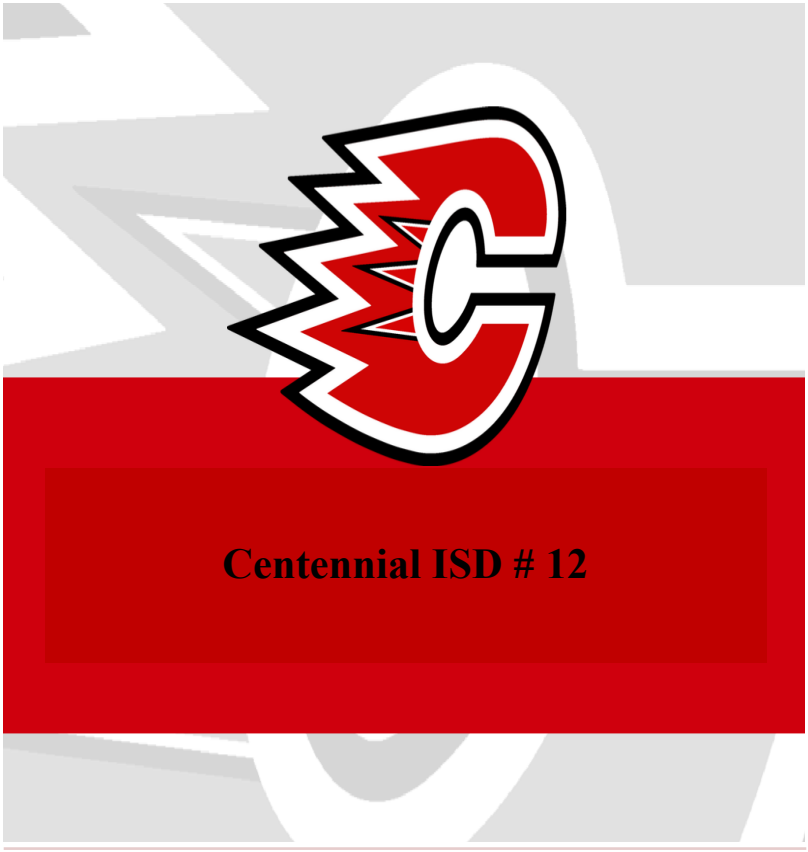
2025-2026
Centennial High School
Registration Book



Nondiscrimination Notice
Centennial School District does not discriminate on the basis of race, color, creed, religion, national origin, sex, age, marital status, status with regard to public assistance, sexual orientation, or disability in its programs and activities. The district has designated the following individuals to coordinate compliance with Section 504 of the Rehabilitation Act of 1973 and Title IX of the Education Amendments Act of 1972.

Section 504 Coordinator: Kathy Zwonitzer, Director of Student Services, 4707 North Road, Circle Pines, MN 55014; 763.792.6040; kzwonitzer@isd12.org.
Alternate Section 504 Coordinator: Mark Grossklaus, Executive Director of Teaching and Learning, 4707 North Road, Circle Pines, MN 55014; 763.792.6006; mgrossklaus@isd12.org.
Title IX Coordinator: Dan Melde, Executive Director of Human Resources, 4707 North Road, Circle Pines, MN 55014; 763.792.6009; dmelde@isd12.org.

What's NEW at CHS for 2025-26

*NEW! Courses Offerings

Number		Course Name	Department	Grade
5343/5344	**New**	**CIS Basic & Applied Stats 1 & 2 (U of M)**	**Math**	**11,12**
8200/8201	**New**	**Kids Club Work Credit 1 & 2**	**Misc**	**11,12**
8380/8381	**New**	**Earth & Space Science 1 & 2**	**Science**	**9**
5355/5356	**New**	**Honors Earth & Space Science 1 & 2**	**Science**	**9**
8385	**New**	**Intro to Biotechnology**	**Science**	**11,12**
5220	**New**	**CIS American Democracy (U of M)**	**Social Studies**	**11,12**
5221	**New**	**CIS Psychology (U of M)**	**Social Studies**	**11,12**
5255	**New**	**CN College Now Macroeconomics 1 (SW State)**	**Social Studies**	**11,12**
8410	**Changed to required (for class of 2028 and beyond)**			
		Personal Finance	**Business**	**10,11,12**
5159H / 5160H	**Changed to hybrid**			
		CIS Intro to Literature 1 & 2 Hybrid (U of M)	**ELA**	**12**

Dear Students and Parents:

One of the most important decisions a high school student can make involves selection of their course of study. At Centennial High School we believe that this decision is best made with the partnership of parents, faculty, and students. CHS encourages students and parents to review the Course Registration Book carefully before making your decisions. Although we strive to provide clear and comprehensive information about all of our courses and programs, you may have questions that should be directed to a school counselor. We hope both students and parents find high school a challenging and rewarding educational experience.

Sincerely,,

Tom Breuning
Principal

Registration Contacts

Counselors:	(Student Last Names)		
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Kristin Hilger		763-792-5203	khilger@isd12.org
Registration Assistant:			
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- AVID
- Business
- English
- English Learner (EL)
- Family and Consumer Science
- Health
- Mathematics
- Media Publications (Yearbook)
- Miscellaneous
- Music
- Physical Education
- Science
- Social Studies
- Special Education
- Technology Education
- Work Based Learning Program
- World Language
- Special Program Options

REGISTRATION INSTRUCTIONS

Step 1:
Use the grade specific CHS registration guide for your 25-26 school year at CHS. You will need this guide when it comes time to enter course selections. The 25-26 Course Description Book found on the CHS website will help you decide what each course is about and help with your family decisions on classes. Plan your courses before registering.

Step 2:
Mobile devices are not recommended for registration.
If you are using a school issued Chromebook you will already be signed into campus, Go to Step 3
If you are using a personal laptop follow these directions before going to Step 3:
1. Go to isd12.org.
2. Up at the top right go to schools
3. At the top right-hand corner click the 3 lines and go to the very bottom where it says students
4. When on the student page underneath Quick links click on Infinite campus student login.
5. When logging into campus make sure to click on "campus login SSO"

Use your ***Student*** Portal login information.
User ID: **Last two digits of graduation year + first 5 letter of first name + first 5 letter of last name**
Password: **Use your district password to login.**
If this is your first time logging in your default password is **Centennialisd12**. A forgotten username/password can be managed at myid.isd12.org-CHS staff cannot reset your password
Helpful reminders:
If you have Split course numbers enter them first.
Required math courses are pre-loaded and will display as a required course and may not be deleted or edited through the student portal. Please contact your counselor with changes. Students who have already completed Advanced Algebra may choose to take additional math courses as electives. Information is saved each time you add or remove a course. You will not see a specific "save" key.

Step 3:
On the Student Portal select the following:
1. On the left hand side select the option that says "More"
2. **Course Registration -** Third in the list. Do not select "Online Registration".
3. 2025-26 Centennial High School
4. "Add Course" at bottom of screen
5. Search by course number or name. Using the course number is easier and will avoid errors.
6. Select the "Blue Plus" symbol of the course you want to add
7.Choose ***"Request"*** until you have 12 requested courses—these are the courses ***you want*** for next school year!
8. Now add 4 additional elective courses as ***Alternates*** - courses you want in case one of your other electives is not available.
Students not listing alternates may be given any elective having open seats or a study hall.
9. Click "Back" at the top of the page and review your registration one last time.

Miscellaneous Information
Some courses are counted as more than one selection, such as:
916 courses will equal 3 selections per course number.
OEC / Spring Lake Park will equal 3 selections per course number.

Registration is complete when you have reviewed your choices in the portal.
Remember you must have 12 Requested courses and 4 Alternates.

TERMINOLOGY & DEFINITIONS

916 Career & Technical Center: Northeast Metro 916 Career and Technical Center offers courses to CHS students.

Alternate Course: A selected class which may be used to replace an elective class due to scheduling constraints.

AP: Advanced Placement courses are college level curriculum designed by the College Board. Students may take and end-of-year exam to potentially earn credit at post-secondary institutions.

AVID: Advancement Via Individual Determination

CE: Concurrent Enrollment (Anoka-Ramsey)

CIS: College in the Schools (University of Minnesota)

CN: College Now (Southwest Minnesota State)

Colleges: An institution of higher learning, beyond high school, which offers a certificate program, technical program, 2 year degree or a 4 year degree.

Course Number: A number assigned to each individual semester course. The course number appears in boldface along with each course title.

Credit: The unit of measure assigned for the successful completion of a course. One semester course meeting for one period per day earns .5 credit.

Elective Course: A course students choose to fulfill graduation credit requirements.

GPA: Letter grades have a corresponding point value. The Grade Point Average (GPA) is calculated by dividing the total amount of grade points earned by the total number of courses.

Honors: These courses have been developed to challenge highly motivated and capable students. The curriculum will be more rigorous in terms of breadth.

Hybrid courses Are developed and taught by Centennial teachers and follow the same rigorous standards and outcomes as our traditional in-person courses. Hybrid courses blend in-person days and asynchronous days. Typically, classes meet in person 2-3 days a week. Typically scheduled periods 1 or 6.

Online courses Are developed and taught by Centennial teachers and follow the same rigorous standards and outcomes as our traditional in-person courses. Online courses are taught asynchronously. Students may remain at CHS or work from home during the period an Online course is taken. Typically scheduled periods 1 or 6.

Prerequisite: A course that must be taken before a student may enroll in a class.

PSEO: Post-Secondary Enrollment Options

Required Course: Specific courses needed to fulfill graduation requirements.

Semester: One half of the school year. See “credit” for explanation of courses and credits.

Sequence: The order in which courses must be taken within a department.

STEM: Science, Technology, Engineering and Mathematics.

Weighted GPA: The GPA for a student who has received a weighted grade for Advanced Placement, College in the Schools, Concurrent Enrollment, College Now courses and/or select PLTW courses.

GENERAL INFORMATION

SEMESTER SCHEDULE

Students must register for a minimum of six courses each semester. This enables students to take advantage of the many curricular opportunities available at CHS. Students should only register for the courses and alternates that they are interested in. Alternate choices are important in the scheduling process and students must list multiple alternates on their registration form. These courses will be used if a student's other course choices are not available.

SCHEDULE CHANGE GUIDELINES

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. Student must meet with their counselor regarding any schedule change requests. All requests to change must be completed by **the end of the third day** of the semester. No exceptions! The schedule change process is outlined on the high school website. A committee comprised of counselors and administration will decide whether or not your change will be granted based upon the reason(s) given for the change and the availability in our master schedule. You will receive notification of your change regardless of the outcome. Courses dropped after the fifth day of the semester will result in a grade of NC (no credit) (which is calculated into the student's grade point average).

CAREER CENTER

Students are welcome to use the Career Center to take a personality or interest inventory, explore career and college options, check-out books on career choices, pick-up information for the ACT or SAT and obtain information regarding financial aid, scholarships and advisory career tasks. Students can also access a job posting board and information regarding resume writing and interviewing tips.

The Career Center will host college admissions counselors and military representatives throughout the school year. The admissions counselors will be in the Career Center during LEAP to talk with students about the college or organization they represent and answer any questions the students might have about the programs offered, the admissions requirements, and application process.

The Career Center is open Monday through Friday from 7:45 AM to 3:15 PM in W411.

PLANNING FOR POST-SECONDARY EDUCATION

THE FOLLOWING INFORMATION IS INTENDED TO GIVE STUDENTS SOME GUIDELINES FOR FUTURE PLANNING. SEE CAREER SUPPLEMENT FOR MORE INFORMATION ON JOB GROWTH, SALARY, AND EDUCATION REQUIREMENTS. PLEASE SEE THE COUNSELING OFFICE FOR SPECIFIC DETAILS.

ADVANCED EDUCATION

Students should consider the entrance requirements for college or vocational/technical school when selecting their high school courses. The following information should be helpful in determining some of those requirements. Students continuing their education after high school graduation are encouraged to see their school counselor as early in their high school career as possible in order to plan their course of study.

GENERAL INFORMATION

COLLEGE

College entrance requirements in Minnesota and throughout the United States can be quite different from college to college. College bound students should become familiar with the requirements of the college or university they plan to attend. Most colleges and universities in Minnesota require or recommend some form of admission test. Four-year college bound students are encouraged to test in the spring of their junior year. The two national college admission tests are:

- American College Test (ACT) (Website: www.act.org)
- Scholastic Aptitude Test (SAT) (Website: www.collegeboard.com)

The following prep exam offered at Centennial High School is highly recommended for college bound students:

- Preliminary Scholastic Aptitude/National Merit Scholarship Qualifying Test (PSAT/NMSQT) (National test date in October.)

Many colleges are changing their admission requirements by making tests optional. Please investigate specific admission requirements for each college you are considering.

MILITARY ROTC PROGRAMS AND ACADEMICS

- Reserve Officer Training Corps: The ROTC consists of Army, Navy, and Air Force Units at over 300 public and private colleges throughout the country. All three branches offer financial aid grants covering the cost of tuition, fees, books, laboratory fees, and, in some cases, living expenses. There are two and four-year subsidized programs available.

- The Federal Military Academies offer four years of college education leading to a bachelor's degree. A candidate's academic qualifications for admission to any one of the five academies is determined by SAT or ACT scores, and a review of his/her entire scholastic record, and a rigorous physical examination.

Any young man or woman wishing to qualify for an officer training program is strongly urged to include the following subjects in his/her high school curriculum: four years of mathematics, including trigonometry; four years of English; two years of world language; one year of chemistry; one year of physics. PRELIMINARY STEPS FOR APPLICATION MUST BE TAKEN DURING THE SECOND SEMESTER OF THE JUNIOR YEAR.

GENERAL INFORMATION

PLANNING A COURSE OF STUDY

Options after graduation from high school are varied and it is best to keep as many open as possible. As students and parents plan courses for high school, the following recommendations may be helpful.

Please see each course description for more information on course outcomes

SUGGESTED PROGRAMS OF STUDY DETERMINED BY POST HIGH SCHOOL PLANS				
What is your goal?	**Vocational/ Technical College Certificate, Diploma**	**Community College Associate Degree Or Transfer Program**	**Traditional 4 Year College/University Bachelor's Degree**	**"Selective" 4 Year College/University Bachelor's Degree**
Example	Century, Dunwoody, St. Paul Technical College	Century, Anoka-Ramsey Community College	UMD*, St. Cloud State, Iowa State	Carleton, U of MN*, Ivy Leagues, UW Madison
How many years of each kind of course should you take? (Based on admission recommendations from sample institutions.)				
English Including composition and literature	4 years	4 years	4 years	4 years, advanced levels
Fine Arts	1 year	1 year	at least 1 year	at least 1 year
Mathematics Advanced Algebra or higher	3 or more years	3 or more years	3 or more years	4 or more years
Science Including Biological Science, Earth Science/Physical Science, Chemistry and Physics with Lab experience	3 or more years	3 or more years	3 or more years	4 or more years
Social Studies Including US History and Geography	3.5 years	3.5 years	3 or more years	3 years, advanced levels
World Language	No recommendation specified	No recommendation specified	Most recommend 2 or more years of a single language. See individual college requirements.	Most recommend 2 or more years of a single language. See individual college requirements.
Electives	Choose electives that will prepare you for a career or broaden your interests.			Choose as many advanced level, Honors, AP, CIS classes as possible.
Optional or Required Testing Confirm specific testing requirements for each college you are considering.	Accuplacer	Accuplacer	ACT or SAT	ACT or SAT

- Please check with your individual college to confirm entrance requirements. All applicants to the University of Minnesota – Twin Cities will be required to have a fourth full year of math. Check individual school requirements: University of Minnesota Crookston, Duluth, Morris, and Rochester.

GENERAL INFORMATION

COLLEGE ALTHETICS

High school student athletes wishing to continue their athletic participation after high school should be aware that most colleges and universities have strict criteria relative to incoming freshman participating in athletics. These criteria deal with core courses taken, grade point average, and other measures of high school academic success. The NCAA has a list of Centennial High School approved core courses for use in establishing the initial-eligibility certification status of student athletes. Approval for course offerings and course title changes are ongoing; therefore, the list is subject to change. Division I & II athletes need to complete special forms from the NCAA Eligibility Center website. Please obtain current information from the NCAA website at https://web3.ncaa.org/ecwr3/ using the school code 240-452. Student athletes who have any questions about course requirements and eligibility should contact their counselor. Course that do not meet NCAA requirements are marked using:

♦ This sequence does not meet NCAA core course requirements.

(AVID) ADVANCEMENT VIA INDIVIDUAL DETERMINATION

Mission of AVID

AVID's mission is to close the achievement gap by preparing all students for college readiness and success in a global society.

AVID is a full year elective course for students in the academic middle who have the desire and determination to prepare for admission to colleges and universities following high school. The AVID elective class provides students with the academic and motivational support to succeed in rigorous college-preparatory courses. The AVID curriculum teaches college-level reading, writing, organizational, and study skills. On Mondays and Wednesdays, students in the AVID elective class are engaged in the AVID curriculum focused on writing, inquiry, collaboration, organization and reading. On Tuesdays and Thursdays, students work in collaborative study groups with trained adult facilitators. On Fridays, students listen to guest speakers, engage in college and career exploration and field trips, or participate in motivational and team building activities.

Students must participate in an application and interview process to enroll in the AVID elective.

Students are encouraged to apply to AVID who have:

- 'Middle to upper-middle achieving' students who have a potential to be successful in Honors / AP courses. These students need a 'push' of rigor paired with academic and emotional support to achieve in an honors course
- Hard worker, positive attitude, collaborative in nature
- Student might be: **Low GPA in Honors course** (taking on the challenge of an Honors course, but needs a little support to find success in Honors)
- **High GPA in regular course** (successful in regular courses and could take an Honors course)
- SPED students can apply, a rigorous course might be an 'on-level' course
- Needs support in at least one of these areas: organization, confidence, social skills
- *Note - this year students can be in AVID without an Honors English course;

Preference given to:

- Students who wouldn't otherwise have attended college and are historically underrepresented students in college (due to race, culture, economics)
- First generation college students
- Low-income, single parent, special circumstances hindering opportunities

ACADEMIC ENRICHMENT OPPORTUNITIES

ACADEMIC ENRCHMENT OPPORTUNTIES

Centennial High School offers a number of options to enhance the level of academic rigor in courses for students needing greater academic challenge and a more rigorous course of study. Those opportunities include:

- Honors courses
- Honors option within courses
- Advanced Placement courses
- Concurrent Enrollment courses (CE)
- College in the Schools courses (CIS)
- College Now courses (CN)
- Project Lead The Way (PLTW)
- Post-Secondary Enrollment Options (PSEO)
- University of Minnesota Talented Youth Math Program (UMTYMP)
- Honors Mentor Connection

Prerequisites for Honors Courses

Students may elect to register for designated honors level courses, Advanced Placement and College in the Schools courses if they have met all prerequisites and entrance criteria as outlined in each course description.

Characteristics and Abilities

- A successful student in an honors course exemplifies the following characteristics and has the following abilities:
- Academic initiative and enthusiasm
- Self-motivation and independent work ethic
- High standards of honesty and reliability
- Willingness to tackle challenging material and projects
- Strong reading and writing skills
- Ability to use higher level thinking
- Ability to handle an accelerated pace

Honors Courses

Honors courses are intended to provide motivated and academically qualified students with significant academic challenge. These courses are designed to promote higher level thinking and encourage inquiry and self-directed learning. The honors course curriculum is altered to provide additional depth of content, accelerated pacing, and advanced concepts. Students are expected to have advanced level skills in reading, writing, and critical thinking.

Honors Option Within Courses

In curricular areas where honors courses are not available, students seeking extended learning opportunities may elect to receive honors credit in designated honors option courses. Honors options are intended to provide students with extended learning opportunities within a course of study. These opportunities are independent study tasks that provide additional depth of content, advanced concepts and a chance for more authentic applications of skills and knowledge. Students obtain all information regarding the honors option guidelines and assignments from the classroom teacher. Honors option courses are designated in the course catalog.

Advanced Placement Courses

The Advanced Placement (AP) Program sponsored by the College Board, a non-profit organization dedicated to preparing, inspiring, and connecting students to college, offers secondary school students the opportunity to participate in challenging, college-level course work while still attending high school. Based on their exam score, students may receive credit, advanced placement, or both from thousands of colleges and universities that participate in the AP Program. These exams, representative of freshman level college knowledge on that subject, form the basis of what is studied in each Advanced Placement course. Students who select these courses must be prepared to meet this challenge. Centennial High School offers the following AP Courses:

ACADEMIC ENRICHMENT OPPORTUNITIES

Concurrent Enrollment CE Courses—Anoka Ramsey College

Concurrent Enrollment Courses are offered through Anoka-Ramsey College

College in the Schools CIS Courses – University of Minnesota-Twin Cities

Centennial High School offers college level courses taught by Centennial teachers in cooperation with the University of Minnesota-Twin Cities. College in the Schools courses are taught during the regular school day at CHS. Each student who successfully completes a College in the Schools course earns University of Minnesota credit for the course as well as high school credit. In most cases, credit can be transferred to other colleges and universities. The student's college transcript/GPA begins upon completion of their first CIS course. Students must transfer their University of Minnesota-Twin Cities transcript to their college of admission after high school.

College Now CN Courses—Southwest State Minnesota University

College Now Courses are offered through Southwest State Minnesota

Expectations: Advanced Placement, Concurrent Enrollment, College in the Schools, and College Now

As you explore taking Advanced Placement and/or college courses, please consider the following information before you complete your registration. Taking college level courses at the high school is a collaborative effort between you the student, your parent/guardian, and the school. These courses are not simply honors level high school courses. They require students to be self-directed, responsible, and willing to spend time outside of school studying. The decision to take Advanced Placement and/or college courses must be made thoughtfully. The academic intensity of your entire schedule of classes must be considered. **Schedule changes will not be honored because of a heavy course load or time commitment to out of the classroom activities.**
Those factors must be considered before registering for these courses. The student, the parent, and the school all play a role and must make the commitment to meet the expectations noted below.
The Student, if admitted into the course, agrees to organize his/her time and effort to successfully complete the course in which he/she is enrolled. The student will notify teachers immediately if he/she falls behind in class readings and/or assignments. The student will be expected to complete assignments, readings, and projects outside of class time. Dropping the course due to poor study habits is not an alternative. A schedule change will only be made if the teacher of the course recommends the change because of the student's ability level or lack of prerequisite skills. Do not register for an AP or college class planning to "try it out" for a few days.

The Parent/Guardian agrees to be familiar with and accept the course requirements and policies, and to help his/her child organize study time in support of class assignments. The parent/guardian agrees to pay the exam fee for AP tests as determined by the College Board. The parent/guardian agrees to pay any material costs and/or field trip associated with the college courses.

The School agrees to provide rigorous instruction and challenging course content. The school will provide the student with a copy of the Bulletin for AP Students and Parents and agrees to administer the AP Exam in a fair and secure environment as outlined in the AP Coordinator's manual. The school will provide college student handbooks from the University of Minnesota. Advanced Placement and college course syllabi are available on the Centennial High School website for students to read before registering. Please see the registration information link for details.
Registration in AP / CIS classes confirms your acknowledgement of and commitment to the above expectations.

Project Lead the Way (PLTW)

PLTW (Project Lead the Way) is a comprehensive STEM program that is offered throughout the nation. Centennial offers the PLTW Engineering program where students can engage, learn and apply the engineer design process using the same software that leading industries use worldwide. MN Universities and colleges offer credit to students that earn a grade of 85% or higher and take the college credit exam with a passing grade of 4 or higher. Students may receive college credit recognition from engineering universities such as Minnesota State University- Mankato, University of Minnesota, and St. Cloud State University. Over 50 colleges and universities across the country offer credit or recognition. Please check the PLTW college listings carefully at Http://www.mnpltw.org under the college credit tab.
Note: PLTW Civil Engineering and Architecture, and PLTW Computer Integrated Manufacturing are honors courses. PLTW Principles of Engineering is an honors course.

ACADEMIC ENRICHMENT OPPORTUNITIES

Post-Secondary Enrollment Options (PSEO)

Students in Minnesota may attend college during their junior and senior years of high school. The tuition and books are paid by the State of Minnesota, and students who successfully complete the course may earn credit through the college as well as high school credit. The University of Minnesota, Minnesota State Colleges and Universities, and some private colleges provide opportunities for high school students to participate in the Post-Secondary Enrollment Options program. These institutions establish admissions criteria for PSEO students that promote progress through college-level course work that will augment continued academic growth. Criteria for enrollment is as follows:

All PSEO students are enrolled on the basis of available space and/or other appropriate defined local standards and procedures.
PSEO students are expected to perform to the standards to which the institution's non-PSEO students are held accountable. (Colleges may establish different academic progress requirements for PSEO students.)
PSEO students will not be enrolled in developmental courses (numbered below 100). (A college offered developmental course gives students basic preparatory skills and knowledge needed for college level courses.)
Each post-secondary institution determines its admission requirements for PSEO students.

How to participate: You must complete the following 3 steps by May 30.
There will be no late additions or exceptions.

1. Attend a mandatory information session or schedule a meeting with your counselor to receive detailed information related to participation in PSEO.
2. Obtain your Counselor's signature on the MN Department of Education PSEO form.
3. Complete the PSEO contract and return to your Counselor.

IF THESE 3 STEPS ARE NOT COMPLETED BY MAY 30, YOU WILL NOT BE ALLOWED TO PARTICIPATE IN PSEO
The May 30 deadline is for enrolling in PSEO for the ENTIRE school year. If you are enrolling in PSEO for 2nd semester only the deadline is Oct 30 of that school year.

Next steps:

1. Be aware of and adhere to established deadlines for each individual college.
2. Complete application to prospective college(s).
3. Once you are accepted, register for your college courses.
4. Make a copy of your college schedule and give to your Counselor. Your high school schedule will be changed to reflect your PSEO enrollment.
5. At the end of each semester, request an official transcript to be sent to CHS from the college you are attending. We will add your college grades to your high school transcript.

Petition process for PSEO "NC" grade on high school transcript:

1. Student must complete all steps in a timely manner.
2. Student will make an appointment to meet with high school counselor to discuss concern.
3. Student will need to set up a meeting with the professor to discuss concern and any available alternate options.
4. If there is no alternate option and the student still has a concern with the course and professor, student will need to request a meeting with the college Dean/Department Chair.
5. After the above meetings have taken place, a formal complaint will be submitted to the college for further review and recommendation.
6. After the college has made a decision based on the complaint to let the student drop with or without a "W", the high school can make a decision to give an "NC" or "NG" grade.
7. When the student has completed the above requests at the college level, the student will be able to bring evidence to a high school meeting with the counselor and principal.

