITS) PARTNERS AND REQUIREMENTS	12
POSTSECONDARY INFORMATION	15
NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA)	15
HIGH SCHOOL STANDARDIZED ASSESSMENTS	16
KEY TO COURSE DESCRIPTIONS	17
HIGH SCHOOL COURSE NAMES AND DESCRIPTIONS	18
UPDATE TO COURSE CHANGES	18
ART	18
EDUCATION	19
ENGLISH LANGUAGE ARTS	20
GENERAL ELECTIVES	24
HEALTH SCIENCE/MEDICAL	25
MATHEMATICS	25
MUSIC	26
PHYSICAL EDUCATION	28
SCIENCE	29
SOCIAL STUDIES	31
WORLD LANGUAGES	34
REQUIRED ELECTIVES	36
SPECIAL EDUCATION COURSES	36
CAREER AND TECHNICAL EDUCATION	38
AEROSPACE CAREERS	39
AGRICULTURE, FOODS, AND NATURAL RESOURCES (AFNR)	39
ARTS, COMMUNICATION, AND INFORMATION SYSTEMS	40
BUSINESS, MANAGEMENT, AND ADMINISTRATION	40
ENGINEERING, MANUFACTURING, AND TECHNOLOGY	41
GENERAL ELECTIVES	46
HEALTH SCIENCE TECHNOLOGY	46
HUMAN SERVICES	47
COMMITMENT AGREEMENT	49

# **GRADUATION REQUIREMENTS**

**Changes for the 24-25 School Year**  
**Approved by Duluth School Board May 21, 2024**

Class Of	NEW REQUIRED COURSES				CREDITS
	9th Grade	10th Grade	11th Grade	12th Grade	
2025	<i>No new course or credit requirements.</i>				22.5
2026			College, Career, & Life Readiness 11	Personal Finance 12	23.0
2027		Computer Science 10	College, Career, & Life Readiness 11	Personal Finance 12	23.5
2028+	9th Grade Futures	Computer Science 10	College, Career, & Life Readiness 11	Personal Finance 12	24.0

## *Graduating Class of 2025 Credits required 22.5*

English Language Arts	4.0 Credits	Science	3.0 Credits	Physical Education	.5 Credits
Social Studies	3.5 Credits	Art	1.0 Credits	Elective	7.0 Credits
Math	3.0 Credits	Health	.5 Credits		

## *Graduating Class of 2026 Credits required 23.0*

English Language Arts	4.0 Credits	Science	3.0 Credits	Physical Education	.5 Credits
Social Studies	3.5 Credits	Art	1.0 Credits	Elective	7.0 Credits
Math	3.0 Credits	Health	.5 Credits	Required Elective	.5 Credits

## *Graduating Class of 2027 Credits required 23.5*

English Language Arts	4.0 Credits	Science	3.0 Credits	Physical Education	.5 Credits
Social Studies	3.5 Credits	Art	1.0 Credits	Elective	7.0 Credits
Math	3.0 Credits	Health	.5 Credits	Required Elective	1.0 Credits

## *Graduating Class of 2028 and beyond Credits required 24.0*

English Language Arts	4.0 Credits	Science	3.0 Credits	Physical Education	.5 Credits
Social Studies	3.5 Credits	Art	1.0 Credits	Elective	7.0 Credits
Math	3.0 Credits	Health	.5 Credits	Required Elective	1.5 Credits

[Table of Contents](#)

For students with Individualized Education Plans (IEPs) and in credit recovery programs, contact your high school counselor and/or case manager for further information.

For requirements for entrance to postsecondary schools, consult the institution of choice.

## **PATHWAYS**

### **Course Pathways - English Language Arts**

**Four Credits of English Language Arts**, including one year of an English elective (may include two semester courses), are required for [graduation](#) from high school in Minnesota.

<b>9th grade</b>	<b>10th grade</b>	<b>11th grade</b>	<b>12th grade</b>
English 9 Or Honors English 9	English 10 Or Honors English 10	English 11 Or Honors English 11 Or AP Language and Composition	<b>English Elective</b> <b>1 credit needed from this category</b> Values in Literature, Drama as Literature, Grammar and Composition, Creative Writing, Interpersonal Communications, Public Speaking, AP Literature and Composition, or College Composition

**\*For honors courses:** *It is strongly recommended that students maintain a B average in the first three quarters of the prerequisite course.*

### **Course Pathways - Mathematics**

**Three credits of Math** are required for [graduation](#) from high school in Minnesota. Students must complete Intermediate Algebra, Geometry, Algebra 2 or its equivalent as part of the three (3) credit requirements.

<b>8th Grade</b>	<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>
Intermediate Algebra	Geometry 9	Algebra 2	CITS Precalculus (prerequisite for AP (CITS) Calculus) Or Probability and Statistics	AP (CITS) Calculus Or CITS Precalculus

*or*

<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>
Intermediate Algebra	Geometry	Algebra 2 Or Algebra 2 Concepts	CITS Precalculus Or Probability and Statistics

## Course Pathways - Science

**Three (3) credits of Science**, including Physical Science, Biology and EITHER Physics or Chemistry are required for high school [graduation](#) in Minnesota. Additional science courses are available to meet graduation requirements for students.

<i>9th Grade</i>	<i>10th Grade</i>	<i>11th Grade and/or 12th Grade</i>
Earth and Space Science <b>(required)</b>	Biology 10 General or honors <b>(required)</b>	<p>Chemistry or Physics or Aerospace  <b>(1 Credit is required from the category of Chemistry or Physics or Aerospace Physics)</b>  Includes: Introductory Chemistry, Chemistry, CITS Chemistry, Introductory Physics, Physics, CITS Physics or Aerospace Physics.</p> <p>-----</p> <p><b>Additional elective options:</b> Human Anatomy &amp; Physiology  General or CITS,  Forestry, Fish and Wildlife,  Plant Science - Plant Science Greenhouse 1,  Plant Science Greenhouse 2</p>

## Course Pathways - Social Studies

**Three and a half credits** in Social Studies are required for high school [graduation](#) in Minnesota.



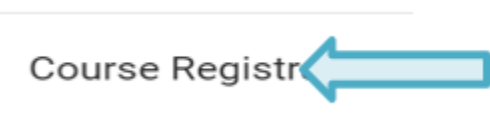
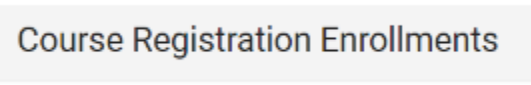

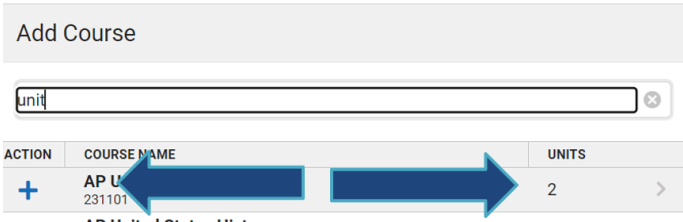
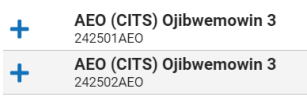

<i>9th Grade</i>	<i>10th Grade</i>	<i>11th Grade and/or 12th grade</i>
Civics In Global Society	United States History or Advanced Placement United States History	<p>International Studies, World History, or Advanced Placement World History</p> <p>Economics or CITS Economics  American Government and Politics or CITS American Government and Politics</p>

## HOW TO REGISTER FOR COURSES

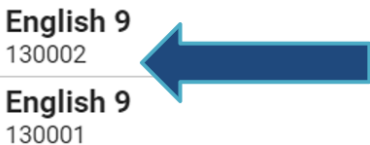


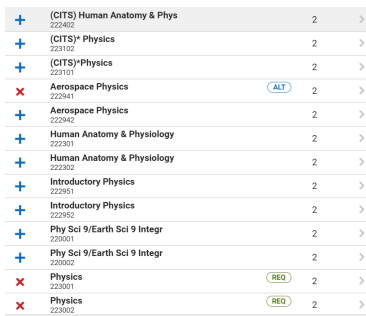
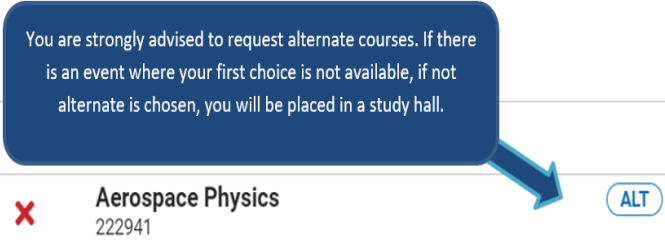
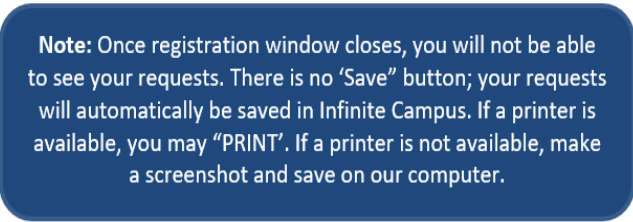
**2024 - 2025 School Year - registration closes on on 03/24/24**

New students to Duluth Public Schools will need to enroll before you can register.

To enroll - Visit [Duluth Public Schools](#) - How to enroll:

1. <b>Log into Infinite Campus Student/Parent Portal</b> and check for announcements. Click the three bars at the top of the screen and you will see the 'More' button.	
2. Select "More" at the bottom of the screen.	
3. Find and select "Course Registration".	
4. Under Course Registration Enrollments, select the high school you are currently attending either "24-25 East HS" or "24-25 Denfeld HS". <i>Important for AEO course registration, you will need a separate enrollment form.</i>	 24-25 EAST 24-25 DENELD
5. Under Course Requests, select "Add course" to begin selecting courses. (At any time you want to review, use the back arrow.)	
6. Using your registration worksheet, begin typing in a course name. As you begin typing, the course name of the course you have selected. A list of courses that match your typing will show all courses available.	Example: Eng
7. After the course appears in the list of courses, you may select the plus action symbol to add the course to your requests. You may also click on the gray arrow to view the course description.	
8. As you are selecting courses, note that some courses have the prefix AEO - these courses are for Academic Excellence Online. The enrollment process can be found at: <a href="https://www.isd709.org/aeo/aeo-enrollment-forms">https://www.isd709.org/aeo/aeo-enrollment-forms</a>	
9. After you have chosen the course, you will be asked if you would "like to add this course as a Request or an Alternate". Select "Request" to add this to your requested courses for the next school year.	



<p>10. Repeat these steps until you have recorded all your selections; <u>be sure to request both semesters of a year-long class!</u> For reference semester 1 will end in a 1 and semester 2 in a 2. Example English 9, 13001 is semester 1, English 9,13002 is semester 2. Continue to add until you reach a minimum of 24 units or a maximum of 28.</p>	
<p>11. Check the “units” you have registered for to be sure you have at least 24 units and no more than 28 units. When you have registered for a full 6 period schedule, the progress bar will indicate that you are 86% complete. If you have selected Zero Hour courses in addition to a full 6 period schedule, the progress bar will show 100% complete with 28 units reflected.</p>	
<p>12. To return to view a list of all added courses, select the back button above your progress bar.</p>	
<p>13. Review your Course Requests to ensure that all of your course selections appear and are correct.</p>	
<p>14. You are strongly advised to request alternate courses. These courses will be added to your schedule in the event your first-choice class is canceled or is full. If you do not list alternate courses, and a class is canceled or closed, you will receive a study hall. <u>To request Alternate Courses</u>, follow the previous steps to add a course, and then click on “Alternate”.</p>	
<p>15. <b>YOU ARE DONE!</b> There is no “SAVE” button, so you can log out now.</p> <ol style="list-style-type: none"> <li>Once the registration window closes, you will not be able to see your requests.</li> <li>Requests will automatically be saved in Infinite Campus until the window closes.</li> <li>Print or email a copy of your summary of courses.</li> <li>Share with your parent or guardian the requests by logging into Infinite Campus or sharing the saved copy.</li> </ol>	

# CHANGING YOUR SCHEDULE

*Students are encouraged to make careful course selections during registration due to its direct correlation to the development of the master schedule for the upcoming school year. All reasonable attempts will be made to grant requests for courses. Alternatives will be used if necessary. It is important to note that schedule conflicts are different from student or parent-initiated requests for schedule changes*

## **Requesting Schedule Changes**

### **Reasons allowed for schedule changes:**

- There is a gap in the student's schedule and/or the student is registered for two classes in the same hour.
- The student didn't register for a class required for graduation.
- There was an error and a student was placed in a class that was not requested.
- The student is scheduled for the same class twice.
- The student failed a class and needs to repeat the course.

### **Schedule changes will **NOT** be approved if:**

- The student is trying to re-arrange their schedule to be with friends or a different lunch.
- The student is requesting a different teacher (unless the student failed a class with that teacher previously).
- The student is trying to re-arrange for early release or late start (seniors only).
- The student changed their mind about what was requested at registration.

### **Adding classes will only be considered for the following reasons:**

- **Students are allowed four days for adding a new class without penalty.**
- A class is offered in an hour that a study hall has been scheduled.
- There is room in the course.
- The request to add is made before the end of the first week of school.

If your schedule changes meet any of these criteria, the change request form, available in the counselor's office, should be filled out completely including any required signatures. Students who need to see a

counselor should do so before school, during lunch or study hall, or after school. All final decisions on next year's course requests need to be resolved with the counselor prior to the end of the school year.

## **Dropping Classes**

**Semester Courses** (i.e. Health, Physical Education, Psychology): Students will have **ten school days** after the start of first grade period to drop without penalty.

**Sequential/Year-long Semester Courses** (i.e. English 10, Geometry, United States History, Biology, Mathematics):

- **First Semester** - Students will have **ten school days** after the start of the first grade period to drop without penalty.
- **Second Semester** - Students will have **ten school days** after the start of the second semester to drop a second semester class without penalty.

Students who choose to drop a class after the above-mentioned timelines would have as part of their transcript a record of their credit(s) attempted and credits earned. Example: If a student drops a class after the deadline, regardless of the grade earned at the time, the student will receive no credit and will receive a grade of "I". The grade point average will be permanently affected since this would be a credit attempted, but no credit earned.

**NOTE:** The current policy relative to removing a student from a class due to lack of attendance remains in effect. That is, any student removed from a class due to excessive truanancies or absences will receive no credit and a permanent "I" grade. The grade point average will be permanently affected since this would

be credit attempted, but no credit earned. (Information can be found on excessive truanancies or absences in the [Family and Student Handbook](#).)

## **Repeating required course**

Repeating a course for credit refers to a high school course repeated via any delivery model, this includes online and seat based. Repeating **required** courses will only be allowed if a student receives a failing grade in that course. Students who have earned a grade of D or better in a course may repeat a course, but may not earn additional credit toward graduation *by* repeating the course. Students who repeat the course and earn a passing grade forfeit the credit previously earned. Students who repeat the course and then earn an F *do* retain credit earned from the previous attempt. In both cases, a student who fails a course may retake the course.

## **Repeating Elective Courses**

**Elective** courses may be repeated for **additional credit as long as a different curriculum is provided to the student**. An example would be a course where students are expected or could enroll in a class on a continuing basis with additional new curricular content, and the use of the same course number is recurring. The repeatable courses are identified with the icon in the course description. Additional credits may be earned for repeatable courses. Examples of repeatable courses: Advanced Band, Personal Fitness 2, and Career Development Internship.

## OPTION TO RECEIVE HIGH SCHOOL CREDIT

### ONLINE

#### Academic Excellence Online (AEO)

- AEO is Duluth Public Schools' state approved online high school.
- Students may enroll full-time or part-time if sharing enrollment with any other public high school in Minnesota.
- Most core courses are approved by the NCAA to meet eligibility requirements.
- Some AP and CITS courses are available.
- Students should provide their own device and internet access.
- AEO curriculum is current, relevant, engaging and created by Duluth Public Schools teachers.
- Instructors are easily accessible.
- Online education allows students and families more flexibility.
- Special Education Assistance is available.

## ADDITIONAL OPTIONS TO RECEIVE HIGH SCHOOL AND COLLEGE CREDIT

### Advanced Placement (AP)

- AP (Advanced Placement) is a program of classes developed by the college board to give high school students an introduction to college-level classes and also gain college credit before even graduating high school. These courses are more difficult than the usual high school class and also require passing an AP exam at the end of the year to gain college credit.

### Articulated College Credit (ACC)

- Articulated college credit courses provide a way for students to start a college-level technical program in high school and continue their educational pathway. The high school CTE credit has been pre-approved by partnering colleges and may be applied toward the student's college transcript. The student must successfully pass the high school CTE class to be eligible for articulated credit at the college.

