

Whitefish Bay High School

Academic/Career Planning and Course Guide

2024 - 2025



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Welcome to Whitefish Bay High School - home of the Blue Dukes!

Grounded in the District Focus Plan, our mission at Whitefish Bay High School is to ensure that each student is engaged in an appropriately rigorous academic experience while also fostering a caring, inclusive learning environment that allows them to grow as young adults while they chase their interests and passions. Student voice and choice are critical elements of our work, allowing each learner to align their coursework to an Academic and Career Plan that reflects their individual goals. The Career Planning and Course Guide that follows is designed as a resource for parents/guardians and students as they plan and manage a high school program unique to each learner.

The beginning sections of this guide provide important information related to graduation requirements, pupil services and college admissions. Familiarizing yourself with this section will provide a foundation for building a program. You will then find an explanation of the sixteen career clusters, accompanied by a list of academic and extracurricular options that support increased exposure to learning in each career pathway. Finally, you will see our academic handbook which provides even greater detail into the topics presented within the various courses at Whitefish Bay High School. Use these resources, in tandem with the personal goals outlined through your ACP, to inform course selection. I encourage you to revisit this resource throughout your high school career, as certain sections will become more relevant as you near graduation.

Ultimately, it our goal that the end result of four years at Whitefish Bay High School is marked by considerable academic and personal growth, leaving every door open to our students for their post-secondary and personal pursuits. Students will not only leave college and career eligible, but college and career ready, armed with both the knowledge and skills to thrive in a changing, global society.

Go Dukes!

Amy Levek
Principal
Whitefish Bay High School



FOCUS PLAN

OUR VISION

The School District of Whitefish Bay, in partnership with families and community, is student-centered with a tradition of educational excellence. We will build upon this tradition by:

- Empowering students with the knowledge, skills, and character necessary to thrive in a changing, global society.
- Respecting the diversity of our students and engaging them as individual learners in an innovative learning community.
- Addressing the needs of the whole child in a caring, inclusive environment.

OUR GOALS & KEY STRATEGIES

Academic Achievement & Engaging 21st Century Learning

Every student will meet or exceed comprehensive learning standards to promote future success within our global society.

1. Develop exemplary, standards-based curriculum and assessment.
2. Develop and implement data-driven, differentiated instruction across all grade levels and subject areas.
3. Develop and implement timely, comprehensive support systems to ensure success for every student.
4. Ensure access to reliable, secure and sufficiently robust technology infrastructure that facilitates transformational educational practice.

Supportive Environment & Whole Child Development

Every student will experience a caring, inclusive learning environment that supports the development of the whole child with balanced attention to physical, social, emotional, and intellectual well-being.

1. Conduct a strengths and needs analysis, including the development of a student feedback process to inform the continuous improvement of a caring, inclusive and culturally responsive environment.
2. Provide professional development for all staff members about nurturing the whole child.

INTRODUCTION

The Whitefish Bay High School Career Planning and Course Guide describes the policies and guidelines which aid students, parents, and counselors in creating academic and career plans to fulfill graduation requirements and prepare students for life after Whitefish Bay High School.

PUBLIC NOTIFICATION OF NONDISCRIMINATION POLICY

It is the policy of the School District of Whitefish Bay that no person shall, on the basis of sex, race, religion, color, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, medical condition or disease, or physical, mental, emotional, or learning disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program, including Career and Technical Education courses, activity, or employment. This policy also prohibits discrimination as defined by Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1972, and Title II of the Americans with Disabilities Act.

The district encourages informal resolution of complaints under this policy. Absent such resolution, any complaint regarding the interpretation or application of the district's nondiscrimination policy shall be processed in accordance with the following grievance procedures:

1. Any student, parent/guardian, resident, or employee of the School District complaining of discrimination on the basis of sex, race, color, national origin, ancestry, creed, religion, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional, or learning disability or handicap in school programs or activities shall report the complaint, in writing, to the Director of Special Education & Pupil Services. The contact information for the Director of Special Education & Pupil Services is Tim Lemke, School District of Whitefish Bay, 1200 E. Fairmount Ave, Whitefish Bay, WI 53217, 414-963-3871, stacy.gahan@wfbschools.com.
 - a. Discrimination complaints relating to the identification, evaluation, educational placement or the provision of a free appropriate public education of a child with exceptional educational needs shall be processed in accordance with established special education appeal procedures. (Chapter 115, Subchapter V, Wis. Stats.)
 - b. Discrimination complaints relating to programs specifically governed by federal law or regulation shall be referred directly to the State Superintendent.
2. The Director of Special Education & Pupil Services will provide a written acknowledgment within twenty (20) days of the receipt of the written complaint. The Director of Special Education & Pupil Services will investigate with the building principal, or other appropriate persons, the facts comprising the alleged discrimination and prepare a written report of the facts. Within fifty (50) days after receiving the complaint, the Director of Special Education & Pupil Services shall decide the merits of the case, determine the action to be taken, if any, and report in writing the findings and the resolution of the case to the grievant.
3. If the grievant is dissatisfied with the decision of the Director of Special Education & Pupil Services, he/she may, within five (5) business days of such decision, appeal the decision in writing to the School Board. The School Board shall hear the appeal at its next regular business meeting, or a special meeting may be called for the purpose of hearing the appeal. The school board shall make its decision in writing within ninety (90) days after the School District's receipt of the complaint, unless the parties agree to an extension of time. Copies of the written decision shall be mailed or delivered to the grievant and the Director of Special Education & Pupil Services.
4. If the grievant is dissatisfied with the School Board's decision, he/she may within thirty (30) days appeal the decision in writing to the State Superintendent.
5. Complainants are reminded that appeals may also be made to the Regional Director of the Office of Civil Rights for federal discrimination law violations.

Any questions concerning this policy should be directed to the Director of Special Education and Pupil Services, School District of Whitefish Bay, 1200 E. Fairmount Ave., Whitefish Bay, WI 53217.

EDUCATIONAL PLANNING

Educational program planning is a joint task shared by students, parents, and school personnel. The high school counselors work closely with students and parents to plan each year's schedule of courses as well as a multi-year organization of prospective courses. Planning takes place through student/parent/counselor and student/counselor conferences. Parents should feel free to contact their student's counselor regarding questions relative to course content, scheduling, and graduation requirements. Counselors may be reached via e-mail or by calling 414-963-3990.

GRADUATION REQUIREMENTS

CRITERION 1: Base Requirements

**All students must also pass the civics test as required per the State of Wisconsin.

**All students must pass the swim test or enroll in PE-9 Swim.

A. Credit Requirement

All students wishing to obtain a diploma from Whitefish Bay High School are required to earn forty semester credits. One credit equals one semester. Credits must be completed as follows:

English - 8 credits	Health/Physical Education - 4 credits
Social Studies - 6 credits	Computer Science - 1 credit
Mathematics - 6 credits	Cultural Arts - 2 credits
Science - 6 credits	Electives - 7 credits

COURSE REQUIREMENTS

Subject	Grade	Course
English	9	English 1 and English 2
	10	English 3 and English 4
	11	Advanced Composition and one semester literature course
	12	Two semester-long literature courses
Social Studies	9	Global Studies (year-long)
	10	Economics (one semester) <i>meets the financial literacy requirement for the State of Wisconsin</i>
	11	United States History (year-long)
	12	American Government (one semester)
Physical Education	9	Physical Education 9 or PE Swim (swim proficiency is a required standard)
	10	Health (one semester)
	10-12	Physical Education course (two semesters) must be taken in 2 different years
Mathematics	9-12	Six credits
Science	9-12	Biology, Chemistry and Physics (Principles of Engineering counts as Physics)
Computer Science	10-12	One credit (Computer Concepts or Computer Science)
Cultural Arts	9-12	Two credits in one of the following areas: Art, Drama, Music, Woodworking 1 & 2, or World Languages

B. Enrollment Requirement

Students wishing to obtain a diploma from Whitefish Bay High School also must have been enrolled in a class or participated in an activity approved by the administration during each class period of each day during high school. *See Board Policy 412.1 for further information on full time enrollment.*

CRITERION 2: Academic Performance

Students may demonstrate acceptable academic performance by obtaining a cumulative grade point average of C- (1.667) or higher at the conclusion of their high school career. Students who meet Criterion 1 and Criterion 2 will earn a diploma. Students who meet Criterion 1, but not Criterion 2, must meet Criterion 3 to earn a diploma.

CRITERION 3: Graduation Plan Criterion

Collaboration and communication among the school, student and parent/guardian of a student in danger of not graduating are important elements of Criterion 3. Students who have not met Criterion 2 may be eligible to graduate by meeting basic criteria for academic performance, attendance, citizenship, and effort as defined by a Graduation Plan developed in conjunction with a high school administrator, school counselor, the student and the student's parents and/or guardians. *Teacher Recommendation Team – Policy 345.6.*

A student whose records indicate that he or she may be in jeopardy of not graduating shall be sent written notification to that effect.

A Teacher Recommendation Team shall convene no later than two weeks after first semester senior grades have been posted for failure to meet Criterion 2. At this time, an agreement will be drafted that outlines basic expectations for academic performance, attendance, citizenship and effort. The plan will be signed by the student, parent/guardian, and members of the meeting. Prior to graduation, the team will convene once again to determine if the terms of the student's plan have been sufficiently met. If so, Criterion 3 has been met.

Note: (1) Students enrolled in a Board approved alternative education program shall demonstrate completion of Criterion 3 by meeting the graduation-related requirements set forth by that program. (2) Students who have an Individualized Education Plan who need to meet Criterion 3 shall do so by meeting the graduation-related goals set forth therein, and may have curriculum modified to accommodate disabilities.

Students who meet Criterion 1 and 3 will earn a diploma. Students who meet Criterion 1, but not Criterion 3, may appeal to the building principal for a final determination of graduation.

Alternative plans for meeting graduation requirements may be established for non-graduating seniors. Students who do not meet graduation criteria with their graduating class may be eligible to complete credits on a limited basis in accordance with the Board graduation policy to receive a Whitefish Bay High School diploma. Outstanding credits must be completed by age 21.

Commencement:

In order to participate in the commencement ceremony, students must complete graduation requirements prior to the date of the ceremony.

WFBHS Graduation Requirements (40 Credits min.)

See Policy 345.6

Course Planning Sheet

FRESHMAN YEAR

SOPHOMORE YEAR

English 1	English 2	English 3	English 4
Global Studies	Global Studies	Economics	Health 10
Math	Math	Math	Math
Biology	Biology	Chemistry/Chemistry in the Community	Chemistry/Chemistry in the Community
PE 9 or PE 9 Swim			

JUNIOR YEAR

SENIOR YEAR

Advanced Composition	Literature choice	Literature choice	Literature choice
U.S. History	U.S. History	American Government	
Math	Math		
Science	Science		

Advanced Placement options available in many departments. Please see the course descriptions for further details.