ACADEMIC ENRICHMENT OPPORTUNITIES

College-Level Examination Program (CLEP)

CLEP is a College Board program that allows students to earn college credit by demonstrating their mastery of college-level material in introductory subjects. CLEP exams do not relate to a specifically designed college-level course taught in high school. Rather, CLEP exams test mastery of college-level materials acquired in a variety of ways-such as through general academic instruction, significant independent study, or extracurricular work. More in-depth information about the CLEP program can be found on the College Board Web site. Students interested in CLEP examinations should contact their counselors. Information is also available on the Minnesota Department of Education website under "Postsecondary-College Prep" (*http://education.state.mn.us/mde/index.html*).

University of Minnesota Talented Youth Math Program (UMTYMP)

This is a program sponsored by the University of Minnesota and designed to reach students in grades 6-12 who are exceptionally talented in mathematics. Students enrolled in UMTYMP will earn high school credit for course work completed during their high school years. All UMTYMP courses are considered honors courses. Students must enter UMTYMP no later than grade 8 to continue in the program through high school.

College & High School Credits

These programs are operated with the University of Minnesota, Anoka Ramsey Community College and Southwest State Minnesota. Students who meet requirements may enroll and earn semester credits at the U of M, SWSM,or ARCC while meeting Centennial High School graduation requirements. Selected other colleges and universities will accept these credits as well.

The following CIS courses are offered at Centennial High School through the University of Minnesota:

CIS US History 1 & 2
CIS Calculus
CIS American Democracy
CIS Psychology
CIS Physics by Inquiry
CIS Physics 1A & 1B
CIS Introduction to Literature 1 & 2 (Hybrid)
CIS Basic & Applied Stats 1 & 2

The following CN course is offered at Centennial High School through Southwest Minnesota State University.

CN Macroeconomics

Concurrent Enrollment (CE) classes that are offered through Anoka Ramsey Community College:

(CE) Introductory Chemistry 1A & 1B

ACADEMIC ENRICHMENT OPPORTUNITIES

HONORS OPTIONS

Centennial High School Honors and Honors Options Courses

DEPARTMENT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ART			AP 2-D Design	AP 2-D Design
BUSINESS	Career Investigation/ Business Technology – Option	Career Investigation & Business Technology – Option Law and Order - Option	Career Investigation & Business Technology –Option Law and Order – Option	Career Investigation & Business Technology –Option Law and Order - Option
ENGLISH	Honors English 9-1 Honors English 9-2 Honors English 9-1 / AVID Honors English 9-2 / AVID	Honors English 10-1 Honors English 10-2	AP English Lit/Comp	CIS Introduction to Literature
MATHEMAT-ICS	Honors Geometry Honors Advanced Alge-bra	Honors Geometry Honors Advanced Algebra Honors Pre-Calculus	Honors Geometry Honors Advanced Algebra Honors Pre-Calculus AP Computer Science CIS Calculus CIS Stats	Honors Geometry Honors Advanced Algebra Honors Pre-Calculus AP Computer Science CIS Calculus CIS Stats
MUSIC		Honors Treble Choir Honors Wind Ensemble	Honors Treble Choir Honors Concert Choir Honors Wind Ensemble	Honors Treble Choir Honors Concert Choir Honors Wind Ensemble
PHY ED & HEALTH		Healthy Living – Option	Healthy Living – Option	Healthy Living – Option
SCIENCE	Honors Earth Science	AP Biology	Honors Zoology AP Biology CE Intro Chem 1A & 1B CIS Intro College Physics 1 & 2 Anatomy/Physiology CIS Physics by Inquiry 1 & 2	Honors Zoology AP Biology CE Intro Chem 1A & 1B CIS Intro College Physics 1 & 2 Anatomy/Physiology CIS Physics by Inquiry 1 & 2
SOCIAL STUDIES	AP Human Geography	AP World History: Modern	CN Macro Economics CIS Psychology CIS American Democracy CIS US History 1 & 2	CN Macroeconomics CIS Psychology CIS American Democracy CIS US History 1 & 2
TECHNOLO-GY EDUCATION	PLTW Principles of Engineering	PLTW Principles of Engineering PLTW Civil Engineering and Architecture PLTW Computer Integrated Manufacturing	PLTW Principles of Engineering PLTW Civil Engineering and Architecture PLTW Computer Integrated Manufacturing	PLTW Principles of Engineering PLTW Civil Engineering and Architecture PLTW Computer Integrated Manufacturing
WORLD LANGUAGE	French 2 – Option Spanish 2 – Option	French 2 – Option French 3 – Option Honors French 4 Spanish 2 – Option Spanish 3 - Option Honors Spanish 4	French 2 – Option French 3 – Option Honors French 4 Honors French 5 Spanish 2 – Option Spanish 3 - Option Honors Spanish 4 Honors Spanish 5	French 2 – Option French 3 – Option Honors French 4 Honors French 5 Spanish 2 – Option Spanish 3 - Option Honors Spanish 4 Honors Spanish 5

(Rev. 12/12/2024)

AP = Advanced Placement
CIS = College in the Schools
CE = Concurrent Enrollment (Anoka-Ramsey College)
CN = College Now (Southwest Minnesota State College)
Option = advanced coursework and enrichment available within regular class for students who want Honors course credit
Honors = advanced coursework and accelerated pacing

PATHWAY

PATHWAY TO COMPUTER SCIENCE CAREERS & MANUFACTURING CAREERS

Computer Science Pathway

The courses in our computer science pathway are designed to prepare students with the skills and experiences required to thrive in a tech-driven society. For students wishing to pursue a career in technology-related fields such as computer programming, web design, IT, business analysis, or cybersecurity, our courses provide opportunities to gain industry-standard knowledge and experience in the computer science field through project-based learning and instruction in a variety of program languages. For students seeking careers that are not specifically technology -related, our computer science courses provide a strong foundation in computer science concepts and rigorous problem-solving skills.

Courses in this Pathway

- Computer Programming Hybrid 1 & 2
- Special Projects Computer Programming Hybrid 1 & 2
- AP Computer Science Programming with Java Hybrid
- Career Investigation & Business Technology
  - Honors Option Offered
- Web Design

See course descriptions section for full information

Manufacturing Pathway

Our manufacturing pathway of courses is designed to prepare students with the in-demand skills needed in our manufacturing industry. Whether students are looking for experience in metal working as a hobby/interest or making it a career. These courses will take students through a variety of processes in developing a wide range of knowledge in metal manufacturing. Our courses and lab are designed around a rotation approach where students will complete projects in 4 main areas in each course.

Courses in this Pathway

- General Metals
- Metals Technology
- Advanced Metal Technology
- Cougar Manufacturing

See course descriptions section for full information

GRADUATION INFORMATION

REQUIREMENTS TO PARTICIPATE IN GRADUATION CEREMONY

Only students who have met all requirements for graduation will be allowed to participate in the graduation ceremony.
Requirements:

- Meet local graduation requirements according to Board of Education Policy 613. Requirements are further defined for each class in the Planning Guide section of this book.

GRADUATION REQUIREMENT DEFICIENCIES

A deficiency may be a required course not successfully completed or credit(s) needed to bring the student up to the credits required for graduation.
Most deficiencies will require the student to successfully repeat the course. Some credits may be made up through the CALC after school program. Please contact your school counselor for information regarding earned credit restrictions.
Students and parents who have questions regarding progress toward graduation should see the student's counselor immediately.

Weighted Grades—Lettering Grade Equivalents

All Centennial High School (AP) Advanced Placement, (CE) Concurrent Enrollment, (CIS) College in the Schools, (CN) College Now, PSEO, and select PLTW courses will be based on a 4.5 scale (see below).

Grade Symbol	Un-weighted Value	Weighted Value	
A	4.0	4.5	
A-	3.667	4.167	
B+	3.333	3.833	
B	3.0	3.5	
B-	2.667	3.167	
C+	2.333	2.833	
C	2.0	2.5	
C-	1.667	2.167	
D+	1.333	1.833	
D	1.0	1.5	
D-	0.667	1.167	
INC	0.000	0.000	Incomplete (this grade is reflected in the student's GPA)*
NC	0.000	0.000	No Credit (this grade is reflected in the student's GPA)
NG	0.000	0.000	No Grade (this grade is not reflected in the student's GPA)

***Incomplete course work is due before mid-semester marking of the following semester. All INC grades will convert to an NC at mid-semester time.**

GRADUATION INFORMATION

Academic Award and Graduation Honors

All Academic Awards are earned based on the following criteria:
Students become eligible for the Centennial Academic Awards after the 1st semester of their sophomore year. Students must be full-time students at CHS to be eligible for recognition.
Sophomores who have a cumulative Grade Point Average (GPA) of at least 3.667 at the end of the 1st semester will be eligible for an ACADEMIC LETTER. A student's cumulative GPA is a total average of all courses taken beginning in the 9th grade.

Junior or Senior students who have previously earned a letter and have maintained a cumulative GPA of 3.667 or higher through the 1st semester of their junior or senior year will be eligible to receive a SILVER PIN.
Senior students who have earned an academic letter and silver pin, and have a cumulative GPA of 3.667 or higher through the 1st semester of their senior year will be eligible for a GOLD PIN.
Junior or Senior students who have not previously earned a letter award and have maintained a cumulative GPA of 3.667 or higher through the 1st semester of their junior or senior year will be eligible to receive an academic letter.
Students who receive a 3.0 – 3.666 will be recognized with a certificate. Students who receive a certificate become eligible for the next award the following year if their cumulative GPA meets the 3.667 or above requirement. Awards are presented in the order of Academic Letter, Silver Pin, and Gold Pin.

Graduation recognition includes credits earned through 1st semester of senior year:

Honorable Mention: 3.0 – 3.666
Honors: 3.667 – 3.919
Highest Honors: 3.920 – 4.0+

Graduation with Distinction - This recognition includes credits earned through 2nd semester of the senior year and completion of:

- 12 honors credits (honors high school credits for classes at CMS or CHS).

GRADUATION INFORMATION

GRADUATION REQUIREMENTS

Standardized Testing:
Students will be offered the opportunity to participate in a district provided college entrance exam in grade 11 or 12.

Course Credits:
20 course credits (each course per semester = .5 credit) and 4 Advisory credits are required for graduation.

Required Courses:

	Grade 9	Grade10	Grade 11	Grade 12	Credits Required
English	English 9-1 & 9-2/AVID or English 9-1 & 9-2 or Honors English 9-1 & 9-2 or Honors English 9-1 & 9-2 / AVID	English 10-1 & 10-2 or Honors English 10-1 & 10-2 Or English 10-1 & 10-2 / AVID	American Lit/Comp 1 & 2 or AP English Lit/Comp 1 & 2	World Lit 1 & 2 Or World Lit /Comp Hybrid 1 & 2 or CIS Intro to Literature / English Elective	4
Social Studies	Human Geography or AP Human Geography	World History 1 & 2 or AP World History 1 & 2	US History 1 & 2 or CIS History 1 & 2	Government and Citizenship or Government and Citizenship Hybrid Or CIS American Democracy ---------- Economics and Political Science Or Economics and Political Science Hybrid Or CN Macroeconomics	3.5
Science	**(Required for class of 2029 & beyond)** Earth & Space Science 1 & 2 or Honors Earth & Space Science 1 & **2** **(Required for class of 2026,2027,2028)** Physical Science 1 & 2 Or Honors Chemistry 9 and Honors Physics 9	Students must earn 2 additional credits in grades 10, 11 or 12 1 Biology credit and 1 Chemistry or Physics credit Refer to Science Course Electives for specifics.			3
Mathematics	Completion of one mathematics sequence as defined in Mathematical course list.				3
Physical Education	Physical Education 9 or Physical Education 9 Online				.5
Fine Arts	Students must earn 1 credit in fine arts. See Fine Arts Requirement list.				1
Health		Students must earn .5 credit in Healthy Living in grade 10, 11 or 12			.5
Personal Finance (2028 and beyond)		Students must earn .5 credit in Personal Finance in grade 10, 11 or 12			.5
Electives	Earned throughout high school career.				4.5 (26-27) 4.0 (28-29)
Advisory	Advisory 9	Advisory 10	Advisory 11	Advisory 12	+ 4
Total (28 possible)					24

PLANNING GUIDE

Grade 9

English 9-1/AVID English 9-1 or Honors English 9-1 or Honors English 9-1/AVID	English 9-2/AVID English 9-2 or Honors English 9-2 or Honors English 9-2/AVID
Earth & Space Science 1 Honors Earth & Space Science 1	Earth & Space Science 2 Honors Earth & Space Science 2
Mathematics (Placed by CHS)	Mathematics (Placed by CHS)
Human Geography or AP Human Geography	Physical Education 9
***Fine Arts Requirement**	**Elective**
Elective	**Elective**

Grade 10

English 10-1 or Honors English 10-1 Or English 10-1 / AVID	English 10-2 or Honors English 10-2 Or English 10-2 / AVID
World History 1 or AP World History 1	World History 2 or AP World History 2
Mathematics (Placed by CHS)	Mathematics (Placed by CHS)
♦Science Requirement	**♦Science Requirement**
***Fine Arts Requirement**	**▫Healthy Living**
● Personal Finance Requirement	Elective
Elective	Elective

Grade 11

American Lit/Comp 1 or AP English Lit/Comp 1	American Lit/Comp 2 or AP English Lit/Comp 2
US History 1 or CIS US History 1	US History 2 or CIS US History 2
Mathematics (Placed by CHS)	Mathematics (Placed by CHS)
♦Science Requirement	**♦Science Requirement**
▫Healthy Living	***Fine Arts Requirement**
Elective	**Elective**

Grade 12

World Literature 1 or World Literature and Composition 1 Hybrid or College Intro to Literature /	World Literature 2 or World Literature and Composition 2 Hybrid or College Intro to Literature /
Government and Citizenship or Government and Citizenship Hybrid or AP US Government and Politics	Economics and Political Science or Economics and Political Science Hybrid or CN Macroeconomics
♦Science Requirement	**♦Science Requirement**
▫Healthy Living	***Fine Arts Requirement**
Elective	**Elective**
Elective	**Elective**

* *FA* **Fine Arts Requirements** can be taken during grades 9-12 (2 courses required for graduation equals 1 credit).

▫ **Health Requirement** can be taken during grades 10-12 (.5 credit required for graduation).

♦ **Science Requirement** can be taken in grades 10, 11 or 12 (6 science courses required equals 3 credits). Please see Graduation Requirements-Science Section for details.

• **Personal Finance Requirement can be taken during grades 10, 11, or 12 (.5 credit required for graduation class of 2028 and beyond)**

Art

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grades
.5	8501	Art 1		FA	9-12
.5	8502	Art 2	Art 1. Note: May be taken concurrently with Art 3	FA	9-12
.5	8503	Art 3	Art 1. Note: May be taken concurrently with Art 2	FA	9-12
.5	8507	Drawing	Art 1 or Senior Art	FA	9-12
.5	8508	Graphic Arts	Art 1 (Drawing recommended)	FA	9-12
.5	8509	Painting	Art 1 (Drawing recommended)	FA	9-12
.5	8513	Ceramics – Hand Building	(Art 1 or Senior Art recommended)	FA	9-12
.5	8514	Ceramics – Wheel Thrown Pottery	(Art 1 or Senior Art recommended)	FA	9-12
.5	8525	Senior Art	(Art 1 recommended)	FA	12
.5	8682	Visual Communications 1 – Photo, Video, Graphics	Completion of Graphics Arts It is recommended that students have a minimum 8G flash drive.	FA	9-12
.5	8683	Visual Communications 2	Completion of Visual Communications 1 It is recommended that students have a minimum 8G flash drive.	FA	9-12
.5	5500	AP Studio Art: 2-D Design	Art 1 (Drawing Recommended)	FA	11-12

Advancement via Individual Determination

AVID

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grade
1	8125 / 8126	AVID / English 9-1 and 9-2	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		9
1	5125 / 5126	AVID / Honors English 9-1 and 9-2	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		9
1	8032 / 8033	AVID 10-1 and 10-2	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		10
1	8133 / 8134	AVID / English 10-1 and 10-2	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		10
1	8034 / 8035	AVID 11-1 and 11-2	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		11
1	8036 / 8037	AVID 12-1 and 12-2	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		12

Business

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grade
.5	8403	Keyboarding & Word Processing			9-12
.5	8438	Career Investigation & Business Technology	**Honors option offered**		9-12
.5	8448	Web Design			9-12
.5	8441	Accounting - The Language of Business			10-12
.5	8410	Personal Finance	State requirement for class of 2028 and beyond (Must be taken in 10, 11 or 12)		10-12
.5	8415	Management			10-12
.5	8414	Marketing			10-12
.5	8418	Law and Order	**Honors option offered**		10-12
.5	8416	School Store 1	Marketing, Management, or Accounting		10-12
.5	8417	School Store 2	Marketing, Management, or Accounting		10-12

English

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grade
.5 each	8121 / 8122	English 9-1 and 9-2			9-12
.5 each	8125 / 8126	English 9-1 and 9-2/ AVID	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		9-12
.5 each	5121 / 5122	Honors English 9-1 and 9-2	Please see the General Information - Academic Enrichment Opportunities section.		9-12
.5 each	5125 / 5126	Honors English 9-1/9-2 / AVID	Full year course. Credit .5 per semester. Application process (please see criteria found in the General Information - Academic Enrichment Opportunities section).		9-12
.5 each	8131 / 8132	English 10-1 & 10-2	Completion of English 9-1 and 9-2 or Honors English 9-1 and 9-2.		10-12
.5 each	8133 / 8134	English 10-1 & 10-2 AVID	Completion of English 9-1 and 9-2 AVID		10-12
.5 each	5131 / 5132	Honors English 10-1 and 10-2	English 9-1 and 9-2 or Honors English 9-1 and 9-2		10-12
.5 each	8145 / 8146	American Literature & Composition 1 & 2	Completion of English 10-1 and 10-2 or Honors 10-1 and 10-2 or teacher recommendation.		11
.5 each	8145H / 8146H	American Literature and Composition 1 and 2 Hybrid	Completion of American Literature and Composition 1 or teacher recommendation. Please see General Information - Hybrid Courses section for more information.		11
.5 each	8147 / 8148	World Literature and Composition 1 and 2	Completion of American Literature and Composition 1 and 2 or or AP English Literature or teacher recommendation.		12
.5 each	8147H / 8148H	World Literature and Composition 1 and 2 Hybrid	Completion of American Literature and Composition 1 and 2 or AP English Literature or teacher recommendation. Please see General Information - Hybrid Courses section for more information.		12
.5	8143	Creative Writing	Completion of English 9-1 and 9-2 or Honors English 9-1 and 9-2.		10-12
.5	8106	Best Sellers	Completion of English 10-1 and 10-2 or Honors English 10-1 and 10-2		11-12
.5	8111	Greek & Roman Mythology	Completion of English 9-1 and 9-2 or Honors English 9-1 and 9-2.		10-12
.5 each	8113 / 8114	Journalism	Completion of English 9-1 and 9-2 or Honors English 9-1 and 9-2.		10-12
1	5156 / 5157	AP English Literature and Composition	Completion of English 10-1 and 10-2 or Honors English 10-1 and 10-2. This course may have associated fees.		11
1	5159H / 5160H	CIS Intro to Literature 1 and 2 (Hybrid)	Student cumulative GPA in previously-taken English courses that exceeds a 3.25 and be able to demonstrate to the CIS instructor ONE of the following: The reading and writing skills necessary for success in the course, OR a passion for reading and writing about literature. See the General Information - Academic Enrichment Opportunities for additional information.		12

English Learner (EL)

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grades
.5 each	8992 / 8993	English Learner Support	**Counselor recommendation only**		9-12
.5 each	8994 / 8995	English Learner 1	**Counselor recommendation only**		9-12
.5 each	8996 / 8997	English Learner 2	**Counselor recommendation only**		9-12

Family and Consumer Science

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grade
.5	8617	Child Psychology/Development 1			9-12
.5	8618	Child Psychology/Development 2 Play School Experience	Child Psychology/Development 1		10-12
.5	8601	Foods and Nutrition 1			9-12
.5	8602	Foods and Nutrition 2	Foods and Nutrition 1 or Chemistry of Foods		9-12
.5	8606	Creative Foods	*Prerequisite: Foods & Nutrition 1 or Chemistry of Foods and Foods & Nutrition 2*		10-12
1 FACS 1 Science	8620 / 8621 8320 / 8321	Chemistry of Foods 1 / 2 Chemistry of Foods 1 /2	Physical Science - Chemistry and Physical Science - Physics May replace Chemistry 1 and 2 This is a full year course with two periods per semester. Students will be enrolled in Chemistry of Foods (Science) AND Chemistry of Foods (FACS). You must enter all four numbers when registering. ♦ **This course does not meet NCAA core course requirements.**		10-12
.5	8613	Interior Design			9-12
.5	8626	Senior Strategies			12

Health

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grade
.5	8720	Healthy Living	**Honors option offered**		10-12
.5	8720V	Healthy Living Online	**Honors option offered** **8720V** - should be entered as an alternate choice if your want this course as a zero hour (7th period) *if taken as a zero hour student should not have a study hall **8720V** - should be entered as an elective choice if you would like it in you 6 period school day See course description for details		10-12
.5	8719H	Medical Terminology Hybrid	This elective course does not replace Healthy Living. Please see General Information - Hybrid Courses section for more information.		10-12

Mathematics

All courses will utilize technology. It is highly recommended that students enrolling in Math courses have a graphing calculator (model TI-84 recommended).

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Grade
.5 each	8271 / 8272	Math Support Intermediate Algebra	Upon registration, each student will go through a selection process to ensure proper placement.	9-12
1	8288-1A / 8288-1B	Intermediate Algebra Concepts 1A	This is a full year course. Students must register for both courses. ♦ **This course does not meet NCAA core course requirements.**	9
1	8289-2A / 8289-2B	Intermediate Algebra Concepts 1B	This is a full year course. Students must register for both courses. ♦ **This course does not meet NCAA core course requirements.**	10
1	8288 / 8289	Intermediate Algebra Concepts 1 and 2	♦ **This course does not meet NCAA core course requirements.**	9-10
1	8291 / 8292	Geometry Concepts 1 and 2	Intermediate Algebra Concepts 2 or Intermediate Algebra 2. ♦ **This course does not meet NCAA core course requirements.**	10
1	8293 / 8294	Advanced Algebra Concepts 1 and 2	Geometry Concepts 2. ♦ **This course does not meet NCAA core course requirements.**	11-12
1	8309 / 8310	Intermediate Algebra 1 and 2	May be completed in grade 8 or 9.	9
1	8322 / 8323	Geometry 1 and 2	Completion of Intermediate Algebra 2.	9-10
1	5322 / 5323	Honors Geometry 1 and 2	Completion of Intermediate Algebra 2. Ninth grade students must meet required criteria of enrollment. Tenth grade students need teacher approval. Please see General Information - Academic Enrichment Opportunities section for more information.	9-10
1	8312 / 8313	Advanced Algebra 1 and 2	Geometry 2	11-12
1	5312 / 5313	Honors Advanced Algebra 1 and 2	Completion of Honors Geometry 2 or Geometry 2	10-11
1	8331 / 8332	Pre-Calculus 1 and 2	Completion of Advanced Algebra 2 or Honors Advanced Algebra 2	11-12
1	5331 / 5332	Honors Pre-Calculus 1 and 2	Completion of Advanced Algebra 2 or Honors Advanced Algebra 2	11-12
1	5331H / 5332H	Honors Pre-Calculus 1 and 2 Hybrid	Completion of Advanced Algebra 2 or Honors Advanced Algebra 2 Please see General Information - Hybrid Courses section for more information.	11-12
.5	8317H	Computer Programming 1 Hybrid**	Intermediate Algebra 2. Please see General Information - Hybrid Courses section for more information.	9-12
.5	8318H	Computer Programming 2 Hybrid**	Computer Programming 1. Please see General Information - Hybrid Courses section for more information.	9-12
.5	8327H	Special Projects Computer Programming 1 Hybrid**	Computer Programming 2 with a C or above and teacher permission. Please see General Information - Hybrid Courses section for more information.	10-12
.5	8328H	Special Projects Computer Programming 2 Hybrid**	Special Projects Computer Programming 1. Please see General Information - Hybrid Courses section for more information.	10-12
.5	5329H	AP Computer Science Programming with Java Hybrid**	Computer Programming 1 and 2. See AP and CIS Expectations section. This course may have associated fees.	10-12
1	5337 / 5338	CIS Calculus	Completion of Honors Pre-Calculus	9-12
1	5339 / 5340	AP Calculus BC 1 and 2	Completion of Honors Pre-Calculus 2. See AP and CIS Expectations section. This course may have associated fees.	11-12
1	5343/ 5344	CIS Basic & Applied Statistics 1 and 2	Advanced Algebra 2 or Honors Advanced Algebra 2. See AP, CE, CIS, CN Expectations section. This course may have associated fees.	11-12

****NCAA does not recognize Computer Programming as core courses.**

Math Sequence A This sequence does not meet NCAA core course requirements		Math Sequence B	
8288 / 8289 OR 8288A/ 8289A	Intermediate Algebra Concepts 1 and 2 OR Intermediate Algebra Concepts 1A and 2A	8309 / 8310	Intermediate Algebra 1 and 2 (Grade 8 or 9)
8291 / 8292	Geometry Concepts 1 and 2	8322 / 8323 OR 5322 / 5323	Geometry 1 and 2 OR Honors Geometry 1 and 2
8293 / 8294	Advanced Algebra Concepts 1 and 2	8312 / 8313 OR 5312 / 5313	Advanced Algebra 1 and 2 OR Honors Advanced Algebra 1 and 2

Media Publications (Yearbook)

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grades
.5	8790	Media Publications 1 (Yearbook)	Advanced writing and journalism skills necessary. Photography experience preferred.		10-12
.5	8791	Media Publications 2 (Yearbook)	Media Publications 1		10-12

Miscellaneous

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grades
.5 each	8022 / 8023	Freshman Support	Students are placed based on middle school data and staff recommendation.		9
.5 each	8020 / 8021	Academic Support	See course description for details. Counselor Recommendation only.		10-12
.5 each	8271 / 8272	Math Support Intermediate Algebra	Please see Mathematics section for description and details. Counselor Recommendation only.		9-12
0	8001	Study Hall—Sem 1	Grades 9 and 10 may take one semester per year. Grades 11 and 12 may take two semesters per year.		9-12
0	8002	Study Hall—Sem 2	Grades 11 and 12 additional semester.		11-12
0		Classroom Aide	See course description for details.		11-12
.25 each		Media Aide Office Aide Attendance Aide	See course description for details.		11-12
.5		Kids Club Worker 1 & 2	See course description for details. Must be employed by Centennial Community Education Kids Club		11-12

Music

Band and Music Directions will place students in the appropriate course after registration.
****BAND AND CHOIR ARE FULL YEAR COURSES—1 Course number = 2 Elective Requests****

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grades
1	1320B	Varsity Band	Successful completion of band the previous year (may not have failed one or more semesters) or director's approval.	FA	9
1	1320B	Symphonic Band, Honors Wind Ensemble	Successful completion of band the previous year (may not have failed one or more semesters) or director's approval.	FA	10-12
1	1320C	Varsity Choir	Successful completion of choir the previous year (may not have failed more semesters) or director's approval.	FA	9
1	1320C	Cougar Choir, Treble Choir, Honors Treble Choir, Honors Concert Choir	Successful completion of choir the previous year (may not have failed one or more semesters) or director's approval.	FA	10-12

PATHWAY

Computer Science Pathway

The courses in our computer science pathway are designed to prepare students with the skills and experiences required to thrive in a tech-driven society. For students wishing to pursue a career in technology-related fields such as computer programming, web design, IT, business analysis, or cybersecurity, our courses provide opportunities to gain industry-standard knowledge and experience in the computer science field through project-based learning and instruction in a variety of program languages. For students seeking careers that are not specifically technology-related, our computer science courses provide a strong foundation in computer science concepts and rigorous problem-solving skills.