### College Level Examination Program (CLEP)

- The College-Level Examination Program® (CLEP) gives examinees the opportunity to receive college credit for what they already know by earning university-designated minimum scores on any of 34 exams. This program is offered at official CLEP test centers and not Duluth Public Schools.

### Minnesota Bilingual Seals Program

- Minnesota school districts may award Minnesota bilingual and multilingual seals **to high school students upon graduation** who have demonstrated the required levels of language proficiency. American Sign Language (ASL), Indigenous American Indian languages, Spanish, German and many other languages other than English are included. Students will demonstrate proficiency through assessments. Credit may be granted at Minnesota State Colleges and Universities (MNSCU) Schools based on performance.

### Postsecondary Enrollment Options (PSEO)

- PSEO is a dual credit program that allows 11th- and 12th-grade students in Duluth Public Schools to earn high school and college credit tuition free, through enrollment in and successful completion of college courses taught by college instructors, by enrolling either part-time or full-time. 10<sup>th</sup> graders are also eligible to enroll in one career technical education (CTE) course during the first semester of PSEO enrollment with a proficient score on the 8<sup>th</sup> grade MCA reading test.
- These courses are generally offered on the campus of the Minnesota postsecondary institution; some are online.
- Each participating college or university sets its own admission requirements for enrollment. Courses may be taken full time or part time.
- Students must inform the district by May 30 of each year of intent to enroll.
- No charge for tuition, books or fees, funds available for transportation.

### College In The Schools (CITS) (Concurrent Enrollment)

- College in the Schools (CITS) is a concurrent enrollment ('dual credit' or 'dual enrollment') program that allows students to earn both college and high school credit in courses for students in 11th and 12th grades and earn college and high school credits for free. These courses are taught by high school teachers at the rigor of college level and have admission requirements.

## **ARTICULATED PARTNERS AND REQUIREMENTS**

<https://www.ctecreditmn.com/articulated-college-credit.php>

**Note: Current articulation agreements are under pending review at the college level and changes may occur after registration. For the most accurate information, consult your classroom teacher.**

Course #	Course Name	College	College Course Name	Cr	College #
121630 and 125000	Additive Manufacturing AND Advanced Independent Engineering Research & Design	Lake Superior College	Prototyping Processes	3	INMG 1450
121211 and 121502	Intro to Engineering Design & Principles of Engineering Design	Lake Superior College	Solidworks	3	CADE 1468
151100	Emergency Medical Responder	Lake Superior College	First Aid & CPR/AED for Healthcare Professionals	1	ALTH Pathways 1430

## **COLLEGE IN THE SCHOOLS (CITS) PARTNERS AND REQUIREMENTS**

UMD: University of Minnesota Duluth  
 CSS: College of St Scholastica  
 LSC: Lake Superior College  
 FDLTCC: Fond du Lac Tribal and Community College  
 CR - College Credit

CITS: College In The Schools  
 CTE: Career and Technical Education  
 College GPA: Grade Point Average

### **College of St. Scholastica**

Name of Course High School/College	College Credits	Qualifying Requirements
CITS Pathways to Teaching/ <b>EDU 1540</b> Intro to Teaching and Intro to Field Experience	3 cr	Junior and Seniors are eligible, no other requirements

[www.getmytranscript.com](http://www.getmytranscript.com) Search "College of St. Scholastica"

**Dropping Course Policy at College of St. Scholastica** - Drops are allowed during the first two weeks of a semester. After the third day of a term, signatures are required by the instructor and advisor. The date the student requests the course drop is the official date used in registration. Confirmation of the last date of attendance must be supplied by the course instructor. A dropped course will not be officially entered on the students' record, including the student's transcript.

**Withdraw from a course:** Course withdrawals are allowed during weeks 3 through 9 of a semester. The date the student requests the course withdrawal is the official date used in registration. Confirmation of the last date of attendance must be supplied by the course instructor. A grade of W will be officially entered on the students' record, including the student's transcript.

### **Fond du Lac Tribal and Community College**

Name of Course High School/College	College Credits	Qualifying Requirements
CITS Physics/ <b>PHYSICS 1001</b> Introduction to Physics	4cr	Juniors with a cumulative GPA of 3.0 or greater and seniors with a cumulative GPA of 2.5 or greater are eligible. Updated information and application can be found at <a href="#">Fond du Lac Tribal and Community College - College in the Schools</a>
CITS Chemistry/ <b>CHEM 1010 General</b> Chemistry	5cr	
CITS American Govt/ <b>POLS 1010</b> American Government	3cr	
CITS General Psychology/ <b>PSYC 2001</b> General Psychology	4cr	
CITS Civil & Criminal Law Intro to Criminal Justice/ <b>LAWE 1001</b> Introduction to Criminal Justice	3cr	
Anishinaabe (Ojibwemowin) <b>ANSH 1001</b> Introduction to Anishinaabe Language and <b>ANSH 1002</b> Anishinaabe Language II	4 cr 4 cr	
CITS Anishinaabeg of Lake Superior <b>AMIN 1050</b> Anishinaabeg of Lake Superior	3 cr	

<https://fdltcc.edu/current-students/records-office/transcripts/>

**Dropping Course Policy at Fond du lac Tribal and Community College** - Add/Drop/Withdraw Registration for CITS courses occurs as part of the regular high school registration process. The high school instructor/CITS coordinator will assist you with the application process. The add/drop policy for CITS states the student has the first 25 days of FDLTCC's campus academic schedule to add or drop classes. After this date, a "W" (for withdraw) will appear on the student's transcript. Students wishing to drop after the 25th day must fill out a petition with their CITS coordinator. Students have until the 60th day of the semester to withdraw from a class.

### **Lake Superior College**

Name of Course High School/College (LSC)	College Credits	Qualifying Requirements
CITS Pre-Calculus/ <b>MATH1150</b> Pre-Calculus	4cr	Completion; Algebra 2 with qualifying final grade
CITS Human Anatomy & Phys/ <b>BIOL 1005</b> Intro to Cell Biology and <b>*BIOL 1140</b> Human Anatomy & Physiology I	1cr	Juniors with a cumulative GPA of 3.0 or greater and seniors with a cumulative GPA of 2.5 or greater are eligible. Updated information can be found at <a href="#">Lake Superior College - College in the Schools</a>
	4cr	
CITS Medical Occupations/ <b>ALTH 1400</b> Intro Allied Health and <b>ALTH 1410</b> Medical Terminology	1cr	
	2cr	
CITS Intro to Nursing/ <b>NUNA 1420</b> Nursing Assistant	4cr	
CITS Ceramics/ <b>ART 1138</b> -Ceramics I	3 cr	

<https://www.lsc.edu/current-students/student-payment-office/request-transcripts/>

**Dropping Course Policy for Lake Superior College** - Students must follow the calendar for adding, dropping, and withdrawing from courses set by the Lake Superior College CITS program. Students who do not add a course during the registration window cannot be added at a later date and will not receive LSC credit. Students who do not contact their high school counselor about dropping or withdrawing from a course by the stated deadlines cannot be dropped or withdrawn at a later date, risk receiving an F grade, and risk violating LSC policies. See the Petition to Policy section for information.

## **University of Minnesota - Duluth**

<b>Name of Course High School/University</b>	<b>College Credits</b>	<b>Qualifying Requirements</b>
CITS Economics/ <b>ECON 1003</b> Economics & Society	3cr	<p>Juniors and Seniors with a cumulative GPA 3.0 or greater are eligible  Updated information can be found at  <a href="https://onestop.d.umn.edu/academics/transcripts">University of Minnesota - Duluth,</a>  <a href="https://cits.d.umn.edu/">College in the Schools</a></p>
CITS College Composition/ <b>WRIT 1120</b> College Writing	3cr	
CITS A.P Lit & Composition/ <b>ENGL 1907</b> Intro to Literature	3cr	
CITS Sociology/ <b>SOC 1101</b> Intro to Sociology	4cr	
CITS AP Calculus/ <b>MATH 1296</b> Calculus 1	5cr	
CITS Spanish Level 5/ <b>SPAN 1201</b> Intermediate Spanish I & <b>SPAN 1202</b> Intermediate Spanish II	4cr 4cr	
CITS German Level 5/ <b>GERMAN 1201</b> Intermediate German I & <b>GERMAN 1202</b> Intermediate German II	4cr 4cr	
CITS Strength Training/ <b>PE 1616</b> Weight Training	1cr	

<https://onestop.d.umn.edu/academics/transcripts> <https://cits.d.umn.edu/>

**Dropping Course Policy at UMD -** If students transfer out of a semester course after the tenth week, they must officially cancel the course via an approved UMD petition; a “W” symbol (student withdrew from the course) will automatically appear on their UMD transcript. Tuition fees are not refunded to the school district if a student withdraws after the deadline for dropping a course. Deadlines are established by the UMD Office of the Registrar.

**Other information about College in the Schools:** [Mathematics Career and College Readiness \(CCR\) and Use of High School MCA Scores by Minnesota State Colleges and Universities](#) [Minnesota Statutes, section 120B.30](#) indicates that Minnesota State Colleges and Universities may use high school MCA reading and mathematics scores to assist in determining course enrollment.

## **POSTSECONDARY INFORMATION**

Postsecondary options include a certificate program, two year degree, four year degree, and beyond! Students should consider all of their options thoroughly. One important piece to prepare for are the admission requirements to each college. The overview is below, for most up to date information, contact your post secondary schools of choice for the most accurate information.

### **Minnesota State Colleges and Universities Admission Requirements**

- Four years of English, including composition, literature and speech
- Three years of math, including elementary algebra, geometry, intermediate algebra (integrated math 1, 2 & 3). Examples of 4th year math include calculus (preferred), pre-calculus, analysis, integrated math 4
- Three years of science, including one year each of biological and physical science, all with significant laboratory experience.
- Three years of social studies, including one year each of geography and U.S. history
- Two years of a single world language, including non-English native languages and American Sign Language.
- One year of arts (visual arts and the performing arts of theater, music, dance and media arts)
- ACT or SAT may not be required as long as you meet the other requirements
- Additional recommendations may be required for **University of Minnesota System Twin Cities, Morris, Duluth, Rochester, and Crookston**, call the college admission office for specific requirements.

### **Technical and Community Colleges Admission Requirements**

- High School diploma or GED is required with coursework in English, mathematics, science, and social studies
- Technical colleges and community colleges require placement tests that they administer to all incoming student

**Testing and Placement Update:** M State uses ACT, SAT, MCA, Accuplacer scores, high school GPA or previous college coursework to determine course placement. Accuplacer assessment testing is now available on campus for students who would like to re-test or have their current course placement re-evaluated.

### **Minnesota Private Colleges and University of Wisconsin System Admission Requirements**

## **NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA)**

To be certified by the Eligibility Center, you must: Access information and application directly from the NCAA Eligibility Center website: [www.eligibilitycenter.org](http://www.eligibilitycenter.org). Students that are interested should work with their counselors for the potential pathway to NCAA courses and credits.



## **HIGH SCHOOL STANDARDIZED ASSESSMENTS**

### **2024-2025 SCHOOL YEAR**

Test	Grade	Purpose	Offered During the School Day	Fee	Required
MCA-II Reading or MTAS-III Reading	10	The Minnesota Comprehensive Assessments (MCA) and the Minnesota Test of Academic Skills (MTAS) are statewide accountability assessments that measure proficiency in the areas of reading, math, and science.	Yes	No	Yes
MCA-III Mathematics or MTAS-III Mathematics	11				
MCA-III Science or MTAS-III Science	10 or 11		Yes	No	Yes
ACCESS or Alternate ACCESS	9-12	The ACCESS and Alternate ACCESS for ELLs are statewide accountability assessments that measure English language proficiency (reading, listening, speaking, writing).	Yes	No	Yes (English Learners Only)
STAMP 4s	9-12	The Standards-based Measurement of Proficiency (STAMP) measures language proficiency in reading, writing, listening, speaking. Depending on performance, students may earn bilingual and multilingual seals and world language proficiency certificates upon graduation. Students may also request college credit upon enrollment in a Minnesota State college or university.	Yes	Yes*	No
ACT	11, 12	The ACT measures college readiness in English, Math, Reading, Science, and also includes a career interest inventory.	Yes	Yes*	No
PSAT	11	The PSAT gives information on ability to do college work. Scores are given in Verbal, Math, and Writing. Practice for PSAT and screening for scholarships are controlled by the National Merit Scholarship Corporation.	Yes	Yes*	No
AP	10, 11, 12	AP exams are college-level exams in several subjects. Students who do well may earn college credit and/or advanced standing.	Yes	Yes*	No

\*A fee is charged for these tests; however, waivers are available for students receiving free or reduced priced meals.

Important change: **Mathematics Career and College Readiness (CCR) and Use of High School MCA Scores by Minnesota State Colleges and Universities** [Minnesota Statutes, section 120B.30](#) indicates that Minnesota State Colleges and Universities may use high school MCA reading and mathematics scores to assist in determining course enrollment.



## **KEY TO COURSE DESCRIPTIONS**

### **AEO** **Also Available through Academic Excellence Online (AEO)**

Online high school is an option for students and families who desire a bit more flexibility in their schedule. 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. Students can advance their education through one of the most up-to-date and compliant online high school programs in the state that is offered through the Duluth Public Schools. Students benefit through a personalized, relationship-based, and interactive online academic experience. These courses meet MN State Standards.

### **ACC** **Articulated College Credit**

Articulation allows high school students to earn Career and Technical Education (CTE) college credits as a sophomore, junior or senior. Students may earn credits while they stay in their own high school if they meet their high school's requirements and are in an articulation program. Articulation Agreements must be in place between the high school and college in order to receive articulated credit. For more information on courses and credits refer to page 12.

### **AP** **Advanced Placement (AP)**

These courses are a great option for students looking to challenge themselves to have a more rigorous course and to help them be more academically challenged. The Advanced Placement Program, administered by The College Board and taught at local high schools, allows students to participate in a university level course and possibly earn university credit while still in high school. Secondary schools and universities cooperate in this program to give students the opportunity to show mastery in university-level courses by taking the AP exam in May of each school year. There may be a minimum grade point average or have taken certain classes before you are allowed to take AP courses. All AP courses adheres to rigorous standards set by the College Board. Students will be asked to cover the cost of testing.

### **CTE** **Career and Technical Education (CTE)**

Career and Technical Education (CTE) programs are a sequence of courses that integrate core academic knowledge with technical and occupational knowledge and skills to provide students a pathway to postsecondary education and careers. CTE teaches transferable workplace skills in applied learning contexts to provide opportunities to explore high-demand career options, and gives students the technology and skills needed for success in adult life.

### **CITS** **College in the Schools (CITS)**

College in the Schools allows students to earn both high school and college credit for classes offered through high school and taught by a high school teacher. Credits earned through the College in the Schools program are accredited and will transfer to other Minnesota colleges and universities. Acceptance of transfer credits by private and out-of-state colleges and universities is always guided by the policies of the postsecondary institution accepting the credits. Eligibility varies depending on the college that the courses are offered. For more information on courses and credits refer to page 12.

### **REPT** **Repeatable Courses**

Elective courses may be repeated for additional credit as long as a **different curriculum** is provided to the student. An example would be a course where students are expected or could enroll in a class on a continuing basis with additional new curricular content, and the use of the same course number is recurring. The repeatable courses are identified with the icon in the course description. Additional credits may be earned for repeatable courses. Examples of repeatable courses: Introduction to Foods, Introduction to Cooking, Advanced Drawing and Painting, Advanced Ceramics and Sculpture, and most music courses.

# **HIGH SCHOOL COURSE NAMES AND DESCRIPTIONS**

## **UPDATE TO COURSE CHANGES**

On May 21, 2024 school board approval of the high school schedule changing from a 6 period day to a 7 period day, the following courses have been added to the registration guide and will be offered in the 2024-2025 school year:

- 9th Grade Futures: Navigating High School and Beyond
- 10th Grade Computer Science
- 11th Grade College, Career, and Life Readiness
- 12th Grade Personal Finance
- Academic Skills for Success
- Global and Indigenous Sports
- Diverse Perspectives in Literature
- African/African American Literature
- American Sign Language
- CITS Anishinaabeg of Lake Superior
- Ethnic Studies

## **ART**

### **100000 Art Across Mediums**

**Grade(s):** 9-1    **Credit:** .5 per semester    **Term(s):** 1 or 2

**AEO**

Design and create artworks with a variety of mediums, such as drawing, painting, collage, digital drawing, papier mâché, clay, and mixed media, etc. Explore various movements in art history to gain a better understanding of the impact art has had on our society. Each unit will focus on a unique creative process through historic/cultural contexts and the foundation of design principles.