Other Requirements:

- 1 credit Computers (Computer Concepts or Computer Science) **for Classes 2027-2025**
- 1 credit Personal Finance **for Class of 2028 and beyond**
- 2 credits of Cultural Arts (art, drama/theatre, music, woodworking, or World Language)
- 7 additional credits (your choice)

*Note: **Physics is required for graduation.** This can be taken junior or senior year. Physics, Physics Concepts and Applications, or Principles of Engineering will count.

*Note: **Two additional PE courses must be taken in grades 10-12.** They may not be taken in the same year.

AWARDING CREDIT & GRADES ON A TRANSCRIPT

When transferring from another school, high school credits and grade point average earned at another U.S. public or private/parochial high school will be accepted and treated in a manner similar to credits and grade point average earned at Whitefish Bay High School. All grades will be put onto the transcript with the appropriate course name, credit value and weight (for comparable coursework at WFBHS) associated with each grade.

*Note: High school courses completed in middle school will be noted on a high school transcript but will not receive grades or credits toward graduation. If a student transfers from an international high school, full credit will be awarded and Ps will be assigned as grades.

If a student takes an **AP/Honors class from another high school** that we do not offer, no weight is given from that class on our transcript. When sending to colleges, a transcript from the previous school may need to be sent. It is the student's responsibility to check college requirements and contact the previous school if needed.

Courses taken by students in home-based private educational programs (i.e. **home-schooled**) will be recorded on the student's transcript. Credit will only be recorded that is in compliance with mandates of curriculum requirements for home-based private educational programs under state law or are deemed by the High School Principal to meet the criteria of an elective in the current WFBHS Career Planning and Course Guide. Home-based instruction will be recorded as credit only and given Ps to indicate the earned grade. Home-based grades will not be recorded on the admitting high school transcript. Grades and grade point averages from home-based private educational programs shall not be used in class standing.

All grades from an alternative educational setting will receive a grade of P (pass) and credit will be given toward graduation.

Course Enrollment for Credit Recovery/Enrichment Purposes (including summer school) - Students who fail a class at WFBHS must retake the class here before alternatives will be offered. Extreme cases of credit deficiency are the exception to this standard. Students wishing to complete courses outside of WFBHS with the intention of transferring credit to WFBHS will need to consult with their counselor. If a student failed a class twice at WFBHS and earns a final mark of at least a C- or 70% in an **approved** course alternative to the standard WFBHS curriculum, the student will be awarded a P (pass) and receive credit toward graduation. There is no grade replacement option unless the student retakes the same course at WFBHS. If a student enrolls in a course for enrichment purposes, the student will need to obtain approval prior to enrolling in the course. Enrichment credit does not replace WFBHS coursework, as all graduation requirements must be taken here. Students are strongly encouraged to save transcripts or reports to submit with their college application materials.

Summer education programs for high school students are offered locally, at neighboring schools, and through Milwaukee Public Schools. Whitefish Bay High School does offer a computerized credit recovery program for a limited number of students based on credit deficiency. Nationwide, various college-based summer education programs are available to high school students. Information and registration materials pertaining to summer school options are available through the Counseling Office.

Failing Grade Replacement – If a student repeats a failed course at WFBHS and earns a passing grade in the same course, the original failing grade is replaced with an NG (no grade). If only one semester of a year-long course is failed and the entire course is repeated, the original passing semester grade is also replaced with an NG provided the corresponding repeat grade is passing.

Passing Grade Replacement – If a student earns a D+ or less in a course, the same course may be repeated. The original grade is replaced with an NG (no grade).

Concordia Language Villages Credit Policy - Students who attend the four (4) week Concordia language experience are awarded 1.0 credit for 180 hours of instructions as verified by the Concordia Language Village transcript. The grade for this course will be transferred as pass/fail. *Note: Students who wish to skip a level of language because they have participated in the four-week session must receive pre-approval from the World Language Department and take the final exam of the level they wish to skip and be able to demonstrate proficiency.

Foreign Exchange Program - The Board of Education recognizes the educational value of student foreign exchange programs. Parents/guardians, students, and school counselor must meet prior to a district student's participation in a foreign exchange program to review plans and verify graduation requirements. All courses taken by a district student as part of a foreign exchange program will be noted on the transcript. Credits received for foreign exchange classes are shown without a grade, using pass/fail, and not included in the student's cumulative grade point average. Thus, the student returns from an exchange program with the same GPA as when they left. The credits, however, are counted towards meeting the 40 minimum graduation requirement.

OTHER EDUCATIONAL OPTIONS

Early College Credit Program (ECCP)

The Early College Credit Program provides an opportunity for high school students to enroll in and complete courses through a UW System institution, or a private, non-profit institution of higher education, to take one or more non-sectarian courses for which the student may earn high school credit, post-secondary credit or both. The deadline for submitting ECCP paperwork is October 1st for spring semester and March 1st for fall semester.

<https://dpi.wi.gov/dual-enrollment/eccp>

Start College Now

Technical colleges are not part of the ECCP; however, a high school pupil may enroll in a class offered by a technical college under the parameters of the technical college program. This program is called Start College Now.

[https://mywtcs.wtcsystem.edu/student-success/career-prep/new-start-college-now-\(formerly-youth-options\)](https://mywtcs.wtcsystem.edu/student-success/career-prep/new-start-college-now-(formerly-youth-options)).

Part Time Open Enrollment

Students may open-enroll part time to attend a public school in a non-resident school district for the purposes of taking up to two courses at a time. Application information for the ECCP, technical college enrollment or part-time open-enrollment is available in the Counseling Office or can be found on the Counseling website. Students should consult with their counselor and/or parent/guardian and then receive state/district approval as required.

Dual Enrollment

Whitefish Bay High School will accept applications for Dual Enrollment Programs except in Practical Nursing and Pre-Nursing/General Studies. Many of the coursework offered in these programs have substantial overlap to existing courses at the high school.

All courses that fall under these educational option designations are graded as a "P" earning one credit on the student's transcript.

**APPLICATION DEADLINE: Submit the completed application to the Counseling Office by March 1st for fall courses and October 1st for spring courses.*

**18 minimum credits paid by Whitefish Bay High School.*

Transcripted Credit (TC)

Upon completion of the WFB HS course, students will receive credit for a college equivalent course that will be placed on a respective college transcript for that student. Upon completion of the dual credit courses, students will need to contact the issuing college to obtain a copy of the post-secondary transcript.

Work-Study Experience - Juniors and seniors may participate in a work experience program for high school elective credit. Students interested in this program should consult with their school counselor. The counselor will assist in the guidelines and establishment of the work experience.

ACP Experience: Taken from the Department of Public Instruction, “ACP is intended to equip students and their families with the tools necessary to make more informed choices about post secondary education, training, careers for life after high school.” Students may participate in outside experiences that clearly align to their Academic and Career Plan (ACP) and earn high school elective credit. Examples may include internships, training programs, apprenticeships, etc. Students who seek these opportunities for themselves should consult with their school counselor and gain administrative approval. Documentation must be provided to confirm the time that will be spent away from school.

Independent Study - Students wishing to pursue study beyond established curricular offerings may apply for permission to engage in Independent Study for elective credit. The process involves completion of the Independent Study Plan form, and requires parent, supervising teacher, counselor, department chair, and principal approval. Planning for an Independent Study should take place prior to the start of the semester in which the Independent Study will occur. It is expected that the Independent Study will be completed by the end of the semester. Independent Study courses are graded on a pass/fail basis and have no bearing on a student's grade point average. *Note: This does not count towards an exam exemption.

Teacher Aide position - There are times when teachers in the building need and appreciate assistance from upperclassmen (juniors and seniors) in prepping for lessons, laboratories, and/or helping peers one on one. Some examples of aide positions include working with various departments such as: Art, Science, English, Special Education, and World Language. Aide positions need to be discussed with and approved by the teacher. The student will then work with their counselor to put it in their schedule. Aide positions are graded on a pass/fail basis and awarded one credit per semester. *Note: This does not count towards an exam exemption.

EARLY GRADUATION PROCEDURES

Students who have met the graduation requirements may wish to graduate from high school before the end of the traditional eight semesters of attendance. After discussing alternative plans with his or her counselor, a student planning to graduate early must submit a written request for early graduation, including parent signature, to the high school principal prior to the start of the semester the student wishes to graduate. Given principal approval, the student and counselor may then plan accordingly. NOTE: Students who graduate early are not eligible to participate in extra-curricular activities beyond their early graduation date.

Students who plan to graduate at the end of six semesters: To be considered a senior, a student must be in the fourth year of attendance; therefore, early graduates will be ranked with other members of the junior class according to their cumulative semester grade point average. They will be eligible for junior awards and honors. However, they are not eligible for senior scholarships or the Academic Excellence scholarship.

Students who plan to graduate at the end of seven semesters: Since senior honors are based on seven semesters of high school performance, these students are eligible for senior honors and awards. Those students who wish to attend college during the second semester should be aware that college calendars do not always correspond to the high school's calendar. Special arrangements may have to be made to complete the semester's work before the end of the high school semester. Seventh semester graduates are urged to take part in commencement exercises.

COURSE SCHEDULE CHANGE PROCEDURE

Each spring, parents/guardians are asked to approve student course selections for their child. We ask that they do so only after consulting with their son/daughter about appropriate academic choices to help maintain proper balance throughout high school. After the course selection window closes and sections are established in March, changes will not be considered until initial student schedules have been generated.

Once established, students' schedules may be changed with staff approval only. Student, parent, counselor, teacher and administrator input may be taken into consideration in responding to schedule change requests. Schedules may change due to class size and balancing purposes.

- i. Students have five days from the start of each semester to add a course.
- ii. The deadline for students to drop a course, without penalty, for a study hall, is the end of September and /or February (Students may only have one study hall each semester).
- iii. Dropping a class beyond September 30th or February 28th will result in an F for that class unless initiated by a WFB staff member.
- iv. Changing course levels (ex. Chemistry to ChemComm) is made in consultation with student, parent, counselor, teacher and administration input.

ADVANCED PLACEMENT COURSES

The Advanced Placement (AP) Program is a cooperative educational endeavor between secondary schools and colleges and universities. It allows high school students to undertake college-level academic learning in AP courses and gives them the opportunity to show mastery of advanced material by taking AP Exams. Passing grades earned in Advanced Placement (AP) courses receive an additional grade point. For instance, a student receiving an A in an AP course receives five rather than four grade points (see below for grade point information).