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Grade
.5	8317H	Computer Programming 1 Hybrid**	Intermediate Algebra 2. Please see General Information - Hybrid Courses section for more information.	9-12
.5	8318H	Computer Programming 2 Hybrid**	Computer Programming 1. Please see General Information - Hybrid Courses section for more information.	9-12
.5	8327H	Special Projects Computer Programming 1 Hybrid**	Computer Programming 2 with a C or above and teacher permission. Please see General Information - Hybrid Courses section for more information.	10-12
.5	8328H	Special Projects Computer Programming 2 Hybrid**	Special Projects Computer Programming 1. Please see General Information - Hybrid Courses section for more information.	10-12
.5	5329H	AP Computer Science Programming with Java Hybrid**	Computer Programming 1 and 2. See AP and CIS Expectations section. This course may have associated fees.	10-12
.5	8438	Career Investigation & Business Technology	Honors option offered	9-12
.5	8448	Web Design		9-12

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Manufacturing Pathway

Our manufacturing pathway of courses is designed to prepare students with the in-demand skills needed in our manufacturing industry. Whether students are looking for experience in metal working as a hobby/interest or making it a career. These courses will take students through a variety of processes in developing a wide range of knowledge in metal manufacturing. Our courses and lab are designed around a rotation approach where students will complete projects in 4 main areas in each course.

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Grades
.5	8645	General Metals	No Prerequisites	9-12
.5	8646	Metals Technology	No Prerequisites	9-12
.5	8647	Advanced Metal Technology	Completion of General Metals and/or Metal Technology	10-12
.5	8648	Cougar Manufacturing	Completion of General Metals and/or Metal Technology	11-12

Physical Education

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grades
.5	8717	Physical Education 9			9
.5	8717V	Physical Education 9 Online			9
.5	8717S / 5202S	Physical Education 9 Split	This is a full year course alternating days with 5202S AP Human Geography Split. Students must register for both courses.		9
.5	8711 / 8712	Competitive Sports	Physical Education 9 Student may take one or two courses per year.		10-12
.5	8725 / 8726	Cougar Strength	Physical Education 9		10-12
.5	8735 / 8736	Advanced Cougar Strength	Prerequisite: Cougar Strength (class or Summer)		10-12
.5	8715	Unified Physical Education			10-12
.5	8723	Intro to Weights			10-12

Science

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Grade
.5	8380/8381	Earth & Space Science 1 & 2		9
.5	5355/5356	Honors Earth & Space Science 1 & 2		9
1	8355 / 8356	Biology 1 and 2		10-12
.5	5380	Honors Zoology	Biology 1 and 2 or AP Biology. This course offers an optional field trip requiring participating students to pay associated fees.	11-12
.5	8358	Aquatic Studies	Biology 1 and 2 or AP Biology. This course offers an optional field trip requiring participating students to pay associated fees.	11-12
.5	8360	Minnesota Outdoor Connections	Optional fee-based projects may be offered to students. ♦ **This course does not meet NCAA core course requirements.**	11-12
.5	8359	Anatomy and Physiology	Biology 1 and 2 or AP Biology. **Honors option offered**	11-12
.5	8361	Chemistry 1	Physical Science - Chemistry and Physical Science - Physics or Honors Physics 9 and Intermediate Algebra 2 or concurrent enrollment	10-12
.5	8362	Chemistry 2	Chemistry 1 or Honors Chemistry 9 and Intermediate Algebra 2 or concurrent enrollment	10-12
1 Science 1 FACS	8320 / 8321 8620 / 8621	Chemistry of Foods 1 / 2 - Science Chemistry of Foods 1 / 2 - FACS	Replaces Chemistry 1 & 2; Successful completion of a year of Chemistry of Foods meets the graduation requirement for 1 Chemistry or Physics credit. This is a full year course, two periods per semester. Students will be enrolled in Chemistry of Foods (Science) AND Chemistry of Foods (FACS). You must enter all four numbers when registering. ♦ **This course does not meet NCAA core course requirements.**	10-12
.5	8363	Physics 1	Intermediate Algebra 1 or concurrent enrollment.	10-12
.5	8364	Physics 2	Physics 1 or Honors Physics 9 and Intermediate Algebra 1 or concurrent enrollment.	10-12
.5	8369	Astronomy	Physical Science –Chemistry and Physical Science—Physics or Honors Chemistry 9 and Honors Physics 9 requirement.	10-12
1	5346 / 5347	AP Biology 1 and 2	Physical Science –Chemistry and Physical Science—Physics or Honors Chemistry 9 and Honors Physics 9 requirement.	10-12
1	5369/5370	CIS Physics by Inquiry 1 and 2	Algebra 1	11-12
.5	8385	Intro to Biotechnology	Biology 1 & 2 or AP Biology	11-12
1	5367 / 5368	CIS Intro to College Physics 1A and 1B	The University of Minnesota requires that students taking this course have earned a B or better in a rigorous Algebra 2 course, AND have completed prerequisite courses in high school algebra, plane geometry, and trigonometry. Please see General Information - Academic Enrichment Opportunities and AP and CIS Expectations sections for details.	11-12
1	5376 / 5377	CE Intro to College Chemistry	Please see course description for general information-academic enrichment opportunities for course explanations. *Anoka-Ramsey Community College Course* *ARCC requires that students taking this course have earned a C or better in Advanced Algebra, AND have completed Honors Chem 9 or Chemistry 1. Please see general information, academic enrichment opportunities and AP and CIS expectations section for details.*	11-12

Social Studies

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Arts	Grade
.5	8202	Human Geography			9
1	8230 / 8231	World History 1 & 2			10
1	8205 / 8206	United States History 1 & 2			11
.5	8207	Economics & Political Science			12
.5	8207H	Economics & Political Science Hybrid	Please see General Information - Hybrid Courses section for more information.		12
.5	8210	Government & Citizenship			12
.5	8210H	Government & Citizenship Hybrid	Please see General Information - Hybrid Courses section for more information.		12
.5	8214	Multicultural Studies			11-12
.5	8208	Psychology			11-12
.5	8209	Sociology			11-12
.5	8212	Criminology			10-12
.5	5202S/ 8717S	AP Human Geography Split	May replace Human Geography. This is a full year course alternating days with 8717S Physical Education 9 Split. Students must register for both courses. Students must meet required criteria for enrollment. Please see General Information - Academic Enrichment Opportunities and AP and CIS Expectations sections for details.		9
1	5230 / 5231	AP World History: Modern Sequence	May replace World History 1 and 2. Please see General Information - Academic Enrichment Opportunities and AP, CE, CIS, CN Expectations sections for details.		10
.5	5220	CIS American Democracy	May replace 8210 Government and Citizenship. Please see General Information - Academic Enrichment Opportunities and AP, CE, CIS, CN Expectations sections for details.		11-12
.5	5221	CIS Psychology	Please see General Information Academic Enrichment Opportunities and AP, CE, CIS, CN Expectations sections for details.		11-12
1	5222 / 5223	CIS US History 1 & 2	May replace US History 1 & 2. Please see General Information - Academic Enrichment Opportunities and AP, CE, CIS, CN Expectations sections for details.		11
.5	5255	CN Macroeconomics	May replace 8207 Economics and Political Science. Please see General Information - Academic Enrichment Opportunities and AP, CE, CIS, CN Expectations sections for details.		11-12

Special Education (Open to IEP Students Only) (These courses do NOT meet NCAA requirements)

Credit	Course #	Course Name	Prerequisites / Recommendations and Notes	Grade
.5 each	6045 / 6046	Basic Skills	Course numbers for semesters 1 and/or 2	9-12
.5 each	6101 / 6102	Autism Spectrum Disorders Social/Life/Transition Skills	Course numbers for semesters 1 and/or 2	9-12
.5 each	6121 / 6122	Interpersonal Skills 1 and 2	Course numbers for semesters 1 and/or 2	9-12
.5	6310	Advanced Basic English 1-9/10		9-10
.5	6311	Advanced Basic English 2-9/10		9-10
.5	6312	Basic English 1-9/10		9-10
.5	6313	Basic English 2-9/10		9-10
.5	6314	Advanced Basic World Literature 1-11/12		11-12
.5	6315	Advanced Basic World Literature 2-11/12		11-12
.5	6316	Basic World Literature 1-11/12		11-12
.5	6317	Basic World Literature 2-11/12		11-12
.5 each	6055 / 6056	Pre-Algebra Skills		9-12
.5 each	6020 / 6021	Intermediate Algebra Skills		9-10
.5 each	6022 / 6023	Intermediate Mathematics		10-12
.5	6324	Basic Earth Science 1		9-12
.5	6325	Basic Earth Science 2		9-12
.5	6026	Basic Biology 1		10-12
.5	6027	Basic Biology 2		10-12
.5	6332	Basic Human Geography		9-10
.5	6333	Advanced Basic Human Geography		9-10
.5	6334	Basic Economics		11-12
.5	6336	Basic Government		11-12
.5	6335	Advanced Basic Economics		11-12
.5	6337	Advanced Basic Government		11-12
1.5 each	6070 / 6071	Work Experience Programs	Hours 4, 5 and 6	11-12
1 each	6068 / 6069	Work Experience Program	Hours 5 and 6	11-12
.5 each	6064 / 6065	Work Experience Program	Hour 6 Only	11-12
.5 each	6072 / 6074	Work Experience Program Seminar		11-12
.5 each	6906 / 6907	Woodland AM		9-12
.5 each	6908 / 6909	Woodland PM		9-12
.5 each	6060 / 6061	HIRE Learning		9-12
.5 each	6660/ 6661	Functional HIRE Learning		9-12
.5 each	6602 / 6603	D Practical Reading		9-12
.5	6606	D Practical Basic Social Studies		9-12
.5	6611	D Practical Basic Science		9-12
.5 each	6614 / 6615	D Life Skills Math		9-12
.5 each	6621 / 6622	D Functional Math		9-12
.5 each	6625 / 6626	D Functional Social Skills		9-12
.5 each	6164 / 6165	Developmental/Adapted Physical Education 9	(D.A.P.E.)	9-12
.5 each	6627 / 6628	D Functional Living Skills		9-12
.5 each	6629 / 6630	D Functional Reading		9-12
.5 each	6288 / 6289	STEPS English		9-12
.5 each	6290 / 6291	STEPS Mathematics		9-12
.5 each	6292 / 6293	STEPS Science		9-12
.5 each	6294 / 6295	STEPS Social Studies		9-12
.5 each	6296 / 6297	STEPS Social & Personal Skills		9-12
.5 each	6180 / 6181	SC English		9-12
.5 each	6182 / 6183	SC Physical Education		9-12
.5 each	6184 / 6185	SC Special Services Skills		9-12
.5 each	6186 / 6187	SC Mathematics		9-12
.5 each	6188 / 6189	SC Science		9-12
.5 each	6190 / 6191	SC Social Studies		9-12

Technology Education

Credit	Course #	Course Name	Prerequisites	Arts	Grade
.5	8645	General Metals	No Prerequisites		9-12
.5	8646	Metals Technology	No Prerequisites		9-12
.5	8647	Advanced Metal Technology	Completion of General Metals and/or Metal Technology		10-12
.5	8648	Cougar Manufacturing	Completion of General Metals and/or Metal Technology		11-12
.5	8635	Wood 1 – Introduction	Optional fee-based projects may be offered to students.		9-12
.5	8636	Wood 2 - Techniques	Completion of Wood 1 Optional fee-based projects may be offered to students.		9-12
.5	8637	Wood 3 – Creative Woods	Completion of Wood 1 and 2 Optional fee-based projects may be offered to students.		10-12
.5	8639	Independent Projects Wood	Completion of Wood 3 - Creative Woods. Optional fee-based projects may be offered to students. This course may be repeated.		11-12
.5	8682	Visual Communications 1 – Photo, Video, Graphics	Completion of Graphics Arts It is recommended that students have a minimum 8G flash drive.	*FA*	9-12
.5	8683	Visual Communications 2	Completion of Visual Communications 1 It is recommended that students have a minimum 8G flash drive.	*FA*	9-12
.5	8684	Independent Projects Visual Communications	Completion of Visual Communications 1 & 2 and Advanced Visual Communications. This course may be repeated. It is recommended that students have a minimum 8G flash drive.		11-12
1	8651 / 8652	PLTW Introduction to Engineering Design (STEM)	PLTW Introduction to Engineering Design and PLTW Principles of Engineering are separate courses which may be taken in any order. *This course fulfills the Fine Arts requirement beginning Fall 2017.	*FA**	9-12
1	5653 / 5654	PLTW Principles of Engineering (STEM) ***	PLTW Introduction to Engineering Design and PLTW Principles of Engineering are separate courses which may be taken in any order. Completion of Intermediate Algebra.		9-12
1	5655 / 5656	PLTW Civil Engineering and Architecture (STEM) ***	It is strongly recommended that a student has taken PLTW Introduction to Engineering Design or PLTW Principles of Engineering.		10-12
1	5657 / 5658	PLTW Computer Integrated Manufacturing (STEM) ***	It is strongly recommended that a student has taken PLTW Introduction to Engineering Design or PLTW Principles of Engineering.		10-12

***** This course is considered a rigorous course. Grades will be weighted and may count toward graduation with distinction. Please see General Information - Academic Enrichment Opportunities section for details.**

Work Based Learning Program

Students interested in this program must consult with their counselor for Work Seminar, Work Experience OJT and Advanced Work Experience OJT.

Credit	Course #	Course Name	Prerequisites	Arts	Grade
.5 each	8961H/ 8962H	Work Seminar Hybrid	Permission of instructor and Counselor– Must be taken 3rd period each semester		11-12
.5 each	8965 / 8966	Work Experience OJT	Permission of instructor and counselor		11-12

World Language

***Note Regarding 1A / 1B Courses:** **Most Centennial students choose to begin their first year of World Language in grade 8 at Centennial Middle School. High school level 1 courses must have a sufficient number of requests to schedule classes. Level 1 courses not offered at the high school for French 1 and German 1 may be completed online (no instructor or classroom).**
On-Line courses are available through MDE approved programs. See Counselor for additional information.

Credit	Course #	Course Name	Prerequisites	Grade
1	8161 / 8162	Spanish 1	An average English grade of C- or above is highly recommended for success in this course.	9-12
1	8163 / 8164	Spanish 2	A grade of C- or above in Spanish 1B is highly recommended for success in this course. **Honors option offered**	9-12
1	8165 / 8166	Spanish 3	A grade of C- or above in Spanish 2B is highly recommended for success in this course. **Honors option offered**	9-12
1	5167 / 5168	Honors Spanish 4	Spanish 3B with a C- or above is highly recommended for success in this course.	10-12
1	5169 / 5170	Honors Spanish 5	Spanish 4B with a B- or above is highly recommended for success in this course. Course taught entirely in Spanish.	11-12
1	8181 / 8182	French 1*	An average English grade of C- or above is highly recommended for success in this course.	9-12
1	8183 / 8184	French 2	Prerequisite: French 1B with a C- or above is highly recommended for success in this course. **Honors option offered**	9-12
1	8185 / 8186	French 3	Prerequisite: French 2B with a C- or above is highly recommended for success in this course. **Honors option offered**	9-12
1	5187 / 5188	Honors French 4	French 3B with a C- or above is highly recommended for success in this course.	10-12
1	5189 / 5190	Honors French 5	French 4B with a C- or above is highly recommended for success in this course.	10-12

Special Program Options

Credit	Course #	Course Name	Prerequisites	Arts	Grade
varies	1301 Full-Time* or 1302 Part-Time* *Enter as an alternate when registering	PSEO	**You must complete 3 steps by May 30th to participate in PSEO for the full year. To enroll for only 2nd sem. you must complete the 3 steps by Oct 30th of that year. See the General Information PSEO Section for specific details.** Enter course number 1301 or 1302 as an alternate when registering to indicate PSEO intentions.		10-12
varies		Northeast Metro 916 Career and Technical Center	See program details.		11-12
varies		Spring Lake Park	See program details.		11-12

Course Descriptions

ART

8501 ART 1
Grades: 9, 10, 11, 12 FA Credit: .5

Students in this course will:
- Explore the elements and principles of design.
- Incorporate the elements and principles of design into a variety of projects.
- Use a variety of two-dimensional materials and approaches.
- Study various art movements and the work of various artists throughout history.
- Projects include: drawing, painting and mixed media.

8502 ART 2
Grades: 9, 10, 11, 12 FA Credit .5
Recommended: Art 1 (May be taken concurrently with Art 3)

Students in this course will:
- Further explore the elements and principles of design.
- Incorporate the elements and principles of design into a variety of projects.
- Use a variety of two-dimensional and three-dimensional materials to further develop skills.
- Further study various art movements and the work of various artists throughout history.

Projects include: drawing, painting, clay, sculpture and printmaking.

8503 ART 3
Grades: 9, 10, 11, 12 FA Credit .5
Recommended: Art I (May be taken concurrently with Art 2)

Students in this course will:
- Create and assemble a portfolio with specific requirements and objectives similar to what an art college might require for admission.
- Learn how to use a variety of mediums (tempera, watercolor, and acrylics) and painting techniques.
- Apply color theory through practical application.
- Discuss and critique projects in a small group.

8507 DRAWING
Grades: 9, 10, 11, 12 FA Credit: .5
Recommended: Art 1 or Senior Art

Students in this course will:
- Demonstrate a variety of drawing approaches and techniques through figure, still life, and observational drawing.
- Review the elements and principles of design.
- Recognize and evaluate artwork (specifically drawings) made by masters.
- Practice visual problem solving.
- Incorporate various mediums into projects.

8508 GRAPHIC ARTS
Grades: 9, 10, 11, 12 FA Credit: .5
Recommended: Art 1 (Drawing recommended)

Students in this course will:
- Be introduced to digital imaging and computer graphic design.
- Develop several visual solutions to a problem.
- Demonstrate basic skills used in commercial art.
- Explore new ways of approaching the design process.
- Further develop an understanding of art criticism.
- Explore color theory.
- Analog based with digital options.

8509 PAINTING
Grades: 9, 10, 11, 12 FA Credit: .5
Recommended: Art 1 (Drawing recommended)

This course may be repeated with instructor permission.
Students in this course will:
- Learn how to use a variety of mediums (tempera, watercolor, and acrylics) and painting techniques.
- Recognize and evaluate painting styles, periods and artists.
- Apply color theory through practical application.
- Discuss and critique projects in a small group.
- Create paintings with specific medium and technique requirements

8513 CERAMICS – HAND BUILDING
Grades: 9, 10, 11, 12 FA Credit: .5
Recommendation: Art 1 or Senior Art

Students in this course will:
- Construct a variety of slab, coil, sculptural and relief projects.
- Identify and apply basic sculptural techniques to projects.
- Demonstrate a variety of construction and glazing techniques.
- Develop an appreciation of the history of pottery.

8514 CERAMICS – WHEEL THROWN POTTERY
Grades: 9, 10, 11, 12 FA Credit: .5
Recommendation: Art 1 or Senior Art
[Optional fee-based projects may be offered to students.]

Students in this course will:
- Construct wheel thrown bowls, cups and mugs with some hand built projects.
- Critique and evaluate class work.
- Demonstrate a variety of wheel thrown and glazing techniques.
- Develop an appreciation of the history of pottery.
- Some hand building will be involved.

ART

8525 SENIOR ART

Grades: 12 *FA* Credit: .5

Recommended: Art 1

Students in this course will:

- Use a variety of mediums.
- Critique and evaluate class work.
- Develop an appreciation for art by investigating a number of artistic styles.
- Projects may include: drawing, painting, ceramics.
- Evaluate & critique works of art history.
- Explore & compare art movements within projects.

8682 VISUAL COMMUNICATIONS – 1 PHOTO, VIDEO, GRAPHICS

Grades: 9, 10, 11, 12 *FA* Credit: .5

Completion of Graphics Arts.

[It is recommended that students have a minimum 8G flash drive.]

This course will include photography, movie making, and computer graphics. Students will pursue an area(s) of interest.

Students in this course will:

- Use digital cameras/camcorders and other accessories to capture moments while learning and using composition elements to add interest to a photograph or video.
- Learn the tools of Adobe Master Collection CS6 to edit and enhance their photo/video projects.
- Continue their exposure of CorelDraw to create logos, artwork, and designs.
- Have access to design equipment such as laser engravers for cutting and engraving several different products like acrylics, metals and wood, vinyl cutters for decal production, and dye sublimation process for creating a multitude of products like; T-shirts, mugs, signs, tags, license plates, portable electronic covers, and more!
- Be able to create posters on a large format printer using personal photographs and computer generated graphics.

8683 ADVANCED VISUAL COMMUNICATIONS—2

Grades: 9, 10, 11, 12 *FA* Credit: .5

Prerequisite: Visual Communications 1

[It is recommended that students have a minimum 8G flash drive.]

This course will expand on Visual Communications 1, photography, movie making and computer graphics curriculum. Students will pursue an area(s) of interest. Projects will be determined by student and instructor.

♦ *ADVANCED PLACEMENT OFFERING* ♦

See the General Information-Academic Enrichment Opportunities Section for an explanation and expectations of the AP Program.

5500 AP STUDIO ART: 2-D DESIGN

Grades: 11, 12 *FA* Credit: .5

Prerequisite: Art 1 (Drawing Recommended)

The AP Studio Art: 2-D Design course is designed for students who are seriously interested in the practical experience of art. The course corresponds to common college foundation courses. AP Studio Art: 2-D Design is not based on a written exam; instead, students submit a portfolio of 29 2-D projects for evaluation. The College Board subsequently determines whether college credit is awarded. Students will have access to Art Studio space during LEAP to support completion of these works.

AVID

HOW TO APPLY FOR AVID COURSES

AVID Program Information and How To Apply

Prerequisite: *Students who are interested in enrolling in the AVID Elective for the first time must complete an application and participate in the selection process. Students may enroll in the AVID Elective each year following their first year without a new application.*

Students are encouraged to apply to AVID who have:

- Average to high test scores
- GPAs in the range of 2.0-3.5 (students in the academic middle)
- Good attendance and behavior
- A strong desire to go to college.

Students **may** meet one or more of the following:

- Special circumstances
- Be of a culture historically underserved in four-year colleges
- Economically disadvantaged
- First in their family to attend college

Advancement Via Individual Determination (AVID) is a researched-based academic and leadership development elective class that prepares students for college readiness and success, and is scheduled during the regular school day as a year-long course. AVID targets students in the academic middle who have a desire to go to college and the willingness to work hard. Students enrolled in the AVID elective will be enrolled in rigorous courses that will enable them to fulfill the sequence of 4-year college entrance requirements.

AVID's mission is to close the achievement gap by preparing all students for college readiness and success in a global society. Each week in the AVID Elective course, students receive instruction utilizing a rigorous college preparatory curriculum, tutor-facilitated study groups, motivational activities and academic success skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, organization and reading (WICOR) to support their academic growth and success.

Students in AVID Elective courses will:

- Participate in writing to learn activities, including note-taking, learning logs, reflective and essay writing
- Think critically and ask probing questions
- Increase their awareness of their personal contributions to their learning, as well as their involvement in their school and community
- Work in collaborative settings, learn how to participate in collegial discussions and use sources to support their ideas and opinions
- Participate in tutorials for academic success in all courses
- Improve their oral communication skills
- Refine their organization, study, test-taking and research skills
- Participate in college-bound activities including goal setting, college and career planning, financial topics, preparing for college entrance exams and college and scholarship application processes.

All 1st time students apply for the AVID program, MUST complete the AVID application and enter the following numbers when registering:

Grade 9

- Register for:
  - 8125 English 9-1 / AVID and
  - 8126 English 9-2 / AVID

  OR
  - 5125 Honors English 9-1 / AVID and
  - 5126 Honors English 9-2 / AVID

Grade 10

- Register for:
  - 8133 English 10-1 / AVID and
  - 8134 English 10-2 / AVID

Grades 10, 11, 12

- Enter:
  - Grade 10 Elective # 8032 / 8033
  - Grade 11 - # 8034 / 8035
  - Grade 12 - # 8036 / 8037

AVID

8125 ENGLISH 9-1 / AVID
8126 ENGLISH 9-2 / AVID
Grade: 9 Credit: .5

Students in this course will:
- Expand grammar instruction.
- Begin establishing a grammatical base to expand on during high school.
- Construct written works by following a process of prewriting, drafting, revising and editing.
- Evaluate non-fiction writing and works of fiction.
- Read, analyze and critique literature from a variety of cultures and perspectives.
- Work in collaborative settings, learn how to participate in collegial discussions and use sources to support their ideas and opinions.

AVID Requirements:
- Engage in a rigorous college preparatory curriculum, tutor-facilitated study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.
- Increase awareness of personal contributions to learning, as well as involvement in school and community as an AVID Ambassador.
- Read, analyze, and critique literature from a variety of cultures and perspectives.
- Prepare and present a speech.
- Engage in collaborative study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.

Please see "General Information - Academic Enrichment Opportunities" section for more honors course details.

5125 HONORS ENGLISH 9-1 / AVID
5126 HONORS ENGLISH 9-2 / AVID
Grade: 9 Credit: .5
This course may be taken in place of English 9–1 & 9—2

Students in this course will:
- Complete mandatory summer reading.
- Generate ideas for self-selected topics in essay writing.
- Construct essays and other written works by following a process of prewriting, drafting, revising and editing.
- Research and analyze information to be presented orally to a group using proper voice, poise, eye contact and diction.
- Read, analyze and critique literature (accelerated pacing) from a variety of cultures and perspectives.
- Participate in literature circles and Socratic Discussions which extend vocabulary, develop the understanding of literary devices, and encourage inquiry and self-directed learning.
- Discuss advanced concepts or abstract ideas that require high level thinking skills.
- Analyze patterns and relationships of ideas, topics, or themes.

AVID Requirements:
- Engage in a rigorous college preparatory curriculum, tutor-facilitated study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.
- Increase awareness of personal contributions to learning, as well as involvement in school and community as an AVID Ambassador.