### **101000 Drawing and Painting 1**

**Grade(s):** 9-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

Develop and improve your drawing and painting abilities for fine art or commercial design applications. Learn skills for drawing from direct observation and imagination and build understanding of design principles, visual literacy, color theory, and critical thinking. Design concepts are explored through a variety of media, such as pencil, charcoal, pastel and ink, watercolor, acrylic, collage, digital media, mixed media, and airbrush.

### **101100 Advanced Drawing and Painting**

**Prerequisite:** Drawing and Painting 1

**Grade(s):** 9-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**REPT**

Expand your skills and develop your personal style for a range of functions, from narratives to creative applications for personal expression or commercial use. Students contract individually to research, plan, and design independent works of art within the context of the core class.

### **101300 Art of Photography and Cinematography 1**

**Grade(s):** 9-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**REPT**

Develop and demonstrate photography and composition skills through a variety of design themes, building digital photography/editing skills on a foundation of film and paper processes. Explore color imaging through print and media. Explore the evolution of still to moving images through animation and cinematography, practicing composition through camera movement, point of view, and digital video editing.

### **101400 Advanced Art of Photography & Cinematography**

**Prerequisite:** Art of Photography and Cinematography 1

**Grade(s):** 9-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**REPT**

Students continue to hone their behind-the-lens skills through photography and cinematography, using a variety of photography, animation and cinematography skills with digital editing tools. This course emphasizes individual creativity in both artistic and commercial media design, while students study photographic and cinematic artists and careers based on arts standards objectives.

**101600 Ceramics and Sculpture 1****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2

Students will learn clay handbuilding skills, as well as glazing and clay decorative techniques. This will build basic skills that carry into ceramics, sculpture and mixed-media work for both utilitarian and artistic purposes. Students will analyze historical, cultural, and contemporary ceramics materials, terminology, styles, and techniques.

**101700 Advanced Ceramics and Sculpture****Prerequisite:** Ceramics and Sculpture 1**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2**REPT**

Students work independently in areas such as handbuilding and wheel throwing in clay, and a variety of mediums in sculpture. Students design and create more challenging pieces, developing personal style through individual student preferences and ideas.

**101710 (CITS) Ceramics****Prerequisite:** Ceramics and Sculpture 1**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2**CITS**

Students will learn new advanced handbuilding and wheel throwing techniques, and explore several glaze and surface decoration techniques. Both contemporary and historical ceramics and art history are incorporated in studio classes as well as regular group and individual critiques. CITS classes are conceptually based allowing students to focus on their work and personal explorations while maintaining a vital interactive studio experience.

**101900 Stained Glass, Metals, and Fibers 1****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

Design and create works of art with a variety of techniques in contemporary and historic crafts such as stained glass, weaving, and various metal and jewelry making techniques. Students will analyze historical, cultural, and contemporary materials, terminology, styles, and techniques.

**102000 Advanced Stained Glass, Metals, and Fibers****Prerequisite:** Stained Glass, Metals, and Fibers 1**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2**REPT**

Develop personal style, sharpen your skills, and use new and innovative techniques for a more in-depth exploration of stained glass, weaving, and various metal and jewelry making techniques. Students will analyze historical, cultural, and contemporary materials, terminology, styles, and techniques.

Advanced Stained Glass, Jewelry, and Fibers may not be taken concurrently with Stained Glass, Jewelry, and Fibers 1.

## EDUCATION

**202301 Pathways 2 Teaching; Introduction to Socially Just Education****Grade(s):** 11-12 **Credit:** .5 Semester **Term(s):** 1 & 2

This course examines teaching as a career and the foundations of our educational system. Students will explore the sociopolitical context related to schools, communities, and teaching while providing an overview of such topics as school culture, diversity, ethnicity, and social realities in American schools. Students will learn research skills by reviewing and analyzing achievement data to generate questions, offer suggestions, and engage in critical dialogue about educational topics.

**202302 (CITS) Pathway 2 Teaching; Introduction to Socially Just Education****Prerequisite:** Pathways 2 Teaching**Grade(s):** 11-12 **Credit:** .5 Semester **Term(s):** 1 & 2**CTE, CITS**

This course is a continuation of Pathways2Teaching and examines teaching as a career and the foundations of our educational system. Students will continue to explore the sociopolitical context related to schools, communities, and teaching while providing an overview of such topics as school culture, diversity, ethnicity, and social realities in American schools. Students will learn research skills by reviewing and analyzing achievement data to generate questions, offer suggestions, and engage in critical dialogue about educational topics.

# ENGLISH LANGUAGE ARTS

## **130001-130002 English 9**

**Grade(s):** 9    **Credit:** .5 per semester    **Term(s):** 1 & 2

**AEO**

This course is designed to fulfill the expectations of the ninth-grade standards for English Language Arts. Students in this course will:

- Read and comprehend ninth grade literature and informational texts for personal enjoyment, interest, and academic tasks, and read widely to understand multiple perspectives and pluralistic viewpoints. Required ninth grade texts including novels and plays, short stories, essays and poetry. Required common texts include: *Romeo and Juliet*, *Spirit Car*, and *The Odyssey*.
- Use information from multiple print and digital sources, use a writing process to write for a range of tasks, purposes, and audiences.
- Use MLA formatting; understand how to avoid plagiarism.
- Demonstrate command of the conventions of language while speaking and writing.
- Acquire and accurately use grade-level vocabulary.

## **131001-131002 Honors English 9**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 9    **Credit:** .5 per semester    **Term(s):** 1 & 2

This rigorous course augments the expectations of English 9. Expectations include:

- More in-depth knowledge is expected and a broader understanding of concepts and generalizations is expected. More student generated classroom discussion and evaluation expected. Honors English is a student-sustained class.
- Students must be able to keep a fast pace of reading and understanding.
- Students will have homework each night as well as short and long-term projects. Projects will be completed individually and in groups with some projects involving class presentations.
- A significant amount of independent reading is required.
- Students should be self-motivated to complete higher level work and to take ownership of their academic success.

## **131101-131102 English 10**

**Grade(s):** 10    **Credit:** .5 per semester    **Term(s):** 1 & 2

**AEO**

This course is designed to fulfill the expectations of the 10<sup>th</sup> grade standards for English Language Arts. Students will:

- Read and comprehend 10<sup>th</sup> grade literature and informational texts for personal enjoyment, interest, and academic tasks, and widely to understand multiple perspectives and pluralistic viewpoints. Required 10<sup>th</sup> grade texts include novels and plays, short stories, essays and poetry. Required common texts include: *Julius Caesar* and/or *Much Ado About Nothing*, *Antigone*, Arthurian Legends, and *Lord of the Flies*.
- Using information from multiple print and digital sources, use a writing process to write for a range of tasks, purposes, and audiences.
- Use MLA formatting; understand how to avoid plagiarism.
- Demonstrate command of the conventions of language while speaking and writing.
- Acquire and accurately use grade-level vocabulary.

## **131201-131202 Honors English 10**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 10    **Credit:** .5 per semester    **Term(s):** 1 & 2

**AEO**

This rigorous course augments the expectations of English 10. Expectations include:

- More in-depth knowledge is expected and a broader understanding of concepts and generalizations is expected. More student generated classroom discussion and evaluation expected. Honors English is a student-sustained class.
- Students must be able to keep a fast pace of reading and understanding.
- Students will have homework each night as well as short and long-term projects. Projects will be completed individually and in groups with some projects involving class presentations.
- A significant amount of independent reading is required.
- Students should be self-motivated to complete higher level work and to take ownership of their academic success.

## **131301-131302 English 11**

**Grade(s):** 11    **Credit:** .5 per semester    **Term(s):** 1 & 2

**AEO**

This course is designed to fulfill the expectations of the 11<sup>th</sup> grade standards for English Language Arts with an emphasis on American Literature. English 11 explores foundational works of American Literature that are inclusive of multiple cultural perspectives, semester 1 explores American literature from the pre-colonial period to the late nineteenth century, semester 2 explores American literature from the nineteenth century to the present. Students in this course will:

- Read and comprehend literature and informational texts for personal enjoyment, interest, and academic tasks.

- Read widely to understand multiple perspectives and pluralistic viewpoints.
- Read at least three of the following texts: *The Crucible*, *Of Mice and Men*, *The Great Gatsby*, *The Autobiography of Frederick Douglass*, *The Nickel Boys*, and *The Scarlet Letter*.
- Analyze foundational U.S. documents of historical and literary significance (including the Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features.
- Evaluate author's differing points of view, including differing points of view about Minnesota American Indian history on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
- Delineate and evaluate the reasoning in seminal U.S. texts including the application of constitutional principles and use of legal reasoning (e.g., in the U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist*, presidential addresses).
- Using information from multiple print and digital sources, use a writing process to write for a range of tasks, purposes, and audiences, use MLA formatting; understand how to avoid plagiarism. Demonstrate command of the conventions of language while speaking and writing and acquire and accurately use grade-level vocabulary.

### **131401-131402 Honors English 11**

**Grade(s):** 11 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This rigorous course augments the expectations of English 11. Expectations include:

- More in-depth knowledge is expected and a broader understanding of concepts and generalizations is expected.
- More student generated classroom discussion and evaluation expected, this course is a student-sustained class.
- Students must be able to keep a fast pace of reading and understanding.
- Students will have homework each night as well as short and long-term projects. Projects will be completed individually and in groups with some projects involving class presentations.
- A significant amount of independent reading is required.
- Students should be self-motivated to complete higher level work and to take ownership of their academic success.

### **131501-131502 AP Language and Composition**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 11 **Credit:** .5 per semester **Term(s):** 1 & 2

**AP**

This rigorous course teaches students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. Students will compose a variety of analytical and argumentative essays on non-literary topics. This course will prepare students to take the AP Exam in Language and Composition administered by the Educational Testing Service for the College Board. Students in this course will:

- Analyze the rhetoric of professional authors.
- Appropriately use rhetoric in writing, controlling tone, establishing and maintaining voice, and achieving appropriate emphasis through diction and sentence structure.
- Analyze and use a variety of credible sources to support arguments.
- Effectively communicate their analysis of text.

### **131600 AP (CITS) Literature & Composition**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 12 **Credit:** .5 per semester **Term(s):** 1 or 2

**AP, CITS**

This rigorous course teaches students to become skilled readers of literature written in a variety of periods, genres, and contexts. Students will compose a number of literary analysis for a variety of purposes. This course will prepare the students to take the AP Exam in Literature and Composition administered by the Educational Testing Service for the College Board. Students in this course will:

- Focus on solid preparation in the areas of literary analysis, literary discussion/presentation, and literary essays.
- Study classic works of English and World Literature.
- Develop and work on critical reading skills and oral presentations.
- Create and improve upon detailed and lengthy essays and research papers.

### **131700 Values in Literature**

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2

**AEO**

This unique course offers a discussion of basic philosophical questions through a study of literature and informational texts from ancient times to modern. Students in this course will:

- Analyze the development of the central ideas of literary and philosophical texts.
- Use textual evidence to support analysis of ideas and inferences drawn from the text.
- Write several essays including one on personal values.
- Examine the meaning of life from multiple perspectives.
- Engage in small group and class discussions of literature and values.
- Use MLA formatting; understand how to avoid plagiarism.



- Demonstrate command of the conventions of language while speaking and writing. Acquire and accurately use grade-level vocabulary.

### **131800 Drama as Literature**

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2

The purpose of this course is to provide an intensive study of selected plays. Students in this course will:

- Understand the continuing development of plays throughout time.
- Analyze multiple interpretations of plays including recorded and/or live productions.
- Study the development of important themes of drama.
- Read and comprehend plays to understand multiple perspectives and pluralistic viewpoints.
- Read plays aloud.
- Study the history of theater integrating and evaluating multiple sources of information.
- Analyze how the playwright's choices affect play structure.
- Demonstrate literary analysis skills through writing and speaking.

### **131900 Grammar and Composition**

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2

**AEO**

This course is designed to increase proficiency in both writing and the understanding of grammar. Students in this course will:

- Write routinely over extended time frames for a range of tasks.
- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.
- Develop and strengthen writing by planning, drafting, revising, editing, and rewriting.
- Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- Use MLA formatting to cite and credit sources.
- Write original compositions using grammar, language mechanics, and other conventions of standard written English.
- Demonstrate command of grammar, usage, and punctuation when writing.

### **132000 (CITS) College Composition**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 12 **Credit:** .5 per semester **Term(s):** 1 or 2

**AEO, CITS**

This rigorous course is designed for the student who is capable of doing college level work in English while he/she is still in high school. Students are required to write an extensive research paper. Students in this course will:

- Conduct research and communicate findings, while using research to present an argument in a variety of modes.
- Access and use UMD databases for scholarly and peer reviewed research.
- Write arguments to support claims in analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.
- Use a writing process to develop and strengthen writing as needed by planning, drafting, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
- Use technology, including the internet, to produce and publish writing and to interact and collaborate with others.
- Conduct short as well as more sustained research projects to answer a question or solve a problem.
- Synthesize and evaluate the information gathered from print and digital sources; assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- Demonstrate command of grammar, usage, and punctuation when writing.

### **132100 Creative Writing**

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2

This course is designed for students who like to write short stories, poems, and plays, and want to improve their writing. Students in this course will:

- Write narratives and other creative texts to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
- Develop and strengthen writing by planning, drafting, revising, editing, and rewriting.
- Write routinely over extended time frames and shorter time frames for a range of tasks, purposes, and audiences.
- Select writing topics and formats for personal enjoyment, interest, and academic tasks.
- Learn to give feedback on the writing of others.
- Demonstrate command of English grammar, usage, punctuation, and spelling when writing.

- Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style.
- Demonstrate understanding of figurative language, word relationships and nuances in word meanings.

### **132200 Interpersonal Communication**

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2

This course develops person-to-person communication skills. Students in this course will:

- Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.
- Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.
- Understand multiple perspectives and pluralistic viewpoints and their origins.
- Recognize ethical standards and safe practices in social and personal media communications.
- Interpret non-verbal communication.
- Practice focused listening skills.

### **132300 Public Speaking**

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2

This introductory course provides students the opportunity to develop public speaking skills. Students will:

- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- Deliver a variety of speeches such as informative, persuasive, impromptu, and oral interpretation and practice effective delivery techniques.
- Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- Gather relevant information from multiple authoritative print and digital sources using advanced searches, integrating information while avoiding plagiarism.
- Practice cognitive listening techniques.
- Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

### **132401-132402 Journalism**

**AEO**

**Prerequisite:** Application process **Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

This course is for students interested in journalism and in the production of the school newspaper. Members of the class will make up the newspaper staff. The journalism staff is seeking individuals who can commit to the class both before and after school. Students in this course will:

- Write informative/explanatory texts about community and school events that examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- Develop and strengthen writing by planning, drafting, revising, editing, and rewriting.
- Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- Gather relevant information from multiple print and digital sources, assess credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- Demonstrate command of English grammar, usage, punctuation, and spelling when writing.
- Gain experiences in all aspects of journalistic writing and newspaper production and explore individual interest in the field.

### **131710 African/African American Literature**

**Only offered at AEO**

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

A course of interdisciplinary engagement through African and African American Literature. Students will engage in a variety of texts, mediums of art, and media predominantly produced by black authors, artists, and creatives. The main goal of the course is to learn about the human condition through the black experience both nationally and abroad with

the intent to explore the plurality of experiences of what it means to be Black, in the United States and internationally, and discover something about oneself in the learning process.

### **TBD Diverse Perspectives in Literature**

**Grade(s):** 11-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

This course introduces students to differences in identity and perspectives through literary works drawn from a wide range of voices and genres. Texts from BIPOC and LGBTQ+ authors will be explored and analyzed, including texts from local authors.

## **GENERAL ELECTIVES**

### **250000 Freshman Seminar**

**Grade(s):** 9    **Credit:** .5 per semester    **Term(s):** 1 or 2

This course will provide students with tools to ease the transition into high school and beyond with an orientation to the building, staff, policies, an examination of learning styles and study skills, and integrated technology skill-building in various computer skills including frequently used software and internet safety. A career exploration unit will include help in high school course selections. Reading and writing assignments will be integrated throughout the course to help prepare students to pass state tests required for graduation. Weekly "I-Time" lessons geared to parent/peer/teacher relationship-building, effective communication skills, problem-solving, and teamwork will be provided. Use of the text "The 6 Most Important Decisions You'll Ever Make" by Sean Covey, and other resources will address the six major social factors facing teens: school, friends, parents, dating and sex, addictions, and self-image/worth.