WFBHS offers Advanced Placement courses in the following:

Art History
Biology
Calculus AB/BC
Calculus III/Physics C - Electricity & Magnetism
Chemistry
Computer Science Principles
Computer Science A - Java
Economics (Microeconomics/Macroeconomics)
English Language and Composition
English Literature and Composition
Environmental Science
French
German
Music Theory
Physics C: Mechanics
Precalculus
Psychology
Spanish
Statistics
Studio Art
U.S. Government & Politics
U.S. History

AP courses, sponsored by The College Board, combine challenging college-level curricula and potential college dollar savings. They are becoming more popular throughout the state and the nation, as more and more high school students receive college credit or advanced standing upon successful completion of national Advanced Placement exams in May. A student may sign up for an AP exam without taking a AP course, although it is clear that students who have prepared for the exam in an Advanced Placement class achieve at a much higher level.

GRADING

Grades are issued every quarter, but only semester grades appear on a student's transcript. If a student has not finished his/her required work by the time that grades are due but, in the opinion of the teacher, deserves more time in which to complete the work, a letter grade of I (for incomplete) will be issued.

At the start of each semester, teachers will clearly communicate course grading policies to students. Students and parents should check with teachers if they are unsure of the basis for grading, such as the grade value of quizzes, tests, projects, papers, discussion, or homework. In order to receive credit for a course, a student must not only earn a passing grade, but must also complete all summative assessments.

Students withdrawing from Whitefish Bay High School before the end of a semester will receive no credit for course work carried during the incomplete semester. When a student withdraws during the first or third quarter, no marks for the semester courses will be recorded on the student transcript. When a student withdraws during the second or fourth quarter, a notation of withdraw/passing or withdraw/failing for each course will be made on the student transcript. Current grades earned, however, will be communicated to the school in which the student is next to be enrolled.

GRADE POINT INFORMATION

Grade points are assigned to grades earned as follows:

A 4.000	B+ 3.333	B- 2.667	C 2.000	D+ 1.333	D- 0.667
A- 3.667	B 3.000	C+ 2.333	C- 1.667	D 1.000	F 0.000

Passing grades earned in Advanced Placement (AP) courses receive an additional grade point. For instance, a student receiving a B in an AP course receives four rather than three grade points. This weighted grading is limited to Whitefish Bay High School AP courses, AP courses completed at a prior high school that are offered at Whitefish Bay High School, and AP courses taken at another high school as a result of students not being able to take the corresponding courses at Whitefish Bay High School.

Honor Roll: 3.0-3.666/High Honor Roll: 3.667 and higher.

FINAL EXAMINATIONS

Students are required to complete final exams for each of their classes during the last week of each semester. Teachers will inform students of the time and place exams are to be held. Examination periods run a minimum of 90 minutes, but teachers may allow students to work beyond this time, up to 2 hours and 15 minutes. Students confronted with circumstances that conflict with the established exam schedule should consult with the principal to determine alternative arrangements that may be made.

PROGRESS REPORTS

Whitefish Bay High School is committed to keeping students and parents well abreast of students' academic progress. Accordingly, grade book related information, updated at least every three weeks, is available to all students and parents online via Family Access.

ACADEMIC SUPPORT

The high school offers several opportunities for academic support. These services include the **Individualized Student Help Period (ISHP)** that runs daily from 11:55am – 12:24pm. During this time, teachers are available to provide extra help to students. Students may also arrange to get extra help from their teachers during mutually agreeable times such as before or after school. For the first semester of Freshman year, all students are required to attend ISHP 2x/semester.

Students may also receive extra help geared specifically for written composition through the Writing Lab, located in Room 265, where an English teacher is available nearly every period of the day to assist students with their papers. Students may schedule appointments through the digital writing lab during their study hall or English class period.

The **Library Media Center** is also available each period of the day, as well as during ISHP/Lunch and before and after school. With the assistance of our Library Media Center Specialist, students may use this facility to study, access information both in print and electronic format, and use available computer resources.

The **Learning Center (LC)** is an important part of our multi-level systems of support (MTSS) framework. Led by certified teachers, the LC offers a general academic support system for approximately 12 to 16 students per hour. The LC provides a structured study hall setting for homework help, study strategies, organizational assistance, and small group reteaching. Additional services include math and reading intervention and alternative credit earning options to students who qualify. LC placement is contingent on both counselor and LC teacher approval based on grades, test scores, and/or individual student needs and circumstances. Any student may also access the LC on a walk-in basis and during ISHP.

Advisory/Homeroom takes place on a monthly basis. The purpose of Advisory/Homeroom is to address important topics such as school safety, personal/social well-being, course planning, safety, and school spirit to name a few.

COUNSELING SERVICES

Counseling at Whitefish Bay High School is a comprehensive, developmental program that includes orientation, academic advising, testing, career/interest exploration, assessment, program planning, social/emotional counseling, and post-high school planning. The counseling process begins while students are in eighth grade and continues through their senior year, with each year involving a specific counseling emphasis. Each student is assigned to a counselor who is available for consultation throughout the school year. Counselors collaborate with parents, teachers, administrators and support personnel on student achievement and emotional well-being. When necessary or helpful, the counselors arrange parent conferences, staffings with teachers and/or administrators, referrals, or other services to assist students in need.

Scheduled and unscheduled individual student conferences with the counselors provide opportunities for students to recognize and work through personal and/or educational questions and concerns. Student group conferences are scheduled throughout the school year to provide assistance with future educational and vocational planning and to provide assistance with decision-making skills. Group conferences may also be arranged to assist students in dealing with personal issues and behavior affecting school performance.

The Counseling Department administers a broad and comprehensive standardized testing program designed to assist students to better understand their own strengths and weaknesses and to assist the school in working with students. Counselors also use a program called Naviance throughout a student's entire career at WFBHS. See below for details.

The Counseling Department hosts several evening meetings throughout the school year. Topics include the eighth grade transition, sophomore year planning, junior year planning and college admissions, and financial aid.

ADDITIONAL PUPIL SERVICES

The services of a School Psychologist are available to all students. The most common reasons for referral are social/emotional issues, learning difficulties and/or related problems. The school psychologist is the contact person for any evaluation referrals and/or questions.

NAVIANCE

Naviance is a powerful, comprehensive online program that is used to help students plan and make decisions about college and careers. There are a lot of features that can help guide students through their career and/or post-secondary research. It is a great tool for everything--from personality and career exploration to college searches. Additionally, students can begin to organize for their college applications.

With Naviance you can:

- Personalize the process:
 - Keep personal notes on colleges you are considering
 - Keep track of application deadlines
 - Track your transcript requests

- Research colleges:
 - Use the college search feature to create a list of colleges that match your criteria
 - View scattergrams comparing your grade point average and standardized test scores to past Whitefish Bay applicants to particular schools
 - Find detailed college data such as size, admissions criteria, deadlines, costs, majors, and activities
 - See the list of college/university representatives coming to visit WFB High School

- Take a personality inventory
- Complete surveys/questionnaires
- Learn about your personality based on the “Do What You Are” inventory
- Learn about your career interests through the Career Interest Profiler and Cluster Finder surveys
- View a list of careers that match your personality type
- Search for scholarships



COLLEGE ADMISSION CONSIDERATIONS

Given that roughly ninety percent of Whitefish Bay High School graduates plan to go on to 2 and 4 year colleges, it is very important that students and parents consider early on the general requirements for college admission. One cannot state that a particular pattern of preparation will invariably meet admission requirements at any one college, but it can be assumed that a four-year, comprehensive program in the core academic subject areas (see below) will meet most college admission requirements. Students should check with their counselors for admission requirements of specific colleges and universities.

- 4 years of English
- 3 to 4 years of math
- 3 to 4 years of science
- 3 to 4 years of social studies

To keep career options open, and because colleges value a breadth of educational experience, students are encouraged to take advantage of elective course offerings in the areas of Art, Business, Computer Science, Engineering/Design, Music, Theater and World Language. In addition, students are encouraged to become involved in some aspect of the school's extra-curricular program. Many colleges view depth of commitment to these experiences as an important factor in arriving at a decision on college admission.

Factors considered in the admission process are grades earned, the degree of rigor associated with high school courses taken, student essays, community service, and special talents in areas such as art, music, drama or athletics, and sometimes performance on college entrance tests. In many instances, colleges give additional consideration to letters of recommendation and high school reputation.

COLLEGE ENTRANCE TESTS

College entrance tests are given by two testing agencies. The College Board administers the PSAT/NMSQT (Pre-Scholastic Aptitude Test/National Merit Scholarship Qualifying Test), SAT, SAT Subject Tests, and Advanced Placement Exams. The ACT Program administers the PreACT and ACT with Writing. Detailed information concerning these tests is provided to students as part of the college counseling program.

STANDARDIZED TESTS

1. PreACT: First pre-test in the ACT series – taken spring of 9th grade
2. PreACT: Second pre-test in the ACT series – taken spring of 10th grade
3. WI Forward Social Studies Assessment Grade 10 – taken spring of 10th grade
4. ACT with Writing – Final tests in the ACT series Grade 11 – taken late Feb./March of 11th grade (state required and college reportable scores)
5. PSAT/NMSQT (National Merit Scholarship Qualifying Test): Pre-test for the SAT (Grade 11) – optional (taken in the fall)
6. SAT: Grades 11 or 12 – Dates vary: September-June
7. ACT: Grades 11 or 12 – Dates vary: September-June
8. Advanced Placement Exams (AP): Administered in the first 2 weeks of May
9. Civics Exam – Graduation requirement (during American Government senior year)

FINANCIAL AID

Financial aid for higher education, based on financial need, is available to students who qualify. Usually this aid comes to qualified students through government loans and grants and college financial aid funds. Information for financial aid is available through the Counseling Office.

SCHOLARSHIPS

Scholarship opportunities for higher education are available through various sources for qualified students. Scholarships are usually based on exceptional academic achievement or exceptional achievement in specialty areas such as art, athletics, music, and drama. Information about scholarship opportunities is provided to students via the daily announcements, emails sent home, and/or directly to students by counselors via Naviance.

THE WISCONSIN ACADEMIC EXCELLENCE SCHOLARSHIP

Academic Excellence Scholarships (AES) are awarded to Wisconsin high school seniors who have the highest grade point average in each public and private high school throughout the State of Wisconsin.