AVID

8133 ENGLISH 10-1 / AVID
8134 ENGLISH 10-2 / AVID
Grades: 10 Credit: 1

Students in this course will:
- Expand grammar instruction.
- Begin establishing a grammatical base to expand on during high school.
- Construct written works by following a process of prewriting, drafting, revising and editing.
- Evaluate non-fiction writing and works of fiction.
- Read, analyze and critique literature from a variety of cultures and perspectives.
- Work in collaborative settings, learn how to participate in collegial discussions and use sources to support their ideas and opinions.

AVID Requirements:
- Engage in a rigorous college preparatory curriculum, tutor-facilitated study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.
- Increase awareness of personal contributions to learning, as well as involvement in school and community as an AVID Ambassador.
- Read, analyze, and critique literature from a variety of cultures and perspectives.
- Prepare and present a speech.
- Engage in collaborative study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.

8032 / 8033 AVID 10-1 and 10-2
Grades: 10 Credit: 1

Students in this course will:
- Expand Writing portfolio (analyze prompts, supporting arguments and claims, character analysis and detailed reflections)
- Expand vocabulary skills
- Focus on ACT/SAT test taking skills
- Update their 4 year plan
- Research college options
- Learn about resources available in Career Center

8034 / 8035 AVID 11-1 and 11-2
Grades: 11 Credit: 1

This is a full year course.
Students must register for both semesters.

Students in this course will:
- Focus on Test Prep for the ACT/SAT/PSAT
- Research College/Educational options
- Work on career explorations
- Become aware of financial aid and real cost of college issues
- Prepare for the College Fair/National College Fair Field Trip
- Attend a college visit
- Update their 4 year plan
- Create and expand their college portfolio
- Work on resume building

8036 / 8037 AVID 12-1 and 12-2
Grades: 12 Credit: 1

This is a full year course.
Students must register for both semesters.

Students in this course will:
- Complete College Applications
- Utilize college writing opportunities (essay, analyzing writing prompts, citing sources)
- Complete their resume
- Reflect on 4 year plan / transition to college
- Complete a Financial Aid Application
- Research scholarship opportunities
- Attend a college panel
- Research first year of college course expectations
- Transition from AVID tutorials to Self-Created study groups

BUSINESS

8403 KEYBOARDING & WORD PROCESSING
Grades: 9, 10, 11, 12 Credit: .5

Want to save time creating your reports and essays? Learn how to use the touch method of keyboarding and improve your speed and accuracy. You will also learn how to format documents correctly using word processing skills.
Students in this course will:
- Learn the correct keyboarding technique to avoid aches and pains.
- Learn the alpha/numeric keyboard.
- Learn the numeric keypad.
- Develop speed and accuracy using the correct technique.
- Become more familiar with computer fundamentals such as using the desktop, creating files and folders, and opening and saving documents.
- Develop confidence in producing documents such as letters, envelopes, reports and tables.

8438 CAREER INVESTIGATION & BUSINESS TECHNOLOGY
Grades: 9, 10, 11, 12 Credit: .5
Honors Option Offered

Students will be given direction to help answer the important question of what pathway will guide me to my interests and skills.

- Students will participate in career assessments and aptitude testing to find what careers fit their personalities and interests.
- Students will learn how to locate and apply for jobs, create a professional résumé, cover letter, complete an interview process, and understand the college application process.
- Students will become fully prepared for college and the workforce by gaining experience with software and technical skills valued by college professors and employers.
- Students have the opportunity to become proficient in the Microsoft Office suite. Essential software programs explored include Word, Excel, PowerPoint, and Access. This is a foundational course for anyone pursuing post-secondary education or employment.
- Students can also work towards Microsoft Office certifications.

8448 WEB DESIGN
Grades: 9, 10, 11, 12 Credit: .5

Coding skills are in demand! Learn the basics of creating a web page using HTML. Students in this course will develop technology related knowledge by learning skills in the following areas:
- HTML coding
  - Introduce Hypertext Markup Language to create web pages.
- Web page editing.
- Adding text and images to a web page.
- Use CSS style sheets.
- Create and use external style sheets.
- Embed YouTube videos into web pages.
- Design web pages for business and personal use.

8441 ACCOUNTING
The Language of Business
Grades: 10, 11, 12 Credit: .5

This course is for any student interested in business. Accounting is the language of business and it is essential to the success of any business.
Students in this course will:
- Learn the accounting equation and practice the accounting cycle for a service business.
- Learn accounting procedures to provide a sound background for employment.
- Understand accounting terminology, concepts and practices for a service and merchandising business.
- Participate in a hands-on simulation of a basic accounting system for a service business.

8410 PERSONAL FINANCE
Grades: 10, 11, 12 Credit: .5
Required for the class of 2028 and beyond

Who wants to be a millionaire? This practical, hands-on course will prepare students to be independent and manage their money in the "real world." Students in this course will develop consumer skills and knowledge relating to:
- Budgeting finances
- Preparing and paying taxes
- Banking services and checking accounts
- Saving and investing for the future
- Personal Credit (loans and credit cards)
- Renting an apartment/buying a home
- Buying/Leasing new and/or used cars
- Behavioral Economics

BUSINESS

8415 MANAGEMENT
Grades: 10, 11, 12 Credit: .5

Thinking about a career in business? Want to own your own business? This course will provide students with an introduction to business and the various aspects of managing a business.

Students in the course will:
- Discuss and investigate areas of business management in relation to:
  - The Five Functions of Management
  - Forms of Ownership: Proprietorships, Partnerships, and Corporations
  - Legal issues involving businesses
  - Recording & analyzing finances of a business
  - Human Resource Management
  - Marketing
- Investigate business careers

8414 MARKETING
Grades: 10, 11, 12 Credit: .5

Marketing is an interactive project-based course that focuses on the business of developing, promoting and selling products or services. This course is a great exploration into the world of marketing and is an important step before entering post-secondary business programs. Students in this course will discuss and investigate:
- The 4 P's of marketing (Product, Price, Place, and Promotion)
- Market research techniques
- Developing a marketing campaign
- Product development
- Product packaging
- Advertising and promotion methods
- Retail marketing strategies

Students enrolled in marketing are encouraged to become members of DECA. DECA is an association of marketing education students. It offers students opportunities to gain leadership skills, participate in local, state and national conferences and competitions, work with business and community leaders, and apply for local, state and national scholarships.

8418 LAW AND ORDER
Grades: 10, 11, 12 Credit: .5
Honors Option Offered

Do you know your legal rights and duties? Laws affect us every day. Students in this course will:
- Review the U.S. legal system.
- Learn the difference between civil and criminal procedures.
- Identify torts and crimes.
- Analyze legal issues including laws about minors, marital rights and responsibilities, contracts, employment and discrimination, sexual harassment, ethics, debts and bankruptcies.
- Develop an awareness of personal legal obligations.
- Explore ethical decision making.
- Investigate law related careers.
- Participate in a mock trial.

8416 SCHOOL STORE 1
Grades: 10, 11, 12 Credit: .5
Prerequisite: Accounting, Marketing, or Management

Operate the school store! This course is for students interested in marketing, retail operations, management, and/or fashion. Students in this course serve as store managers and employees throughout each semester. This course will allow students to explore advanced topics in business and marketing. Students in this course will actively engage in the following topics:
- Fashion Merchandising
- Sports and Entertainment Marketing
- Hospitality and Tourism
- Sales
- Inventory
- Entrepreneurship
- Business Finance
- Professionalism and Leadership
- DECA membership is encouraged, but not required

8417 SCHOOL STORE 2
Grades: 10, 11, 12 Credit: .5
Prerequisite: Accounting, Marketing, or Management

This course will expand on the concepts learned and business skills presented in School Store 1.

- Insurance options
- Decision making using an online simulation.

ENGLISH

_8121_ ENGLISH 9-1
8122 ENGLISH 9-2
Grade: 9 Credit: .5 – *Required*

Students in this course will:
- Begin establishing a grammatical base to expand on during high school.
- Construct written works by following a process of prewriting, drafting, revising and editing.
- Evaluate non-fiction writing and works of fiction.
- Read, analyze and critique literature from a variety of cultures and perspectives.
- Engage in collaborative study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.
- Expand grammar instruction.
- Study basic sentence structure.

8125 ENGLISH 9-1 / AVID
8126 ENGLISH 9-2 / AVID
Grade: 9 Credit: .5

Students in this course will:
- Expand grammar instruction.
- Begin establishing a grammatical base to expand on during high school.
- Construct written works by following a process of prewriting, drafting, revising and editing.
- Evaluate non-fiction writing and works of fiction.
- Read, analyze and critique literature from a variety of cultures and perspectives.
- Work in collaborative settings, learn how to participate in collegial discussions and use sources to support their ideas and opinions.

AVID Requirements:
- Engage in a rigorous college preparatory curriculum, tutor-facilitated study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.
- Increase awareness of personal contributions to learning, as well as involvement in school and community as an AVID Ambassador.
- Read, analyze, and critique literature from a variety of cultures and perspectives.
- Prepare and present a speech.
- Engage in collaborative study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.

Please see Academic Enrichment Opportunities section for more honors course details.

5121 HONORS ENGLISH 9-1
5122 HONORS ENGLISH 9-2
Grade: 9 Credit: .5
This course may be taken in place of English 9–1 & 9—2
Students in this course will:
- Complete mandatory summer reading.
- Generate ideas for self-selected topics in essay writing.
- Construct essays and other written works by following a process of prewriting, drafting, revising and editing.
- Research and analyze information to be presented orally to a group using proper voice, poise, eye contact and diction.
- Read, analyze and critique literature (accelerated pacing) from a variety of cultures and perspectives.
- Participate in literature circles and Socratic Discussions which extend vocabulary, develop the understanding of literary devices, and encourage inquiry and self-directed learning.
- Discuss advanced concepts or abstract ideas that require high level thinking skills.
- Analyze patterns and relationships of ideas, topics, or themes.
- Engage in collaborative study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.

Please see AVID section for more course details.

5125 HONORS ENGLISH 9-1 / AVID
5126 HONORS ENGLISH 9-2 / AVID
Grade: 9 Credit: .5
This course may be taken in place of English 9–1 & 9—2
Students in this course will:
- Complete mandatory summer reading.
- Generate ideas for self-selected topics in essay writing.
- Construct essays and other written works by following a process of prewriting, drafting, revising, and editing.
- Research and analyze information to be presented orally to a group using proper voice, poise, eye contact and diction.
- Read, analyze, and critique literature (accelerate pacing) from a variety of cultures and perspectives.
- Participate in literature circles and Socratic Discussions which extend vocabulary, develop the understanding of literary devices, and encourage inquiry and self-directed learning.
- Analyze patterns and relationships of ideas, topics, or themes.

AVID Requirements:
- Engage in a rigorous college preparatory curriculum, tutor-facilitated study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.
- Increase awareness of personal contributions to learning, as well as involvement in school and community as an AVID Ambassador.

ENGLISH

8131 ENGLISH 10-1
8132 ENGLISH 10-2
Grade: 10 Credit: .5 - *Required*
Prerequisite: Completion of English 9-1 and 9-2 or Honors English 9–1 and 9-2.

Students in this course will:
- Demonstrate the ability to write for a variety of academic purposes and situations.
- Interpret fiction and nonfiction selections from a variety of perspectives.
- Read/view various forms of literature to develop an understanding of self and others.
- Analyze, interpret, draw conclusions and question literary devices.
- Listen in order to form opinions.
- Discuss critically given works of literature.
- Prepare and present a speech.

5131 HONORS ENGLISH 10-1
5132 HONORS ENGLISH 10-2
Grade: 10 Credit: .5
This course may be taken in place of English 10-1.
Prerequisite: Completion of English 9-1 and 9-2 or Honors English 9–1 and 9-2. Advanced discussion, participation, and analysis are necessary skills for success in this course.

Students in this course will:
- Complete mandatory summer reading.
- Demonstrate the ability to write for a variety of academic purposes and situations.
- Interpret fiction and nonfiction selections from a variety of perspectives.
- Read/view various forms of literature to develop an understanding of self and others.
- Analyze, interpret, draw conclusions, and question literary devices.
- Listen in order to form opinions, make recommendations and persuade others about fiction and nonfiction.
- Will read *Macbeth, Frankenstein, and a Tale of Two Cities* as well as a variety of poetry in order to prepare for the AP Literature test at the end of junior year.
- Prepare and present a speech.

8133 ENGLISH 10-1 / AVID
8134 ENGLISH 10-2 / AVID
Grades: 10
Credit: 1
Students in this course will:
- Expand grammar instruction.
- Begin establishing a grammatical base to expand on during high school.
- Construct written works by following a process of prewriting, drafting, revising and editing.
- Evaluate non-fiction writing and works of fiction.
- Read, analyze and critique literature from a variety of cultures and perspectives.
- Work in collaborative settings, learn how to participate in collegial discussions and use sources to support their ideas and opinions.

AVID Requirements:
- Engage in a rigorous college preparatory curriculum, tutor-facilitated study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.
- Increase awareness of personal contributions to learning, as well as involvement in school and community as an AVID Ambassador.
- Read, analyze, and critique literature from a variety of cultures and perspectives.
- Prepare and present a speech.
- Engage in collaborative study groups, motivational activities and academic success skills including note-taking, learning logs, reflective and essay writing.

8145/8146 AMERICAN LITERATURE AND COMPOSITION 1 & 2
or
8145H/8146H AMERICAN LITERATURE AND COMPOSITION 1& 2 HYBRID
Grade: 11 Credit: .5 - *Required*

Prerequisite: Completion of English 10-1 and 10-2 or Honors 10-1 and 10-2 or teacher recommendation.

Students in this course will:
- Read a variety of representative selections from American literature.
- Read historical fiction to analyze cultural expressions of a historical era.
- Trace significant themes in the development of literature in the United States.
- Improve writing skills.
- Improve speaking skills.
- Improve rhetorical skills.
- Analyze and interpret literary works using literary elements, author information, and historical context to determine meaning and purpose.

ENGLISH

8147/8148 WORLD LITERATURE AND COMPOSITION 1 & 2

8147H/8148H WORLD LITERATURE AND COMPOSITION 1 & 2 HYBRID

♦ **This course meets NCAA core course requirements.**
Grade: 12 Credit: .5 - *Required*
Prerequisite: Completion of American Literature and Composition 1 and 2 or AP English Literature or teacher recommendation.

Students in this course will:
- Read literature from England, Europe, and the Americas.
- Relate literary selections to the cultures from which they originate.
- Relate literary selections to self and the real world.
- Present literary analyses.
- Participate meaningfully in discussions of selected works.

8143 CREATIVE WRITING
Grades: 10, 11, 12 Credit: .5
Prerequisite: Completion of English 9-1 and 9-2 or Honors English 9-1 and 9-2.

Students in this class will:
- Produce writing in a variety of genres.
- Revise a variety of written works.
- Develop criteria for judging their own written works and the works of others.
- Criticize constructively the writing of fellow class members.
- Utilize conventional literary techniques.
- Evaluate the literary techniques or merits of the works under study.
- Participate in a writing community & providing feedback to other writers.

8106 BEST SELLERS
Grades: 11, 12 Credits: .5

Prerequisite: Completion of English 10-1 and 10-2 or Honors English 10-1 and 10-2

Students in the course will:
- Read best-selling novels to enhance their appreciation and enjoyment of literature.
- Share through writing, class discussions and oral presentations impressions of what has been read.
- Analyze the definition and role of literature in society.

8111 GREEK & ROMAN MYTHOLOGY
Grades: 10, 11, 12 Credit: .5

Prerequisite: Completion of English 9-1 and 9-2 or Honors English 9-1 and 9-2.

Students in this course will:
- Explore the beginnings of Greek and Roman Mythology.
- Compare the role of Greek/Roman mythology from ancient times to the present.
- Explore the use of mythology in today's society.

JOURNALISM
Grades: 10, 11, 12 Credit: .5
8113 – One Semester
8114 – Additional Semester
Note: Students may take more than one semester of this course. These course numbers are not semester specific. All students wishing to take this course should enter 8113 first for one semester, then 8114 for an additional semester, etc.

Prerequisite: Completion of English 9-1 and English 9-2 or Honors English 9-1 and 9-2.
Students in this course will:
- Study the history, rights, limitations, and ethical responsibilities of the press.
- Use the writing process to create articles for possible publication in the school newspaper.
- Practice layout and editing skills while publishing the school newspaper.
- Learn newspaper design, photography and advertising.
- Have an opportunity to write for student newspaper.

ENGLISH

♦ *ADVANCED PLACEMENT OFFERING* ♦

See the General Information-Academic Enrichment Opportunities Section for an explanation of the AP Program.

5156 & 5157 AP ENGLISH LITERATURE AND COMPOSITION SEQUENCE

Student must register for both semesters

Students enrolling in this course are expected to take the AP English Literature and Composition Exam.

Grade: 11 Credit: 1

AP English is a challenging course meant to be similar in scope to a freshman college course. Students enrolling in this course should be avid readers who are willing to devote time to homework and study. Students who pass the AP test in May have the opportunity to earn college credit.

This course may be taken in place of American Literature and Composition 1 and 2.
Prerequisite: Completion of English 10-1 and 10-2 or Honors English 10-1 and 10-2.
Fees: This course may have associated fees.

Students in this course will:

- Read critically a variety of representative selections from American Literature.
- Read historical fiction to analyze cultural expressions of an historical era.
- Trace significant themes in the development of literature in the United States.
- Analyze and interpret poetry and literary works using literary elements, author information and historical context to determine meaning and purpose.
- Prepare for and engage in lively discussions of complex texts.
- Generate pieces of writing that meet the demands of the Advance Placement Exam in English Literature and Composition.
- Take the AP exam in May.
- Read a selected book over the summer.

♦ *COLLEGE COURSE OFFERING* ♦

The English class that is offered for college credit is:
Introduction to Literature (U of M)

Prerequisite for all college English classes:
See the General Information-Academic Enrichment Opportunities Section for an explanation of the College in the Schools program.

5159H & 5160H CIS INTRODUCTION TO LITERATURE 1 & 2 (Hybrid)

Grade: 12 Credits 1

Student must register for both semesters

University of Minnesota Introduction to Literature course number EngL 1001W (receive 4 U of M credits upon course completion)
This course replaces the 8147 and 8148 World Literature 1 and 2 requirements. (**See additional credit requirement below)*
The University of Minnesota requires that students taking this course:

- Have a cumulative GPA in previously-taken English courses that exceeds a 3.25 or be in the top 20% of their high school class

AND be able to demonstrate to the CIS instructor ONE of the following:

- The reading and writing skills necessary for success in the course, **OR**
- A passion for reading and writing about literature.
- Class size cap is 25

Students in this course will:

- Read and analyze a variety of stimulating and often controversial novels of 20th century fiction.
- Explore literary meaning and intent through student led discussion.
- Articulate literary interpretation and analysis in formal journals (no tests).
- Attendance on work days is optional and designed for students who want additional time for writing development and feedback.

This is a college-level University of Minnesota course; therefore, mature content may be read and discussed.

EL-ENGLISH LEARNER

EL—English Learner
Grades: 9, 10, 11, 12 Credit: .5

Prerequisite: Counselor recommendation

This course is designed to help students who's first language is not English and to help them get the basic academic
language necessary to be successful in a U.S. school. Based on their testing scores for English Language (EL) abilities in speaking, listening, reading, and writing students get support in a small class setting with licensed EL teachers through direct English instruction and help. Students remain in the EL program until they meet the language exiting criteria.

EL Support *for students with a 3 or 4 composite score on the WIDA ACCESS exam*
8992 – 1st Semester
8993 – 2nd Semester

EL 1 f*or students with a 1 composite score on the WIDA ACCESS exam*
8994 – 1st Semester
8995 – 2nd Semester

EL 2 *for students with a 2 composite score on the WIDA ACCESS exam*
8996– 1st Semester
8997– 2nd Semester

Students in these courses will:
- Improve listening skills.
- Improve speaking skills.
- Improve reading and writing skills.

Other considerations for this course:
- Curriculum and instruction are aligned to the WIDA English Language Development Standards.
- We view multilingualism as an asset.
- Interpreters and translation services for families home language are available.
- Bilingual SEAL opportunities for students.
- A WIDA ACCESS test score of 4.5, or higher (test given every spring to EL students) is the composite score needed to exit the program.

FAMILY & CONSUMER SCIENCE

8617 CHILD PSYCHOLOGY/DEVELOPMENT 1
Grades: 9, 10, 11, 12 Credit: .5

Children are fun and learning about their development is just as fun! This course is an excellent introduction to careers in the field of child psychology, development and education as well as the opportunity to prepare for a variety of future life experiences. Guest speakers, group and individual projects will contribute to these topics plus a parenting simulation through the Reality Works Real Care Baby program!

Students in this course will:
- Demonstrate knowledge in care-giving skills.
- Understand physical, intellectual, emotional and social areas of development.
- Learn about pregnancy, labor and delivery.

8618 CHILD PSYCHOLOGY/ DEVELOPMENT 2 PLAY SCHOOL EXPERIENCE
Grades: 10, 11, 12 Credit: .5
Prerequisite: Child Psychology/Development 1

If you are interested in teaching and/or working with young children, this course is for you. You will have opportunities to have fun and experience the unique relationship of working with three, four and five year old children in an actual playschool setting. You are the teacher! You will plan, develop, and implement lesson plans for preschool children. This course is designed to encourage you to provide a safe, creative, child-centered environment for the children attending.

Students in this course will:
- Analyze development of preschool and school aged children.
- Apply knowledge of child development in a preschool setting.
- Study human growth, development and behavior using theory and observation.
- Run the Cougar Cubs preschool for approximately 10 weeks.

8613 INTERIOR DESIGN
Grades: 9, 10, 11, 12 Credit: .5

Channel your creativity in this fun and practical course.

Students in this course will:
- Explore Architectural features and styles.
- Discover how to use textiles and lighting to maximize designs.
- Learn how to use Floorplanner, an interior design app, and create spaces with realistic renderings.
- As a final project in this class, students will design a small house for a real client, taking into account the client's wants and needs.

8626 SENIOR STRATEGIES
Grade: 12 Credit: .5

Senior Strategies is a course that addresses the needs of students to achieve post-secondary and life success.

Students in this course will:
- Explore post-secondary and career options.
- Learn strategies for living with a roommate and preparing healthy meals in a small space.
- In conjunction with the Career Center receive guidance in post-secondary school selection and financial aid.
- Create a resume and learn about job interviews.

8601 FOODS AND NUTRITION 1
Grades: 9, 10, 11, 12 Credit: .5

Students in this course will:
- Demonstrate safety and sanitation in the kitchen.
- Prepare a variety of foods to enhance skills in food preparation.
- Understand the principles of basic nutrition.
- Work together as a team in cooperative lab experience.
- Learn about career opportunities in the Food Industry.

8602 FOODS AND NUTRITION 2
Grades: 9, 10, 11, 12 Credit: .5
Prerequisite: Foods & Nutrition 1 or Chemistry of Foods

Students in this course will:
- Practice reading and following recipes through individual and team lab experiences.
- Apply baking techniques to prepare a variety of baked goods such as muffins, cookies, and brownies.
- Prepare foods and beverages using a variety of kitchen equipment such as stoves/ovens, deep fryers, blenders, microwaves, and stand mixers.
- Develop culinary knife skills.
- Analyze nutritional values of recipe ingredients.
- Demonstrate safety and sanitation in the kitchen settings.
- Discover career opportunities available in the food and hospitality industry.

FAMILY & CONSUMER SCIENCE

CHEMISTRY OF FOODS - FACS

♦ **This course does not meet NCAA core course requirements.**

Grades: 10, 11, 12 Credit: 2 (1 Science and 1 FACS)

Students must enter the following 4 numbers to register for this course:
Semester 1: 8320 and 8620
Semester 2: 8321 and 8621

Prerequisite: Completion of Physical Science - Chemistry and Physical Science - Physics.
This course may be taken in place of Chemistry 1 and 2.

This is a full year course.
Students will be scheduled for 2 periods each semester (one Chemistry and one Foods)
Please see the Science Department pages for the a description of the Chemistry component of this course.

Chemistry of Foods focuses on the scientific method to study the various relationships between food science, nutrition and food preparation. Laboratory skills in measuring, recording, and analyzing data are used to explore these relationships. Experimental methods are employed to analyze food mixtures, food preservations and complex food systems. Students are given insight into career possibilities as well as up to date information regarding technological advances and future trends in food preparation, preservation, evaluation and utilization of food.

Students in this course will:
- Understand sanitation and safety in the kitchen.
- Utilize precise and accurate measuring skills in the kitchen.
- Learn about historical advances in food science & technology.
- Evaluate the sensory experience of food particularly in the context of gels, emulsions, and other mixtures.
- Describe the contributions of food scientists.
- Study chemical reactions related to food production and preparation.
- Calculate ratios in recipes and how they relate to chemical reactions.
- Evaluate the nutritional characteristics of food.
- Examine strategies for food preservation.
- Bring together many Food Science concepts to create “farm-to-table” projects.
- Learn about careers in Food Science and related fields.

8606 CREATIVE FOODS

Grades: 10, 11, 12 Credit: .5
Prerequisite: Foods & Nutrition 1 and 2 or Chemistry of Foods

Students in this course will:
- Develop confidence in cooking independently
- Execute advanced baking and cooking recipes.
- Learn about contemporary innovations in food preparation.
- Use a wide variety of kitchen equipment in individual and team cooking labs.

HEALTH

8720 HEALTHY LIVING

Grade: 10, 11, 12 Credit: .5- Required

Recommended for grades 10 or 11.
Grade 12 may take this course if necessary.
Honors Option Offered

Health is a required course to help students access information and learn skills needed to become health literate, maintain and improve health, prevent disease and reduce health-related risk behaviors. We follow the National Health Education Standards in our curriculum. The eight priority health areas are:

- Health and Wellness/Mental Health
- Nutrition
- Physical fitness
- Tobacco use
- Alcohol and other drugs
- Intentional and unintentional injuries; diseases
- HIV/STI's/unintentional pregnancies
- CPR - First Aid

Students in this course will:

- Standard 1Students will comprehend concepts related to health promotion and disease prevention to enhance health.
- Standard 2 Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- Standard 3 Students will demonstrate the ability to access valid information, products, and services to enhance health.
- Standard 4 Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Standard 5 Students will demonstrate the ability to use decision-making skills to enhance health.
- Standard 6 Students will demonstrate the ability to use goal -setting skills to enhance health.
- Standard 7 Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- Standard 8 Students will demonstrate the ability to advocate for personal, family, and community health.

8720V HEALTHY LIVING - ONLINE

Grades: 10, 11, 12 Credit: .5- Required

This course may be taken in place of 8720 Healthy Living
Honors Option Offered

Seating is limited. A minimum number of students are needed to run the course. Registration is official when all steps have been completed as listed on the registration form. Indicate your semester preference with the understanding that scheduling constraints may impact semester placement.

Students without room in their schedule may take this as a 7th course.