### **251001-251002 Yearbook**

**Prerequisite:** Application Process

**Grade(s):** 10-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

Students will apply skills in journalism and editing, graphic design, and photography, advertising and marketing, as well as computer technology. This course requires dedication, self-motivation, attendance at extracurricular activities, and time outside of class to meet deadlines and sell advertisements. Attendance is mandatory and an application should be completed.

### **251101-251102 Student Government**

**Prerequisite:** Application process. Class size is limited.

**AEO**

**Grade(s):** 11-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

Students will learn leadership skills. They will be responsible for planning and implementing events and projects within the school and in the community. Students will be required to participate in school activities and complete community service projects. The goal of this class is to provide students with a hands-on chance to be good citizens. Students will learn the organizational and communications skills necessary for future careers.

### **252100 Career Development Seminar**

**Grade(s):** 10-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**Offered only at AEO**

This class exposes the students to career opportunities available in the world of work. Students will be exposed to various career evaluations to determine their aptitudes, abilities and interests as they relate to occupations. Students will spend extensive time on developing basic work skills, self-esteem, mental and physical health, consumerism and other occupational information, which can be applied to everyday life. Students in the OLL Career Development Seminar will learn about various vocational paths and the skills and education necessary for success. In addition, they will complete a research project on a career of their choice.

### **251200 Career Development Internship**

**Prerequisite:** One semester in a related area of internship.

**Grade(s):** 10-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**Offered only at AEO, REPT**

Students will receive in-depth training and exposure in an entry-level paid employment position in conjunction with course work. A Youth Internship Agreement will be developed jointly with the employer, student, and internship coordinator to develop skills and work processes. Students need to have a reliable means of transportation to insure their attendance at the employer's work site.



## HEALTH SCIENCE/MEDICAL

### 140000 Health

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**AEO**

This course is based on the National Health Standards and is designed to assist students in obtaining accurate information, developing lifelong positive attitudes and behaviors, and making wise decisions related to their personal health. It uses a wellness approach stressing prevention and self-responsibility through informed choices. The inter-relationship of the physical, mental, and social dimensions of health and the effects on the total person is emphasized. Students use problem-solving, research, goal-setting, and communication skills to protect their health and that of the community. Students will receive their CPR Certification through this course. *Students may receive the CPR certificate upon completion of a scheduled hands-on certification session. (Students enrolled in AEO will not receive the hands-on certification.)*

## MATHEMATICS

### 181001-181002 Intermediate Algebra

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

Students will understand the concept of function and identify its important features. Students will recognize and solve math problems involving linear, quadratic, and exponential functions in mathematical situations and represent functions with tables, graphs and symbols.

### 181201-181202 Geometry 9

**Prerequisite:** Intermediate Algebra

**Grade(s):** 9 **Credit:** .5 per semester **Term(s):** 1 & 2

This course is designed for students who have successfully completed Intermediate Algebra in 8th grade. Students will calculate measurements of plane and solid geometric figures, solve geometric problems using algebraic methods, and construct logical arguments, based on axioms, definitions and theorems. Students will also know and apply properties of geometric figures (parallel and perpendicular lines, angles, triangles, quadrilaterals, Pythagorean Theorem, trigonometry, and circles) to solve real-world problems. Additional rigor will be incorporated into the course to extend students' learning.

### 181401-181402 Geometry

**Prerequisite:** Intermediate Algebra

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**Offered at AEO for students 9-12**

This course is designed for students who have successfully completed Intermediate Algebra. Students will calculate measurements of plane and solid geometric figures, solve geometric problems using algebraic methods, and construct logical arguments, based on axioms, definitions and theorems. Students will also know and apply properties of geometric figures (parallel and perpendicular lines, angles, triangles, and quadrilaterals) to solve real-world problem

### 181501-181502 Algebra 2 Concepts

**Prerequisite:** Intermediate Algebra, Geometry

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course is designed for those students that have successfully completed Geometry. It will offer a review of Intermediate Algebra, and incorporate concepts from Algebra 2 such as functions, probability, statistics and graph theory, and will place an emphasis on quadratics.

### 181601-181602 Algebra 2

**Prerequisite:** Geometry or concurrently with Geometry

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course is designed for students who have successfully completed Geometry. Students will solve problems involving linear, quadratic, and exponential functions. Students will generate equivalent algebraic expressions involving polynomials, and radicals. Students are encouraged to purchase their own calculator.

### 181651-181652 Probability and Statistics

**Prerequisite:** Algebra 2 or Algebra 2 Concepts

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course is designed for students that have successfully completed Algebra 2 Concepts, Algebra 2, or Precalculus. An introduction to college statistics, students will work with probability, data collection, descriptive and inferential statistics, and technological tools to draw conclusions, identify trends and describe relationships. Students will also study statistical measures of centrality and spread, methods of data collection, methods of determining probability, binomial and normal distributions, hypothesis testing, and confidence intervals. Students will use multiple representations to present data including written descriptions, numerical statistics, formulas, and graphs. Students are encouraged to purchase their own calculator.

**181701-181702 (CITS) Precalculus****Prerequisite:** Algebra 2**Grade(s):** 11-12 **Credit:** .5 per semester **Term:** 1 & 2**AEO, CITS**

This course is designed for students who excelled in Algebra 2 and intend to study in a field requiring higher mathematics. Precalculus serves as the bridge between Algebra and Calculus. Students will solve problems involving algebraic functions, equations, inequalities, absolute value graphing, logarithmic, exponentials, and analytic trigonometry. Students are encouraged to purchase their own TI-84 calculator.

**181801-181802 AP (CITS) Calculus****Prerequisite:** Precalculus and Commitment Agreement required**Grade(s):** 12 **Credit:** .5 per semester **Term:** 1 & 2**AEO, AP, CITS**

This course is designed for students who excelled in Precalculus and intend to study in a field requiring higher mathematics. Students are strongly encouraged to purchase their own TI-83 calculator and will be expected to take the AP Exam for Calculus in May. Topics of study include: limits, logarithmic, exponential, and other transcendental functions, differentiation and integration.

## MUSIC

**190001-190002 9th Grade Band****Prerequisite:** Previous instrumental study and/or director permission**Grade(s):** 9 **Credit:** .5 per semester **Term(s):** 1 & 2

This course provides instruction in basic high school band repertoire and develops each student's proficiency in music. Course requirements will include concert performances, contests, lessons or sectionals, performance evaluations, playing tests, and the continued study of music theory.

**191001-191002 Intermediate Band****Prerequisite:** Previous instrumental study and audition**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2**REPT**

This course provides instruction in more intermediate band repertoire and further develops each student's proficiency and appreciation of music. Course requirements will include concert performances, contests, lessons or sectionals, performance evaluations, playing tests, and the continued study of music theory. Students in this course will make up the Pep Band and Marching Band.

**191101-191102 Advanced Band****Prerequisite:** Audition**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2**REPT**

This course is designed for the advanced musician who already demonstrates excellent musical skills and wants to strengthen, enhance, and reach a higher level of performance. Course requirements will include concert performances, contests, lessons or sectionals, performance evaluations, playing tests, and the continued study of music theory. Students in the course will make up the Pep Band and Marching Band. Membership in this ensemble is based on needed instrumentation.

**191203-191204 Pop, Rock, and Hip Hop****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2**AEO**

This course is open to all students who are looking to explore the sounds of Pop, Rock, and Hip Hop. Students will have an opportunity to learn the fundamentals of music while playing instruments such as guitar, keyboards, drums, and voice. The goal is to achieve an authentic experience of what it is like to play and compose these styles of music, while studying the history, stylistic features, and influential artists. No previous music experience is required.

**191210 Introduction to Guitar****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2**AEO**

Introduction to guitar is a step by step approach to the basics of guitar and music fundamentals. Students will learn strumming patterns, chords, finger-picking, note reading, and improvisation through a variety of genres, ranging from classical to rock and roll. The online format will provide direct instruction to the student via video lessons and feedback from the teacher. Students may provide their own guitar, or may rent or borrow a guitar through various outlets that will be provided by the teacher.

**191220 Advanced Guitar****Prerequisite:** Experience playing guitar**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or**REPT**

Advanced Guitar is the next course in learning how to play the guitar and music fundamentals. Students will continue to master various playing techniques such as strumming patterns, chords, and finger-picking. Music from a variety of genres and time periods will be studied along with note reading and improvisation. Students will begin learning how to perform

alone and together within small ensembles. Students may provide their own guitar, or may rent or borrow a guitar through various outlets that will be provided by the teacher.

### **191301-191302 Jazz Ensemble**

**Prerequisite:** Audition

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**REPT**

This course provides instruction in the fundamentals of jazz music, develops proficiency, and creates appreciation of jazz music. It provides each student with lessons or sectionals to improve musicianship, technique, and improvisational skills. Course requirements will include concert performances, contest or festival performances, lessons or sectionals, improvisational studies, and the fundamentals of music theory. Students in this course will make up the Pep Band and Marching Band. Membership in this ensemble is based on needed instrumentation.

### **191400 Unified Music**

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s)** 1 & 2

This music course offers an exploratory music experience for students with varied and unique needs. Students will investigate the elements of music by listening and responding, performing and creating. Students will have opportunities to sing and play instruments with accommodations provided as needed. This class will be designed from various perspectives based on school setting, but will follow the Unified Music format in which grade level partner students assist with the learning of music concepts and skills. Open to 9th grade only if determined by the IEP team.

### **191451-191452 9th Grade Choir**

**Grade(s):** 9 **Credit:** .5 per semester **Term(s):** 1 & 2

This course is available to all students without an audition. Basic sight-singing, theory, history, and vocal techniques are taught. All ninth-grade students who are interested in singing should enroll in this course. Students will attend appropriate concerts throughout the year and will be required to evaluate them with a written critique. Concert participation is mandatory.

### **191601-191602 Intermediate Mixed Choir**

**Prerequisite:** Audition

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**REPT**

This choir prepares students for participation in advanced choirs. It provides an appropriate choral experience for students who enjoy singing through concerts and special performances including different styles, cultures, and languages. This is a performing ensemble experience with a high level of expectation and high degree of commitment. Concert participation is mandatory. Students will attend appropriate concerts throughout the year and will be required to evaluate them with a written critique.

### **191701-191702 Advanced SSA Choir (Soprano 1, Soprano 11 & Alto)**

**Prerequisite:** Audition

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**REPT**

This choir offers a focus on excellence in SSA's (Soprano I, Soprano II & Alto) choral literature. Students learn sight-singing and theory skills as they sing literature of various styles, cultures, and languages. This is a performing ensemble experience with a high level of expectation and high degree of commitment. Concert participation is mandatory. Students will attend appropriate concerts throughout the year and will be required to evaluate them with a written critique.

### **191801-191802 Show/Jazz Choir**

**Prerequisite:** Audition

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**REPT**

This is a very select small choral ensemble that teaches all aspects of stage performance through the use of vocal jazz and show choir music. Students develop an appreciation for the historic and cultural influences of vocal jazz and swing music in American society. This course provides comprehensive appropriate solo and group performance experiences including MSHSL solo and ensemble performance. Students will attend and critique appropriate concerts throughout the year. Concert participation is mandatory.

### **191901-191902 Advanced Concert Choir**

**Prerequisite:** Audition

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**REPT**

This choir is designed to expand student knowledge of choral literature that will include a variety of styles, cultures, and languages. A performing ensemble experience with a high level of expectation and high degree of commitment is expected. Students will attend and critique appropriate concerts throughout the year. Concert participation is mandatory.

**192001-192002 Chamber Choir****Prerequisite:** Audition**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2**REPT**

This choir is a performing ensemble with a high level of expectation and a high degree of commitment is expected. This highly selective mixed (SATB) ensemble is involved in various styles with the use of challenging literature and performance styles. This group also provides MSHSL solo and ensemble performance experiences. Students will attend and critique appropriate concerts throughout the year. Concert participation is mandatory.

**192101-192102 9th Grade Orchestra****Prerequisite:** Previous instrumental study and/or director permission**Grade(s):** 9 **Credit:** .5 per semester **Term(s):** 1 & 2

This course provides instruction in the basics of techniques and playing styles to develop each student's proficiency in music. Students will be assessed each semester with playing and music theory tests. Students will attend and critique appropriate concerts throughout the year. Concert participation is mandatory.

**192201-192202 Concert Orchestra****Prerequisite:** Audition**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2**REPT**

This course provides instruction in a more advanced repertoire of orchestral literature and further develops each student's proficiency and appreciation of music. It provides each student with lessons or sectionals for better musicianship and technique. Students will be assessed each semester with playing and music theory tests. Students will attend and critique appropriate concerts throughout the year. Concert participation is mandatory.

**192301-192302 Symphony Orchestra****Prerequisite:** Audition**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2**REPT**

This course provides instruction in the highest level of orchestral repertoire and further develops each student's proficiency and appreciation of music. It provides each student with lessons or sectionals for better musicianship and technique. Students will be assessed each semester with playing and music theory tests. Students will attend and critique appropriate concerts throughout the year. Concert participation is mandatory.

**192401-192402 Chamber Orchestra****Prerequisite:** Audition**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2**REPT**

This course provides unique performing experiences for a variety of functions (i.e. public performances, banquets, musicals) and extends the music student's realm of playing to include chamber/small group experiences, concerts, and festivals. Concert participation is mandatory.

## PHYSICAL EDUCATION

**210000 Foundations of Physical Education****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2**AEO**

This course will enable students to fulfill their High School Physical Education .5 credit requirement in a traditional physical education class setting. Students will obtain physical skills and knowledge to achieve a health-enhancing level of physical activity for fitness activities, team sports, individual sports, games, lifetime activities and dance. Participation in physical activity is emphasized.

**211100 Personal Fitness 1****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2**AEO**

This course will enable students to fulfill their High School Physical Education .5 requirement in a fitness center, gym, and outdoor setting. Students will obtain physical skills and knowledge to achieve a health-enhancing level of physical activity focusing on improving or maintaining fitness. Students will create and implement a fitness plan using individual assessment of cardiovascular endurance, muscular endurance, flexibility and strength. Participation in physical activity is emphasized.

**211600 Personal Fitness 2****Prerequisite:** Personal Fitness 1**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2**REPT**

This course will expand on the physical skills and fitness knowledge gained in Personal Fitness 1. The student will further develop cardiovascular endurance, muscular endurance, flexibility, and strength using more advanced performance skills. This course is designed with a concentrated focus on planning and implementing lifetime activity or sport specific goals.

**211200 (CITS) Strength Training****Prerequisite:** Foundations of Physical Education or Personal Fitness 1**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2**CITS**

This is a college level course and the expectations and coursework will be at the collegiate level. Individual weight training and personal fitness, and creating and implementing a strength training plan is the focus of the class. Individual and team sports will also be part of the class but the main emphasis will be on fitness. Three days of the week will be spent in the fitness center, one day will be in the gym participating in various fitness activities, and one day will be in the gym playing individual or team sports.

**211300 Lifetime Activities and Team Sports****Prerequisite:** Foundations of Physical Education or Personal Fitness 1**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

This course is designed for students to participate actively in a highly competitive environment. Students will learn strategies, etiquette, and officiating team, dual, and individual sports. Personal fitness will be promoted through these team, dual, and individual sports. Current events and athletic topics will be discussed and analyzed.

**211500 Unified Physical Education****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2 (9th grade by IEP or special approval only)

This physical education course combines students of all abilities to participate in developmentally appropriate activities including lifetime activities, physical fitness, and sport. Students will work together to increase competence and confidence in a variety of physical activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students. Aligned to State and National Standards, outcomes include:

- Increased physical fitness and activity-specific skills.
- New friendships and social inclusion fostered among classmates.
- Reinforced positive habits and reasoning resulting in better health & lifestyle choices.
- Advanced social and leadership competencies.
- Deeper understanding of activity/game/sport rules and strategies.
- Movement confidence and competence developed in a variety of physical activities/activity settings.

**TBD Global and Indigenous Sports****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2

This course introduces the relationship between sports and culture. Students will learn about and reflect on how various cultures, including Indigenous communities, have created and participate in sports. Students will have the opportunity to participate in sports and games played from around the world while learning about them.