The number of scholarships each high school is eligible for is based on total student enrollment grades 9-12. In order to receive a scholarship, a student must be enrolled on a full-time basis by September 30th of the academic year following the academic year in which he or she was designated as a scholar, at a participating University of Wisconsin, Wisconsin Technical College, or independent institution in the state. The value of the scholarship is \$2,250 per year, to be applied towards tuition. Half of the scholarship is funded by the state, while the other half is matched by the institution. Eligibility must not exceed 8 semesters.

THE WISCONSIN TECHNICAL EXCELLENCE SCHOLARSHIP

Technical Excellence Scholarships (TES) are to be awarded by the State of Wisconsin to Wisconsin high school seniors who have the highest demonstrated level of proficiency in technical education subjects.

The new TES scholarship program began awarding scholarships in the 2015-2016 college academic year. The scholarships are only for use at a school within the Wisconsin Technical College System (WTCS) located within the state. The value of the scholarship is up to \$2,250 per year, to be applied towards tuition for six semesters.

HONOR 10

Students who earn the top 10 grade point averages among their graduating class after seven semesters will be recognized in the Honor 10. To be eligible for the Honor 10, students must have been enrolled in WFBHS as a full-time student by spring semester of the sophomore year. The designation of valedictorian and salutatorian will be given to the two students with the highest GPAs in their class who meet the criteria for Honor 10.

COLLEGE AND CAREER PLANNING GUIDE

The Whitefish Bay High School counselors have developed a long-range plan to empower students to discover their own personal values and goals. With the integration of *Naviance* into the core curriculum of the college and career program, students have the opportunity to do an abundance of exploration and research.

Eighth grade transition meeting: Counselors meet with incoming freshmen and their parents/guardians in the spring (March/April) to learn about high school and prepare for the transition from middle school to high school. Together, they review the student's completed Naviance incoming freshman survey in order to help guide the discussion. Topics during the meeting include:

- Discuss high school schedule, advisory, ISHP/lunch period, and resources for support.
- Review course selections.
- Learn about the extracurricular activities offered at the high school.
- Review ACP process and Naviance work that will be completed during high school career.

****Eighth Grade Parent Information Night*** offered to parents in January (prior to the spring transition meeting).

Freshman Year: Self Exploration

In late September, counselors continue with transition by checking in with their freshmen in both a large and small group format during their Global Studies class. The lesson begins by reviewing important high school information to the whole group (topics related to the ACP process and course planning are discussed). Then, students break out into small groups with their counselor to further discuss the first few weeks of school and transition. Later in the semester, counselors return to the Biology classes and have freshmen complete the ***Personality*** inventory in Naviance. The focus of the inventory is self-exploration. It is based on the Myers-Briggs Type Personality Assessment.

Other agenda items for completion:

4 year academic course plan

Set one academic goal and one personal goal

Sophomore Year: Career Exploration

Sophomores complete the ***Career Interest Profiler*** which is a career interest survey about interest in types of work activities. Counselors come to the Economics classrooms to conduct the lesson using Naviance and guide students in completing the inventory. The results from the inventory will be used to explore suggested occupations, examine the education, training, and skills required (and where to obtain them) as well as wages typical for these occupations.

Other agenda items for completion:

Update 4 year plan/personal goals

Complete Part 1 of Game Plan Survey

****Sophomore Parent Information Night*** held in late January/early February.

Junior Year: Post-Secondary Exploration

In the fall, juniors and their parents are invited to attend ***Junior Parent Information Night*** where they receive information related to courses, post-secondary options, careers, and a demonstration/review of Naviance. In October, counselors attend history classes to lead a Naviance lesson, where they are instructed to complete the ***Career Cluster Finder*** for their career activity and ***Game Plan*** survey.

Between November and February, juniors and parents/guardians are invited to attend the junior conference with their counselor. In this meeting, counselors review the student's transcript, standardized test scores, college and career goals/plans, prospective college choices, and completed inventories/surveys. Students are strongly encouraged to continue researching post-secondary options and possibilities throughout the school year and over the summer. Counselors also help to introduce the beginning process of drafting a college essay in Advanced Composition classes. Each student is required to write a college essay as a part of the class curriculum. It is one of the final writing pieces towards the end of the semester. Counselors discuss and provide college essay prompts and examples.

Other agenda items for completion:

Update 4 year plan/personal goals

Explore careers and clusters (use information from favorite careers and clusters and Career Interest Profiler)

Complete More About Me survey

College Essay through Advanced Composition class

***Junior Parent Information Night** held in October.

Senior Year: On the Road to Post-Secondary Options

In early September, the counselors hold their annual mandatory **Senior Dishout** meeting. Seniors receive follow up information regarding their Naviance account, how to request letters of recommendation, timeline and process of college applications, sign up for visits with college representatives, standardized testing, and college essays. In fall, a financial aid workshop is offered for seniors and their parents/guardians. In January, seniors work with counselors on mid-year reports as needed. Counselors are available to guide students on each phase of the college application process and their transition to college.

Offering for grades 9-11: Towards the end of May, the Counseling Department hosts a student forum called "**Beyond the Bay: A Student Forum on the College Application Process**". A panel of current Bay seniors is on hand to answer questions from underclassmen and talk about their experiences applying to college. The panelists will be attending a diverse array of schools including small liberal arts colleges to large state universities to technical colleges, military schools and HBCUs. Each student's advice and perspective will hopefully create a fuller picture of the process, dispelling myths as well as providing insight.

Other agenda items for completion throughout senior year:

College applications

Scholarships

Complete Senior Exit survey

***Financial Aid Night** for students and families held in the fall semester to help explain and review the financial aid process.

CERTIFICATE OF GLOBAL COMPETENCY PROGRAM

The Certificate of Global Competency program, authorized through Wisconsin's Department of Public Instruction, is open to graduating high school students who want to learn more about cultures within our global community. Students who received the certificate have demonstrated a strong interest in global citizenship by successfully completing a global education curriculum and engaging in co-curricular activities and experiences that foster the development of global competencies. Whitefish Bay High School students who wish to obtain their Certificate of Global Competency and be recognized as a *Global Scholar* must fulfill the following **four** graduation requirements:

Part 1: Course Work

- Students must complete at least 4 years in a single world language.
- Students must complete at least 8 credits of coursework with a global focus (each semester is one credit). Two of those credits (one year) may be of a second world language.

Science	Environmental Science, AP Environmental Science
World Geography/Cultures	Contemporary Issues, World Cultures
Social Studies	Global Studies, Black History
Literature	British Literature, Modern Thought in Literature, World Literature, Hispanic Literature, AP Literature & Composition
Music, Drama, and Visual Arts	AP Art History, Bel Canto

 Look for this Global icon for the courses approved to meet the Certificate of Global Competency.

Part 2: Cultural Literacy

Each student seeking this certificate shall complete independent reviews/reflection on at least eight (8) works of international/cultural media, including at least four books (fiction and non-fiction). Other international/cultural media may include films, music, and art exhibitions. Students may elect to read books from a recommended reading list or other works (including newly released works) with prior approval at the district level.

The counseling and administration team will serve to determine the criteria for reviews and reflections and how student works will be evaluated.

Part 3: Co-Curricular and Other School-Sponsored Activities

Each student seeking this certificate shall demonstrate interest in global citizenship through active participation and leadership in at least four (4) co-curricular and other school-sponsored or endorsed activities in grades 9-12. These may include participating in:

- International exchange program as an exchange student and/or host.
- Travel abroad program, mission trips.
- Regular, direct engagement with individuals from other countries/cultures (e.g. pen pals, Skype)
- Clubs and activities such as Model UN, AFS Club.
- Lectures on international topics and/or speakers in the community and/or college/university.
- Ask your counselor if you have any other ideas.

Part 4: Community Service

Each student shall complete a global/cross-cultural public service project, involving at least twenty (20) hours of work, connected to a global community (different from his/her own) or to a global issue. This project may include raising awareness about a global issue, fundraising for an international nonprofit service agency/organization, working on an international project with Returned Peace Corps Volunteers, Rotary, or other Service Club, tutoring a child who is an English language learner, or volunteering with a cultural/linguistic group in the community. Each student shall present a project proposal to the Global Scholars Coordinator, create a Google Slideshow of the project, and submit a summary report detailing the successful completion of the project.

Please visit the website for further details and application: <https://bit.ly/3uUJZQK>



Whitefish Bay Career Pathways for Learning

First of all, what are Career Pathways?

Career pathways are a series of connected education, training, and support strategies aimed at helping students achieve their own definition of success. For students, career pathways align education and training with the needs of the local job market, provide a range of post secondary options, result in a high school diploma with at least one industry-recognized credential, and help students enter or advance within an occupation. For schools, career pathways provide a specific academic & career plan (ACP) for some occupations. This allows schools to focus on student and curriculum activities with input and support from regional employers and higher education.

Whitefish Bay High School has developed curricular opportunities for students to learn in an integrated, project-based, hands-on learning environment. Pathways are recommended courses taken in high school that can prepare students for specific career clusters or majors in college.

[Pathways Wisconsin](#)

Patient Care Pathway

Grade	Required Courses for Pathway	Select at least one experience
9th	Biology* PLTW: Biomedical Sciences**	HOSA- Future Health Professionals (co-curricular)
10th	Chemistry* PLTW: Biomedical Sciences** PLTW: Medical Interventions** PLTW: Human Body Systems**	HOSA- Future Health Professionals (co-curricular)
11th	PLTW: Biomedical Sciences** PLTW: Medical Interventions** PLTW: Human Body Systems** AP Biology** AP Chemistry**	HOSA- Future Health Professionals (co-curricular)

12th	PLTW: Biomedical Sciences** PLTW: Medical Interventions** PLTW: Human Body Systems** Psychology or AP Psychology** AP Biology** AP Chemistry**	HOSA- Future Health Professionals (co-curricular) Work study related job experience
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*Required courses

**Recommended courses (PLTW stands for Project Lead the Way)

Business Administration in Finance Pathway

Grade	Recommended Courses for Pathway	Select at least one experience
9th	Introduction to Business	Business Club Investment Club FBLA-Future Business Leaders of America
10th	*Economics Marketing and/or Sports & Entertainment Marketing	Business Club Investment Club FBLA-Future Business Leaders of America
11th	Personal Finance Business Law	Business Club Investment Club FBLA-Future Business Leaders of America
12th	Accounting AP Economics	Business Club Investment Club FBLA-Future Business Leaders of America Work study related job experience

*Required courses

Information Technology Pathway

Grade	Recommended Courses for Pathway	Select at least one experience
9 th	Computer Science 1	FBLA-Future Business Leaders of America
10 th	AP Computer Science Principles	FBLA-Future Business Leaders of America
11 th	AP Computer Science A (JAVA)	FBLA-Future Business Leaders of America
12th	AP Computer Science A (JAVA)	FBLA-Future Business Leaders of America