8719H MEDICAL TERMINOLOGY HYBRID

Grades: 10, 11, 12 Credit: .5 – Health Elective

*This elective course **does not** replace Healthy Living.*

This course is designed for students interested in medical and associate health careers. Students will:

- Study the principles of medical word building to help develop the extensive medical vocabulary used in health care occupations.
- Students receive a comprehensive foundation in basic medical terminology through a study of root words, prefixes and suffixes.
- The study focuses on correct pronunciation, spelling and use of medical terms.
- Anatomy and health careers are discussed throughout the course.

Additional Health option offered through CHS/Spring Lake Park Partnership. See page 84 for more information

MATHEMATICS

It is highly recommended that students enrolling in Math courses have a graphing calculator (model TI-84 recommended).

Completion of one of the following math sequences will meet the Minnesota graduation requirements.

	COURSE NUMBER	COURSE NAME
MATH SEQUENCE A		
Start in:	8288 / 8289	Intermediate Algebra Concepts 1 and 2
		OR
	8288A / 8289B	Intermediate Algebra Concepts 1 Intermediate Algebra Concepts 2
	8291	Geometry Concepts 1
	8292	Geometry Concepts 2
	8293	Advanced Algebra Concepts 1
	8294	Advanced Algebra Concepts 2
♦*This sequence does not meet NCAA core course requirements*		
MATH SEQUENCE B		
Start in:	8309	Intermediate Algebra 1 (Grade 8 or 9)
	8310	Intermediate Algebra 2 (Grade 8 or 9)
	8322 / 8323	Geometry 1 and 2
		OR
	5322 / 5323	Honors Geometry 1 and 2
	8312 / 8313	Advanced Algebra 1 and 2
		OR
	5312 / 5313	Honors Advanced Algebra 1 and 2

♦

MATH SUPPORT OFFERING ♦
Counselor Placement only

MATH SUPPORT INTERMEDIATE ALGEBRA

Grades: 9, 10, 11, 12 Credit: .5

8271 – One Semester **8272** – Additional Semester

Students in this course will:

- Receive ongoing math support to be successful in high school math courses.
- Work towards mastery of Minnesota's math standards required for graduation.
- Engage in a variety of alternative learning strategies, including one-on-one and small group instruction. Edgenuity, an interactive computer-based program, may also be used to individualize instruction.
- Increase math study skills.

This course may be used as credit recovery based upon school counselor review.

This course is based on a credit / no credit grading system.

INTERMEDIATE ALGEBRA CONCEPTS A & B

Grade: 9 Credit: 1

This is a full year course.
Course numbers: 8288-1A and 8288-1B

♦*This course does not meet NCAA core course requirements.*

Students in this course will:

- Solve problems involving linear functions.
- Solve equations and inequalities using symbols and graphs.
- Simplify and factor polynomials.

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INTERMEDIATE ALGEBRA CONCEPTS A & B

Grade: 10 Credit: 1

This is a full year course.
Course numbers: 8289-2A and 8289-2B

Prerequisite: Intermediate Algebra Concepts 1
♦*This course does not meet NCAA core course requirements.*

Students in this course will:

- Simplify radicals and rational expressions.
- Solve problems involving quadratic and exponential functions.
- Identify and explain misleading uses of data.
- Explore quadratic and exponential functions.
- Display and analyze data to draw conclusions and identify trends.

MATHEMATICS

8288 INTERMEDIATE ALGEBRA CONCEPTS 1
8289 INTERMEDIATE ALGEBRA CONCEPTS 2
Grades: 9, 10 Credit: .5
Prerequisite: Intermediate Algebra Concepts 1
♦***This course does not meet NCAA core course requirements.***

Students in this course will:
- Simplify radicals and rational expressions.
- Solve problems involving quadratic and exponential functions.
- Identify and explain misleading uses of data.
- Explore quadratic and exponential functions.
- Display and analyze data to draw conclusions and identify trends.
- Solve problems involving linear functions.
- Solve equations and inequalities using symbols and graphs.
- Simplify and factor polynomials.

8309 INTERMEDIATE ALGEBRA 1
8310 INTERMEDIATE ALGEBRA 2
Grade: 9 Credit: .5

Students in this course will:
- Solve problems involving linear functions.
- Factor and compute with polynomials.
- Use equations and inequalities to represent and solve problems.
- Solve equations and inequalities using symbols and graphs.
- Use data to draw inferences and justify conclusions.
- Solve problems involving quadratic and exponential functions.
- Design simple experiments and explain the impact of sampling methods on data collection.
- Simplify radicals and rational expressions.

8291 GEOMETRY CONCEPTS 1
8292 GEOMETRY CONCEPTS 2
Grade: 10 Credit: .5
Prerequisite: Intermediate Algebra Concepts 2 or Intermediate Algebra 2
♦***This course does not meet NCAA core course requirements.***

Students in this course will:
- Construct geometric figures.
- Know and apply properties of geometric figures.
- Construct logical arguments to justify results.
- Identify and use translations, reflections, and rotations to solve problems.
- Find area and volume of geometric figures.
- Understand and use trigonometric ratios to solve problems.
- Use algebra to solve geometric problems.
- Understand and use trigonometric ratios to solve problems.
- Use algebra to solve geometric problems.
- Construct logical arguments and write proofs of theorems.

8322 GEOMETRY 1
8323 GEOMETRY 2
Grades: 9, 10 Credit: .5
Prerequisite: Geometry 1

Students in this course will:
- Calculate measurements of geometric figures.
- Apply properties of geometric figures to solve problems.
- Use axioms, definitions, and theorems to construct logical arguments.
- Write proofs of theorems involving lines, triangles, quadrilaterals, and circles.
- Construct geometric figures.
- Understand the effect of scale factor on length, area, and volume.
- Use coordinate geometry to solve problems, including transformations, using algebraic methods.
- Solve geometric problems, including right triangles and trigonometric ratios, using algebraic methods.

5322 HONORS GEOMETRY 1
5323 HONORS GEOMETRY 2
Grades: 9, 10 Credit: .5
Prerequisite: Intermediate Algebra 2
This course may be taken in place of 8321 Geometry 1. Ninth grade students must meet required criteria of enrollment. Please see General Information - Academic Enrichment Opportunities section for details. Tenth grade students need teacher approval.

Students in this course will:
- Construct geometric figures.
- Apply properties of geometric figures to solve problems, including area and volume.
- Understand the role of axioms, definitions, undefined terms, and postulates in logical arguments.
- Write proofs of theorems, including proof by contradiction.
- Use coordinate geometry to solve problems involving right triangles, trigonometric ratios, circles, and transformations, using algebraic methods and justify results.
- Assess the validity of a logical argument and give counterexamples to disprove a statement.

This course has been developed to challenge highly motivated and capable students in mathematics.
Curriculum will be more rigorous in terms of breadth and depth of materials covered.

MATHEMATICS

8293 ADVANCED ALGEBRA CONCEPTS 1
8294 ADVANCED ALGEBRA CONCEPTS 2
Grade: 11, 12 Credit: .5
Prerequisite: Geometry Concepts 2
♦***This course does not meet NCAA core course requirements.***

Students in this course will:
- Recognize common algebraic functions and represent them with tables, symbols, graphs, and verbal descriptions.
- Represent relationships in various contexts, including absolute value, quadratic, exponential, and nth root functions.
- Solve equations and inequalities by graphing and algebraic methods.
- Calculate probabilities by performing simulations or experiments.
- Solve problems involving quadratic, exponential, and nth root functions.
- Recognize that a particular solution may not be applicable in the original context.
- Use probability concepts to solve mathematical and real-world problems.

8312 ADVANCED ALGEBRA 1
8313 ADVANCED ALGEBRA 2
Grades: 11, 12 Credit: .5
Prerequisite: Geometry 2

Students in this course will:
- Represent absolute value and exponential functions using tables, symbols, graphs, and verbal descriptions.
- Solve problems involving linear, absolute value and quadratic functions. Interpret results in the original context.
- Know how to use calculators, graphing utilities or other technology to solve problems involving linear, absolute value and quadratic functions.
- Use and interpret graphical representations to solve problems.
- Use the mean and standard deviation of a data set to fit it to a normal distribution. Recognize that there are data sets for which such a procedure is not appropriate.
- Use probability and statistical concepts to solve mathematical and real-world problems.

5312 HONORS ADVANCED ALGEBRA 1
5313 HONORS ADVANCED ALGEBRA 2
Grades: 10, 11 Credit: .5
Prerequisite: Completion of Honors Geometry 2 or Geometry 2

Students in this course will:
- Solve problems involving absolute value, quadratic, exponential, and nth root functions symbolically and graphically. Interpret results in the original context.
- Know how to use calculators, graphing utilities or other technology to solve problems involving absolute value, exponential, quadratic, and nth root functions.
- Solve problems involving quadratic equations and inequalities by appropriate methods, including factoring, completing the square, graphing, and the quadratic formula.
- Extend number systems to include non-real complex numbers to solve quadratic equations with real coefficients.

PRE-CALCULUS

Pre-Calculus is designed to prepare students for future success in college mathematics. Pre-Calculus is a less rigorous alternative to Honors Pre-Calculus and *does not* meet the prerequisite for BC Calculus or CIS Calculus. Students who plan to take AP Calculus in the future should register for Honors Pre-Calculus.

8331 PRE-CALCULUS 1
8332 PRE-CALCULUS 2
Grades: 11, 12 Credit: .5
Prerequisite: Advanced Algebra 2 or Honors Advanced Algebra 2

Students in this course will:
- Solve equations and analyze graphs involving linear, quadratic, polynomial, rational, exponential, and logarithmic functions.
- Evaluate functions and find their domains.
- Identify and graph shifts, reflections, non-rigid transformations of functions.
- Find inverse functions graphically and algebraically
- Solve system of equations and inequalities in two or more variables
- Use matrices and determinants to solve problems.
- Recognize, write, and use arithmetic and geometric sequences to solve problems.
- Use Fundamental Counting Principle, permutations, and combinations to solve problems
- Use the Binomial Theorem and Pascal's Triangle for binomial expansions.
- Evaluate trigonometric functions for any angle.
- Use and verify trigonometric identities.
- Solve trigonometric equations.
- Use trigonometry functions to model and solve real-world problems.
- Solve problems involving conic sections.

MATHEMATICS

HONORS / HYBRID PRE-CALCULUS

Honors Pre-Calculus is an advanced math course designed for students with a high aptitude in mathematics and is a prerequisite for BC Calculus or CIS Calculus. Trigonometry concepts are covered extensively throughout this sequence.

5331 HONORS PRE-CALCULUS 1
or
5331H HONORS PRE-CALCULUS 1 HYBRID

Grades: 11, 12 Credit: .5
Prerequisite: Completion of Advanced Algebra 2 or Honors Advanced Algebra 2

Students in this course will:
- Solve equations and analyze graphs involving linear, quadratic, polynomial, rational, exponential, and logarithmic functions.
- Evaluate functions and find their domains.
- Identify and graph shifts, reflections, non-rigid transformations of functions.
- Find inverse functions graphically and algebraically
- Solve system of equations and inequalities in two or more variables
- Use matrices and determinants to solve problems.

5332 HONORS PRE-CALCULUS 2
or
5332H HONORS PRE-CALCULUS 2 HYBRID

Grades: 11, 12 Credit: .5
Prerequisite: Honors Pre-Calculus 1

Students in this course will:
- Use sequence, factorial, and summation notation to find terms and sums of sequences.
- Recognize, write, and use arithmetic and geometric sequences to solve problems.
- Use Fundamental Counting Principle, permutations, and combinations to solve problems
- Use the Binomial Theorem and Pascal's Triangle for binomial expansions.
- Evaluate trigonometric functions for any angle.
- Use and verify trigonometric identities.
- Solve trigonometric equations.
- Use trigonometry functions to model and solve real-world problems.
- Solve problems involving conic sections.
- Be introduced to polar coordinates.
- Use parametric equations to represent curves and motion.
- Learn techniques for finding a limit.

♦ *HYBRID COURSE OFFERINGS* ♦

See General Information-Hybrid Courses Section for an explanation of a Hybrid course.

8317H COMPUTER PROGRAMMING 1 HYBRID

Grades: 9, 10, 11, 12 Credit: .5
Prerequisite: Intermediate Algebra 2

Students in this course will:
- Identify and differentiate the various parts of a computer and its languages.
- Use logic and problem solving to find solutions to various problems.
- Learn the basics of and program in a high level programming language.
- Implement conditions, control structures and loops into computer programs.

8318H COMPUTER PROGRAMMING 2 HYBRID

Grades: 9, 10, 11, 12 Credit: .5
Prerequisite: Computer Programming 1

Students in this course will:
- Continue the study of a high level programming language.
- Incorporate procedures and functions in computer programs.
- Compile and use arrays.
- Write and retrieve information from files.

8327H SPECIAL TASKS COMPUTER PROGRAMMING 1 HYBRID

Grades: 10, 11, 12 Credit: .5
Prerequisite: Computer Programming 2 with a "C" or above and teacher permission

Students in this course will:
- Study structure, syntax and semantics of the computer programming language.

8328H SPECIAL TASKS COMPUTER PROGRAMMING 2 HYBRID

Grades: 10, 11, 12 Credit: .5
Prerequisite: Special Projects Computer Programming 1

Students in this course will:
- Study structure, syntax and semantics of the computer programming language.

MATHEMATICS

♦ *ADVANCED PLACEMENT OFFERINGS* ♦

See General Information-Academic Enrichment Opportunities Section for an explanation and expectations of the AP, CIS, CN Programs.

5329H AP COMPUTER SCIENCE PROGRAMMING WITH JAVA HYBRID

Grades: 10, 11, 12 Credit: .5

Prerequisite: Computer Programming 1 and 2
See General Information-Academic Enrichment Opportunities Section for course expectations.
Fee: This course may have associated fees.

Students in this course will:
- Learn the basics of the Java programming language.
- Use logic and problem solving to find solutions to various problems.
- Demonstrate the understanding of the object-oriented programming paradigm.
- Implement conditions, control structures, and loops into computer programs.
- Write programs that can be introduced to and used in Web design.
- Experiment with programs that use a Graphical User Interface.

Students will be offered the opportunity to take the AP exam. Students must pass the AP Exam to earn college credit.

5337 CIS CALCULUS 1
5338 CIS CALCULUS 2

Grade: 9, 10, 11, 12 Credit: 1

Student must register for both semesters

Prerequisite: Completion of Honors Pre-Calculus 2
Students who successfully complete CIS Calculus will receive 4 elective credits from the University of Minnesota.

Students in this course will:
- Learn techniques for finding a limit.
- Be introduced to the definition of a derivative and its uses.
- Use derivatives to find rate of change, slope of tangent lines and velocity.
- Use derivatives to find extrema, concavity and points of inflection of graphs.
- Use derivatives to find where a graph is increasing or decreasing.
- Solve optimization problems.
- Be introduced to the definite integral.
- Use the definite integral to find areas, and volume of solids of revolutions.
- Find derivatives of logarithmic and exponential functions.
- Learn various integration techniques.
- Work with the derivative and the integration of transcendental functions.
- Discover and use functions of growth and decay.

AP CALCULUS BC SEQUENCE

AP Calculus BC moves at a faster pace. **To receive up to two semester credits of advanced placement college credit, students must earn a qualifying score on both parts of the advanced placement calculus test after completing both semesters of AP Calculus BC.** The AP exam will be taken in the spring after completing both semesters of AP Calculus BC.

See General Information-Academic Enrichment Opportunities Section for course expectations.
Fee: This course may have associated fees.

5339 AP CALCULUS BC 1
5340 AP CALCULUS BC 2

Grade: 11, 12 Credit: .5

Prerequisite: Completion of Pre-Calculus 2 and teacher recommendation.

Students in this course will:
- Learn the techniques of finding a limit.
- Be introduced to the definition of a derivative and its uses.
- Use derivatives to find rate of change, slope of tangent lines and velocity.
- Use derivatives to find extrema, concavity and points of inflection of graphs.
- Use derivatives to find where a graph is increasing or decreasing.
- Solve optimization problems.
- Be introduced to the definite integral.
- Use the definite integral to find areas, and volume of solids of revolutions.
- Find derivatives of logarithmic and exponential functions.
- Learn various integration techniques.
- Find arc length and surface area of solids of revolution.
- Discover and use functions of growth and decay.
- **Take the "BC" Advanced Placement exam.**

5343/5344 CIS Basic and Applied Statistics 1 & 2

Grades: 11-12 Credit 1

Students who successfully complete CIS Stats will receive 3 credits from the U of M along with your high school credit.

Course Requirements: Juniors or seniors in high school that have earned a B+ or better in a high school algebra course.

EPSY 3264 is designed to engage students using a modeling and simulation approach to inference. Upon completion of this course, students should have an understanding of the foundational concepts of data, variation, and inference, as well as an appreciation for the fundamental role that statistics plays in a host of disciplines, such as business, economics, law, and medicine.

MEDIA PUBLICATIONS/YEARBOOK

8790 MEDIA PUBLICATIONS 1 (Yearbook 1)
Grades: 10, 11, 12 Credit: .5 (1st semester)
Prerequisite: Advanced writing and journalism skills necessary. Photography experience preferred.

Students in this course will:
- Design and publish *The Prowler* Centennial's yearbook.
- Learn elements of design and layout.
- Work under pressure of strict deadlines.
- Develop skills in writing, editing, publishing, project management, art, photo and design.
- Learn 21st century job-related skills.

8791 MEDIA PUBLICATIONS 2 (Yearbook 2)
Grades: 10, 11, 12 Credit: .5 (2nd semester)
Prerequisite: Media Publications 1

Students in this course will:
- Work under pressure of strict deadlines.
- Continue to work with computer design and project management.
- Develop skills in publishing.
- Finish the yearbook by last deadline.
- Create the spring supplement.
- Organize, plan and participate in the distribution of the yearbook.
- Start working on developing a theme and give the yearbook a direction for next year.

MISCELLANEOUS

FRESHMAN SUPPORT

Grades: 9 Credit: .5

8022 – One Semester
8023 – Additional Semester

This course is by counselor recommendation only

This course provides targeted academic support to students entering 9th grade. Students will engage in learning opportunities aimed at not only strengthening reading and writing achievement through individualized skill practice but also focus on improving student organization, study skills, note-taking, test preparation and test-taking, time management, and goal setting. Structured work time will also be provided with support in core academic areas.

This course focuses on enrolling students who:

- Need on-going academic support to increase student academic success
- Are identified as needing support via universal screening (Fastbridge/STAR testing)
- Have been identified by their middle or high school counselor as needing additional academic support

At the end of 9th grade a student in Freshman Support may:

- Demonstrate academic improvement and be recommended to apply for AVID
- Need additional academic support and be recommended to register for Academic Support in 10th grade.

ACADEMIC SUPPORT

Grades: 10, 11, 12 Credit: .5

8020 – One Semester
8021 – Additional Semester

This course is by counselor recommendation only

This course provides targeted academic support to students in 10th - 12th grade. Students will engage in learning opportunities and individualized skill practice aimed at strengthening reading and writing
achievement. Students are supported by the
instructors through regular progress monitoring via grade checks and daily academic planning. Core components of this course include enhancing students skills in note-taking, test preparation and test taking, time management, organization, and goal setting. Students are also provided structured work time with support in core academic areas.

This course focuses on enrolling students who:

- Need on-going academic support to increase student academic success
- Are identified as needing support via universal screening (Fastbridge/STAR testing)
- Have been identified by their school
  counselor as needing additional support
  At the end of the year-long course a student may:
- Demonstrate academic improvement and register for other electives and/or AVID
- Need additional academic support and be recommended to remain in Academic Support the following school year

MATH SUPPORT

Grade: 9, 10, 11, 12 Credit: .5

Counselor Placement Only

Math Support Intermediate Algebra
8271—One semester 8272—Additional Semester

STUDY HALL

Grades: 9, 10, 11, 12 No Credit

Grades 9 and 10 may take one semester per year.
Grades 11 and 12 may take up to two semesters per year.

8001 – One Semester
8002 – Additional Semester
(grades 11 and 12 only)

Students in this course will:

- Complete homework.
- Study for assessments.
- Have access to technology.
- Benefit from and help maintain a quiet, studious environment.

MEDIA/OFFICE/ATTENDANCE AIDE- .25 credit

CLASSROOM AIDE - NO Credit
Grade:10,11,12

Prerequisite: For students interested in being an aide: student must see Media Clerk/Office staff for pre-approval. You will be placed in a study hall until the appropriate staff member completes the contract.

Limit: Two media/office aids per hour
One attendance and classroom aide per hour

Media Duties: Students will assist media staff with duties that may include assisting at the circulation desk, maintaining computer workstations, straightening and shelving books and preparing books for circulation.

Office/Attendance Duties: Students will assist Office and Attendance staff in non-instructional duties such as clerical work and delivering passes to classrooms.

Classroom duties: Students will assist in the classroom with duties assigned by the teacher.

KIDS CLUB WORK CREDIT 1 & 2

Grades: 11,12 Credit .5

- Students must be employed in the Centennial Community Education Kids Club.
- Approval must be given by the Director of Community Education.

MUSIC

♦ *INSTRUMENTAL MUSIC* ♦

Band Directors will place students in each band to achieve best balance and instrumentation.

Successful completion of band - one-full year - will meet the high school graduation fine arts requirement. Students will earn .5 credit each semester for the fine arts requirement.

Students must have their own instruments.

Students using school-owned instruments will pay a yearly rental fee of $45 for brass and woodwinds and $24 for percussion.

1320B	**VARSITY BAND**	**Grade 9**
	SYMPHONIC BAND	**Grade 10-12**
	HONORS WIND ENSEMBLE	**Grade 10-12**

FA Credit: .5 per semester

BAND IS A FULL YEAR COURSE
1 Course number = 2 Elective Requests

Prerequisite: Successful completion of band the previous year (may not have failed one or more semesters) or director's approval.

Varsity Band students in this course will:
- Demonstrate improved playing skills in lessons.
- Participate in band rehearsals and concerts.
- Demonstrate understanding of basic music theory concepts.
- Prepare and perform a solo or small ensemble for annual "in-house" music festival.
- Follow guidelines set out in printed course expectations.

Symphonic Band students in this course will:
- Demonstrate improved playing skills in lessons.
- Demonstrate mastery of assigned playing exam materials.
- Demonstrate mastery of theoretical concepts, historical and cultural context, technical fluency requirements, listening skills, expressive elements and analysis required for music selections, which are studied and performed.
- Fall Marching Band will be "embedded" in the curriculum during semester one.
- Follow guidelines set out in printed course expectations.

Students in this course may elect to participate in:
- Winter Pep Band.
- Region-State Solo and Ensemble Music Contest.

HONORS WIND ENSEMBLE
Prerequisite: Audition and successful completion of band the previous year (may not have failed one or more semesters).

Students in this course will:
- Demonstrate improved playing skills in lessons.
- Demonstrate mastery of assigned playing exam materials.
- Demonstrate mastery of theoretical concepts and historical/cultural context of music performed.
- Demonstrate technical fluency, listening skills, analytical abilities and creative expression required for the music performed.
- Demonstrate the increasing ability to verbalize and put into acceptable written form: historical and musical analysis of musical selections, reasonable performance goals, rehearsal plans to accomplish those goals and critical analysis of live or recorded performances.
- Fall Marching Band will be "embedded" in the curriculum during semester one.
- Follow guidelines set out in published course expectations.

Students in this course may elect to participate in:
Winter Pep Band Region-State Solo and Ensemble Contest.

♦ *VOCAL MUSIC* ♦

Choir Directors will place students in each course to achieve best balance.

Successful completion of choir - one-full year - will meet the high school graduation fine arts requirement* Students earn .5 credit each semester.

1320C	**VARSITY CHOIR**	**Grade: 9**
	COUGAR CHOIR	**Grade: 10-12**
	TREBLE CHOIR	**Grade: 10-12**
	HONORS TREBLE CHOIR	**Grade: 10-12**
	HONORS CONCERT CHOIR	**Grade: 10-12**

FA Credit: .5 per semester

CHOIR IS A FULL YEAR COURSE
1 Course number = 2 Elective Requests

MUSIC

VARSITY CHOIR

Grade: 9 *FA* Credit: .5 per semester

Students must register for Choir both semesters.

Prerequisite: Successful completion of choir the previous year (may not have failed one or more semesters) or director's approval.

Students in this course will:

- Demonstrate basic singing skills and knowledge of choral music notation.
- Demonstrate basic sight-reading skills.
- Demonstrate knowledge of theoretical concepts, historical and cultural context, technical fluency requirements, listening skills, expressive elements, and analysis required for music selections; which are studied and performed.
- Fulfill attendance and expectations for rehearsals, lessons, and concerts.
- Follow guidelines set out in published course expectations.

COUGAR CHOIR

Grades: 10, 11, 12 *FA* Credit: .5 per semester

Students must register for choir both semesters.

Prerequisite: Audition and permission of the director.

Students in these courses will:

- Demonstrate improved singing skills and knowledge of choral music notation.
- Demonstrate improved sight-reading skills.
- Demonstrate improved knowledge of theoretical concepts, historical and cultural context, technical fluency requirements, listening skills, expressive elements, and analysis required for music selections; which are studied and performed.
- Fulfill attendance and expectations for rehearsals, lessons, and concerts.
- Follow guidelines set out in published course expectations.

Students in this course may elect to participate in:

- Region-State Solo and Ensemble Contest.

TREBLE CHOIR

Grades: 10, 11, 12 *FA* Credit: .5 per semester

Students must register for choir both semesters.

Prerequisite: Audition and permission of the director.

Students in these courses will:

- Demonstrate improved singing skills and knowledge of choral music notation.
- Demonstrate improved sight-reading skills.
- Demonstrate improved knowledge of theoretical concepts, historical and cultural context, technical fluency requirements, listening skills, expressive elements, and analysis required for music selections; which are studied and performed.
- Fulfill attendance and expectations for rehearsals, lessons, and concerts.
- Follow guidelines set out in published course expectations.

Students in this course may elect to participate in:

- Region-State Solo and Ensemble Contes

HONORS TREBLE CHOIR

Grades: 10, 11, 12 *FA* Credit: .5 per semester

Students must register for choir both semesters.

Prerequisite: Audition and permission of the director.

Students in these courses will:

- Demonstrate improved singing skills and knowledge of choral music notation.
- Demonstrate improved sight-reading skills.
- Demonstrate improved knowledge of theoretical concepts, historical and cultural context, technical fluency requirements, listening skills, expressive elements, and analysis required for music selections; which are studied and performed.
- Fulfill attendance and expectations for rehearsals, lessons, and concerts.
- Follow guidelines set out in published course expectations.

Students in this course may elect to participate in:

- Region-State Solo and Ensemble Contes

HONORS CONCERT CHOIR

Grades: 10, 11, 12 *FA* Credit: .5 per semester

Students must register for choir both semesters.

Prerequisite: Audition and permission of the director.

All members of Concert Choir **must** also participate in Romancers or Sweet Harmony which meets during advisory.