## SCIENCE

**220011-220012 Earth and Space Science****Grade:** 9 **Credit:** .5 semester **Term(s):** 1 or 2

In Earth and Space, you will learn and explore the interrelationships between the earth, air, space, life, and water. You will learn using a combination of lab investigations, modeling, reading, and data interpretation. This course also focuses on the practices of science and engineering as well as learning several concepts scientists use to discover new ideas and explanations. Topics include Earth's water and its atmosphere, the process and geology and Earth's history, human impact on the environment, and space science. This course prepares students to be scientifically literate as well as prepare them for future courses in biology and other science classes. Earth and Space Science is a required course for graduation.

**221101-221102 Biology****Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2**AEO**

Biology is a course designed to teach the structure and function of living organisms then apply that knowledge to understand how organisms interact within larger systems. The major purpose of this course is to provide students with a basic understanding of biological concepts including: life's chemicals, interaction of cells to sustain life, ecology, heredity and the inheritance of traits, and evolution and diversity. Students will develop an understanding of these concepts through scientific laboratory investigations (including dissection of a fetal pig), hands-on activities, group work, individual work and projects. Biology is a required course for graduation in Minnesota.

**221901-221902 Honors Biology****Prerequisite:** Commitment Agreement required**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2



Biology is a course designed to teach the structure and function of living organisms then apply that knowledge to understand how organisms interact within larger systems. The major purpose of this course is to provide students with a basic understanding of biological concepts including: scientific method, ecology, cells, genetics, evolution, body systems, and the impact of humans on our planet. Students will develop an understanding of these concepts through scientific laboratory investigations (including dissection of a fetal pig), hands-on activities, group work, individual work and projects. Honors Biology uses an AP level textbook and includes research on current events, labs with higher levels of thinking or application and a significant amount of independent reading. Students should be self-motivated and take ownership of the increased academic workload. Biology is a required course for graduation in Minnesota.

**222301-222302 Human Anatomy & Physiology**

**Prerequisite:** Biology

**Grades:** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course is designed for students who are interested in learning more about the structure and function of the human body and/or considering health-related careers. Using varied lab experiences, students will learn how the body's structure reflects its various functions and how it maintains homeostasis. Assessments will involve student-developed models as well as written and practical tests. Each student will have the opportunity to work with human bones and dissect a preserved cat specimen. Students are expected to participate in all lab activities.

**222401-222402 (CITS) Human Anatomy & Physiology**

**Prerequisite:** Biology or Honors Biology/Commitment

Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**CITS**

This is an advanced biology course for students who wish to learn the essentials of human body structure (anatomy) and its functions (physiology). This course is highly recommended for students interested in careers in the health field (medicine, dentistry, nursing, physical therapy) and/or physical education and athletics. It should also be of interest to anyone who is concerned about his/her own physical well-being. The course entails an in-depth study of how the body's structure reflects its various functions and how it maintains a state of constant change. Each student will have the opportunity to work with human bones and dissect a preserved cat specimen. Students are expected to participate in all laboratory activities.

**222601-222602 Introductory Chemistry**

**Prerequisite:** Physical Science 9

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

This course is designed to develop an understanding of chemistry concepts that every person should know. In this course, students will study chemistry concepts in the context of practical decision making and its relevance to everyday lives. For example, through lab, lecture and modeling activities, students will explore chemistry by visiting topics of water, resources, petroleum and everyday applications of the gas laws. This college prep class is designed for students who will attend either college or vocational training after high school and are not likely to take college chemistry. Fulfills Chemistry/Physics graduation requirements.

**222701-222702 Chemistry**

**Prerequisite:** One year of high school science and one year of Algebra or equivalent

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

Chemistry is the study of materials, their composition and structure, and the changes that they undergo. Chemistry is a systematic body of knowledge gained from observation, study, and experimentation as opposed to guesswork and opinions. By studying chemistry, students will be able to understand the nature of the materials around them. Students enrolling in Chemistry will gain an understanding of the basic topics of chemistry including atomic structure, element families and the periodic chart, chemical bonding, formula writing, equation writing and balancing, acids and bases, and many others. Substantial emphasis will be placed on laboratory investigations requiring critical thinking, observing, and drawing conclusions. Skill in scientific writing will be developed as well. If your career plans include a college education, Chemistry or Honors Chemistry is recommended. Fulfills Chemistry/Physics graduation requirement.

**222801-222802 (CITS) Chemistry**

**Prerequisite:** One year of high school science and one year of Algebra or equivalent

Commitment Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**CITS**

Our society depends on science and technology. First-class medical care, sufficient and varied food supplies, comfortable housing, rapid and reliable communication are but a few of the benefits that are a direct result of scientific and technological developments. Chemistry has played an important role in these developments. Honors Chemistry will provide you with a challenging and rewarding laboratory-based experience. Topics of study will include all those typical of a first-year course: atomic and molecular structure, bonding and formulas, chemical equations and their relationship to mass and volume, periodic relationships, acids, and bases. Emphasis will be placed on investigative lab work with outcomes both at the knowledge and skill levels. Considerable time will be spent developing and improving the student's

abilities to observe, think critically, and communicate results and observations through scientific writing. Fulfills Chemistry/Physics graduation requirement.

### **222941-222942 Aerospace Physics**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**CTE**

Aerospace Physics is a hands-on, applied course where students learn the concepts of Physics through the exploration of Aerospace Engineering and Design. This course has been designed for students who want to learn Physics as well as explore the science of flight. During the year, students will gain a strong understanding of physics principles while being introduced to the theories of flight, the principles of engineering, and airplane design and manufacturing. The course uses problem based learning to enhance learning in theory of flight, airplane design, and airplane construction. Aerospace Physics has been designed for students who like hands-on problem solving, collaborative teamwork and creatively finding solutions. For the course final project, students will collaboratively use physics and engineering principles to design a model aircraft, build it and fly it. This course is an exciting opportunity for students interested in pursuing careers in engineering, airplane mechanic or technician, pilot, or any field within the aviation industry. Part of the course has been modeled in conjunction with Lake Superior College *Aviation Physics and Math* course. Fulfills Physics for science graduation requirement.

### **222951-222952 Introductory Physics**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

The conceptual approach engages students with analogies and imagery for real-world situations to build a strong understanding of physical principles ranging from classical mechanics to current physics theories. With this strong foundation, students will be better equipped to understand the equations and formulas of physics, and to make connections between the concepts of physics and their everyday world. This course is for students who want to learn about physics, but may have difficulties with higher level mathematics. Fulfills Chemistry/Physics graduation requirement.

### **223001-223002 Physics**

**Prerequisite:** Geometry

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

Physics is a physical science that describes and explains the nature and interactions of matter and energy. Concepts, relationships, ideas and practical application are stressed rather than rote memorization. This course is recommended for future college and technical school students and students with a strong interest in science. Topics of study will include velocity, momentum, energy, acceleration, light, electricity, force, waves, magnetism, and Newton's laws of motion and gravitation. Fulfills Chemistry/Physics graduation requirement.

### **223101-223102 (CITS) Physics**

**Prerequisite:** Completion or currently enrolled in Algebra 2

Commitment Agreement Required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**CITS**

CITS Physics is for the college bound student seeking science, mathematics, engineering, or technology majors. Work assignments will be both more comprehensive and in depth than the regular physics course. Topics of study will include velocity, momentum, energy, acceleration, light, electricity, force, waves, magnetism, and Newton's laws of motion and gravitation. Fulfills Chemistry/Physics graduation requirement.

## **SOCIAL STUDIES**

### **230010 Civics in Global Society**

**Grade(s):** 9 **Credit:** .5 per semester **Term(s):** 1 or 2

**AEO**

The goal of this course is to provide students with a foundational skill set for understanding global citizenship. Students will investigate how society is organized through various government and social structures, including citizenship, rights, and responsibilities. This course will also integrate geospatial skills to help understand human systems of settlement, population, and migration, and the impact of these systems on societies around the world.

### **231001-231002 United States History**

**Grade(s):** 10 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course is an examination of the history of the 20th century United States to the present. The class provides historical, cultural, social, economic, and political context of United States History from the early to mid-twentieth century. Major topics in the first semester will include the Progressive Era, the Industrial Age, the Age of Imperialism, World War I, Isolationism, Women's Suffrage, Prohibition, the Jazz Age, beginnings of the Great Depression, and the outbreak of World

War II. Second semester topics include the Cold War, the Red Scare and McCarthyism, the Civil Rights Movement, the Great Society, Vietnam, the Women's Movement, Watergate, the end of the Cold War, and Contemporary America.

### **231101-231102 AP United States History**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AP**

The AP program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses to develop the skills necessary to arrive at conclusions on the basis of an informed judgment and present reasons and evidence clearly and persuasively. This course will cover the earliest inhabitants and civilizations in the Americas before colonization through the post-Cold War Era.

### **231201-231202 International Studies**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course provides a historical, cultural, social, economic, and political overview of nations and cultures with a focus on how they are interconnected. By studying the history of regions of the world and current world problems, students will analyze information and issues to gain an understanding of the complexities of our modern world. Topics covered in the first semester will include the United Nations, government and economic systems, world religions, conflicts in the Middle East, human rights, terrorism, trade, and current events. Second semester topics include economically developing nations, civil wars and genocide, immigration, environmental issues and current events. This course will fulfill a 1.0 World History credit requirement.

### **231301-231302 World History**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

World History gives a historical, cultural, social and political overview of the rise of complex human societies. The course provides an overview of history beginning with the development of early river civilizations. In the first semester, the era of complex societies from approximately 1,000 BCE through 1450 CE will be examined with an emphasis on developments in religion, philosophy, arts, sciences, technology, and governments. Second semester topics include the transformations of nation states starting in approximately 1450. The interactions among the Americas, Asian, African, and European realms through the twentieth century will be examined and compared to the Contemporary World.

### **231401-231402 AP World History**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AP**

The purpose of the AP World History course is to develop a greater understanding of the interaction of human societies. This understanding is advanced through a combination of factual knowledge and analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Historical periods as well as specific themes provide organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study. This course will cover from 8000 B.C. to the present.

### **231500 American Government and Politics**

**Grade(s):** 12 **Credit:** .5 per semester **Term(s):** 1 or 2

**AEO**

The purpose of this course is to provide students with an understanding of the functions and organizations of the federal, state, tribal, and local systems of government within the United States. Included in this course will be a look at the legislative, executive, and judicial branches of government. Topics covered will include the United States Constitution, amendment process, electoral process, state government, local government, policy making, and current political issues.

### **231600 (CITS) American Government and Politics**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CITS**

This course will provide students with a study of the structure and function of the national government of the United States, as well as state, tribal, and local governments. The course examines the presidency, Congress, and federal courts in function, structure, and powers. This course also analyzes the impact of interest groups, political parties, and the media upon government and elections.



### **231700 Economics**

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2 **AEO**

This course examines decision-making through the lens of microeconomics and macroeconomics. Fundamental principles of scarcity and choice guide students in understanding how economic decisions affect personal finance and business decisions as well as national and global well-being. Students will use and analyze economic data in order to understand such concepts as supply and demand, pricing, and opportunity cost, and comparative advantage.

### **231800 (CITS) Economics**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 11-12 Seniors will have priority in scheduling. **Credit:** .5 per semester **Term(s):** 1 or 2 **CITS**

This course examines micro- and macroeconomic principles. Microeconomic content includes fundamental economic concepts and principles such as the nature and function of product markets, market failures, and the role of government. Macroeconomic aspects of the course examines the way in which economic performance is measured as well as the impact of various types of policies on economic systems.

### **231900 Psychology**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2 **AEO**

Psychology is the study of individual human behavior and cognitive processes. Students will examine the different types of psychology and the human mind. Specific topics such as sensation and perception, basic processes of learning, personalities and memory will be explored.

### **232000 (CITS) General Psychology**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2 **CITS**

This course will provide students with an introduction to the scientific study of human behavior: History, Research Methods, research design, sensation and perception, learning, personality adjustment, memory and social psychology. A focus will be on the brain and its structures. Upon completion of the course students will be able to: define psychology, name the basic unit of the nervous system, and state what is specifically designed to do, give examples the principles related to the organization of perception (figure and ground, nearness, similarity, etc), describe various categories of mental disorders found in currently existing in the DSM (anxiety disorders, dissociative disorders, and personality disorders etc.), and describe three different approaches to therapy

### **232100 Sociology**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2 **AEO**

Sociology is the study of human behavior within and among groups. Topics of study will include socialization, culture, social institutions, gender roles and issues, and an in-depth look at how individuals, groups, and institutions react to, and influence specific social changes and social problems.

### **232200 (CITS) Sociology**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2 **CITS**

This course provides an introduction to sociological concepts and the application of those concepts to achieve a better understanding of social life. Of key importance is to understand how these concepts provide us with a framework with which to view societies and the problems within societies. Social forces impact our lives in powerful ways. It is primarily because of these social forces that we do the things we do. Requirements include a research paper and/or project.

### **232300 Civil and Criminal Law**

**CTE**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2

This course will help students gain an introductory level of understanding of the American legal system through the study of the criminal and civil justice systems. Units of study will include a historical perspective on the judicial system, case studies, mock trial simulations, and application of law to current issues.

### **232400 (CITS) Civil & Criminal Law/Introduction to the Criminal Justice System and Related Careers**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2 **CTE, CITS**

This course will help students gain an understanding of our legal system through the study of the civil and criminal justice systems. Students will examine the conflicting values that impact justice systems through case studies and attention to current issues. Units of study will include: History of Law, Criminal Law, Juvenile Law, Civil Law, Mock Trial, Careers in Justice.

**TBD CITS Anishinaabeg of Lake Superior****Prerequisite:** Commitment Agreement required**Grade(s): 11-12 Credit: .5 per semester Term(s): 1 and 2**

This course is designed to familiarize students with the indigenous people of the Lake Superior region: the Ojibwe-Anishinaabe. Exploring the philosophical and social changes that occurred as a result of contact and colonization, topics range from pre-contact to the activism of the 60's. Among the topics covered are philosophy, the oral tradition, migration to the Great Lakes region, fur trade, assimilation policies, the federal trust responsibility and sovereignty.

**TBD Ethnic Studies****Grade(s): 11-12 Credit: .5 per semester Term(s): 1 or 2**

This course introduces students to anthropology, which is the study of people, past and present. In this course, students will explore cultural, genetic, and linguistic variation across time and space and reflect on what makes us human. Students will learn to "think like an anthropologist" which means seeking to understand other points of view while learning something about ourselves.

## WORLD LANGUAGES

**240001-240002 German Level 1****Grade(s): 9-12 Credit: .5 per semester Term(s): 1 & 2**

This course is designed for students with little to no knowledge of the German language. During German 1 students will develop language skills allowing them to read, speak, write, and understand simple sentences about themselves and everyday life as well as explore various cultural aspects of the German-speaking world. Emphasis is given to building comprehension and literacy skills in German. This course is designed to develop language proficiency starting from the Novice-Low Proficiency Range as determined by the American Council on the Teaching of Foreign Languages (ACTFL).

**241001-241002 German Level 2****Prerequisite:** German Level 1**Grade(s): 9-12 Credit: .5 per semester Term(s): 1 & 2**

German 2 focuses on expanding the range of everyday life topics that students can talk, read, listen, write and converse about. In German 2, students rely less on memorized phrases and begin communicating in longer and more varied sentence structures. They continue to make simple comparisons and connections with the products and practices of the German-speaking world and increase their independent reading skills. This course is designed to increase students' language proficiency starting from the Novice-Mid+ Proficiency Range as determined by the ACTFL.

**241101-241102 German Level 3****Prerequisite:** German Level 2**Grade(s): 10-12 Credit: .5 per semester Term(s): 1 & 2**

In German 3, students begin to identify main ideas and related details from authentic texts, expand their ability to ask questions, and express their thoughts, opinions, preferences and reactions in more detail. Grammar topics focus on structures that allow students to communicate about the past, the future, their wishes, and uncertainties. Continued exploration of cultural aspects of the German speaking world is embedded in language study, and students will transition from the Novice to the Intermediate Proficiency Range as determined by the ACTFL. Students in this level are eligible but not required to take the assessment for the Minnesota Bilingual Seals Program.

**241201-241202 German Level 4****Prerequisite:** German Level 3**Grade(s): 11-12 Credit: .5 per semester Term(s): 1 & 2**

The focus of German 4 is to develop student proficiency in the Intermediate Proficiency levels as determined by the ACTFL. Students will expand their range of vocabulary and refine their use of grammatical structures to allow them to boost their ability to communicate their thoughts, opinions, and experiences as they relate to cultural products, practices, and perspectives of the German-speaking world. Students will use more complex sentences and paragraphs in written work as well as focus on developing the ability to respond, reflect upon, and make connections between texts and in conversation. Students in this level are eligible but not required to take the assessment for the Minnesota Bilingual Seals Program.