*1 Credit (Semester) of computers required










COURSES OF STUDY/CAREER PATHWAYS AND CAREER CLUSTERS

Whitefish Bay High School offers advising and course opportunities to develop awareness of skills for future careers. The following pages explain Career Clusters and the pathways one can take within each cluster. They are designed to help students develop a coherent sequence of preparation for college and careers. Utilizing the 16 Career Clusters, students can identify pathways from high school to two- and four-year colleges, graduate school or directly into the workforce. You can find more information about the Career Clusters and their pathways at: <http://www.wicareerpathways.org/>. On the following pages, you will find courses recommended for each cluster. Many courses require prerequisites - please see the course description guide to help determine the proper sequencing. The courses are recommendations only and are not intended to direct students away from areas of interest including art, music, theater/drama, engineering/tech ed, etc. These recommendations are broad in order to match each career cluster, but not all courses are required for each occupation in that cluster. For more information about career choices and relevant courses, see your counselor. ***REQUIRED COURSES ARE NOT LISTED ON THE CAREER PATHWAYS PAGES BECAUSE ALL STUDENTS WILL NEED TO TAKE THEM TO FULFILL GRADUATION REQUIREMENTS.** (Source: Wisconsin Career Pathways. The Sixteen Career Clusters. www.wicareerpathways.org)



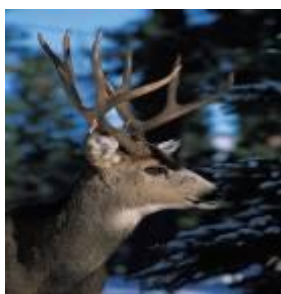
The Sixteen Career Clusters

	<p>The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.</p>
	<p>Careers in designing, planning, managing, building and maintaining the built environment.</p>
	<p>Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</p>
	<p>Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.</p>
	<p>Planning, managing and providing education and training services, and related learning support services.</p>
	<p>Planning, services for financial and investment planning, banking, insurance, and business financial management.</p>
	<p>Executing governmental functions to include Governance, National Security, Foreign Service, Planning, Revenue and Taxation, Regulation, and Management and Administration at the local, state, and federal levels.</p>

 <p>Health Science</p>	<p>Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p>
 <p>Hospitality & Tourism</p>	<p>Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.</p>
 <p>Human Services</p>	<p>Preparing individuals for employment in career pathways that relate to families and human needs.</p>
 <p>Information Technology</p>	<p>Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.</p>
 <p>Law, Public Safety, Corrections & Security</p>	<p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p>
 <p>Manufacturing</p>	<p>Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.</p>
 <p>Marketing, Sales & Service</p>	<p>Planning, managing, and performing marketing activities to reach organizational objectives.</p>
 <p>Science, Technology, Engineering & Mathematics</p>	<p>Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.</p>
 <p>Transportation, Distribution & Logistics</p>	<p>Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.</p>



Agriculture in Wisconsin includes science, marketing, service, production, supply, processing, and preservation of the food supply, plants, animals and natural resources. This area employs over 12 percent of Wisconsin's workforce



INTERESTS AND ABILITIES

Animals

- Working with sick or injured animals
- Working with companion animals like dogs and cats
- Working with unique species such as fish for food
- A medical field
- Marine biology

Plants

- Caring for plants in your home or yard
- Designing landscapes for homes or businesses
- Developing new plants or modifying existing ones
- What plants need to grow successfully

Natural Resources

- Native fish and their aquatic habits
- Forest ecosystems
- Preservation of endangered species
- Wolves and whitetails in Wisconsin

Foods

- What makes bread rise and soda fizz
- Being a food scientist
- Designing new food and flavors
- How science is used to process your food

PATHWAYS IN THIS CLUSTER

- Food Products and Processing Systems
- Plant Systems
- Animal Systems
- Power, Structural & Technical Systems
- Natural Resource Systems
- Environmental Service Systems
- Agribusiness Systems

Recommended Courses for this Cluster:

Accounting
Human Body Systems
AP Biology
AP Calculus AB/BC
AP Chemistry
AP Economics

AP Environmental Science
AP Statistics
Business Law
Chemistry
Engineering
Environmental Science

Physics
Statistics
World Languages

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Bee Keeper	Landscape Laborer	Pet Shop Worker
Crop Sprayer	Logger	Stable Worker
Farm Worker	Nursery Worker	Vet Hospital Worker
Fisherman	Pet Groomer	

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Animal Control Officer	Ferrier	Horticulturist
Animal Nutritionist	Fish & Game Officer	Landscape Designer
Arborist	Forestry Technician	Quality Food Control Specialist
Bio-Tech Lab Technician	Genetic Technologist	Turf Manager
Cheese Maker	Golf Course Manager	Veterinary Technician
Crop &/or Animal Farmer	Greenhouse Manager	Waste Water Technician
Environmental Technician		

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Agriculture Banker	Botanist	Plant Pathologist
Agricultural Commodities Broker	Entomologist	Soil Geologist
Agricultural Economist	Food Scientist	Soil Scientist
Agricultural Educator	Forester	Toxicologist
Agricultural Engineer	Game Warden	USDA Inspector
Agri. Sales & Communications	Geneticist	Veterinarian
Animal Psychologist	Greenhouse Operator	Wild Life Biologist
Animal Scientist	Landscape Architect	Zoologist
Biochemist	Marine Biologist	

Related Co-Curricular, Student Organizations & Activities:

Athletics	E.A.R.T.H (Environmental Action Requiring Teen Hands)
Bay Gives Back	MAPS Team
Robotics	Teton Science School
Science Team	Chemistry Club



Careers in designing, planning, managing, building, and maintaining the built environment



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Read and follow blueprints and/or instructions.
- Picture a finished product in my mind.

Work with my hands:

- Perform work that requires precise results.
- Solve technical problems.
- Visit and learn from beautiful, historic, or interesting buildings.
- Follow logical, step-by-step procedures.

Personal qualities that describe me:

- Curious
- Good at following directions
- Pay attention to detail
- Good at visualizing possibilities
- Patient and persistent

School subjects that I like:

- Math
- Drafting
- Physical Sciences
- Construction Trades
- Electrical Trades
- Technology Education

PATHWAYS IN THIS CLUSTER

- Design/Pre-Construction
- Construction
- Maintenance/Operations

Recommended Courses for this Cluster:

2D Design	AP Statistics	Studio Art
3D Design	Business Law	World Languages
AP Art Studio	Ceramics	PLTW: Intro to Engineering Design
AP Art History	Chemistry	PLTW: Civil Engineering & Architecture
AP Calculus AB/BC	Digital Photography	Woodworking 1-3
AP Economics	Environmental Science	
AP Environmental Science	Precalculus	
AP Physics	Statistics	

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Construction Laborer
Construction Worker Helper

Fence Builder
Highway Maintenance Worker

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Air Conditioning Technician
Architectural Drafter
Bricklayer
Carpenter
Cement Mason
Drywall Installer

Electrician
Glazier
Pipe Fitter
Plasterer
Plumber
Tile Setter

BACHELORS, PRE -PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Architect
Building Contractor
C.A.D. Designer
Civil Engineer
Cost Estimator

Electrical Engineer
Grounds Supervisor
Interior Design
Landscape Architect
Acoustic Engineering

Related Co-Curricular, Student Organizations & Activities

Bay Gives Back
Math Team
Stage Crew
Robotics
Engineering Club



Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Use my imagination to communicate new information to others.
- Perform in front of others.
- Read and write.
- Play a musical instrument.
- Perform creative, artistic activities.
- Use video and recording technology.
- Design brochures and posters.

Personal qualities that describe me:

- Creative and imaginative
- Good communicator/good vocabulary
- Curious about new technology
- Relate well to feelings and thoughts of others
- Determined/tenacious

School subjects that I like:

- Art/Graphic design
- Music
- Speech and Drama
- Journalism/Literature
- Audiovisual Technologies

PATHWAYS IN THIS CLUSTER

- Audio and Video Technology and Film
- Printing Technology
- Visual Arts
- Performing Arts
- Journalism and Broadcasting
- Telecommunications

Recommended Courses for this Cluster:

AP Computer Science
 AP Language & Comp.
 AP Literature & Comp.
 AP Music Theory
 AP Studio Art
 Concert Band
 Wind Ensemble
 Concert Orchestra

Computer Science
 Jazz Band I/II
 Video Production
 2D Design
 Graphic Design
 Digital Photography
 Exploration of Theater Production

World Languages
 PLTW: Intro to Engineering Design
 Digital Music
 Chamber Orchestra
 Treble, Bel Canto, Concert Choir(s)
 American Pop Music
 Contemporary Issues

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Floral Designer	Musician	Proofreader
Food Stylist	Photographer	Sign Designer/Painter
Mural Painter	Pre-Press	Stained Glass

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Animator	Potter
Bookbinder	Prepress Technician
Broadcast Technician	Printing Press Operator
Caption Writer	Public Relations Manager
Communications Line Maintainers	Recording Technician
Craft Artist	Sign Painter
Graphic Designer	Taxidermist

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Architect	Copy Editor	Journalist
Artist/Musician	Dancer	Photographer
Art Professor	Graphic Designer	Potter
Art Teacher	Illustrator	Reporter
Art Therapist	Interior Decorator	Set Designers
Cinematographer	Jeweler	Videographer
Composer	Music Educator	

Related Co-Curricular, Student Organizations & Activities:

3D Animations Club	Debate Team	Stage Crew
Art Club	Drama Club	Student Council
Band	Fall/Spring Play	Tower Times Newspaper
Cheerleading	Forensics	Tower Times Yearbook
Choir	Jazz Band	
Dance Team	Musical	



Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Perform routine, organized activities but can be flexible.
- Work with numbers and detailed information.
- Be the leader in a group.
- Make business contact with people.
- Work with computer programs.
- Create reports and communicate ideas.
- Plan my work and follow instructions without close supervision.