Students in this course will:

- Demonstrate mastery of singing skills and knowledge of choral music notation.
- Demonstrate mastery of sight-reading skills.
- Demonstrate mastery of theoretical concepts, historical and cultural context, technical fluency requirements, listening skills, expressive elements, and analysis required for music selections; which are studied and performed.
- Fulfill attendance and expectations for rehearsals, lessons, and concerts.
- Follow guidelines set out in published course expectations.

Students in this course may elect to participate in:
Region-State Solo and Ensemble Contest.

PATHWAY

COMPUTER SCIENCE & MANUFACTURING PATHWAY

COMPUTER SCIENCE PATHWAY

The courses in our computer science pathway are designed to prepare students with the skills and experiences required to thrive in a tech-driven society. For students wishing to pursue a career in technology-related fields such as computer programming, web design, IT, business analysis, or cybersecurity, our courses provide opportunities to gain industry-standard knowledge and experience in the computer science field through project-based learning and instruction in a variety of program languages. For students seeking careers that are not specifically technology-related, our computer science courses provide a strong foundation in computer science concepts and rigorous problem-solving skills.

8438 CAREER INVESTIGATION & BUSINESS TECHNOLOGY

Grades: 9, 10, 11, 12
Credit: .5
Honors Option Offered

Students will be given direction to help answer the important question of what pathway will guide me to my interests and skills.

- Students will participate in career assessments and aptitude testing to find what careers fit their personalities and interests.
- Students will learn how to locate and apply for jobs, create a professional résumé, cover letter, complete an interview process, and understand the college application process.
- Students will become fully prepared for college and the workforce by gaining experience with software and technical skills valued by college professors and employers.
- Students have the opportunity to become proficient in the Microsoft Office suite. Essential software programs explored include Word, Excel, PowerPoint, and Access. This is a foundational course for anyone pursuing post-secondary education or employment.
- Students can also work towards Microsoft Office certifications.

8448 WEB DESIGN

Grades: 9, 10, 11, 12 Credit: .5

Coding skills are in demand! Learn the basics of creating a web page using HTML. Students in this course will develop technology related knowledge by learning skills in the following areas:

- HTML coding
  - Introduce Hypertext Markup Language to create web pages.
- Web page editing.
- Adding text and images to a web page.
- Use CSS style sheets.
- Create and use external style sheets.
- Embed YouTube videos into web pages.
- Design web pages for business and personal use.

8317H COMPUTER PROGRAMMING 1 HYBRID

Grades: 9, 10, 11, 12 Credit: .5
Prerequisite: Intermediate Algebra 2

Students in this course will:

- Identify and differentiate the various parts of a computer and its languages.
- Use logic and problem solving to find solutions to various problems.
- Learn the basics of and program in a high level programming language.
- Implement conditions, control structures and loops into computer programs.

8318H COMPUTER PROGRAMMING 2 HYBRID

Grades: 9, 10, 11, 12 Credit: .5
Prerequisite: Computer Programming 1

Students in this course will:

- Continue the study of a high level programming language.
- Incorporate procedures and functions in computer programs.
- Compile and use arrays.
- Write and retrieve information from files.

8327H SPECIAL TASKS COMPUTER PROGRAMMING 1 HYBRID

Grades: 10, 11, 12 Credit: .5
Prerequisite: Computer Programming 2 with a "C" or above and teacher permission

Students in this course will:

- Study structure, syntax and semantics of the computer programming language.

PATHWAY

COMPUTER SCIENCE & MANUFACTURING PATHWAY

8328H SPECIAL TASKS COMPUTER PROGRAMMING 2 HYBRID
Grades: 10, 11, 12 Credit: .5
Prerequisite: Special Projects Computer Programming 1

Students in this course will:
- Study structure, syntax and semantics of the computer programming language.

5329H AP COMPUTER SCIENCE PROGRAMMING WITH JAVA HYBRID
Grades: 10, 11, 12 Credit: .5

Prerequisite: Computer Programming 1 and 2
See General Information-Academic Enrichment Opportunities Section for course expectations.
Fee: This course may have associated fees.

Students in this course will:
- Learn the basics of the Java programming language.
- Use logic and problem solving to find solutions to various problems.
- Demonstrate the understanding of the object-oriented programming paradigm.
- Implement conditions, control structures, and loops into computer programs.
- Write programs that can be introduced to and used in Web design.
- Experiment with programs that use a Graphical User Interface.

Students will be offered the opportunity to take the AP exam. Students must pass the AP Exam to earn college credit.

MANUFACTURING PATHWAY

Our manufacturing pathway of courses is designed to prepare students with the in-demand skills needed in our manufacturing industry. Whether students are looking for experience in metal working as a hobby/interest or making it a career. These courses will take students through a variety of processes in developing a wide range of knowledge in metal manufacturing. Our courses and lab are designed around a rotation approach where students will complete projects in 4 main areas in each course.

8645 GENERAL METALS
Grades 9, 10, 11, 12 Credit: .5

May repeat this course with instructor permission
***OSHA-10 Certification in the course*

This course will focus on metalworking and developing skills in the areas of:
- CAD Modeling and Blueprint Reading Basics
- MIG Welding
- CNC Plasma Cutting (artistic)
- ARC Welding
- Sheet Metal Fabrication

8646 METAL TECHNOLOGY
Grades 9, 10, 11, 12 Credit: .5

May repeat this course with instructor permission

This course will focus on metalworking and developing skills in the area of:
- Advanced CAD/Advanced Drafting
- Manual Milling
- TIG Welding

8647 ADVANCED METAL TECHNOLOGY
Grade 10, 11, 12 Credit: .5

Prerequisite: General Metals and/or Metal Technology

May repeat this course with instructor permission

This course will focus on metalworking and developing skills in the areas of:

- CNC Milling
- Advanced MIG Welding
- Advanced TIG Welding
- OXY Fuel

8648 COUGAR MANUFACTURING
Grade: 11, 12 Credit: 1

Prerequisite: General Metals and/or Metal Technology

Cougar manufacturing will focus on a cumulation of the entry level knowledge and skills learned from prior courses and apply those skills towards a legacy project or business model in the design and fabrication of a product designed to solve a specific problem or need as a student run business

.

PHYSICAL EDUCATION

8717 PHYSICAL EDUCATION 9
or
8717V PHSICAL EDUCATION 9 ONLINE
Grade: 9 Credit: .5 - *Required*
Students in this course will:
- Develop an awareness of methods to improve present level of physical fitness.
- Be given the opportunity to improve present physical fitness level through individual, dual and team activities.
- Acquire knowledge of the history, rules and regulations in the activities covered.
- Develop and improve skills in the various activities covered (i.e. soccer, team handball, flag football, volleyball, softball, pickleball and tennis).

8717S/ PHYSICAL EDUCATION 9 SPLIT /
5202S AP HUMAN GEOGRAPHY SPLIT
Grade: 9 Credit: .5 full year
This is a full year course.
Note: Physical Education 9 rotates every other day with AP Human Geography. Students registered for AP Human Geography must also take 9th Grade Physical Education Split using course numbers 8717S/5202SS.

COMPETITIVE SPORTS
Grades: 10, 11, 12 Credit: .5

8711 – one semester **8712** – additional semester
Prerequisite: Physical Education 9
This course may be taken a maximum of two courses per year.

Students in this course will:
- Learn to interact with other students in team and individual sports.
- Improve skills in various sports and activities.
- Acquire knowledge of rules and regulations in areas covered.
- Continue to develop an appreciation for life long fitness.

COUGAR STRENGTH
Grades: 10, 11, 12 Credit: .5

8725 – one semester **8726** – additional semester
Prerequisite: Physical Education 9

Students in this course will:
- Understand and demonstrate proper weight training and power lifting techniques.
- Understand how strength, speed, power, flexibility and agility are related.
- Design and demonstrate a personal strength training program.
- Determine proper nutritional goals.
  Regardless of where you are in terms of training, let Cougar Strength help you. Students will be grouped and progress through training programs according to their needs and development. Emphasis will be placed on safety, lifting and spotting
  techniques. Weight training and a variety of agility and conditioning activities will be taught with a focus on individual improvement shown through tracking progress.

ADVANCED COUGAR STRENGTH
Grades: 10, 11, 12 Credit: .5

8735 – one semester **8736**– additional semester
Prerequisite: Cougar Strength (class or Summer)

Students in this course will:
- Understand and demonstrate proper weight training and power lifting techniques.
- Understand how strength, speed, power, flexibility and agility are related.
- Design and demonstrate a personal strength training program.
- Determine proper nutritional goals.
  Regardless of where you are in terms of training, let Cougar Strength help you. Students will be grouped and progress through training programs according to their needs and development. Emphasis will be placed on safety, lifting and spotting techniques. Weight training and a variety of agility and speed activities will be taught with a focus on individual improvement shown through tracking progress.

8715 UNIFIED PHYSICAL EDUCATION
Grades: 10, 11, 12 Credit: .5

Prerequisite: Physical Education 9

Students in this course will:
- Work together with both General Education and Special Education students in developmentally appropriate activities including lifetime activities, physical fitness, and sport.
- Build confidence in a variety of physical activities.
- Grow leadership opportunities among peers.
- Create an increased inclusive and accepting school environment for all students.
- Learn the rules of adapted athletics at CHS and how to be a part of these events.
- Students will leave this class with a greater knowledge of barriers and tools to modify physical activity patterns appropriately when needed.

8723 INTRO TO WEIGHTS
Grades: 10,11,12 Credit: .5
Elective
Students will be able to…
- Properly perform movements and exercises that help them improve their strength, speed and flexibility.
- Explain safety protocols in a strength & conditioning setting.
- Self select exercises to meet their goals.
- Create a personal workout program that they can use outside the classroom.

SCIENCE

8380 EARTH & SPACE SCIENCE 1
8381 EARTH & SPACE SCIENCE 2
Grade 9 Credit .5 Required

This is an introductory course to earth and space science for 9th grade students. Students in this course will investigate topics including Earth's place in the universe, Earth's systems, and Earth and human activity. use techniques including laboratory experiments, modeling, and scientific discourse to develop an understanding of how systems interact and explore their connection to the Earth.
Students in this course will:

- Analyze data to make a claim about the way stars produce elements.
- Evaluate the evidence and reasoning that Earth's interior is layered and that convection drives the cycling of matter.
- Investigate how seismic energy can provide evidence for Earth's internal structure.
- Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
- Develop a model to describe the cycling of carbon among Earth's systems.
- Investigate the properties of soils to model the impact of human activity.
- Model how unequal heating and rotation of the Earth cause atmospheric and oceanic circulation that determine climates.
- Model how energy flows into and out of the Earth, resulting in climate change.

5355 HONORS EARTH & SPACE SCIENCE 1
5356 HONORS EARTH & SPACE SCIENCE 2
Grade 9 Credit .5

The Honors Earth Science course is a rigorous study of the Earth's systems, including geology, meteorology, oceanography, and astronomy. Delving deeper into complex concepts like plate tectonics, rock formations, weather patterns, climate change, and natural hazards. With an emphasis on critical thinking, research, in-depth analysis, and advanced laboratory investigations. Students will use techniques including laboratory experiments, modeling, and scientific communication to develop an understanding of how systems interact and explore their connection to the Earth.

Students in this course will:

- Analyze data to make a claim about the way stars produce elements.
- Evaluate the evidence and reasoning that Earth's interior is layered and that convection drives the cycling of matter.
- Investigate how seismic energy can provide evidence for Earth's internal structure.
- Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
- Develop a model to describe the cycling of carbon among Earth's systems.
- Investigate the properties of soils to model the impact of human activity.
- Model how unequal heating and rotation of the Earth cause atmospheric and oceanic circulation that determine climates.
- Model how energy flows into and out of the Earth, resulting in climate change.

8355 BIOLOGY 1
8356 BIOLOGY 2
Grades: 10, 11, 12 Credit: .5 – *Required*

Biology 1 is a *laboratory science course* that will introduce students to basic cellular biology. The focus of the course will be on different types of cells and how they utilize available energy (photosynthesis and respiration) to maintain homeostasis and reproduce. Students will investigate:

- Different types of cells and how cell structure relates to the function of the cell.
- How genetic information found in DNA provides information for assembling proteins, which dictate the expression of traits in an individual.
- How cells respond to internal and external environment changes to maintain homeostasis.
- How mutations in genes can result in uncontrolled cell division called cancer, and how the environment might influence those mutations.
- How the immune system is a response to fighting off viral and bacterial invaders as well as how vaccines assist in this process.
- The processes of photosynthesis and cellular respiration as they relate to the energy flow in ecosystems.
- How matter and energy is transformed and transferred among organisms in an ecosystem.
- The impact of human interactions/activity on living organisms and ecosystems.

5380 HONORS ZOOLOGY
Grades: 11, 12 Credit: .5
Prerequisite: Completion of Biology requirement (i.e. 8355-8356 or 5346-5347)
[This course offers an optional field trip requiring participating students to pay associated fees.]

Zoology will investigate the diversity of the animal kingdom by studying the morphology of each phyla, and using comparative anatomy and dissection to understand the similarities and uniqueness of those phyla. Both an ecological and evolutionary perspective will be used to help understand how animals function and why animals are united with other forms of life.
Students in this course will:

- Identify and describe major characteristics common to species within each animal phyla (group).
- Understand how similarities (and variations) are used in the classification of species.
- Understand how scientists use similarities among species to construct phylogenetic trees.
- Describe adaptations in terms of their benefit to organism survival (natural selection).
- Identify and explain reasons for geographical distribution of species.
- Describe factors that influence animal behavior and how those behaviors aid in species survival.
- Understand the idea of "scaling" and how it relates to the structures and functions of organs and systems.

SCIENCE

8358 AQUATIC STUDIES

Grades: 11, 12 Credit: .5

Prerequisite: Completion of Biology requirement (i.e. 8355-8356 or 5346-5347)

[This course offers an optional field trip requiring participating students to pay associated fees.]

Minnesota is fortunate to have a wide variety of fresh water aquatic habitats. This class will investigate the origins and characteristics of these habitats, study some of the organisms that live in these habitats, and investigate some of factors that can impact an aquatic ecosystem. This class may have some out of pocket expenses for a field trip behind the scenes to Sea Life Exhibit at the Mall of America and for the purchase of fish for an in-class aquarium project.

Students in this course will:

- Survey fish populations with emphasis on Minnesota species.
- Conduct internal and external anatomical identifications of selected fish species.
- Survey the historical geology in relation to stream and lake formation in Minnesota.
- Understand water quality parameters.
- Determine the pollutants in an aquatic ecosystem.
- Sample local streams and lakes with emphasis on the flora and fauna contained in them. [Dependent on outside conditions.]

8360 MINNESOTA OUTDOOR CONNECTIONS

Grade: 11, 12 Credit: .5

♦ **This course does not meet NCAA core course requirements.**

Minnesota Outdoor Connection will promote the development of self-esteem, leadership and team building skills. Outdoor topics include:

- Ecology
- Minnesota Natural History
- Outdoor survival skills
- Minnesota recreation
- Navigation and orienteering

Building projects include:

- Rod building
- Fur sewing
- Survival bracelet

Students should be prepared to attend class indoors and outdoors in all weather conditions.

8359 ANATOMY AND PHYSIOLOGY

Honors Option Offered

Grades: 11, 12 Credit: .5

Prerequisite: Completion of Biology requirement (i.e. 8355-8356 or 5346-5347)

This course is designed to give students an exploration of the structure and function of the human body. It will survey information students would be required to know as they prepare for college level anatomy and physiology courses.

Students in this course will:

- Acquire and refine dissection skills by completing a fetal pig or cat dissection.
- Describe the primary functions of cells and tissues within organs and organ systems.
- Locate and describe the major organ systems of the human body.
- Relate human physiology to human health.

8361 CHEMISTRY 1
8362 CHEMISTRY 2

Grades: 10, 11, 12 Credit: .5

Chemistry 1 & 2 are typically taken as a full year course. Students who successfully completed Honors Chemistry 9 may enroll directly in Chemistry 2.

In this introductory chemistry course, dive into the fundamental principles that govern the chemical reactions that occur around us! Explore the building blocks of matter, how atoms bond to form molecules, the classifications and interactions of matter, and how chemical and nuclear reactions transform substances. Through lectures, discussions, and hands-on labs, you'll gain a foundational understanding of chemistry and its applications in the real world. Students will investigate:

- Different categories of matter including atoms, isotopes, pure substances, mixtures, and states of matter.
- Relationships among mass, moles, number of particles, and concentration.
- The Law of Conservation of Mass and the Law of Conservation of Energy.
- Structure and patterns of the periodic table.
- The way we 'speak chemistry' by following the naming of rules for chemicals.
- The behavior of gases in comparison to liquids and solids.
- Measuring precisely and accurately using a variety of laboratory equipment.
- A wide range of chemical reaction types, including acid-based neutralization.
- The way chemists calculate the amount of chemicals used in reactions.
- And, an introduction to polymers and organic chemistry.

SCIENCE

CHEMISTRY OF FOODS - Science

♦ **This course does not meet NCAA core course requirements.**

Grades: 10, 11, 12 Credit: 2 (1 Science and 1 FACS)
Recommendation: Prior completion of 9th grade science.

This course may be taken in place of Chemistry 1 and 2.

This is a full year course.
Students will be scheduled for 2 periods each semester (one Chemistry and one Foods)
Please see the FACS department pages for the Foods component of this course.

Note: *Students who have already taken Chemistry 1 & 2 may enroll in this course. This course satisfies the requirement (in conjunction with Physical Science and Biology) for taking a third year of science.*

Students must enter the following 4 numbers to register for this course:

Semester 1: 8320 and 8620
Semester 2: 8321 and 8621

Chemistry of Foods focuses on the scientific method to study the various relationships between food science, nutrition, and food preparation. Laboratory skills in measuring, recording, and analyzing data are used to explore these relationships. Experimental methods are employed to analyze food mixtures, food preservations, and complex food systems. Students are given insight into career possibilities as well as up to date information regarding technological advances and future trends in food preparation, preservation, evaluation, and utilization of food.

Students in this course will:

- Understand laboratory safety.
- Measure precisely, and convert among metric and standard unit systems.
- Describe the properties of elements, compounds, and mixtures found in food production.
- Prepare solutions using concepts of molarity and dilution and study their properties.
- Explain how covalent and ionic bonds and intermolecular forces influence properties.
- Write and balance chemical reactions related to food production and preparation.
- Calculate ratios in chemical reactions and use them to predict yield and efficiency.
- Evaluate the energy stored in food using calorimetry.

8363 PHYSICS 1
8364 PHYSICS 2

Grades: 10, 11, 12 Credit: .5
Prerequisite: Intermediate Algebra 1 or concurrent enrollment

Students in this course will explore, experiment with, and communicate understanding within the following physics topics:

- Motion & Forces
- Energy & Momentum
- Electricity & Magnetism
- Waves, Sound, and Light

8369 ASTRONOMY

Grades: 10, 11, 12 Credit: .5
Prerequisite: Grade 9 Physical Science requirement (i.e. 8380 and 8381 or 5355 and 5356)

Students in this course will:

- Gain an understanding of how the history of astronomy has shaped the current theories and laws of modern astronomy.
- Demonstrate an understanding of a broad overview of topics in astronomy -- from the Earth, the moon, and the solar system topics to stars, galaxies, and the universe.
- Recognize and be able to locate a wide variety of stars and constellations visible to observers in Minnesota.
- Participate in actual observations of the sun, stars, and other astronomical objects.

SCIENCE

ADVANCE PLACEMENT OFFERINGS

See General Information Section for an explanation and expectations of the AP, CE, CIS, CN programs.

AP BIOLOGY SEQUENCE

Student must register for both semesters
Course Numbers: 5346 and 5347
Students enrolling in this course are encouraged to take the AP Biology Exam.
Recommendation: The following criteria are highly recommended for success in this course:

- *Completion of Honors Chemistry 9 and Honors Physics 9 or Physical Science - Chemistry and Physics*

Grades: 10, 11, 12 Credit: 1
This course may be taken in place of Biology 1 and 2.

The AP Biology course is designed to be the equivalent of a two-semester college introductory biology course usually taken by biology majors during their first year. AP Biology will include those topics regularly covered in a college biology course for majors. The college course in biology differs significantly from the usual first high school course in biology with respect to the kind of textbook used, the range and depth of topics covered, the type of laboratory work done by students, and the time and effort required of students. The textbooks used for AP Biology should be those used by college biology majors. The kinds of labs done by AP students must be the equivalent of those done by college students. **To be eligible to earn advanced placement college credit, students must earn a qualifying score on the advanced placement biology test after completing semesters 1 and 2 of AP Biology. The awarding of college credit is at the discretion of the college or university.**

5346 AP BIOLOGY 1
5347 AP BIOLOGY 2
Grades: 10-12 Credit: 1
Students in this course will cover:

- Evolutionary Biology - using *Natural Selection* to explain the history and diversity of life on earth.
- Ecology - a study of the interactions living organisms have within ecosystems that includes: energy production, energy transfer, and nutrient cycling.
- Chemistry of Life – what are the biological molecules associated with living and what role do each play?
- Cell Structure/Function – a look at the different types of cells and their structure and function as they relate to both individual organisms as well as their role within larger systems.

5369 CIS PHYSICS BY INQUIRY 1
5370 CIS PHYSICS BY INQUIRY 2
Grades 11, 12 Credit: .5

Student must register for both semesters

Prerequisites: Algebra I
This is a year long course at CHS. Upon completion of this course earn 4 U of M credits
Physics by Inquiry is a hands-on, laboratory-based introductory class where students learn by experimenting, creating, and testing scientific explanations. Topics include electric circuits, light, color, and optics (lenses and mirrors). This course will focus on the nature of science, science learning, effective strategies for team-based learning, and logical reasoning skills.

8385 INTRODUCTION TO BIOTECHNOLOGY
Grade 11,12 Credit: .5

Prerequisites: Biology 1 & 2 or AP Biology
Course objectives/outcomes
This course offers students and overview of the rapidly evolving field of biotechnology. Students will be able to

- Explain the basic principles of biotechnology and describe its key applications in various fields such as agriculture, medicine, and forensic science.
- Articulate informed perspectives on the moral and societal issues related to biotechnology.
- Explore various biotechnology career paths, gaining insight into the roles, responsibilities, and educational requirements for professionals in the field.

5367 CIS INTRO COLLEGE PHYSICS 1A
5368 CIS NTRO COLLEGE PHYSICS 1B
Grades:11, 12 Credit: .5 high school

Student must register for both semesters
Prerequisite: Advanced Algebra 2 and juniors or seniors who have earned a B or better in a rigorous high school algebra 2/ trigonometry course.
This is a year long course at CHS. Upon completion of this course earn 4 U of M credits
Students in this course will:
Summarize the relationship between matter, energy, force and motion.
Demonstrate the ability to relate, mathematically, the individual components of motion to the overall understanding of how an object moves.
Recognize and apply the function of forces in producing and affecting the motion of various objects.
Participate in laboratory experiments and analysis of experimental results.

This course is a continuation of the concepts from Introductory College Physics 1 with some additional exploration of physics topics as time permits.

SCIENCE

The student successfully completing Introductory College Physics 1A and 1B will receive 4 college credits in physics, equivalent to PHYS 1101W at the University of Minnesota.

5376 CE INTRODUCTORY COLLEGE CHEMISTRY 1A
(CE at Anoka-Ramsey Community College)

5377 CE INTRODUCTORY COLLEGE CHEMISTRY 1B
(CE at Anoka-Ramsey Community College)

Grades: 11, 12 Credit: 1

Student must register for both semesters

Prerequisites: Completion of Honors Chemistry 9 or Chemistry 1. Completion of Advanced Algebra or successful completion of the Accuplacer exam with a score of > 250.

Students who successfully complete Introductory College Chemistry 1A & 1B will receive 4 college credits in Chemistry at Anoka-Ramsey Community College

Students in this course will:

- Learn the importance of accurate, precise laboratory measurements.
-
- Examine the history of atomic theory and its implications for Periodic Table and its trends.
- Name chemicals using the rules of nomenclature.
- Write, balance, and interpret chemical reactions.
- Determine chemical quantities in solutions and gases.
- Describe the flow of energy in chemical reactions using thermochemistry.
- Accurately depict the bonding and shape of molecules by applying quantum theory.
- Examine other topics as time permits.

SOCIAL STUDIES

8202 HUMAN GEOGRAPHY
Grade: 9 Credit: .5 – *Required*
Using a thematic approach, students in this course will:
- Identify the distribution and migration patterns of human population on the earth.
- Explain the concept of culture and determine the factors of cultural settlements throughout the world.
- Analyze the spatial organization of the earth into political units.
- Compare the economic activity of developed and developing countries.
- Describe how humans influence the earth and in turn are influenced by it.
- Utilize tools of geographers to answer geographic questions.
- Evaluate urban patterns around the world.

*AP Human Geography may be taken in place of this course.

8230 WORLD HISTORY 1
8231 WORLD HISTORY 2
Grade: 10 Credit: .5 - *Required*
Covering the period from 100,000 BCE to 1450 CE, and the following themes:
- Interaction between humans and the environment.
- Development and interaction of cultures.
- State-building, expansion, and conflict.
- Creation, expansion, and interaction of economic systems.
- Development and transformation of social structures.

Students will:
- Construct and evaluate arguments, using evidence to make plausible arguments.
- Use documents and other primary data; developing the skills necessary to analyze point of view.
- Assess continuity and change over time and over different world regions.
- Explore diversity of interpretations through analysis of primary source documents.

*AP World History may be taken in place of World History 1 & 2

8205 UNITED STATES HISTORY 1
8206 UNITED STATES HISTORY 2
Grade: 11 Credit: .5 – *Required*

Description United States History 1: provides an overview of United States History from the events of early American Foundations, Revolutionary War, creating a national identify, Civil War, the industrial revolution, the Progressive Era, World War I and the Roaring 20's.

Description for United States History 2: includes the Great Depression, World War II, the 1950's, Civil Rights, the 1960's, Vietnam, the 1970's, the 1980's and resent history.

Students in this course will:
- Summarize economic development.
- Examine national/international conflicts.
- Analyze cultural developments.
- Define key sociological aspects.
- Determine political implications.
- Identify the implications of geographical influences.

* CIS US History 1 & 2 can be taken in place of US History 1 & 2

8207 ECONOMICS AND POLITICAL SCIENCE
or
8207H ECONOMICS & POLITICAL SCIENCE HYBRID
Grade: 12 Credit: .5 – *Required**
This course focuses on the study of human society, the relationships created among members of society, and the political and economic systems at work together. Students in this course will take an interdisciplinary approach to understanding both economics and political science. Economic principles will be taught within the context of political systems.
Students in this course will:
- Analyze supply and demand to determine the impact on price and quantity.
- Analyze political ideologies and political parties while comparing free versus mixed markets and the difference between private ownership and government control of resources.
- Explore U.S. domestic policy along with elasticity, taxation, subsidies, GDP, GNP, healthcare, welfare, etc.
- Discuss U.S. foreign policy along with foreign trade agreements, terms of trade, globalization, outsourcing, etc.
- Measure the influence of government policies on the economy
- Use economic tools to create a personalized budget plan and analyze debt and credit.
- Use economic tools to evaluate government policies.