**241251-241252 (CITS) German Level 5****Prerequisite:** German Level 4**Grade(s): 11-12 Credit: .5 per semester Term(s): 1 & 2**

CITS German Level 5 parallels the UMD Intermediate German curriculum covering speaking, listening, writing, reading and culture of the German speaking world. Students in this level are eligible but not required to take the assessment for the Minnesota Bilingual Seals Program.

**CITS****241301-241302 Spanish Level 1**

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course is designed for students with little to no knowledge of the Spanish language. During Spanish 1 students will develop language skills allowing them to read, speak, write, and understand simple sentences about themselves and everyday life as well as explore various cultural aspects of the Spanish-speaking world. Emphasis is given to building comprehension and literacy skills in Spanish. This course is designed to develop language proficiency starting from the Novice-Low Proficiency Range as determined by the ACTFL.

#### **241401-241402 Spanish Level 2**

**Prerequisite:** Spanish Level 1

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

Spanish 2 focuses on expanding the range of everyday life topics that students can talk, read, listen, write and converse about. In Spanish 2, students rely less on memorized phrases and begin communicating in longer and more varied sentence structures. They continue to make simple comparisons and connections with the products and practices of the Spanish-speaking world and increase their independent reading skills. This course is designed to increase students' language proficiency starting from the Novice-Mid+ Proficiency Range as determined by the ACTFL.

#### **241501-241502 Spanish Level 3**

**Prerequisite:** Spanish Level 2

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

In Spanish 3, students begin to identify main ideas and related details from authentic texts, expand their ability to ask questions, and express their thoughts, opinions, preferences and reactions in more detail. Grammar topics focus on structures that allow students to communicate about the past, the future, their wishes, and uncertainties. Continued exploration of cultural aspects of the Spanish speaking world is embedded in language study, and students will transition from the Novice to the Intermediate Proficiency Range as determined by the ACTFL. Students in this level are eligible but not required to take the assessment for the Minnesota Bilingual Seals Program.

#### **241601-241602 Spanish Level 4**

**Prerequisite:** Spanish Level 3

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

The focus of Spanish 4 is to develop student proficiency in the Intermediate Proficiency levels as determined by the ACTFL. Students will expand their range of vocabulary and refine their use of grammatical structures to allow them to boost their ability to communicate their thoughts, opinions, and experiences as they relate to cultural products, practices, and perspectives of the Spanish-speaking world. Students will use more complex sentences and paragraphs in written work as well as focus on developing the ability to respond, reflect upon, and make connections between texts and in conversation. Students in this level are eligible but not required to take the assessment for the Minnesota Bilingual Seals Program.

#### **241701-241702 (CITS) Spanish Level 5**

**Prerequisite:** Spanish Level 4/Commitment Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**CITS**

CITS Spanish Level 5 parallels the UMD intermediate Spanish curriculum covering speaking, listening, writing, reading and culture of the Spanish speaking world. Students in this level are eligible but not required to take the assessment for the Minnesota Bilingual Seals Program.

#### **242301-242302 Ojibwemowin Level 1**

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

This course will provide students with opportunities to develop themselves as lifelong-learners of Ojibwemowin. Students will acquire fundamental listening, speaking, reading, and writing skills in Ojibwemowin. Topics include, but are not limited to, grammar functions and vocabulary development, fluency with survival phrases, understanding through hearing and speaking the sounds of Ojibwemowin, and an applied understanding of elements of the cultures of the diverse Ojibwe-speaking world. Ojibwemowin language skills will center on everyday life situations and Ojibwe perspectives of oneself and the world. Required texts may provide an historical framework for contemporary life experiences.

#### **242401-242402 Ojibwemowin Level 2**

**Prerequisite:** Ojibwemowin Level 1

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & S

This course will provide learners with opportunities to continue to develop themselves as lifelong-learners of Ojibwemowin. This course expands on the language skills and topics from the Ojibwemowin 1 course. Topics include, but are not limited to, increased grammatical understanding, vocabulary development, a continued focus on listening comprehension and speaking in narratives in Ojibwemowin with an increase in use of creative language that students will apply through conversational situations, and an applied understanding of elements of the cultures of the diverse Ojibwe-speaking world. Required texts may provide an historical framework for contemporary life experiences.

#### **242601 & 242602 (CITS) Ojibwemowin 3**

**Prerequisite:** Ojibwemowin Level 2

**Grade(s):** 11-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

**CITS**

This course will provide learners with tools and procedures necessary to function as a lifelong learner of Ojibwemowin. These tools and procedures include, but are not limited to, increased grammatical understanding, structure, increased vocabulary development, fluency with “survival language,” a broader focus on listening comprehension and speaking narratives in Ojibwemowin, and students will apply language use and cultural understanding through school visits, immersion experiences, and Ojibwe community events. Students will continue to identify and access Ojibwemowin resources, including written texts and audio recordings, to further their ability to self-develop their language skills. Required texts may provide an historical framework for contemporary dynamics. Students in this level are eligible but not required to take the assessment for the Minnesota Bilingual Seals Program.

### **243101-243102 - American Sign Language**

**Grade(s):** 9-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

American Sign Language (ASL) is one of the fastest growing languages in the United States and is the indigenous language of the Deaf community. ASL is a natural, visual, non-spoken language with its own distinct grammatical structure. The shape, movement, and location of the hands, facial expressions and body are used to communicate with one another. ASL as a visual language, uses a different modality of communication compared to spoken languages.

## **REQUIRED ELECTIVES**

### **250000 9th Grade Futures: Navigating High School and Beyond**

**AEO**

**Grade(s):** 9    **Credit:** .5 per semester    **Term(s):** 1 or 2

This course teaches academic and professional skills for success through high school and into adulthood. Students will explore their strengths, passions and make connections to opportunities after high school.

### **250100 Computer Science 10**

**Grade(s):** 10    **Credit:** .5 per semester    **Term(s):** 1 or 2

**AEO**

This course engages students in the use of computer applications needed for educational, personal, and professional development. Topics covered in this course include digital citizenship, ethics, and professionalism in digital communication.

### **250200 College, Career, Life Readiness 11**

**AEO**

**Grade(s):** 11    **Credit:** .5 per semester    **Term(s):** 1 or 2

This course will provide students with post-secondary opportunity exploration and research. Professional skill development and preparation of Life Skills needed moving into adulthood.

### **250200 Personal Finance 12**

**Grade(s):** 12    **Credit:** .5 per semester    **Term(s):** 1 or 2

## **SPECIAL EDUCATION COURSES**

*\*The courses in this section are only available to students with an Individual Education Plan (IEP). All courses will require approval by the IEP case manager.*

### **801131 - 801132 Reading/Writing Strategies**

**Grade(s):** 9-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

This class is individualized for students who have not passed the MCAs. Students will focus on improving reading and writing skills specific to reading fluency, decoding skills, and reading comprehension, based on IEP goals. This course can be taken multiple times for credit per IEP team decision.

### **801181-801182 Math Strategies**

**Grades(s):** 9-12    **Credits:** .5 per semester    **Term(s):** 1 & 2

**AEO**

This class is individualized for students who have not passed the MCAs. Students will focus on improving skills in addition, subtraction, multiplication, and division of whole numbers, decimals, fractions, and percents. Applied problems,

measurements, ratios, proportion, circles, cylinders, probability, statistics, and graphing will also be studied based on IEP goals. This course can be taken multiple times for credit per IEP team decision.

#### **801251- 801252 Self Advocacy**

**Grades(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This class offers students with emotional and/or behavior disorders opportunities to work as a part of a small group in activities related to attitudes and behaviors which will result in the ability to function successfully in school. A willingness to participate in discussion by using appropriate listening and speaking skills and by doing in-class reading and writing activities is required. This course also includes individual conferences regarding progress in all classes and individualized tutoring to assist in the completion of mainstream requirements. It is also designed to extend the skills of students who have been diagnosed as disabled in reading, writing, listening skills, oral expression, or study skills. Its purpose is to assist them in completing and earning required mainstream course credits. Students will be instructed in learning strategies for studying, test taking, and task completion. They will also receive instruction in organizational strategies to increase the probability of success. This course can be taken multiple times for credit per IEP team decision.

#### **801261- 801262 Transition**

**Grades(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO**

This course will address the transition needs of students and will focus on the five areas of transition as identified by the student's IEP (i.e. Home Living, Jobs and Job Training; Postsecondary Education and Learning Opportunities; Recreation and Leisure; and Community Participation). Topics will include: career exploration, investigating post-secondary options, study skills, organization skills, social skills, money management, self-advocacy skills, health and safety issues, communication skills, consumer awareness, community participation, and the development of recreation and leisure skills. The coursework will be individualized for each student based on IEP goals. This course can be taken multiple times for credit per IEP team decision.

#### **801271- 801272 Life Skills**

**Grades(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

In this class, special attention is given to developing student skills in daily living and life skills, vocational skill building, transition planning, and implementation. All areas of study are based on student IEP goals and objectives. Services are delivered through hands-on activities and community based learning. Students develop independent living and personal social skills necessary to manage a home, family and finances. Further, students will develop appropriate levels of independence, self-confidence, and socially acceptable behaviors. Through classroom instruction, hands-on activities and community outings, students study areas of: health, safety, nutrition, meal planning, preparation and clean up, consumer skills, home management skills, personal finances, and community living. Students will also receive career skills and training through curriculum and on-the-job experiences in the school and community.

#### **801281- 801282 Work Experience**

**Grades(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2

This course uses community job sites and seminars to teach students employment skills. Students may have a job, or will find a job with help from the work coordinator. The goal of the work experience program is to help students with job seeking and retention skills, through an individual employment plan. Students will learn specific employment skills, such as effectively interacting with co-workers and employers, and advocating for themselves at a work site. They will also develop good work habits and identify personal employment preferences.

#### **801241-801242 PAES Lab (1 hr) and/or 801291-801292 PAES Lab (2 hr)**

**Grades(s):** 9-11 **Credit:** .5 per semester **Term(s):** 1 & 2

Practical Assessment Exploration System (PAES) is a simulated work assessment and hands-on curriculum lab where students learn by doing work tasks in a structured environment. In the lab, students will explore the following five career field areas: business/marketing, computer/technology, construction/industrial, processing/production, and consumer service. Students will complete tasks using real tools and equipment. These tasks start at a basic level and build in complexity as the student's skills increase. The PAES lab allows students to experience and practice skills that help prepare them for the world of work as well as assist them in finding direction for their desired career paths.



## CAREER AND TECHNICAL EDUCATION



# Career and Technical Education Courses 2024-2025



### Business, Management, & Administration

- Intro to Marketing & Business
- Business Management, Leadership & Coaching
- Sports & Entertainment Marketing
- Starting Your Own Business – Entrepreneurship
- Business & Personal Finance
- AP Computer Science Principles



### Agriculture, Food, & Natural Resources

- Intro to Agriculture/Food/ Natural Resource Sciences
- Plant Science Fall and Spring
- Plant Science: Greenhouse 1
- Plant Science: Greenhouse 2
- Forestry, Fish, & Wildlife



### Arts, Communication, & Information Systems

- Graphic Arts I
- Graphic Arts II
- Graphic Arts III



### Human Services

- Intro to Cooking
- \*Intro to Baking
- \*Advanced Culinary
- \*Meal Prep & Packaging
- \*Intro to Law Enforcement
- Civil and Criminal Law
- CITS Civil and Criminal Law
- CITS Pathways2Teaching
- Child Development/ Child Psychology
- Early Childhood and Education Professions



### Health Science Technology

- Emergency Medical Responder
- CITS Medical Occupations
- CITS Intro to Nursing
- \*Fire Science
- \*Forensic Science



### Engineering, Manufacturing, & Technology

- \*Intro to Construction
- \*Woodworking
- \*Construction Trades 1 & 2
- Auto Basics: Brakes & Engines
- Auto Basics: Transmissions & Suspensions
- Principles of Engineering
- Intro to Engineering & Design
- Adv. Ind. Engineering Design
- CAD for Architecture 1 & 2
- Adv. Ind. Architecture Research & Design
- FAB Lab 1 & 2
- Robotics 1 & \*2
- Adv. Engineering Design 1 & 2
- Manufacturing Tech 1 & 2
- Adv. Manufacturing Tech
- Weldments
- Finite Element Analysis

*\*NEW COURSE in 24-25*

## AEROSPACE CAREERS

### **222941-222942 Aerospace Physics**

**Grade(s):** 11-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

**AEO, CTE**

Aerospace Physics is a hands-on, applied course where students learn the concepts of Physics through the exploration of Aerospace Engineering and Design. This course has been designed for students who want to learn Physics as well as explore the science of flight. During the year, students will gain a strong understanding of physics principles while being introduced to the theories of flight, the principles of engineering, and airplane design and manufacturing. The course uses problem based learning to enhance learning in theory of flight, airplane design, and airplane construction. Aerospace Physics has been designed for students who like hands-on problem solving, collaborative teamwork and creatively finding solutions. For the course final project, students will collaboratively use physics and engineering principles to design a model aircraft, build it and fly it. This course is an exciting opportunity for students interested in pursuing careers in engineering, airplane mechanic or technician, pilot, or any field within the aviation industry. Part of the course has been modeled in conjunction with Lake Superior College *Aviation Physics and Math* course. Fulfills Chemistry/Physics graduation requirement.

### **222931- 222932 Introduction to Aviation, Aerospace History, and Aerospace Engineering Design**

**Grade(s):** 10-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**CTE, AEO**

Students gain a foundational understanding of the science of flight and typically include the history, regulations, and possible career paths within the aviation industry. Aviation courses usually cover physics, the relationships of weight and balance, principles of navigation and flight control, ground and airport operations and services, and Federal Aviation Agency regulations.

## AGRICULTURE, FOODS, AND NATURAL RESOURCES (AFNR)

### **221410 Introduction to Agriculture, Food, and Natural Resource Sciences**

**Grade(s):** 10-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**CTE**

Introduction to Agriculture and Natural Resource Sciences provides a project-based survey of the array of professions in these fields. Students will be introduced to the breadth of these industries. Particular focus will be given to engaging students in firsthand experiences of these industries in Duluth and how emerging technologies behind urban agriculture, food science, and natural resources are revolutionizing issues of scale, efficiency, yield, and local community-based production to power the rapid expansion of this industry in our city. Students will survey a wide array of topics within the industry, gaining understanding of types of agriculture, trends, and career opportunities. Using the SAE model, students will explore where their career interests lie and identify areas for continued study. Students will learn and practice career and leadership skills, through introduction and involvement in Future Farmers of America (FFA).

### **221621 Plant Science Fall**

**Grade(s):** 10-12    **Credit:** .5 per semester    **Term:** 1

**CTE**

During this class we will study plant structures, learn basic functions and explore plant propagation. We will investigate factors that affect plant growth, including light, temperature, soil/media and nutrients. Students will be exposed to career opportunities in horticulture and greenhouse operations, while cultivating salad greens for the school deli. Students will also plan, propagate plants and lead a plant sale as a fundraiser.

### **221622 Plant Science Spring**

**Grade(s):** 10-12    **Credit:** .5 per semester    **Term:** 2

**CTE**

During this class we will study plant structures, learn basic plant functions and explore seed starting. We will investigate factors that affect plant growth, including light, temperature, soil/media and nutrients. Students will be exposed to career opportunities in horticulture and greenhouse operations, while cultivating greens for the school deli. Students will start plants for local gardens & work with community members on community-based gardening projects.

**221822 Plant Science Greenhouse 2\* (2-hour class)****Prerequisite:** Plant Science**Grade(s):** 10-12 **Credit:** 1 per semester **Term(s):** 2**CTE**

The state-of-the-art greenhouse allows students to continue the development of skills and knowledge needed to perform successfully in a career involving plants. Various challenging projects in the greenhouse and outdoors in the landscape provide real-world experiences. These include producing a spring horticulture crop for sale, and designing an environmentally friendly landscape. Students lead the way in a school Service Learning project of a schoolyard garden. Applying plant and soil science knowledge, along with technical math, occurs in these projects.

*\*This course is offered at East High School. Denfeld High School students may register for this course. Transportation is provided to and from the East.*

**221420 Forestry, Fish, and Wildlife\* (2-hour class)****Grade(s):** 10-12 **Credit:** 1 per semester **Term(s):** 1 or 2**CTE**

This course will give students the opportunity to experience forestry, fish, and wildlife firsthand. The school grounds serve as an outdoor classroom for studying tree morphology, identification, timber cruising, and small and large mammals. The school's proximity to Hawk Ridge and Lake Superior are ideal for learning about local birds and fish. Course work is divided into class discussions, group work, labs, projects, and outdoor activities. Upon completion of the class, students will have gained job skills related to the field of natural resources and an understanding of the importance of flora and fauna in Northern Minnesota. Students will perform a service-learning project at a Duluth city park or school property.