Personal qualities that describe me:

- Organized
- Practical and logical
- Patient
- Tactful
- Responsible

School subjects that I like:

- Computer Applications/Business and Information Technology
- Accounting
- Math
- English
- Economics

PATHWAYS IN THIS CLUSTER

- General Management
- Business Information Management
- Human Resources
- Operations Management
- Administration Services

Recommended Courses for this Cluster:

Accounting
AP Calculus AB/BC
AP Computer Science
AP Economics
AP Statistics
Algebra 2 and/or Advanced Algebra 2/Trigonometry
Business Law
Marketing

Pre-Calculus
Psychology
Statistics
World Languages
Graphic Design
AP Psychology

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Bank Teller	Mail Clerk	Sales Clerk
Caterer	Meter Reader	Telephone Operator
File Clerk	Receptionist	Typist

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Accountant	Court Reporter	Small Business Owner
Administrative Assistant	Kennel Operator	Stenographer
Computer Operator		Tax Preparer

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Advertising Manager	Human Resource Manager
Art Director	Marketing Manager
Business and Industry	Sales Representative
Consultant	Theater Manager
Health Care Administrator	Travel Agency Manager

Related Co-Curricular, Student Organizations & Activities:

Business Club	Investment Club	FBLA- Future Business Leaders of America
Debate Team	Student Council	
Forensics	World Language Clubs	
Gender/Sexuality Alliance (GSA)	Health Club	
HOSA	Math Team	



Planning, managing, and providing education and training services, and related learning support services



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Communicate with different types of people.
- Help others with their homework or to learn new things.
- Go to school.
- Direct and plan activities for others.
- Handle several responsibilities at once.
- Acquire new information.
- Help people overcome their challenges.

Personal qualities that describe me:

- Friendly
- Decision maker
- Helpful
- Innovative/Inquisitive
- Good listener

School subjects that I like:

- Language Arts
- Social Studies
- Math
- Science
- Psychology

PATHWAYS IN THIS CLUSTER

- Administration & Administrative Support
- Professional Support Services
- Teaching/Training

**Students interested in secondary education should take as many relevant courses in the area in which they wish to teach. For example, if you are interested in teaching history, take a wide variety of social studies courses/ art teacher- take all art courses.*

**Education majors should consider volunteering at the elementary/middle school level in the 11th/12th grade year.*

Recommended Courses for this Cluster:

- | | |
|-------------------------------|-----------------|
| Any of the offered AP courses | World Cultures |
| Statistics | World Languages |
| Leadership for Social Justice | 2D Design |
| Pre-calculus | 3D Design |
| Psychology | AP Psychology |

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Aerobics Instructor
Child Care Assistant
Dance Teacher
Library Assistant
Self-Enrichment Teacher

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Preschool Teacher
Teacher Assistant
Sign Language Interpreter

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Agri-Science Instructor	Kindergarten Teacher
Apprenticeship Consultant	School Psychologist
Bilingual Educator	Secondary School Teacher
Educational Administrator	Teacher of the Blind
Elementary School Teacher	University Researcher
Instructional Coordinator	Vocational Education Teacher

Related Co-Curricular, Student Organizations & Activities:

Bay Gives Back	
Best Buddies	World Language Clubs
Dance Team	Yearbook
Student Council	Big Buddy/Little Buddy



Planning, services for financial and investment planning, banking, insurance, and business financial management



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Work with numbers.
- Work to meet a deadline.
- Make predictions based on existing facts.
- Have a framework of rules by which to operate.
- Analyze financial information and interpret it to others.
- Handle money with accuracy and reliability.
- Take pride in the way I dress and look.

Personal qualities that describe me:

- Trustworthy
- Orderly
- Self-confident
- Logical
- Methodical or efficient

School subjects that I like:

- Accounting
- Math
- Economics
- Banking/Financial Services
- Business Law

PATHWAYS IN THIS CLUSTER

- Securities & Investments
- Business Finance
- Banking Services
- Accounting
- Insurance

Recommended Courses for this Cluster:

Accounting
Algebra 2/Advanced Algebra 2/Trigonometry
Business Law
Introduction to Business
Marketing

Personal Finance
Psychology/AP Psychology
Statistics
Economics/AP Economics
World Languages

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Bill & Account Collector
 Brokerage Clerk
 Cashier

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Accountant	Brokerage Clerk
Claim Adjuster	Financial Institution Manager
Insurance Agent	Investigator & Adjustor
Loan Officer	Personal Property Appraiser

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Accountant	Actuary
Auditor	Brokerage Clerk
Business & Industry Consultant	Controller
Credit Analyst	Credit Card Operations Manager
Insurance Underwriter	Investment Advisor

Related Co-Curricular, Student Organizations & Activities:

Business Club	FBLA-Future Business Leaders of America
Forensics	
Investment Club	
Math Team	
Student Council	



Executing governmental functions to include governance: national security; foreign service; planning; revenue and taxation; regulation; and management and administration at the local, state, and federal levels



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Be involved in politics.
- Negotiate, defend, and debate ideas and topics.
- Plan activities and work cooperatively with others.
- Work with details.
- Perform a variety of duties that may change often.
- Analyze information and interpret it to others.
- Travel and see things that are new to me.

Personal qualities that describe me:

- Good communicator
- Competitive
- Service minded
- Well organized
- Problem solver

School subjects that I like:

- Government
- Language Arts
- History
- Math
- Foreign Language

PATHWAYS IN THIS CLUSTER

- Governance
- National Security
- Foreign Service
- Planning
- Revenue and Taxation
- Regulation
- Public Management & Administration

Recommended Courses for this Cluster:

Accounting
AP Economics
AP Statistics
AP U.S. Government & Politics
Algebra 2/Advanced Algebra 2/Trigonometry
Business Law

Marketing
Psychology
Statistics
World Languages
Contemporary Issues

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Infantry Forces	Mail Carrier	Postal Clerk/Drivers
License Clerks	Mail Handling Machine	Special Forces
License Examiner	Operator	

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Accountant	Coroner	Title Examiner
Association Executive	Inspector	Translator/Interpreter
Building Inspector	Postmaster	Transportation
City Planning Aid		

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Accountant	Equal Opportunity	Legislator
Apprenticeship	Emergency Management	Political Scientist
Aviation Security Specialist	Infantry Officer	Special Operations Officer
City Manager	Lawyer	Urban Planner
Consultant		

Related Co-Curricular, Student Organizations & Activities:

Best Buddies	Mock Trial	Students Demand Action
Business Club	Model UN	
Debate Team	Political Club	
Forensics	Student Council	
Gender/Sexuality Alliance (GSA)	World Language Clubs	



Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Work under pressure.
- Help sick people and animals.
- Make decisions based on logic and information.
- Participate in health and science classes.
- Respond quickly and calmly in emergencies.
- Work as a member of a team.
- Follow guidelines precisely and meet strict standards of accuracy.

Personal qualities that describe me:

- Compassionate and caring
- Good at following directions
- Conscientious and careful
- Patient
- Good listener

School subjects that I like:

- Biological Sciences
- Chemistry
- Math
- Occupational Health classes
- Language Arts

PATHWAYS IN THIS CLUSTER

- Therapeutic Services
- Diagnostic Services
- Health Informatics
- Support Services
- Biotechnology Research & Development

Recommended Courses for this Cluster:

Human Body Systems

AP Biology

AP Calculus AB/BC

AP Chemistry

AP Psychology

AP Physics

AP Statistics

Any of the Phy Ed Courses

Biomedical Science

PLTW: Medical Interventions

Statistics

World Languages

AP Music Theory

Advanced Health

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Certified Nursing Assistant
Clerk

Food Service Worker
Hospital Admitting

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Emergency Medical Technician
Home Health Aide
Massage Therapist

Physical Therapy Aide
Radiology Technologist
Registered Nurse

Surgical Technician
Translator & Interpreter
Ultrasound Technician

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Athletic Trainer
Chiropractor
Dentist
Dietician
Laboratory Scientist

Nurse Practitioner
Occupational Therapist
Pharmacist
Physical Therapist
Music Therapy

Primary Care Physician
Psychiatrist
Radiation Therapist
Surgeon

Related Co-Curricular, Student Organizations & Activities:

Bay Gives Back
Best Buddies
Forensics
HOSA
World Language Clubs
Health Club



Hospitality and Tourism encompasses the management, marketing and operations of restaurants and other food service, lodging, attractions, and recreation events and travel-related services



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Investigate new places and activities.
- Work with all ages and types of people.
- Organize activities in which other people enjoy themselves.
- Have a flexible schedule.
- Help people make up their minds.
- Communicate easily, tactfully, and courteously.
- Learn about other cultures.

Personal qualities that describe me:

- Tactful
- Self-motivated
- Works well with others
- Outgoing
- Slow to anger

School subjects that I like:

- Language Arts/Speech
- Foreign Language
- Social Sciences
- Marketing
- Food Services

PATHWAYS IN THIS CLUSTER

- Restaurant & Food/Beverage Services
- Lodging
- Travel & Tourism
- Recreation, Amusements & Attractions

Recommended Courses for this Cluster:

Alg 2/Adv Alge 2/Trig
 AP Economics
 AP U.S. History
 Business Law
 Economics
 Marketing
 Jazz Band I/II

Sports/Ent. Marketing
 Digital Photography
 Graphic Design
 Psychology
 World Languages
 AP Art History
 Wind Ensemble

AP Psychology
 Concert Band
 Digital Music
 AP Music Theory
 Treble, Bel Canto, Concert Choir(s)
 Concert Orchestra
 Chamber Orchestra

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Baggage Porter & Bellhop
 Booth Cashier
 Cake Decorator
 Concierge Usher

Day Worker
 Food Attendant
 Furniture Refinisher
 Wardrobe & Dressing

Gaming Change Person
 Guide
 Room Attendant

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Club Manager
 Conference Planner
 Food Service Supervisor

Household Manager
 Motel & Hotel Manager
 Recreation Director

Restaurant Manager
 Taxidermist
 Translator (Interpreter)

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Archivist
 Coaches
 Conservation Technician
 Curator

Historian
 Hotel Manager
 Park Ranger
 Recreation Director

Theatre Manager
 Translator/Interpreter
 Zookeeper

Related Co-Curricular, Student Organizations & Activities:

Bay Gives Back
 Best Buddies
 Business Club
 Musical - crew
 Student Council
 World Language clubs
 Yearbook



Preparing individuals for employment in career pathways that relate to families and human needs



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Care about people, their needs, and their problems.
- Participate in community services and/or volunteering.
- Listen to other people's viewpoints.
- Help people be at their best.
- Work with people from preschool age to old age.
- Think of new ways to do things.
- Make friends with different kinds of people.