* CN Macroeconomics course may be taken in place of this course.

SOCIAL STUDIES

8210 GOVERNMENT AND CITIZENSHIP
8210H GOVERNMENT AND CITIZENSHIP HYBRID
Grade: 12 Credit: .5 – *Required**

The purpose of this course is to provide students with relevant information about our government so that they can be active and well-informed participants in the political process.

Students will investigate the historical and philosophical foundations of American Government.

Students in this course will:
- Identify and critique the functions and goals of our government, as well the purpose and structure of our Constitution.
- Understand the role of citizens in a democracy, including voting rights and responsibilities, the way we choose candidates, and the way citizens and politicians are influenced.
- Analyze the Bill of Rights and court decisions to understand our civil liberties and civil rights.

**CIS American Democracy may be taken in place of this course.*

8214 MULTICULTURAL STUDIES
Grade: 11-12 Credit: .5

This course will examine the role of race and ethnicity in America and its contemporary significance. We will use the social science disciplines of history and sociology to explore the experiences of diverse racial and ethnic groups. Because of time constraints, the course cannot provide an in-depth analysis of every ethnic group in America or their complexities, but rather key aspects will be used to illustrate commonalities and differences among them with a focus on under-represented perspectives. Experiences of these groups will serve to illustrate theoretical concepts and themes generally applied to the study of race and ethnicity in America. Throughout the term, students will be given the opportunity to apply the theoretical concepts and themes studied in the course to themselves and/or any ethnic group of their choice.

Students in this course will:
- Explore a variety of perspectives while developing skills in civil discourse and metacognition.
- Analyze historical events and primary sources while reflecting upon our personal experience.
- Explore historical themes, events, and legacies.
- Analyze the dynamics at play when cultural and ethic groups intersect.
- Discuss how someone else's identity informs their beliefs and actions.
- Empathize with others' lived experiences.

8208 PSYCHOLOGY
Grades: 11, 12 Credit: .5

Have you ever wondered if we all see color the same way? Are you curious about what effect birth order might have on your personality? In psychology, we answer these questions and more. Psychology is the study of behavior and the mind, in which our understanding of ourselves and others is expanded.

Students in this course will:
- Participate in activities that show how our brains trick us into seeing things that are not really there.
- Engage in active discussions about why people behave the way they do, especially when it comes to mental illness.
- Dive into research involving social interactions in order to understand why people are prejudicial and how attraction works (spoiler: opposites don't attract!).
- Examine how psychologists conduct research and conduct some of your own research on unsuspecting classmates.
- Learn how much sleep you really should be getting and what is the significance of your dreams.
- Analyze how we learn, how we remember, and why we forget so that you can improve your performance in all your classes.

8209 SOCIOLOGY
Grades: 11, 12 Credit: .5

Ever wonder how things become the "norm"? Why girls like pink and boys like blue? Why anyone who is "different" is "awkward"? In this course, we will explore the effects of socialization through different aspects of identity such as race, gender and religion through various cases of crime, family, and media. Students will develop their understanding of the social world and social phenomena and develop critical thinking and empathy sills. This course seeks to discuss the most current issues in American society and incorporates a lot of student discussion and participation.

Students in this course will:
- Examine how social scientists conduct research and conduct their own original research.
- Identify and analyze the components of a culture.
- Understand the human socialization process.
- Examine deviance in society.
- Explore inequalities in race, ethnicity, and class.
- Investigate issues related to social justice and human rights.

SOCIAL STUDIES

8212 CRIMINOLOGY
Grades: 10, 11, 12 Credit: .5

Are you interested in getting inside the mind of a criminal? What are the factors that lead to criminal behavior? Whether you are interested in a job in the law, forensic science, or not, in this course we will try to understand these questions and more. Criminology is an elective social studies course designed to introduce students to the study of crime, criminal behavior, and the criminal justice system.

Students in this course will:
- Participate in activities that show how our criminal justice system works.
- Examine the major topics in criminology, including:
  - types of crime and criminals
  - law enforcement and CSI
  - the criminal case
  - corrections and the death penalty

♦ *ADVANCED PLACEMENT OFFERINGS* ♦

See Academic Enrichment Opportunities Section for an explanation and expectations of the AP , CE, CIS, CN Programs.

5202S / 8716S AP HUMAN GEOGRAPHY SPLIT / PHYSICAL EDUCATION 9 SPLIT
Grades: 9 Credit: .5 full year

This is a full year course.

Note: AP Human Geography rotates every other day with Physical Education 9. Students registered for AP Human Geography must also take 9th Grade Physical Education using course number 8716.

*This course may be taken instead of Human Geography.
This course is designed to challenge the needs of highly motivated and capable students in the subject area of Human Geography. Successful students will be those who are ambitious, responsible, and diligent in completing homework.

AP Human Geography is designed to introduce students to the study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface.
Students will use spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They will also learn about the methods and tools geographers use in their science and practice. This challenging course is the equivalent of a freshman college course and students may earn college credit.

Students in this course will:
- Use and think about maps and spatial data.
- Understand and interpret the implications of associations among phenomena in places.
- Recognize and interpret at different scales the relationships among patterns and processes.
- Define regions and evaluate the regionalization process.
- Characterize and analyze changing interconnections among places.
- Use case studies to see geographic impact in our world.

5230 & 5231 AP WORLD HISTORY: MODERN SEQUENCE

Student must register for both semesters

Grade: 10 Credit: 1

This course has been developed to challenge highly motivated and capable students in the area of World History. Students utilize high levels of critical thinking and read and write extensively. A significant amount of outside work is required including a summer assignment. This course is a challenging course meant to be the equivalent of a freshman college course. Students must pass the AP Exam to earn college credit.
In AP World History: Modern students:
- Investigate significant events, individuals, developments, and processes from 1200 to the present.
- Develop and use the same skills, practices, and methods employed by historians by:
  - analyzing primary and secondary sources
  - developing historical arguments
  - making historical connections
  - utilizing reasoning about comparison, causation, and change over time.

This course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places:
- humans and the environment
- cultural developments and interactions
- governance, economic systems, social interactions and organization technology and innovation.

*** This full year course may be taken in place of World History 1 & 2**

SOCIAL STUDIES

ADVANCED PLACEMENT OFFERINGS ♦

See Academic Enrichment Opportunities Section for an explanation and expectations of the AP, CE, CIS, CN Programs.

5220 CIS AMERICAN DEMOCRACY

Grade 11,12 **Credit .5**

Upon passing this course you can earn 3 U of M credits along with your high school credits.

Course description
This course is intended to introduce students to the expressed hopes of the American people for their government and to the institutions and processes that have been created and recreated to achieve these hopes.
We will explore topics including the ideas underlying the nation's founding and its constitutional foundations; civil rights and civil liberties; the role of the United States in an increasingly globalized world; the structure and function of American political institutions; and the behavior of American citizens in the political process.

In addition, we will learn to think and communicate like political scientists. We will read primary documents, such as the Federalist papers, engage with scholarly arguments about the way the American political system works, and critically evaluate critiques of the American political system that have been offered from a variety of perspectives.

By the end of the semester students should have a basic understanding of the structure and function of American government as well as an increased ability to critically reflect on the degree to which our institutions, processes, and citizens live up to the expectations placed on them. This course fulfills the liberal education requirements for the Social Sciences Core.

Qualifications:
POL 1001 is an intensive U of M social science course that requires substantial reading, writing, and critical thinking. Students enrolling in POL 1001 must be juniors or seniors who meet at least ONE of the following additional qualifications:

- Have a cumulative GPA in recent social science courses that exceeds a 3.25, OR
- Are in the top 20% of their high school class, OR
- Demonstrate strength in the necessary reading and writing skills to the CIS instructor.

5221 CIS PSYCHOLOGY

Grades: 11, 12 Credit: .5
This is a semester course.

Upon passing this course you can earn up to 4 U of M credits along with your high school credits.

This course explores how human behavior can be studied including: biological, social, and environmental influences on behavior; thinking, remembering, and feeling; and other ways in which humans differ, including psychological disorders. CIS Psychology is an introductory University of Minnesota College in the Schools course (PSY 1001) and a prerequisite for all other college-level psychology courses. When you take this class, you are taking a U of M class, and you will be working with the same content as on-campus students.

Course Objectives

1. Understanding the research process. Students learn about classic and contemporary findings in diverse research areas in psychology and become acquainted with new research currently conducted at the U of M.

2. Developing critical thinking. Students learn how to think scientifically and to become skeptical consumers of psychological (and other) research.

3. Applying knowledge creatively. Students begin to apply knowledge of psychological findings and methods to creatively solve real-world problems.

Qualifications : Junior or senior with a class rank in the top 20%, or instructor approval; previous coursework in high school psychology or biology and reading score review are recommended. Open to 10th graders with instructor permission.

SOCIAL STUDIES

5222/5223 CIS US HISTORY 1 & 2
Student must register for both semesters
Grade: 11, 12 Credit: .5
Upon passing this course you can earn up to 3 U of M credits along with your high school cred

Course Description for # 1:
This course covers issues, events, and ideas in the social, economic, political, and intellectual history of the United States, from the moment of earliest European contact through the Civil War and Reconstruction. Indigenous America before 1492, European conquest and colonization, revolution and nation building, national expansion, political culture, and reform movements , slavery, immigration, industrialization and labor, family and gender roles, religion and culture. Students will use primary sources and have 2 required academic papers.

Course Description for # 2:
This Course covers the forces that shaped the emergence modern and global America from the end of the Civil War to present.
Shaping of the modern industrials/post-industrial economy. Work and everyday life. Race relations and immigration. Popular culture. Politics and reform movements. The impact of war on American society. The role of the United States as a world power, before, during and after the Cold War. Students will use primary sources and have 2 required academic papers.

Qualifications for 1 & 2:
IST 1307 is an intensive U of M course that requires substantial reading, writing, and critical thinking. Students enrolling in HIST 1307 must be juniors or seniors and meet at least **ONE** of the
following qualifications:

- Have a cumulative GPA in recent social studies, courses exceeding 3.25, OR
- Are in the top 30% of their high school class OR
- Demonstrate sufficient strength in necessary reading and writing skills to the CIS instructor.

* This course can be taken in place of US History 1 & 2

5255 CN MACROECONOMICS
Grades: 11, 12 Credit: .5

This one semester class

Upon passing this course you can earn up to 3 SW State credits along with your high school credits.

This class is recommended for any student who wishes to take on the challenge of a college level Macroeconomics course. Macroeconomics examines the economy as a whole: large scale economic activity, economic growth, unemployment, inflation, government spending, taxation and deficits, the banking system, international trade, and how other economic systems work. Emphasis is placed on logical, critical, and evaluative thinking skills while analyzing governmental decisions for our economy. Strong math skills and a willingness to work are requirements for this course.

Qualifications:
This course requires a mathematical background including two years of high school algebra.

SPECIAL EDUCATION

BASIC SKILLS

Grades: 9, 10, 11, 12 Credit: .5

6045 – 1st Semester **6046** – 2nd Semester

Open to special education students.

Prerequisite: Current I.E.P. & case manager recommendation.

The course offers a two-part focus. Part of the class period is designed for direct instruction with a semester focus on the following skills:

- Reading, writing, math and transition
- Self-advocacy skills

The other part of the class period is a structured study hall setting. The students have the opportunity to utilize:

- Time to complete their assignments for other courses.
- Teacher assistance on daily assignments.
- Teacher assistance with organizational techniques.

AUTISM SPECTRUM DISORDERS SOCIAL/LIFE/TRANSITION SKILLS

Grades: 9, 10, 11, 12 Credit: .5

6101 - 1st Semester **6102** – 2nd Semester

Prerequisite: Current I.E.P. with specific needs related to Autism Spectrum Disorders or case manager recommendation and approval from the Autism Resource Teacher.

The class provides students with the opportunity to work on assignments, organize their materials, plan their day, problem solve and receive social skills instruction.

Social Skills instruction will be provided in small groups or individually with a focus on the following:

- Increasing opportunities for social interaction with supportive peers and staff members.
- Learn problem solving skills.
- Explore and improve transition skills related to the areas of post-secondary education, employment, home living, community participation, and recreation and leisure.
- Building organization skills including daily planning.

INTERPERSONAL SKILLS

Grades: 9, 10, 11, 12 Credit: .5

6121 – 1st Semester **6122** – 2nd Semester

Prerequisite: Current I.E.P. & case manager recommendation.

This class is designed for students with behavioral and/or social goals on their I.E.P. A social skill curriculum is included along with time for independent study. The purpose of the class is to support academic progress as well as progress on I.E.P. goals.

6310 ADVANCED BASIC ENGLISH 1-9/10
6311 ADVANCED BASIC ENGLISH 2-9/10

Grades: 9, 10 Credit: .5

Open to special education students

Prerequisite: Current I.E.P. & case manager recommendation

This course moves at a faster pace and is more in-depth than the Basic English course. Students in this course will:

- Improve writing skills such as spelling, punctuation, and capitalization.
- Acquire and reinforce sentence and paragraph writing skills.
- Increase vocabulary.
- Improve reading ability and comprehension of fiction and non-fiction text.
- Improve listening skills.
- Relate literacy selections to self and real world.

6312 BASIC ENGLISH 1-9/10
6313 BASIC ENGLISH 2-9/10

Grades: 9, 10 Credit: .5

Open to special education students

Prerequisite: Current I.E.P. & case manager recommendation

Students in this course will:

- Improve writing skills such as spelling, punctuation, and capitalization.
- Acquire and reinforce sentence and paragraph writing skills.
- Increase vocabulary.
- Improve reading ability and comprehension of fiction and non-fiction text.
- Improve listening skills.
- Relate literacy selections to self and real world.

6314 ADVANCED BASIC WORLD LITERATURE 1
6315 ADVANCED BASIC WORLD LITERATURE 2

Grades: 11, 12 Credit: .5

Open to special education students

Prerequisite: Current I.E.P. & case manager recommendation

Students in this course will:

- Read literature from a variety of cultures.
- Relate literary selections to self and real world.
- Present literary analyses.
- Participate meaningfully in discussions of selected works.
- Improve writing skills.
- Improve reading ability and comprehension skills.

SPECIAL EDUCATION

6316 BASIC WORLD LITERATURE 1
6317 BASIC WORLD LITERATURE 2

Grades:11, 12 Credit: .5
Open to special education students
Prerequisite: Current I.E.P. & case manager recommendation

Students in this course will:
- Read literature from a variety of cultures.
- Relate literary selections to self and real world.
- Present literary analyses.
- Participate meaningfully in discussions of selected works.
- Improve writing skills.
- Improve reading ability and comprehension skills.
- Expand skills

PRE-ALGEBRA SKILLS

Grades: 9, 10 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.

6055 – 1st Semester **6056** – 2nd Semester

- Student who are not yet ready for Algebra Concepts to fill gaps and/or those students who have limited success in upper level math classes.
- This course will include various web-based learning tools as a supplement.

INTERMEDIATE ALGEBRA SKILLS

Grades: 9, 10 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.

6020 – 1st Semester **6021**– 2nd Semester

This class is a continuation of Pre-Algebra 1 for students that need additional practice in order to successfully complete Intermediate Algebra Concepts.

INTERMEDIATE MATHEMATICS

Grades: 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. & case manager recommendation.

6022 – 1st Semester **6023** – 2nd Semester

This course is designed for students who will not complete mainstream math. Independent and project based math skills will be taught.

6324 BASIC EARTH SCIENCE 1

Grade: 9, 10 Credit: .5
1st semester—open to Special Education Students
Prerequisite: Current IEP & Case Manager Recommendation

This is an introductory earth and space science course for 9th-grade special students. Students will investigate topics including the universe, our solar system, and Earth's place in the universe. They will use techniques such as laboratory experiments, modeling, and scientific discourse to develop an understanding of how systems interact and explore their connection to Earth.
Students in this course will:
- Introductions to Science—Scientific Method and Basic Idea of an Atom
- The Universe: including Big Bang Theory, Astronomy, and Nucleosynthesis
- Formation and History of the Solar System Orbital Motions

6325 BASIC EARTH SCIENCE 2

Grade: 9, 10 Credit: .5
2nd semester—open to Special Education Students
Prerequisite: Current IEP & Case Manager recommendation

This is an introductory earth and space science course for 9th-grade special students. Students will investigate topics including Earth's systems and Earth's and human activity. They will use techniques such as laboratory experiments, modeling, and scientific discourse to develop an understanding of how systems interact and explore their connection to the Earth.
Students in this course will:
- Layers of the Earth: Interior of the Earth Layers and Quakes
- Exterior Features and Motions of the Earth: Plate Tectonics and Surface Features
- Earth Systems and Human Activities, Geosphere and Hydrosphere Erosion & Weathering Carbon Cycle
- Climate, Atmosphere, Biosphere, & Cryosphere

6026 BASIC BIOLOGY 1

Grades: 10, 11, 12 Credit: .5
1st Semester – Open to special education students.
Prerequisite: Current I.E.P. & case manager recommendation.

Students in this course will:
- Learn about the nature of life – Science of Biology.
- Learn about cells – Structure, Photosynthesis, and Respiration.
- Learn about genetics – Introduction, DNA, RNA, and human heredity.

SPECIAL EDUCATION

6027 BASIC BIOLOGY 2

Grades: 10, 11, 12 Credit: .5
2nd Semester – Open to special education students.
Prerequisite: Current I.E.P. & case manager recommendation.

Students in this course will:
- Learn about ecosystems and communities.
- Learn about populations.
- Learn about human impact on the environment.

6332 BASIC HUMAN GEOGRAPHY
6333 ADVANCED BASIC HUMAN GEOGRAPHY

Grades: 9, 10 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. & case manager recommendation

Students in this course will:
- Examine geography concepts (map skills, 5 themes of geography).
- Analyze population patterns (migration, immigration, push-pull factors, and population density).
- Identify cultural patterns (cultural groups, elements, and diffusion).
- Determine political and economic geography (structures, systems, and spatial organization).
- Explore interconnections (human and environmental relationships).

6334 BASIC ECONOMICS & POLITICAL SCIENCE
6335 ADVANCED BASIC ECONOMICS & POLITICAL SCIENCE

Grades: 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. & case manager recommendation
Students in this course will:
- Identify key principles such as supply, demand, scarcity, opportunity cost, resources, etc.
- Explore economic systems (traditional, market, mixed).
- Determine how goods and services are distributed.
- Analyze government and economic policies in the United States vs. foreign entities.
- Examine state and local government issues.

6336 BASIC GOVERNMENT & CITIZENSHIP
6337 ADVANCED BASIC GOVERNMENT & CITIZENSHIP

Grades: 11, 12 Credit: .5
Open to special education students
Prerequisite: Current I.E.P. & case manager recommendation
Students in this course will:
- Explore different systems of government.
- Examine issues within the Supreme Court.
- Investigate roles of U.S. citizens in our democracy.
- Discuss and analyze local and state governments.
- Identify U.S. policies (foreign and domestic).
- Learn about the Constitution, Bill of Rights, and the 27 Amendments.

WORK EXPERIENCE PROGRAM

Students interested in this program must consult with their counselor/case manager .

This program is open to all students employed a minimum of 15 hours per week, working shifts during the school day and receiving a W-2 at year's end. The philosophy of the program is that work experience, coupled with an employability skills seminar, assists young adults in making the transition from student to a member of the work force after trade school or college. This program is an alternative to regular classroom instruction. It provides the students with skills that will enable them to gain confidence,
self-respect, and the ability to grow with the changing world.
The student MUST be as least 16 years old in order to participate in this program.

WORK SEMINAR

Grades: 11, 12 Credit .5 each semester

Must be taken each semester and may conflict with other course requests.
Prerequisite: Permission of instructor & case manager

6072 – 1st Semester **6074 – 2nd Semester**

Units of instruction:
- Character Education and Soft Skills
- Safety and Sexual Harassment
- Interest, Aptitude, and Value Assessments
- Career Choices
- S.M.A.R.T. Goal Writing
- Family Genogram
- Career Research
- Applications, resumes, and interviewing
- Taxes
- Credit

SPECIAL EDUCATION

WORK EXPERIENCE PROGRAM

Grades: 11, 12
Open to special education students.

Period(s)	Semester 1/2	Semester Credit(s)
4—6	6070 / 6071	1.5 each
5—6	6068 / 6069	1 each
6 only	6064 / 6065	.5 each

Prerequisite: Current I.E.P. and teacher recommendation.

Student must acquire and maintain a part time position within the community, and attend a weekly seminar with the Work Experience Coordinator.
Students in this course will:

- Be encouraged to become responsible and competent members of the workforce.
- Record hours worked and reflect upon experiences at work.
- Learn appropriate coping and stress relieving methods on the job.
- Understand ways in which students can promote good working relationships with their employers and co-workers.
- Develop a personal resume.

6906 & 6907 WOODLAND AM– Required Course
6908 & 6909 WOODLAND PM

Grades: 9, 10, 11, 12 Credit: .5

Participation in the Woodland Program is determined by the Individualized Education Plan (IEP) team. Prerequisite: Current I.E.P. and teacher recommendation.

HIRE LEARNING

Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. & case manager recommendation.
6060 – 1st Semester **6061** – 2nd Semester

HIRE Learning is a program designed to teach hands-on job skills needed to find and keep employment within the community. By operating a retail craft store, students will learn business skills, social interaction, professional etiquette, and examine career choices. Classroom format focuses on encouraging students to become responsible, independent and self-motivated employees through the process of creating crafts, organizing materials and supplies, completing daily assignments, and self-evaluate performance values and principles.

FUNCTIONAL HIRE LEARNING

Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. & case manager recommendation.
6660 – 1st Semester **6661** – 2nd Semester

HIRE Learning is a program designed to teach hands-on job skills needed to find and keep employment within the community. By operating a retail craft store, students will learn business skills, social interaction, professional etiquette, and examine career choices. Classroom format focuses on encouraging students to become responsible, independent and self-motivated employees through the process of creating crafts, organizing materials and supplies, completing daily assignments, and self-evaluate performance values and principles.

D PRACTICAL READING

Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6602 – 1st Semester **6603** – 2nd Semester
Students in this course will:
Develop and improve their functional reading, writing, and communication skills.

D PRACTICAL BASIC SOCIAL STUDIES

Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6606 – 1st Semester
Students in this course will:

- Study many aspects of social studies including geography, American History, government, and map skills.

D PRACTICAL BASIC SCIENCE

Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6611 – 2nd Semester
Students in this course will:

- Study various categories of science such as life physical science, life science, environmental science and Earth science.

SPECIAL EDUCATION

D LIFE SKILLS MATH
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6614 – 1st Semester **6615** – 2nd Semester
Students in this course will:
- Develop individual math skills.
- Apply math concepts to real life problems.
- Apply math concepts to guide decisions.

D FUNCTIONAL MATH
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6621 – 1st Semester **6622** – 2nd Semester
Students in this course will:
- Study the concepts of time and money.
- Learn number sense.
- Learn calculator skills.

D FUNCTIONAL SOCIAL SKILLS
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6625 – 1st Semester **6626** – 2nd Semester
Students in this course will:
- Study peer and adult relationships.
- Identify and monitor emotions.
- Learn how to work cooperatively with others.

DEVELOPMENTAL/ADAPTED PHYSICAL EDUCATION 9 (D.A.P.E.)
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. for D.A.P.E. and case manager recommendation.
6164 – 1st Semester **6165** – 2nd Semester
Students in this course will:
- Develop gross motor skills.
- Develop fitness methods for life long activities.
- Develop and improve skills in the various activities covered, to the best of the student's abilities.
- Develop both team and individual skills through participation (i.e. soccer, softball, volleyball, tennis, bowling, swimming, basketball and others).
- Work on IEP goals.
- Begin working on Physical Education standards.

D FUNCTIONAL LIVING SKILLS
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6627 – 1st Semester **6628** – 2nd Semester
This class is designed to start to prepare Special Education students with the functional skills they will need as they enter the adult world. Themes that will be addressed are the five areas of transition required for all special education students.
Students in this course will:
- Learn pre-vocational skills such as work on job boxes, practice fine motor coordination, and following directions.
- Become familiar with electronic devices, i.e. computers and assistive technology.

D FUNCTIONAL READING
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6629 – 1st Semester **6630** – 2nd Semester
Students in this course will:
- Develop functional reading skills and communication skills for daily living.

SPECIAL EDUCATION

STEPS ENGLISH
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6288 – 1st Semester **6289** – 2nd Semester

STEPS MATHEMATICS
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6290 – 1st Semester **6291** – 2nd Semester

STEPS SCIENCE
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6292 – 1st Semester **6293** – 2nd Semester

STEPS SOCIAL STUDIES
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6294 – 1st Semester **6295** – 2nd Semester

STEPS SOCIAL & PERSONAL SKILLS
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students.
Prerequisite: Current I.E.P. and case manager recommendation.
6296 – 1st Semester **6297** – 2nd Semester
This course will look at personal and social skills to meet student needs and help them be successful in school and the transition process. Areas considered include:
- Learning styles
- Study skills
- Social skills

SC ENGLISH
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students that meet Aspire requirements.
Prerequisite: Current I.E.P. and case manager recommendation.
6180 – 1st Semester **6181** – 2nd Semester

SC PHYSICAL EDUCATION
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students that meet Aspire requirements.
Prerequisite: Current I.E.P. and case manager recommendation.
6182 – 1st Semester **6183** – 2nd Semester

Students in this course will:
- Develop gross motor skills.
- Develop and improve skills in the various activities covered.
- Develop fitness methods for life long activities.
- Develop both team and individual skills through participation (i.e. soccer, softball, volleyball, tennis, bowling, swimming, basketball and others).
- Work on rules and knowledge of activities.

SC SPECIAL SERVICES SKILLS
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students that meet Aspire requirements with case manager approval.
Prerequisite: Current I.E.P. and case manager recommendation.
6184 – 1st Semester **6185** – 2nd Semester
Students in this group experience will:
- Develop interpersonal skills.
- Manifest confidentiality.
- Encourage and develop respect.
- Expand self-discovery skills.