*\*This course is offered at East High School. Denfeld High School students may register for this course. Transportation is provided to and from East.*

## ARTS, COMMUNICATION, AND INFORMATION SYSTEMS

**102201-102202 Graphic Arts/Digital Design 1***This course fulfills the 1.0 Arts credit requirement.***Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 & 2**CTE**

Explore communication technology careers including pre-press, offset printing, silk screen, finishing work, and quality control. Extensive "hands-on" class using computers, scanners, offset printing presses, silk screens and other equipment found in the graphic arts industry. Students envision, design, and use resources to create, assemble, and deploy a finished project. Software use includes current industry standard, Adobe Creative Suite - InDesign, Illustrator, Photoshop and Flash. Units include paste-up, silk screening, scratch pads, elements of design, typography, small space ads, digital photography and poster design. Troubleshoot equipment including computers and printers. Produce real-world work for high school: posters, flyers, advertisements.

**102301-102302 Graphic Arts/Digital Design 2****Prerequisite:** Graphic Arts/Digital Design 1*This course fulfills the 1.0 Arts credit requirement.***Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2**CTE**

Course includes in-depth study of communication technology career paths. Units include color theory, 2-sided offset printing, tiling poster, ink mixing, business portfolios, rubber stamps, 2-color silk screening, spot colors, and poster design. Use digital and video cameras. Students create presentations using sound and motion. Troubleshoot equipment including computers, printers, scanners, offset presses. Produce real-world work for high school: staff business cards, school scratch pads, and promotion of school events.

**102401-102402 Graphic Arts/Digital Design 3****Prerequisite:** Graphic Arts/Digital Design 2**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 & 2**REPT, CTE**

This upper-level course is a continuation of the skills learned in Graphic Arts 1 and 2. Students will prepare advanced multi-color projects for offset and silkscreen printing. Troubleshoot equipment including network issues, computers, printers, scanners, offset presses. Produce real-world work for high schools and communities.

## BUSINESS, MANAGEMENT, AND ADMINISTRATION

**114100 Introduction to Marketing and Business****Grade(s):** 9-12 **Credit:** .5 Semester **Term(s):** 1 or 2**CTE**

Marketing and Business involves the many activities needed to get products/services from producers to consumers. It's one of the most exciting and vital career areas you could ever explore. This class is a must for all students who plan on



succeeding in our very competitive Free Enterprise System. Students will be exposed to Marketing/Business, Economics and Human Relations. Activities will help students apply all of the marketing and business functions and relate them to any career opportunity. In addition, students will learn advanced skills in locating, applying for, and keeping a job.

#### **114300 Business Management, Leadership, Coaching**

**Prerequisite:** Introduction to Marketing and Business

**Grade(s):** 9-12 **Credit:** .5 Semester **Term(s):** 1 or 2

**CTE**

Marketing and Business Management gives students insight into the characteristics, organization, and operation of business, management and leadership. This class will give any student, whether planning to go on to school or work after graduation, the edge in the job market. To be successful in the global and diverse workplace, students must develop communication, human relations, self-management, and workplace enhancement skills. More than ever before, merely being technically competent is not sufficient.

#### **14200 Sports and Entertainment Marketing**

**Prerequisite:** Introduction to Marketing and Business

**Grade(s):** 9-12 **Credit:** .5 Semester **Term(s):** 1 or 2

**CTE**

The marketing and business field is seeing exponential growth in the sports and entertainment industry. Now a \$500 billion industry, the sports and entertainment industry has become a dominant presence not only in the U.S., but also in the rest of the world. The sports and entertainment industry encompass everything from digital communications to personal service and sales. Students will learn the fundamental principles and concepts identified with sports and entertainment marketing, and develop skills through marketing research and actual industry-based projects. Students will also have the opportunity to plan, implement and evaluate school and community sports and entertainment marketing practices and strategies.

#### **114400 Starting Your Own Business-Entrepreneurship**

**Prerequisite:** Introduction to Marketing and Business

**Grade(s):** 9-12 **Credit:** .5 Semester **Term(s):** 1 or 2

**CTE**

An Entrepreneur is a person who attempts to earn a profit by taking the risk of operating their own business enterprise. Thousands of people become entrepreneurs each year. They start their own businesses from scratch, buy existing businesses, or buy franchised business; if they are successful in providing products and services to consumers at a profit, they will build rewarding careers for themselves as entrepreneurs. This class will help you understand what it is like to be an entrepreneur and what is involved in starting a business. Economics will be emphasized in this class.

#### **110000 Business and Personal Finance**

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**AEO, CTE**

Students will gain the ability to manage their personal finances and make wise economic decisions. Areas explored include budget planning, banking, tax returns, investing, consumer credit, insurance, and career exploration. This course will help students become intelligent decision-makers in a global economy.

#### **111111-111112 AP Computer Science & Principles**

**Grade(s):** 11-12 **Credit:** .5 Semester **Term(s):** 1 and 2

**CTE, AP**

Learn the principles that underlie the science of computing and develop the thinking skills that computer scientists use. You'll work on your own and as part of a team to creatively address real-world issues using the tools and processes of computation.

## **ENGINEERING, MANUFACTURING, AND TECHNOLOGY**

#### **171600 Introduction to Construction**

**Grade(s):** 9-12 **Credit:** .5 **Term(s):** 1 or 2

**CTE**

Building Repair & Maintenance courses provide students with knowledge and skills related to devices and systems found in the home. Course content may include electrical wiring, plumbing, window and door repair and installation, wall and floor repair and finishing, furniture repair and finishing, and small appliance repair and installation, wall and floor repair and finishing, furniture repair and finishing, and small appliance repair.

#### **172310 Woodworking**

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE**

This course involves the use of hand, power, and mounted machine tools in a woodshop setting. Students will explore pathways to working with wood either as a hobby or vocation. Students will learn about different types of wood, lumber, boards, and forestry products. They will practice fine woodworking skills and learn how to produce items ranging from entry level to finished furniture.

**171621-171622 Construction Trades 1\* (2-hour class, yearlong)****Grade(s):** 10-12 **Credit:** 1 per semester **Term(s):** 1 & 2**CTE, ACC**

Construction Trade 1 is an introductory class where students become members of a construction team. Students learn how to use hand, power, and mounted tools safely. The team works together on various school, or community projects throughout the year in a simulated work environment. Students will get a broad exposure to the various trades. Hands on learning.

*\*This course is offered at East High School. Denfeld High School students may register for this course. Transportation is provided to and from East.*

**171721-171722 Construction Trades 2\* (2-hour class)****Prerequisite:** Construction Trades 1**Grade(s):** 10-12 **Credit:** 1 per semester **Term(s):** 1 & 2**CTE, ACC**

Construction Trades is a class for students that are interested in developing their tool use skills and/or are interested in exploring a career path in the trades. Students learn how to plan, design, lead, and complete projects in a simulated work environment. They research pathways to trades and careers they are interested in. Students are encouraged to work towards certifications and endorsements.

*\*This course is offered at East High School. Denfeld High School students may register for this course. Transportation is provided to and from East.*

**171921-171922 Automotive Basics: Brakes and Engines (2-hour class, yearlong)****Grade(s):** 10-12 **Credit:** 1 per semester **Term(s):** 1 & 2**CTE, ACC**

This course introduces students to basic automotive technology including the maintenance and light repair of vehicles with a focus on brakes and engines. Students will earn SP2 shop safety certification. Students will learn to perform engine diagnostics as well as disc, drum, and ABS brake services and repairs. Students will utilize service information and testing equipment to diagnose problems and perform repairs. The instruction will also focus on employability skills, ethics training, and the technical career exploration necessary for entry level employment or post-secondary education in a technical field.

*This is a year-long 2-hour (2 credit) course with no prerequisites. Courses Brakes and Engines and Transmissions and Suspensions may be taken in any order. The program is accredited by the ASE (Automotive Service Excellence) Education Foundation.*

*\*This course is offered at Denfeld High School. East High School students may register for this course. Transportation is provided to and from Denfeld.*

**172121-172122 Automotive Basics: Transmissions and Suspension\* (2-hour class, yearlong)****Grade(s):** 10-12 **Credit:** 1 per semester **Term(s):** 1 & 2**CTE, ACC**

This course introduces students to basic automotive technology including the maintenance and light repair of vehicles with a focus on transmissions and suspensions. Students will earn SP2 shop safety certification. Students will perform the following: wheel and tire maintenance, power steering system service and inspections, front and rear suspension inspection, maintenance, and repair, and automatic and manual transmission service and adjustments. Students will utilize service information and testing equipment to diagnose problems and perform repairs. The instruction will also focus on employability skills, ethics training, and the technical career exploration necessary for entry level employment or post-secondary education in a technical field.

*This is a yearlong 2-hour (2 credit) course with no prerequisites. Brakes and Engines and Transmissions and Suspension may be taken in any order. The program is accredited by the ASE (Automotive Service Excellence) Education Foundation.*

*\*This course is offered at Denfeld High School. East High School students may register for this course. Transportation is provided to and from Denfeld.*

**172231-172232 Advanced Automotive (Block class, yearlong)****Prerequisite:** Automotive Basics: Brakes and Engines Automotive Basics: Transmission and Suspension**Grade(s):** 10-12 **Credit:** 1 per semester **Term(s):** 1 & 2**CTE, ACC**

Experienced students will work at an advanced level in the automotive shop using test equipment and doing live on car diagnostic and repair work on electrical and electronic systems including HVAC systems and engine performance testing. Students will demonstrate the proper use of a digital volt meter and OBDII scan tools. The instruction will also focus on employability skills, ethics training, and the technical career exploration necessary for entry level employment or

post-secondary education in a technical field. Students are encouraged to participate in job shadowing and/or an internship at a local repair facility.

*This is a yearlong 2-hour (2 credit) course for students with prerequisites. The program is accredited by the ASE (Automotive Service Excellence) Education Foundation.*

*\*This course is offered at Denfeld High School. East High School students may register for this course. Transportation is provided to and from Denfeld.*

### **121502 Principles of Engineering**

**Prerequisite:** Introduction to Engineering Design

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 2

**CTE**

*Opportunity to earn the Certified SolidWorks Associate (CSWA) certification.*

Principles of Engineering Design builds off the skills learned in Introduction to Engineering Design. Students continue to develop their understanding of engineering concepts and proficiency using SolidWorks state-of-the-art Computer Aided Drafting (CAD) software. They learn to create assemblies, to read and prepare drawings found in manufacturing and engineering industries, and begin to explore more advanced CAD techniques like stress analysis and motion studies. This course fulfills the prerequisite for advancement in the Engineering Design sequence as well as the Fab Lab courses. It is recommended for any students interested in pursuing a career in engineering, design, technical illustration, 3D printing, machining, or other technical fields.

### **121211 Introduction to Engineering Design (CAD)**

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE, ACC**

*Opportunity to earn the Certified SolidWorks Associate (CSWA) certification.*

This course is a single semester introduction to engineering design concepts for students who would like to explore the Engineering Design program without the need to commit to a full year course. It also affords students who may not be able to fit a full-year course into their schedule the ability to get started on the Engineering Design pathway. Students learn about the engineering design process and parametric 3D modeling through the use of SolidWorks industry leading Computer Aided Drafting (CAD) software. Students who complete this course can continue on to Principles of Engineering to complete the prerequisite for advancement in the Engineering Design sequence as well as the Fab Lab courses. It is recommended for any students interested in exploring the engineering profession or who plan to pursue a career in engineering, design, technical illustration, 3D printing, machining, or other technical fields.

### **125000 Advanced Independent Engineering Research and Design**

**Prerequisite:** Teacher Approval

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE, ACC**

This course is the capstone program of the Engineering Design pathway. Students who have successfully completed beginning and intermediate coursework in the Engineering Design program are eligible for this course. Students will work under the premise of "engineer almost anything". Students will work to develop, research, and create projects in engineering and design fields. From this research, students will develop personalized projects to apply advanced skills in design and engineering concepts. This hands-on course will allow students to independently develop skills for future career pathways in STEM, Engineering and Design. Students will work closely with instructors on developing individual learning plans and standards.

### **122101 CAD for Architecture I**

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1

**CTE**

This course is intended specifically for students interested in pursuing a career in an architectural field. Students are introduced to Revit Architectural design software where they learn to prepare various types of drawings found in the architectural drafting industry. Students learn about the composition of a typical structure while creating detailed working drawings and Building Information Models (BIM) for homes, duplexes, and cabins. This course is recommended for students interested in pursuing a career in architecture, real estate, interior decorating, or a building trade.

### **122102 CAD for Architecture II**

**Prerequisite:** CAD for Architecture

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 2

**CTE**

This course builds off the skills learned in CAD for Architecture I. Students continue to develop their understanding of architectural concepts and proficiency using Revit Architectural design software. Students tackle more complex projects, creating detailed working drawings and in-depth Building Information Models (BIM) to design larger structures like malls and office buildings. This course is recommended for students interested in pursuing a career in architecture, real estate, interior decorating, or a building trades.

### **122110 Advanced Independent Architecture Research and Design**

**Prerequisite:** CAD for Architecture

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE**

This course builds on professional skills learned in CAD for Architecture II. Students continue to develop their understanding of architectural concepts and proficiency using Revit Architectural design software. Students tackle more complex projects, focusing on detailed design prints. Students build a portfolio, with all their drawings for internships with local Architecture Firms. This course is recommended for students interested in pursuing a career in architecture, real estate, or commercial structural buildings.

### **121201 Fab Lab I**

**Prerequisite:** Principles of Engineering Design and Manufacturing Technologies

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE**

This course is the capstone program of the Engineering Design pathway. Students who have successfully completed beginning and intermediate coursework in the Engineering Design program are eligible for this course. Students will work under the premise of “engineer almost anything”. Students will work to develop, research, and create projects in engineering and design fields. From this research, students will develop personalized projects to apply advanced skills in design and engineering concepts. This hands-on course will allow students to independently develop skills for future career pathways in STEM, Engineering and Design. Student will work closely with instructor on developing individual learning plan and standards.

### **121202 Fab Lab II**

**Prerequisite:** Fab Lab I

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 2

**CTE**

In Fab Lab II, students expand on what they learned in Fab Lab I. They continue to apply their knowledge of engineering, design, and manufacturing to take ideas through the engineering design process and into prototype products. This hands-on course is designed to let students explore software, machines, and practices used in engineering design and give them practical experience. Students work to solve engineering problems through design and development of a prototype, and then test their product and make any revisions to improve their design. Students will work both independently and in groups to create designs using CAD software and fabricate their prototype using the equipment available to them in the Fab Lab. A great deal of emphasis is placed on working as a team, problem solving, process iteration, design improvement, and creating things that interest you.

### **172600 Robotics 1**

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE**

Robotics is a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous and operator-controlled mobile robots. Students will learn how to use feedback from sensors and apply mathematics and measurement to program a robot to navigate in its environment. Students will have the opportunity to complete multiple challenges involving guided research, problem solving, and design documentation. The class will promote applications of engineering principles while exploring topics in design, programming, electrical wiring, pneumatics, and strategy. Emphasis will be placed on working as a team and project management. This course is a great introduction to robotics for students interested in joining a LeFIRST competition robotics team.

### **172610 Robotics 2**

**Prerequisites:** Robotics 1

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 2

**CTE**

Robotics 2 is a lab-based course that uses a hands-on approach to further the concepts of robotics learned in Robotics 1, with an additional focus of robotics programming and autonomous robotic control. Students will continue to build on their understanding of mechanical robotics concepts, but will also learn to add sensors so their robots can act independently based on external stimuli.

### **121301-121302 Advanced Engineering Design I and II (CAD III and CAD IV)**

**Prerequisite:** Principles of Engineering

**Grades(s)** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**CTE, ACC**

*Opportunities for Career Development Internship*

This course is the main continuation of the Engineering Design pathway for students who have completed one year of engineering design studies or have already passed the Certified SolidWorks Associate (CSWA) exam. Students continue to build on their knowledge of CAD and engineering design procedures. They explore advanced CAD techniques like lofts, sweeps, surfacing, cavity molds, structural members, multibody parts, and complex top-down assemblies. They learn to create proper engineering drawings, including exploded view assemblies, bill of materials, detailed views, callouts, datums, and tolerancing. Any students who have not yet earned their CSWA will work to obtain that certification early in the year. The course will include a reverse engineering project where students will thoroughly analyze an existing product and redesign it in CAD. Students will explore possible design improvements or revisions for their reverse engineering project, and take those ideas through the process of design, analysis and application. Throughout the year, the class will review preparation materials of all three segments of the Certified SolidWorks Professional (CSWP) exam.