Personal qualities that describe me:

- Good communicator/good listener
- Caring
- Non-materialistic
- Uses intuition and logic
- Non-judgmental

School subjects that I like:

- Language Arts
- Psychology/Sociology
- Family and Consumer Sciences
- Finance
- World Language

PATHWAYS IN THIS CLUSTER

- Early Childhood Development & Services
- Counseling & Mental Health Services
- Family & Community Services
- Personal Care Services
- Consumer Services

Recommended Courses for this Cluster:

Accounting
Human Body Systems
AP Biology
AP Chemistry
AP Statistics
Business Law

Chemistry
Leadership for Social Justice
Personal Finance
Psychology
World Cultures
World Languages

AP Psychology

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Aerobics Instructor Crossing Guard
Household Cook Nanny

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Community Organization Worker Nail Technician
Cosmetologist Preschool Teacher
Funeral Director Skin Care
Specialist Institutional Cook Shoe Repairer

BACHELORS, PRE-PROFESSIONAL OR HIGHER DEGREE

Colleges/Universities

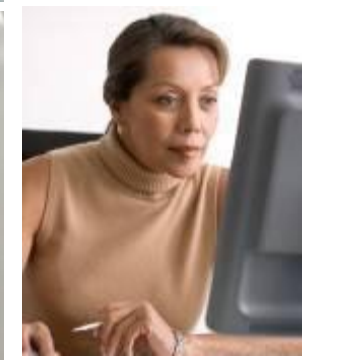
Athletic Trainer Psychiatrist
Dietician Psychologist
Investment Advisor School Counselor
Personal Trainer Social Worker
Placement Counselor Sociologist
Vocational Rehab Counselor

Related Co-Curricular, Student Organizations & Activities:

Bay Gives Back Gender/Sexuality Alliance (GSA)
Best Buddies HOSA
Big Buddy/Little Buddy Health Club
Black Student Union Student Council



Building linkages in IT occupations framework for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Work with computers.
- Reason clearly and logically to solve complex problems.
- Use machines, techniques, and processes.
- Read technical materials and diagrams and solve technical problems.
- Adapt to change.
- Play video games and figure out how they work.
- Concentrate for long periods without being distracted.

Personal qualities that describe me:

- Logical/analytical thinker
- See details in the big picture
- Persistent
- Good concentration skills
- Precise and accurate

School subjects that I like:

- Math
- Science
- Computer Tech/Applications
- Communications
- Graphic Design

PATHWAYS IN THIS CLUSTER

- Network Systems
- Information Support & Services
- Programming and Software Development
- Web & Digital Communications

Recommended Courses for this Cluster:

AP Computer Science
AP Physics
AP Statistics
Video Production/Animation
Business Law
PLTW: Intro to Engineering Design
Computer Science Principles

Marketing
Graphic Design
Digital Photography
Physics
Video Production/Animation

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Careers in this field require more than minimal experience or on-the-job training

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Computer Programmer	Computer Systems Analyst
Computer Support Specialist	Tool Programmer
Data Communications Analyst	Webmaster

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Animator	Illustrator
Computer Engineer	Scientific & Engineering Programmer
Computer Network Coordinator	Software Engineer
Database Administrator	Webmaster

Related Co-Curricular, Student Organizations & Activities:

Bay Robotics
 Cyber Security Club
 E-Sports Club
 Next Gen Robotics
 Yearbook
 FBLA- Future Business Leaders of America



Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Work under pressure or in the face of danger.
- Make decisions based on my own observations.
- Interact with other people.
- Be in positions of authority.
- Respect rules and regulations.
- Debate and win arguments.
- Observe and analyze people's behavior.

Personal qualities that describe me:

- Adventurous
- Dependable
- Community-minded
- Decisive
- Optimistic

School subjects that I like:

- Language Arts
- Psychology/Sociology
- Government/History
- Law Enforcement
- First Aid/First Responder

PATHWAYS IN THIS CLUSTER

- Correction Services
- Emergency & Fire Management Services
- Security & Protective Services
- Law Enforcement Services
- Legal Services

Recommended Courses for this Cluster:

Human Body Systems
 AP Biology
 AP Chemistry
 AP U.S. History
 AP U.S. Government
 AP Physics

Chemistry
 Health
 Leadership for Social Justice
 PLTW: Biomedical Science
 Phy Ed Classes

Psychology/AP
 Physics
 Statistics
 World Languages

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Correctional Officer
Crossing Guard
Dispatcher
Parking Enforcement Officer
Security Guard

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Bailiff	Legal Secretary	Park Ranger
Court Reporter	Emergency Medical Technician	Police Officer
Firefighter	Paralegal Assistant	Private Detective

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Adjudicator	Forensic Science	Lawyer
Arbitrator	Judge	Probation and Parole Officer
FBI Agent	Judicial Law Clerk	Technician

Related Co-Curricular, Student Organizations & Activities:

Best Buddies	Gender/Sexuality Alliance (GSA)
Cyber Security Club	Mock Trial
Debate Team	Student Council
Forensics	Teton Science School



Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Work with my hands and learn that way.
- Put things together.
- Do routine, organized and accurate work.
- Perform activities that produce tangible results.
- Apply math to work out solutions.
- Use hand and power tools and operate equipment/machinery.
- Visualize objects in three dimensions from flat drawings.

Personal qualities that describe me:

- Practical
- Observant
- Physically active
- Step-by-step thinker
- Coordinated

School subjects that I like:

- Math-Geometry
- Chemistry
- Trade and Industry courses
- Physics
- Language Arts

PATHWAYS IN THIS CLUSTER

- Production
- Manufacturing Production Process Development
- Maintenance, Installation & Repair
- Quality Assurance
- Logistics & Inventory Control
- Health, Safety & Environmental Assurance

Recommended Courses for this Cluster:

AP Calculus AB/BC

AP Chemistry

AP Computer Science

AP Economics

AP Environmental Science

AP Physics

AP Statistics

Chemistry

Environmental Science

PLTW: Intro to Engineering Design

Physics

Statistics

Woodworking 1-3

World Languages

2D Design

3D Design

Ceramics

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Apparel & Home Furnishings
 Brush Painter
 Dyer
 Engraver
 Hand Worker

Oil Well Driller
 Order Filler
 Production and Planning Clerk
 Production Assembler
 Tire Builder

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Apparel Pattern Maker
 Combination Welder
 Computer Technician
 Electric Appliance Repair
 Electrical Motor Technician

Locksmith
 Musical Instrument Repairer
 Quality Control Technician
 Tool and Die Maker

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Communications Operations
 Electrical Engineer
 Engineering Manager
 Environmental Engineer
 Mechanical Engineer

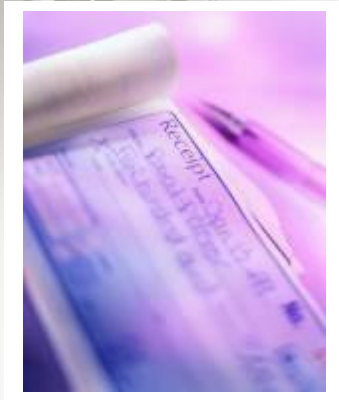
Industrial Engineer
 Inspector
 Occupational Health & Safety
 Production Manager
 Supervisor

Related Co-Curricular, Student Organizations & Activities:

Bay Robotics
 Math Team
 MAPS Team



Planning, managing, and performing marketing activities to reach organizational objectives



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Shop and go to the mall.
- Be in charge.
- Make displays and promote ideas.
- Give presentations and enjoy public speaking.
- Persuade people to buy products or to participate in activities.
- Communicate my ideas to other people.
- Take advantage of opportunities to make extra money.

Personal qualities that describe me:

- Enthusiastic
- Competitive
- Creative
- Self-motivated
- Persuasive

School subjects that I like:

- Language Arts
- Math
- Business Education/Marketing
- Economics
- Computer Applications

PATHWAYS IN THIS CLUSTER

- Professional Selling
- Merchandising
- Marketing Communications
- Marketing Management
- Marketing Research

Recommended Courses for this Cluster:

Accounting
AP Computer Science
AP Economics
AP Statistics
AP U.S. Government
Computer Science

Digital Photography
Marketing
Sports/Entertainment Marketing
Statistics
World Languages
Graphic Design

AP Psychology

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Antique/Collectible Dealer	News Vendor
Cashier	Street Vendor
Classified Ad Clerk	Telemarketer
Counter Clerk	Wedding Planner
Customer Service Representative	

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Advertising Layout Designer	Buyer
Advertising Sales Representative	Purchasing Manager
Auctioneer	Real Estate Agent
Auto Salesperson	

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Advertising Account Executive	Public Relations Manager
Advertising Manager	Purchasing Agent
Business Agent	Research Analyst
Marketing Manager	

Related Co-Curricular, Student Organizations & Activities:

Business Club	Yearbook
Debate Team	FBLA- Future Business Leaders of America
Forensics	
Math Team	



Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering), including laboratory and testing services, and research and development services



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Interpret formulas.
- Find answers to questions.
- Work in a laboratory.
- Figure out how things work and investigate new things.
- Explore new technology.
- Experiment to find the best way to do something.
- Pay attention to details and help things be precise.

Personal qualities that describe me:

- Detail oriented
- Inquisitive
- Objective
- Methodical
- Mechanically inclined

School subjects that I like:

- Math
- Science
- Drafting/Computer Aided Drafting
- Electronics/Computer Networking
- Technical Classes/Technology Education

PATHWAYS IN THIS CLUSTER

- Engineering & Technology
- Science & Math

Recommended Courses for this Cluster:

AP Biology
 AP Calculus AB/BC
 AP Chemistry
 AP Computer Science
 AP Environmental Science
 AP Physics
 AP Statistics

Chemistry
 Environmental Science
 PLTW: Intro to Engineering Design
 Physics
 Statistics
 World Languages
 PLTW: Principles of Engineering

PLTW: Civil Engineering & Architecture
 PLTW: Engineering Design & Development

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Statistical Clerk

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Biological Technician
 Chemical Technician
 Civil Engineering Technician
 Environmental Technician
 Mathematical Technician

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Aerospace Engineer	Computer Engineer	Metallurgist
Anthropologist	Electrical Engineer	Mining Engineer
Archaeologist	Geologist	Nuclear Engineer
Astronomer	Industrial Engineer	Physicist
Biomedical Engineer	Mathematician	Solar Engineer
Chemical Engineer	Mechanical Engineer	Statistician
Civil Engineer		

Related Co-Curricular, Student Organizations & Activities:

HOSA	Science Team	Bay Robotics
Math Team	Teton Science School	Next Gen Robotics
Engineering Earth	MAPS Team	Engineering Club



Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance



INTERESTS & ABILITIES

Activities that describe what I like to do:

- Travel.
- See well and have quick reflexes.
- Solve mechanical problems.
- Design efficient processes.
- Anticipate needs and prepare to meet them.
- Drive or ride.
- Move things from one place to another.