SC MATHEMATICS
Grades:9, 10, 11, 12 Credit: .5
Open to special education students that meet Aspire requirements.
Prerequisite: Current I.E.P. and case manager recommendation.
6186 – 1st Semester **6187** – 2nd Semester

SC SCIENCE
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students that meet Aspire requirements.
Prerequisite: Current I.E.P. and case manager recommendation.
6188 – 1st Semester **6189** – 2nd Semester

SC SOCIAL STUDIES
Grades: 9, 10, 11, 12 Credit: .5
Open to special education students that meet Aspire requirements.
Prerequisite: Current I.E.P. and case manager recommendation.
6190 – 1st Semester **6191** – 2nd Semester

TECHNOLOGY EDUCATION

8635 WOOD 1 - INTRODUCTION
Grades: 9, 10, 11, 12 Credit: .5

[Optional fee-based projects may be offered to students.]
Students in this course will:
- Relate principles, concepts and properties of wood to basic furniture construction techniques.
- Understand basic knowledge and skill to identify and safely operate hand tools, power tools, and shop equipment.
- Develop accuracy skills through an understanding of working and assembly drawings.
- Select, calculate costs, machine and assemble an appropriate level project.
- Develop time management and working relations with other students.
- Construct an end table with a bottom shelf and a drawer. Along with options to make pens, cutting boards, and various other optional projects.

8636 WOOD 2 - TECHNIQUES
Grades: 9, 10, 11, 12 Credit: .5
Prerequisite: Completion of Wood 1-Introduction.
[Optional fee-based projects may be offered to students.]
Students in this course will:
- Focus on advanced machining and assembly techniques.
- Concentrate on problem solving through self-design or modified project development.
- Explore alternatives in materials and construction.
- Choose between a few project options: Chess board with a dovetail drawer, or upgrade to a larger project like a rocking chair or a coffee table with a dovetailed drawer.
- Begin to explore the processes of CNC equipment that are used in today's wood production industries.

8637 WOOD 3 – CREATIVE WOODS
Grades: 10, 11, 12 Credit: .5
Prerequisite: Completion of Wood 1 and 2.
[Optional fee-based projects may be offered to students.]
Students in this course will:
- Explore career choices and post education preparation.
- Maximize their performance through individualized learning (heavy emphasis on total creativity and time management).
- Students will design and develop woods projects of their choice using multiple medias and the "Principles of Design". **OR**
- Design and construct your own project with plans that you create. Draft & sketch your project and complete a Bill of Materials to calculate costs
- Use of advanced joinery techniques and a creation of a CNC project is required.

8639 INDEPENDENT PROJECTS WOOD
Grades: 11, 12 Credit: .5
*Prerequisite: Completion of Wood 3***[Optional fee-based projects may be offered to students.]**

Projects determined by student and instructor.

TECHNOLOGY EDUCATION

8682 VISUAL COMMUNICATIONS – 1 PHOTO, VIDEO, GRAPHICS

Grades: 9, 10, 11, 12 *FA* Credit: .5

[It is recommended that students have a minimum 8G flash drive.]

This course will include photography, movie making, and computer graphics. Students will pursue an area(s) of interest. Students in this course will:

- Use digital cameras/camcorders and other accessories to capture moments while learning and using composition elements to add interest to a photograph or video.
- Learn the tools of Adobe Master Collection CS6 to edit and enhance their photo/video projects.
- Continue their exposure of CorelDraw to create logos, artwork, and designs.
- Have access to design equipment such as laser engravers for cutting and engraving several different products like acrylics, metals and wood, vinyl cutters for decal production, and dye sublimation process for creating a multitude of products like; T-shirts, mugs, signs, tags, license plates, portable electronic covers, and more!
- Be able to create posters on a large format printer using personal photographs and computer generated graphics.

8683 ADVANCED VISUAL COMMUNICATIONS—2

Grades: 9, 10, 11, 12 *FA* Credit: .5

Prerequisite: Visual Communications

[It is recommended that students have a minimum 8G flash drive.]

This course will expand on Visual Communications 1, photography, movie making and computer graphics curriculum. Students will pursue an area(s) of interest. Projects will be determined by student and instructor.

8684 INDEPENDENT PROJECTS VISUAL COMMUNICATIONS

Grades: 11, 12 Credit: .5

Prerequisite: Completion of Visual Communications and Advanced Visual Communications. This course may be repeated.

[It is recommended that students have a minimum 8G flash drive.]

This course will expand on the student's experiences in Visual Communications 1 and 2. Students will pursue an area(s) of interest through independent projects determined by student and instructor.

*PROJECT LEAD THE WAY OFFERINGS *

Students may be eligible to receive college credit for PLTW courses. Please see the General Information-Academic Enrichment Opportunities section for details.

PLTW Introduction to Engineering Design and PLTW Principles of Engineering are separate courses which may be taken in any order.

8651 & 8652 PLTW - INTRODUCTION TO ENGINEERING DESIGN (STEM)

This is a full year course.

Student must register for both semesters.

Grades: 9, 10, 11, 12 *FA* Credit: 1

This course fulfills the Fine Arts requirement beginning Fall 2017.

Students in this course will:

- Create drawings with Autodesk Inventor
- Further enhancement of geometric shapes and properties
- Explore the design process
- Explore 3D modeling
- Develop assembly animation
- Use various physical properties in design

5655 & 5656 PLTW – CIVIL ENGINEERING AND ARCHITECTURE (STEM)

Honors Course: This course is considered a rigorous course. Grades are weighted and count toward graduation with distinction. Please see "Academic Enrichment Opportunities" section for more course details.

This is a full year course.

Student must register for both semesters.

Prerequisite: It is strongly recommended that a student has taken PLTW Introduction to Engineering Design or PLTW Principles of Engineering.

Students in this course will:

- Design and build electronic and physical models of residential and commercial facilities.
- Use industry standard CAD drafting computer software to design their facilities.
- Use the design process to work through real-world problems.
- Apply math and science concepts in relevant projects.
- Hone computer skills, interpersonal skills, and creative abilities.

TECHNOLOGY EDUCATION

5653 & 5654 PLTW – PRINCIPLES OF ENGINEERING (STEM)

Honors Course: This course is considered a rigorous course. Beginning Fall 2017 grades will be weighted and count toward graduation with distinction. Please see "Academic Enrichment Opportunities" section for more course details.

This is a full year course.
Student must register for both semesters.

Grades: 9, 10, 11, 12 Credit: 1

Principles of Engineering (POE) is a high school level engineering course. Students in this course will:

- Be exposed to some of the major concepts that they will encounter in a post-secondary engineering course of study.
- Have an opportunity to investigate engineering and high tech careers.
- Be given the opportunity to develop skills and an understanding of course concepts through activity-based, project-based, and problem-based (APPB) learning.
- Be challenged through APPB learning to continually hone their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts.
- Develop strategies to enable and direct their own learning.

5657 & 5658 PLTW – COMPUTER INTEGRATED MANUFACTURING (STEM)

College Credits can be obtained upon successful completion of the course, passing score on the end of course exam (EoC). Please see instructor or visit https://www.pltw.org/experience-pltw/student-opportunities for more information on how to earn and pay for college credits at one of our local universities.

This is a full year course.
Student must register for both semesters.

Grades: 10, 11, 12 Credit: 1

Prerequisite: It is strongly recommended that a student has taken PLTW Introduction to Engineering Design or PLTW Principles of Engineering.

This course explores manufacturing history, individual processes, systems, and careers.

Students in this course will:

- Learn Manufacturing Processes including design for manufacturability, property analysis, creating a prototype, manufacturing processes and machines, and CNC mill programming and usage.
- Learn the elements of automation including robotic simulation, and physical testing, power systems, and pneumatic system design and construction.
- Analyze, design, and build manufacturing systems. While implementing these designs, students will continually hone their interpersonal skills, creative abilities, and understanding of the design process. Students apply knowledge gained throughout the course in a final open-ended problem to build a factory system.
- Incorporate finance, ethics, and engineering design within the course. This reflects an integrated approach that leading manufacturers have adopted to improve safety, quality, and efficiency.

MANUFACTURING PATHWAY

Our manufacturing pathway of courses is designed to prepare students with the in-demand skills needed in our manufacturing industry. Whether students are looking for experience in metal working as a hobby/interest or making it a career. These courses will take students through a variety of processes in developing a wide range of knowledge in metal manufacturing. Our courses and lab are designed around a rotation approach where students will complete projects in 4 main areas in each course.

8645 GENERAL METALS

Grades 9, 10, 11, 12 Credit: .5

May repeat this course with instructor permission
***OSHA-10 Certification in the course*

This course will focus on metalworking and developing skills in the areas of:

- CAD Modeling and Blueprint Reading Basics
- MIG Welding
- CNC Plasma Cutting (artistic)
- ARC Welding
- Sheet Metal Fabrication

8646 METAL TECHNOLOGY

Grades 9, 10, 11, 12 Credit: .5

May repeat this course with instructor permission

This course will focus on metalworking and developing skills in the area of:

- Advanced CAD/Advanced Drafting
- Manual Milling
- TIG Welding
- CNC Plasma Cutting (CAD based

TECHNOLOGY EDUCATION

8647 ADVANCED METAL TECHNOLOGY
Grade 10, 11, 12 Credit: .5

Prerequisite: General Metals and/or Metal Technology

May repeat this course with instructor permission

This course will focus on metalworking and developing skills in the areas of:

- CNC Milling
- Advanced MIG Welding
- Advanced TIG Welding
- OXY Fuel

8648/8650 COUGAR MANUFACTURING 1 & 2
Grade: 11, 12 Credit: 1

Prerequisite: General Metals and/or Metal Technology

Cougar manufacturing will focus on a cumulation of the entry level knowledge and skills learned from prior courses and apply those skills towards a legacy project or business model in the design and fabrication of a product designed to solve a specific problem or need as a student run business.

WORK EXPERIENCE

Students interested in this program must consult with their counselor/case manager .

This program is open to all students employed a minimum of 15 hours per week, working shifts during the school day and receiving a W-2 at year's end. The philosophy of the program is that work experience, coupled with an employability skills seminar, assists young adults in making the transition from student to a member of the work force after trade school or college. This program is an alternative to regular classroom instruction. It provides the students with skills that will enable them to gain confidence,
self-respect, and the ability to grow with the changing world.
The student MUST be as least 16 years old in order to participate in this program.

WORK SEMINAR HYBRID

Grades: 11, 12
Credit .5-1.0

Must be taken each semester and may conflict with other course requests.
This course will be scheduled Period 3.
Prerequisite: Permission of instructor & counselor

8961H – 1st Semester **8962H** – 2nd Semester

Units of instruction:

- Character Education and Soft Skills
- Safety and Sexual Harassment
- Interest, Aptitude, and Value Assessments
- Career Choices
- S.M.A.R.T. Goal Writing
- Family Genogram
- Career Research
- Applications, resumes, and interviewing
- Taxes
- Credit

WORK EXPERIENCE OJT

Grades: 11, 12 Credit: .5-1.5
Students are released up to three hours early from school depending on academic standing.

8965 - 1st Semester **8966** – 2nd Semester

Prerequisite: Permission of instructor & counselor

Student's work activities will be under close supervision by his/her employer. The Work Experience
Coordinator will oversee and coordinate all aspects of the program.

WORLD LANGUAGE

Note for Freshman native Spanish speakers and/or Freshman who have completed 4 or more years in a Spanish immersion

***Note Regarding 1A / 1B Courses:** **Most Centennial students choose to begin their first year of World Language in grade 8 at Centennial Middle School. High school level 1 courses must have a sufficient number of requests to schedule classes. Level 1 courses not offered at the high school for French 1 may be completed online (no instructor or classroom). On-Line courses are available through MDE approved programs. See Counselor for additional information.**

♦ *SPANISH* ♦

8161 SPANISH 1A (Beginning)
8162 SPANISH 1B (Beginning)

Grades: 9, 10, 11, 12 Credit: .5

Prerequisite: An average English grade of C- or above is highly recommended for success in this course.
Students who have successfully completed Spanish 1A and 1B at CMS or another school should sign up for Spanish 2A and 2B.

Students in this course will:

- Begin to learn the basic vocabulary and sentence structures needed to communicate in daily life situations.
- Develop basic listening, speaking, reading and writing skills in Spanish.
- Become acquainted with Spanish-Speaking countries and their cultures.
- Read a short, easy novel in Spanish.

8163 SPANISH 2A (Beginning)
8164 SPANISH 2B (Beginning)

Grades: 9, 10, 11, 12 Credit: .5

Honors Option Offered
Prerequisite: A grade of C- or above in Spanish 1B is highly recommended for success in this course.

Students in this course will:

- Speak, listen, read and write in Spanish.
- Build knowledge and understanding of vocabulary and sentence structures learned in Spanish 1.
- Continue to improve communication skills.
- Continue to investigate Spanish-speaking countries and their cultures.
- Read a short novel in Spanish about a teenager who goes to Mexico.
- Read a short novel in Spanish about a teenager who goes to Chile.

8165 SPANISH 3A (Intermediate)
8166 SPANISH 3B (Intermediate)

Grades: 9, 10, 11, 12 Credit: .5

Honors Option Offered
Prerequisite: A grade of C- or above in Spanish 2B is highly recommended for success in this course.

Students in this course will:

- Continue to expand their knowledge and ability to speak, read, write, and listen in Spanish.
- Talk about present, past, future, and hypothetical activities.
- Create a scrapbook describing their childhood.
- Read a short novel in Spanish about a family that escapes a civil war in Guatemala and comes to the U.S.
- Read a short novel in Spanish about Spain and bull-fighting.
- Watch shows and movies in Spanish
- Continue to investigate Spanish-speaking countries and their cultures.

5167 HONORS SPANISH 4A (Intermediate)
5168 HONORS SPANISH 4B (Intermediate)

Grades: 10, 11, 12 Credit: .5

Prerequisite: Spanish 3B with a C- or above is highly recommended for success in this course.

Students in this course will:

- Discuss, read, listen and write about their interests and daily activities, current and historical events and people of Spanish-speaking world.
- Become increasingly proficient at communicating and interpreting language in various time frames.
- Read and discuss three short novels. Watch movies and shows in Spanish.
- Learn about the cultures practices of Spanish-speaking countries, especially Mexico and the U.S, Cuba, and El Salvador.

5169 HONORS SPANISH 5A (ADVANCED)
5170 HONORS SPANISH 5B (ADVANCED)

(Course taught entirely in Spanish)

Grades: 11, 12 Credit: .5

Prerequisite: Spanish 4B with a B- or above is highly recommended for success in this course.

Students in this course will:

- Discuss, read, listen, and write about their interests and daily activities, childhood, future, hypothetical situations, and current and historical events and people of the Spanish-speaking world.
- Become increasingly proficient at communicating and interpreting language in various time frames.
- Read and discuss short novels and news articles from Spanish-speaking countries.
- Watching shows and movies in Spanish.
- Learn about the cultures of Spanish-speaking countries, especially Costa Rica, Spain, and Argentina

WORLD LANGUAGE

8181 FRENCH 1A (Beginning)
8182 FRENCH 1B (Beginning)
Grades: 9, 10, 11, 12 Credit: .5
Prerequisite: An average English grade of C- or above is highly recommended for success in this course.
Students in this course will:
- Begin to learn basic vocabulary and sentence structure needed to communicate in everyday situations.
- Listen, speak, write and read in French.
- Become acquainted with French-speaking areas of the world as well as the geography of France.
- Become familiar with school, family life, and daily life.
- Become familiar with French-speaking countries and their customs.
- Learn and understand your way through dining, shopping, and leisure time in France.
- If time permits, discover the early history of France.

8183 FRENCH 2A (Beginning)
8184 FRENCH 2B (Beginning)
Grades: 9, 10, 11, 12 Credit: .5
Honors Option Offered
Prerequisite: French 1B with a C- or above is highly recommended for success in this course.
Students in this course will:
- Continue to use and improve skills learned in French.
- Students will be able to read, speak, listen & write in French
- Communicate about the past.
- Continue to expand vocabulary, especially in the areas of sports and travel.
- Become familiar with and describe your own homes.
- Discover the early history of France from the Celts through the fall of the Roman Empire.
- Explore French towns and regions of France.
- Explore the history of France from the rise of the monarchy through the Renaissance.

8185 FRENCH 3A (Intermediate)
8186 FRENCH 3B (Intermediate)
Grades: 9, 10, 11, 12 Credit: .5
Honors Option Offered
Prerequisite: French 2B with a C- or above is highly recommended for success in this course.
Students in this course will:
- Build on their two years of French, reusing old and combining with new material.
- Students will be able to read, speak, listen & write in French
- Explore life of a different era.
- Be able to talk about their daily personal routines and holidays.
- Learn and understand the different types of past and future tenses.
- Tie together French history from King Louis XV and XVI to the French Revolution
- Use a new verb tense, the subjunctive, to express want, need and fear.
- Read a French novel.
- Eat, a`la francaise.

5187 HONORS FRENCH 4A (Intermediate)
5188 HONORS FRENCH 4B (Intermediate)
Grades: 10, 11, 12 Credit: .5
Prerequisite: French 3B with a C- or above is highly recommended for success in this course.
Students in this course will:
- Review, refine and reacquaint yourselves with the grammar and structures learned over the previous years.
- Become conversational around a book.
- Expand their knowledge base of topics in the language.
- Learn to be more comfortable expressing themselves more fully as they expand their areas of subject matters through continued practice.
- Understand various cultural topics from other points of view that differ from their own.
- Read and discuss a French play or extended literature. Personal copies are available.
- Use a variety of compound verb tenses when speaking and writing.
- Complete a project of your choice.

5189 HONORS FRENCH 5A (Advanced)
Grades: 11, 12 Credit: .5
Prerequisite: French 4B with a C- or above is highly recommended for success in this course.
Students in French 5 are taught entirely in French. The expectation is for students to use only French when communicating with the teacher and other French students.

Students in this course will:
- Refine speaking, listening, reading and writing skills with authentic French resources.
- Discuss various current topics of social, cultural, special interest based on class ideas.
- Participate in cultural activities that use their language skills.
- Continue their understanding of French language and the Francophone world that uses it

5190 HONORS FRENCH 5B (Advanced)
Grades:11, 12 Credit: .5
Prerequisite: French 5A with a C- or above is highly recommended for success in this course.
Students in French 5 are taught entirely in French. The expectation is for students to use only French when communicating with the teacher and other French students.
Students in this course will:
- Refine speaking, listening, reading and writing skills with authentic French resources.
- Discuss various current topics of social, cultural, special interest based on class ideas.
- Participate in cultural activities that use their language skills.
- Continue their understanding of French language and the Francophone world that uses it.

SLP & SATELLITE COURSES

SATELLITE PROGRAMS

Satellite programs are not located at Northeast Metro 916 Career and Technical Center. These programs are offered at area high schools with unique class times. Students must provide their own transportation to sites.

COURSE TITLE	CHS COURSE NUMBERS
Woodbury High School	
Air Force Junior ROTC	9302-9303
Mounds View High School	
American Sign Language 1	9306-9307
American Sign Language 2	9308-9309

♦ SPRING LAKE PARK ♦

Students may take courses at Spring Lake Park High School. When space is available students are responsible for their own transportation to Spring Lake Park High School. The following courses are offered:

Remember: All SLP programs must be taken both semesters.

Please see the Spring Lake Parks Schools course registration guide for full descriptions at: www.Springlakeparkschools.org/registration

♦ Space may be limited ♦

COURSE TITLE	CHS COURSE NUMBERS
Year 1:	
Emergency Medical Responder and EMT Program (full year)	9610-9611
Nursing Assistant - Registered (full year)	9612-9613
Year 2:	
Two courses below equal a full year.	
Enhanced EMT 1	9614
Fire Rescue/Fire Fighter 1	9622
Prerequisite: Emergency Medical Responder	
Teacher Education 1	9630
Teacher Education 2	9631
Construction Trades 1	9620
Construction Trades 2	9621

Construction Trades

Grades: 11, 12 (must be 16 years old)
Credit: 6 Elective Credits - 2 hour course for each trimester

Type: Full Year; Required- register for both course numbers 9620 / 9621,
Elective

Students will construct a 3-bedroom house or stand-alone rental cabins. Students will learn about construction materials, tools and equipment, read blueprints and analyze, estimate, and plan residential buildings. Other projects may include students' personal projects which they have the option to design and possibly build. Collaboration with local construction companies, colleges, and business partners will supplement the learning experience throughout the course. This course is held at Spring Lake Park High School and is a 2-hour block. As part of this course, students will also have the opportunity to attend off-site opportunities focused on different trades.

916 CAREER & TECHNOLOGY CENTER

The Northeast Metro 916 Career and Technical Center is located on Century College's East Campus. Some credits completed by a high school student enrolled at Northeast Metro 916 Career and Technical Center may be applied toward a related college program at Century and other colleges. Students completing a (*certificate program) will gain skills for entry-level jobs in the labor market.

Seniors and students having completed similar elective courses at CHS are given priority when availability is limited.

How to Register
Students interested in attending courses at 916 Career and Tech must register through their counselor at their home school.
For more information, visit www.916careertech.org

AGRICULTURE, FOOD, & NATURAL RESOURCES

9125 & 9126 ANIMAL SCIENCE (1 or 2 year program)

- Provide care for live animals through veterinary examination, health care, first aid, and habitat enrichment.
- Discover the science of animal anatomy, physiology, and genetics through dissections, models, and other hands-on activities.
- Jumpstart a career in veterinary, companion, large animal, or zoological sciences.

R2 College Credit Available, FFA, Career Experiences

9137 & 9138 PLANT SCIENCE & NATURAL RESOURCES

- Get outside and jumpstart a career in MN conservation; gather information about water, soils, forestry, and wildlife.
- Grow your own plants in our greenhouse and design, create, and install sustainable habitats and landscapes
- Make a difference in your community and the world by identifying and solving environmental problems.

R2 College Credit Available, FFA, Scholarships

BUSINESS MANAGEMENT & ADMINISTRATION

9131 & 9132 ENTREPRENEURSHIP, TRAVEL, AND SOCIAL MEDIA MARKETING

- Be the boss, develop an entrepreneurial spirit, and build your own business.
- Tell a story of branding and promotion through video and podcast mediums.
- Design, prototype, and launch advertising sales and public relations campaigns for a wide range of products including travel.

R2 College Credit Available, Career Experiences, Scholarships

ARTS, COMMUNICATIONS, & INFORMATION SYSTEMS

INTERACTIVE TECHNOLOGY CAREERS (1 or 2 year program)

9100 & 9101 1st year—sem 1 & 2
9102 & 9103 2nd year—sem 1 & 2

- Solve real-world technology problems by using high-tech computer repair troubleshooting techniques.
- Experience the power of Python programming to unlock the worlds of cybersecurity, automation software and game development.
- Unleash the power of art and technology to produce eye-catching graphics and animation with Unity, Blender and C# programming.

R3 College Credit Available, Certifications, Scholarships

COSMETOLOGY

9175 & 9176 COSMETOLOGY: GENERAL (1 or 2 year program)

- Express individual creativity by providing a wide range of artistic hair, nail, and skincare services using the latest technology, trends, and name-brand products.
- Network with guest speakers and industry connections.
- Work in a simulated full-service salon and spa while preforming services according to industry standards.

R2 MN Cosmetology Board Hours, College Credit Available, Scholarships

9173 & 9174 COSMETOLOGY: NAIL TECHNOLOGY AND ESTHIOLOGY (SKIN) (1 or 2 year program)

- Grow your ability to care for, repair, and beautify skin with salon-quality products.
- Express your creativity & build your skills in nail design and extension using gel and acrylic systems.
- Jumpstart your career with skills to preform eyelash extensions, tinting, facials, body scrubs, waxing, and makeup.

R3 MN Cosmetology Board Hours, College Credit Available, Scholarships

MEDICAL CAREERS SERIES

(Combine any two of these courses or take alone.)

9157 MEDICAL CAREERS: INTRODUCTION (11th grade & up) Rigor 2

9154 NURSING ASSISTANT (11th grade & up) Rigor 3

9155 PHLEBOTOMY (12th grade only) Rigor 3

College Credit Available, Certifications, Competitions
*For more info visit: **bit.ly/916medcareers**

916 CAREER & TECHNOLOGY CENTER

ENGINEERING, MANUFACTURING & TECHNOLOGY

9221 & 9222 AUTOMOTIVE TECHNOLOGY (1 or 2 year program)

- Maintain, repair, and fine-tune a wide range of vehicles alongside an ASE Master Technician in a full-service automotive center.
- Utilize the same advanced diagnostic and repair equipment as industry professionals to troubleshoot complex systems.
- Optimize vehicle operation and performance using applied critical thinking and problem-solving.

R3 Certifications, College Credit Available, Paid Internships

9204 & 9205 CONSTRUCTION OCCUPATIONS: STUDENT BUILT HOME (1 or 2 year program)

- Experience the satisfaction of building an upscale residential home from the ground up.
- Operate power tools in carpentry, masonry, plumbing, HVAC, and electrical while working alongside professionals.
- Apply critical thinking to manage construction teams and interpret blueprints.

R2 College Credit Available, Certifications, Scholarships

9206 & 9207 CONSTRUCTION OCCUPATIONS: LICENSED TRADES

- Get hands-on, real-world experience in the licensed trades of plumbing, HVAC, electrical, and solar/renewable energy.
- Fast track yourself by attaining the skills and knowledge that lead to success in post-secondary training or direct entry into the workforce.
- Engage in hands-on activities used in residential, commercial, and industrial settings.

R2 Career Experiences, Certifications, College Credit Available

9208 & 9209 DIESEL TRUCKS & ENGINE TECHNOLOGY (1 or 2 year program)

- Diagnose, repair, overhaul, and assemble diesel-powered engines for trucks, trains, and power generation equip.
- Utilize the same advanced equipment as industry professionals in this high-demand, high-paying field.
- Network with local employers and training programs.

R2 College Credit Available, Certifications, Scholarships

9202 & 9203 AUTOMOTIVE & AUTO BODY CAREERS (1 or 2 year program/ 10th grade & up)

- Jumpstart your future as an auto service, tire, lube, small engines, and auto body (wraps, paintless dent repair, ceramic coating, etc) technician.
- Experience a real-life automotive shop environment utilizing the same tools and equipment as professionals.
- Explore MIG, TIG, and virtual welding for use with auto body and repair.

R2 Professional Skills, Scholarships, Professional Networking

HUMAN SERVICES

9181 & 9182 CRIMINAL JUSTICE & LAW ENFORCEMENT

- Make a difference by being entrusted to improve community relationships and protect citizens.
- Engage in police ride-a-longs, auto extrications, and community involvement.
- Explore how state and federal laws work to keep people safe and analyze the causes and effects of criminal behavior

R3 Field Experiences, College Credit Available, Scholarships

HEALTH SCIENCES

9150 & 9151 DENTAL CAREERS (12th grade only)

- Develop a passion for educating adults and children on importance of oral health, hygiene, and diet.
- Preform a wide range of dental services including chairside assistance, instrument transfer, and oral impressions.
- Explore careers in this high-demand healthcare field such as orthodontics, oral surgery, and endodontics.

R3 College Credit Available, Certifications, Competitions

9152 & 9153 EMERGENCY MEDICAL TECHNICIAN

- Experience the thrill of saving lives in real-world emergency situations where your actions make a difference.
- Preform detailed medical and trauma patient assessments using advanced emergency equipment.
- Engage in ambulance ride-a-longs, 911 call center job shadowing, and auto extrications.

R3 College Credit Available, Competitions, Scholarships