**121630 Additive Manufacturing****Prerequisite:** Principles of Engineering**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2**CTE, ACC***Opportunity to earn the Certified SolidWorks Associate in Additive Manufacturing (CSWA-AM) certification.*

In this course, students explore the rapidly growing field of additive manufacturing, otherwise known as 3D printing. They examine the benefits and drawbacks for many different material types and processes available in the 3D printing industry. They learn how to design parts with printing considerations in mind, and how to use slicer software to take their CAD designs from SolidWorks into machine printable parts. They learn how to prepare and maintain a 3D printing machine, including changing nozzles, replacing filament, bed & nozzle heating, and alignment. Students investigate how different machine settings like print speed, wall thickness, infill, nozzle/bed temperature, and supports affect a 3D printed part. Students will create their own designs and print those parts using Fab Lab's state of the art 3D printers. This course may require students to complete some work independently.

**124101 Manufacturing Technologies I****Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1**CTE**

In this course, students are introduced to the tools, materials, techniques, and skills that are found in manufacturing industries. Students will learn about the processes, procedures, and safety for taking raw materials into a finished manufactured product. Students learn to operate drill presses, table saws, miter saws, circular & belt sanders, grinders, planers, jointers, scroll saws, and band saws as well as many other hand tools. Students learn to etch designs into parts using the Epilog Helix Laser machine. Projects will focus on fabricating parts and products while working with metals, woods, and plastics. This course is one of the prerequisites for the Fab Lab pathway. It is recommended for students wishing to pursue a career in manufacturing, woodworking, design, construction, or building trades.

**124102 Manufacturing Technologies II****Prerequisite:** Manufacturing Technologies I**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 2**CTE**

In this course, students continue to explore techniques and skills found in the manufacturing industries that they started in Manufacturing Technologies I. Coursework will focus more heavily on precision machining as students learn to use a vertical mill. Students will work with a wide range of materials including wood, aluminum, steel, acrylic, HDPE, UHMW and other plastics. They will learn about the processes, procedures and safety for taking raw materials into finished manufactured products. This course is recommended for students wishing to pursue a career in manufacturing, machining, construction, or building trades.

**124200 Advanced Manufacturing Technologies III****Prerequisite:** Manufacturing Technologies II**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2**CTE**

In this course, students continue and expand their study of the tools, materials, techniques, and skills that are found in the machine tool and manufacturing industry. Students will apply their skills and knowledge of processes and techniques to more complex projects. Students will learn the basics of welding as well as computer-controlled machine operation using processes in CAD, CAM, and CNC. Students will be expected to design, plan and complete a large-scale project. Emphasis is placed on individual design, creativity, safety, and craftsmanship. In this course, students will be expected to work independently while developing leadership skills. This course is recommended for students wishing to pursue a career in manufacturing, wood working, metal working, machining, construction, or building trades.

**121610 Weldments****Prerequisite:** Principles of Engineering**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2**CTE***Opportunity to earn the Certified SolidWorks Advanced Professional in Weldments (CSWAP-WD) certification.*

In this course, students explore the SolidWorks Weldments functionality to design welded structures. They design models using 3D sketches and weldment profiles. They learn to modify corner treatments such as mitered corners and end-butts, make their designs structurally sound using support beams and gussets, and apply finishing features like end caps and base plates. They determine the types of weld beads to be used for joining parts as well as how to specify them on an engineering drawing. They also learn how to use SolidWorks Weldments to derive cut-lists for their design. This course may require students to complete some work independently.

**121620 Simulation: Finite Element Analysis****Prerequisite:** Principles of Engineering**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2**CTE***Opportunity to earn the Certified SolidWorks Associate in Finite Element Analysis (CSWA-FEA) certification.*

In this course, students use SolidWorks Simulation to apply the Finite Element Method (FEM) to analyze engineering designs. They perform static analysis studies on parts to apply axial and shear forces to determine bending moments, displacements, reaction forces, strains, stresses, and factors of safety distribution. They examine the stress-strain curve for different materials, and how different loads and restraints affect deformation or displacement that can lead to a potential failure in a model. This course may require students to complete some work independently.



## GENERAL ELECTIVES

### **251301-251302 Career Seminar**

**Prerequisite:** Approval by instructor

**Grade(s):** 11-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**CTE**

In this course, students will explore career opportunities in the Twin Ports area and develop their own career and employability skills. This class must be taken concurrently with CTE Work-Experience. Students will learn about their interests in career areas and then choose a job to work at for the semester (or longer if desired). During the time working at the job, students will be required to attend class once a week. Class time will be dedicated to learning about career skills, resume writing, interviewing skills, and improving skills through direct feedback from supervisors.

### **252101-252102 CTE Work Experience**

**Grade(s):** 11-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

**CTE**

In this course, students will explore career opportunities in the Twin Ports area and develop their own career and employability skills. This class must be taken concurrently with Career Seminar 2. Students will explore their career interests, and then choose a business/organization at which to work for the semester, or longer if desired. Students will be required to fill out and turn in mandatory paperwork from the Minnesota Department of Education, as well as from the Duluth School District, before being allowed to attend work during the school day. Students will be not only performing the necessary tasks of their chosen workplace, but also receiving constructive feedback from their supervisor and teacher advisor. Students will attend class one day a week to further hone their employability skills.

### **250401-250402 Academic Skills for Success**

**AEO**

**Grade(s):** 9-12    **Credit:** .5 per semester    **Term(s):** 1 & 2

This course is designed to support credit deficient students including tutoring. Study Skills and individual tutorials; job preparation, readiness, application and interview skills; communication skills; personal assessment and awareness activities; and small group seminars.

## HEALTH SCIENCE TECHNOLOGY

### **151100 Emergency Medical Responder**

**Grade(s):** 11-12    **Credit:** .5 per semester    **Term(s):** 1 or 2

**CTE, ACC**

Emergency Medical Responder courses place a special emphasis on the knowledge and skills needed in medical emergencies. Course focus is to prepare students to obtain certification in Emergency Medical Response (EMR).

### **151221 (CITS) Medical Occupations (2-hour class)**

**Prerequisite:** Biology/Commitment Agreement required

**Grade(s):** 11-12    **Credit:** 1 per semester    **Term(s):** 1

**CTE, CITS**

This course will provide students with a foundation of knowledge and skills in both Medical Terminology and Allied Health. Information learned will assist the student in the career decision-making process and prepare them for a healthcare career. Students will:

- Explore the range of health industry occupations through on site visits.
- Understand and use common medical abbreviations and terminology.
- Interpret information found in medical records.
- Understand the roles and responsibilities of members on the health care team.
- Practice safety and infection precautions.
- Demonstrate competence in communication and problem-solving.

### **151322 (CITS) Intro to Nursing/Home Health (2-hour class)**

**Prerequisite:** Medical Occupations

Commitment Agreement required

**Grade(s):** 11-12    **Credit:** 1 per semester    **Term(s):** 2

**CTE, CITS**

This course meets the criteria necessary for entry-level employment as a Nursing Assistant/Home Health Aide and serves as an introduction to the medical/nursing career pathway for students who decide to advance in the medical/nursing profession and other Allied Health careers. Complete and pass background study clearance prior to clinical, which is a mandatory requirement of the Minnesota Department of Human Services. All state requirements must be met. Students will: Perform basic medical/nursing skills, demonstrate ability to care for residents in an area long-term care facility, understand concepts of basic human needs, know individual career-related strengths, be prepared to take the Minnesota Nursing Assistant/Home Health Aide Test out to be registered as a Nursing Assistant and Home Health Aide, have the



opportunity to attend state and national conferences for Health Occupations Students of America, apply basic principles in caring for the client at home, have the opportunity to acquire American Heart Association Healthcare Provider Basic Life Support certification for CPR/AED (valid for two years), and to pass physical examination and Mantoux screening, which is required for clinical.

### **232510 Fire Science**

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 & 2

**CTE**

Fire Fighting courses offer students the opportunity to learn fire prevention and control. Instruction may include organization, rules, requirements, and regulations of fire departments; study and practice the tools and techniques used by firefighters to control or extinguish fires; and examine the behavior of fires.

### **232420 Forensic Science**

**Grade(s):** 10-12 **Credit:** .5 semester **Term(s):** 1 or 2

**CTE**

Provides an overview of the theoretical understanding and practical application of forensic science techniques. Topics typically include genetics, anthropology, toxicology, entomology, ballistics, pathology, computer forensics, fire debris and trace evidence among others.

## **HUMAN SERVICES**

### **160000 Introduction to Cooking**

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE**

This course is structured to expose students to the foundations of cooking. Students will be introduced to basic concepts of culinary techniques, learn how to safely use both residential and industrial kitchen equipment, identify and use ingredients in basic food preparation while learning basic recipes with hands-on experience. They will be introduced to proper knife skills, food safety and sanitation, and how to work collaboratively. This course is designed for students to explore not only the joy of learning how to cook but also explore career options in the field of hospitality and tourism.

### **160030 Introduction to Baking (Block one semester)**

Pre Requisite - Intro to Cooking

**Grade(s):** 10-12 **Credit:** 1.0 per semester **Term(s):** 1 or 2

**REPT, CTE**

Are you a baker, or would like to learn how to bake more? Introduction to baking is a study of the fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and basic items made in a bakery. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the use of proper flour. Topics include safety, baking skills and techniques, and the opportunity to prepare and serve your delicious creations with the community.

### **160040 Advanced Culinary (Block one semester)**

**Grade(s):** 10-12 **Credit:** 1.0 per semester **Term(s):** 1 or 2

**REPT, CTE**

Advanced Culinary is a course for students who aspire to have a career in the hospitality & Tourism industry, want to be the next great social media Chef, or for students who just want to spend more time in the kitchen. Students in the course will increase their self-efficacy in the kitchen as well as management skills they can apply to any career. Topics include safety, advanced culinary skills and techniques, and the opportunity to prepare and serve your delicious creations with the community. Students need to have achieved a score of 70% or higher in Intro to Cooking.

### **160050 Meal Prep and Packaging (Block one semester)**

**Grade(s):** 10-12 **Credit:** 1.0 per semester **Term(s):** 1 or 2

**REPT, CTE**

Calling all foodies! This course is structured to expose students to the foundations of working in the food industry with daily hands-on experiences. It focuses on nutritional information, sourcing quality ingredients, proper knife skills, industrial equipment knowledge and identifying the correct measuring tools and ingredients along with reading recipes to create packaged meals & desserts for the Clock Tower Cafe (student staffed deli) for public consumption. It will teach students the importance of work ethic and teamwork as well as how to fill out a job application and answer job interview questions pathway to secure employment in the Hospitality and Food Industry.

*\*This course is offered at Denfeld. East High School students may register for this course. Transportation is provided to and from Denfeld.*

### **232410 Introduction to Law Enforcement and Community Relations**

**Grade(s):** 10-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE**

Students will learn how the criminal justice system works and will gain broad knowledge of the importance and principles behind community policing, how, and why law enforcement has evolved over time. Students will gain understanding of the causes and means to prevent crime and to work effectively in the law enforcement field.

### **232300 Civil and Criminal Law**

**CTE**

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2

This course will help students gain an introductory level of understanding of the American legal system through the study of the criminal and civil justice systems. Units of study will include a historical perspective on the judicial system, case studies, mock trial simulations, and application of law to current issues.

### **232400 (CITS) Civil & Criminal Law/Introduction to the Criminal Justice System and Related Careers**

**Prerequisite:** Commitment Agreement required

**Grade(s):** 11-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE, CITS**

This course will help students gain an understanding of our legal system through the study of the civil and criminal justice systems. Students will examine the conflicting values that impact justice systems through case studies and attention to current issues. Units of study will include: History of Law, Criminal Law, Juvenile Law, Civil Law, Mock Trial, Careers in Justice.

### **202301 Pathway2Teaching; Introduction to Socially Just Education**

**Grade(s):** 11-12 **Credit:** .5 Semester **Term(s):** 1 & 2

This course examines teaching as a career and the foundations of our educational system. Students will explore the sociopolitical context related to schools, communities, and teaching while providing an overview of such topics as school culture, diversity, ethnicity, and social realities in American schools. Students will learn research skills by reviewing and analyzing achievement data to generate questions, offer suggestions, and engage in critical dialogue about educational topics.

### **202302 (CITS) Pathway2Teaching; Introduction to Socially Just Education**

**Prerequisite:** Pathways 2 Teaching

**Grade(s):** 11-12 **Credit:** .5 Semester **Term(s):** 1 & 2

**CTE, CITS**

This course is a continuation of Pathways2Teaching and examines teaching as a career and the foundations of our educational system. Students will continue to explore the sociopolitical context related to schools, communities, and teaching while providing an overview of such topics as school culture, diversity, ethnicity, and social realities in American schools. Students will learn research skills by reviewing and analyzing achievement data to generate questions, offer suggestions, and engage in critical dialogue about educational topics.

### **201400 Child Development/Child Psychology**

**Grade(s):** 9-12 **Credit:** .5 per semester **Term(s):** 1 or 2

**CTE**

In this course, students will develop knowledge and understanding in guiding the growth and development of children ages zero-six. Students will explore concepts of human growth and development influences and analyze the effect on a child's emotional, physical, social, and cognitive growth. This course is designed for students to explore careers that involve working with young children and is strongly recommended for those students considering pursuing careers involving young children. Part of the class experience will include working with young children in the community. These skills will help prepare students for future employment and will provide valuable training for various careers (i.e. summer camp counselor, recreational director, education and human services).

### **201521-201522 Early Childhood and Education Professions\*** (2-hour class, yearlong)

**Grade(s):** 10-12 (9<sup>th</sup> grade by arrangement) **Credit:** 1 per semester **Term(s):** 1 & 2

**CTE**

Early Childhood and Education Professions: Are you ready to work with children ages 4-5 while earning college credit? This course is a lab preschool setting with lecture and covers topics from birth through school aged children. Students will mentor a preschooler for the year and learn about child development, safety, guidance, theory, and best practices, teach basic curriculum, conduct observations, and earn hours towards industry certification through lab days. Students also have a student organization and opportunities to complete at the state and national level in this field. Practicum experiences are included. Use research based best practices and apply your skills directly.

*Please note: Students need to be scheduled for the same block both semesters. \*This course is offered at Denfeld. East High School students may register for this course. Transportation is provided to and from Denfeld.*

## **COMMITMENT AGREEMENT**

### Honors/Advanced Placement (AP) College in the Schools (CITS) Course Expectations

Students who elect to take an Honors, AP, or CITS course should exhibit the following qualities and be aware of the following commitments required to complete the course:

1. Evidence of strength in skills relevant to the content area.
2. Commitment to assume personal responsibility for independent and long-term assignments.
3. Commitment to be challenged and to accept the rigorous standards and expectations of the course.
4. Recognition that the additional time commitment required for an Honors, AP, or CITS class may require a student to make time choices with regard to out-of-school activities.
5. Do not register for Honors, AP, or CITS classes with the idea that schedule changes will be made if the class does not work out. A decision to elect to take an Honors, AP, or CITS course is much like a contract that must be honored and not broken. Tutors are available to help students if necessary.

### **Course Expectations**

As with all courses receiving credit, Honors, AP, and CITS courses will provide activities that meet state standards. In addition, course activities and assignments will address the following guidelines:

1. Although students will be expected to do more work in terms of homework and concepts covered, the major emphasis will be placed on high-level and rigorous activities, assignments, performance, and assessment.
2. Reading, writing, speaking, listening, and thinking activities will emphasize upper levels of comprehension.
3. Activities will strive for both breadth and depth of learning.
4. All written and oral communication activities will require higher critical thinking/reasoning skills; exhibit linguistic sophistication, and neatness in presentation.
5. The textbook will be supported and enriched through additional related materials and activities.
6. Although short-term assignments may characterize the day-to-day activities of the course, these will be enriched through long-term assignments.
7. Major assessment, such as projects and tests, will require application of concepts as well as recall of information acquired.

**When a student registers for any AP/Honors/CITS, they are agreeing and committing to the following statement:**

**"I understand the student expectations as stated above and agree to make a yearlong commitment to the course for which I am registering. If I am not able to complete the course as registered for, I understand I will be dropped to a study hall for the remainder of the semester."**