Personal qualities that describe me:

- Realistic
- Mechanical
- Coordinated
- Observant
- Planner

School subjects that I like:

- Math
- Trade and Industry courses
- Physical Sciences
- Economics
- Foreign Language

PATHWAYS IN THIS CLUSTER

- Transportation Operations
- Logistics Planning & Management Services
- Warehousing & Distribution Center Operations
- Facility & Mobile Equipment Maintenance
- Transportation Systems/Infrastructure Planning, Management & Regulation
- Health, Safety & Environmental Management
- Sales & Service

Recommended Courses for this Cluster:

AP Biology
 AP Calculus AB/BC
 AP Chemistry
 AP Economics
 AP Environmental Science

AP Physics
 PLTW: Intro to Engineering Design
 Physics
 Statistics
 World Languages

PLTW: Civil Engineering
 & Architecture

Career Options

FROM HIGH SCHOOL

On-the-job training and/or minimal experience

Bus Driver	Reservation and Ticket Clerk
Deckhand	Service Station Attendant
Delivery Driver	Shipping and Receiving
Clerk Highway Maintenance Worker	Traffic Clerk

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

Community college, technical college, apprenticeship, experience

Aircraft Mechanic	Cartographic Technician	Railroad Conductor
Auto Body Technician	Flight Attendant	Security Consultant
Automobile Painter	Motorcycle Technician	Travel Agent
Diesel Technician		

BACHELORS, PRE-PROFESSIONAL or HIGHER DEGREE

Colleges/Universities

Airline Pilot	Locomotive Engineer	Public Health Sanitarian
Air Traffic Controller	Mechanical Engineer	Travel Agency Manager
Astronaut	Mining Manager	
Environmentalist		

Related Co-Curricular, Student Organizations & Activities

Bay Robotics
Next Gen Robotics
Engineering Club

ART

**THE FOLLOWING ART COURSES FULFILL
THE CULTURAL ART GRADUATION
REQUIREMENTS FOR THE GRADES
INDICATED**

2D Design

Grades 9-12

Prerequisites: None

Semester 1 or 2, One credit

Lab/Supply Fee: \$40.00

In this course, a variety of design concepts and tools are introduced to foster visual literacy. Students will explore art and design principles through drawing, painting, and printmaking processes. These processes include acrylic paint, intaglio and relief printing, graphite, and color pencil to name a few. The new skills are then applied to explore a variety of themes and topics as the basis for the creation of artworks from observation and the imagination. The course is designed to promote problem-solving, creative thinking, and formal expression.

3D Design

Grades 9-12

Prerequisites: None

Semester 1 or 2, One credit

Lab/Supply Fee: \$60.00

3D Design explores art and design principles in a three-dimensional format. A wide variety of techniques are taught in order to build, carve, and assemble three-dimensional works from paper, stained glass, clay, plaster, metal, wood and other media. This class also introduces students to the potentials and limitations of 3D Printing through 3D modeling and design. This course develops critical thinking and problem-solving skills through hands-on projects. An emphasis on design thinking gives students a new way to think about creative work, working to anticipate problems before attempting to come up with ideas, and create solutions. Students will gain an understanding of physical and visual balance and the qualities of traditional and contemporary sculpture processes.

Ceramics

Grades 9-12

Prerequisites: None

Semester 1 or 2, One credit

Lab/Supply Fee: \$60.00

Ceramics explores the creative possibilities of clay as an artistic medium. Students will gain experience in hand-building techniques as well as learning to work on the potter's wheel. Glazing and firing techniques are introduced as well as a basic understanding of the kiln and firing process. Students gain an understanding of the development, history, and design of ceramics. The main purpose of this course is to develop creative problem solvers. The course will also focus on building independence in the artistic process by developing students' creative self. Skills such as organization, visual literacy, accountability, time management, and self-reflection will be reinforced. This involves creating a balance between encouraging students' high-interest areas while learning new art techniques and skills.

Graphic Design

Grades 9-12

Prerequisites: None

Semester 1 or 2, One credit

Lab/Supply Fee: \$30.00

Graphic Design is an introductory course in digital design using Adobe Creative Cloud (Photoshop & Illustrator). Emphasis will be on the integration of drawing, scanned images, image processing, and 2-D paint graphics into high-resolution images. Self-portraits, abstract images, advertising, and graphic design will be some of the subjects explored. Techniques, principles, and processes from traditional art and design are used in tandem with the software-based tools.

2D Intermediate

Grades 9-12

Prerequisites: 2D, 3D, Ceramics, or Graphic Design

Semester 1 or 2, One credit

Lab/Supply Fee: \$40.00

In this course, students will explore drawing, painting, and printmaking processes not covered in 2D Design. These processes include oil paint, watercolor, and screen printing to name a few. An emphasis will be placed on collaboration, presentation, and originality as students continue to explore the splendor of art making. Students will develop a personal voice and style as they progress through the course.

Ceramics and Sculpture 2

Grades 9-12

Prerequisites: 3D or Ceramics

Semester 1 or 2, One credit

Lab/Supply Fee: \$60.00

In this course, you will choose a track to work in, Ceramics or Sculpture. In Ceramics, students will use clay as their medium. Students will complete complex assignments with an emphasis on theme development. Glaze technology will continue to be investigated as well. In Intermediate Sculpture, the students will increase their knowledge of 3D materials and sculpting techniques by completing large and small freestanding pieces over the course of the semester using a variety of 3D materials (stained glass, plaster, clay, etc.) In both tracks, students will participate in class critiques and discussions. Projects will be evaluated in terms of design preparation, the application of sculpture processes, and demonstrated craftsmanship. Students will see their own style emerge through this course as they experience a greater amount of freedom.

Digital Photography MATC

MATC Transcribed Course, *Photography 101: Digital Fundamental Photography (3 Credits)*

Grades 10-12

Prerequisites: None

Semester 1 or 2, One credit

Lab/Supply Fee: \$35.00

Digital Photography is an introductory course in the art of composition and light. Students will explore the basic concepts of photography using school-provided DSLR cameras. Emphasis will be on the production of Fine Art images, edited for quality in Lightroom and Photoshop, while developing an understanding of the elements of art and the principles of design. Students will learn from the work of many photographers, exploring traditional and contemporary themes and techniques.

This is a dual enrollment course through MATC. Students will gain college credit if they receive a B or better in the course

Video Production

Grades 10-12

Prerequisites: 2D, 3D, Ceramics or Graphic Design

Semester 1 or 2, One credit

Lab/Supply Fee: \$20

In Video Production, students will be introduced to collaboratively creating scripts, organizing video shoots, operating cameras, and using editing software with the goal of communicating and storytelling through quality videos and creative short films. Animating with Adobe Animate, Photoshop, Illustrator, and After Effects will be discussed. Students will explore the art of storytelling and communication through video and film with an emphasis on the use of script writing and storyboarding to create well-crafted and complete stories. We will look to classic films and “viral” videos for inspiration and will learn the art of filmmaking from camera angles to audio components. Student films and animations will be shared in class, with the opportunities to grow through peer critique and hands-on projects.

Studio Art (repeatable one-semester class)

Grades 10-12

Prerequisites: 3 Art Classes or Art Department approval

Semester 1 or 2, One credit (repeatable)

Lab/Supply Fee: \$50 (per semester)

Studio Art is a course that allows for great self-expression and freedom of choice. Students are guided individually as they prepare works that fall into a possible concentration strand, 3-D, 2-D, or Drawing. Students will also have the opportunity to focus on themes and topics for art making that they are personally interested in. Students are exposed to a variety of styles and approaches used throughout the history of art today.

AP Art (may be repeated for credit if submitting a new portfolio from a different media)

Grades 11-12

Prerequisites: 3 Art classes or Art Department approval, and completion of assigned pre-course summer work

Semester 1 and 2, Two credits

Lab/Supply Fee: \$100 (covers both semesters)

The AP Program in Studio Art is intended for highly motivated students who are seriously interested in the study of art. Students pursue college-level art while in high school as they work to put together a personal portfolio of works to be submitted to the College Board for possible college credit upon completion of the AP Program. Students are guided individually as they prepare works that fall into three distinct categories: Quality, Concentration, and Breadth. Students should be aware that AP work involves significantly more time than Intensive Art courses and that the program is not for the casual art student. Time outside of class is required for success. Students are exposed to a variety of styles and approaches used throughout the history of art today. Reading as well as independent research, visits to art venues, and journal keeping are required. Students in AP will gain skills in promoting their work and sharing their work beyond the art classroom setting.

**AP ART HISTORY FULFILLS THE
CULTURAL ART GRADUATION
REQUIREMENT FOR THE GRADES
INDICATED**

AP Art History 

Grades 11-12, open to sophomores with instructor consent

Prerequisites: 3 Art Classes or Art Department approval

Semester 1 and 2, Two credits

Lab/Supply Fee: \$30 (covers both semesters)

The AP Art History course is equivalent to a two-semester introductory college course that explores the nature of art, art making, and responses to art. In this course, we will be looking at, among other things, 250 works of art that are characterized by diverse artistic traditions from prehistory to the contemporary. Throughout the year, students will become active participants in the global art world, engaging with its forms and content. We will think about: *why* artists manipulate materials and ideas to create an aesthetic object, act, or event; *how* art making is shaped by tradition and change; and how interpretations of art are variable. Students will experience, research, discuss, read, and write about art, artists, art making, responses to, and interpretations of art. This AP Exam consists of both a multiple choice and free response assessment. Students will earn college credit for the successful completion of the AP Exam.

AVID ELECTIVES

AVID 9 Elective

Grade: 9

Prerequisites: Application and Interview Process

Semester: 1-2, Two credits

The AVID Elective prepares students to take ownership of their learning, independently advocate for support, and collaborate productively with peers. The AVID 9 Elective is an academic elective course that introduces students to the intellectual and behavioral skills needed for achievement in college utilizing a rigorous college preparatory curriculum, tutor-facilitated study groups, goal setting, community building activities, and academic success skills, behaviors, and strategies. Students will practice interpersonal communication skills in small and large group settings. Its curriculum addresses the following strands of standards: Student Agency (Student Empowerment and Leadership of Others), Rigorous Academic Preparedness (Writing, Inquiry, Collaboration, Organization, Reading), and Opportunity Knowledge (Advancing College Preparedness and Building Career Knowledge). Students visit a minimum of two local colleges/universities.

AVID 10 Elective

Grade: 10

Prerequisites: AVID 9, Application and Interview Process

Semester: 1-2, Two credits

The AVID Elective guides students to take ownership of their learning, independently advocate for themselves, and collaborate productively with peers. The AVID 10 Elective is an academic elective course that supports students to use the intellectual and behavioral skills needed for achievement in rigorous coursework in all of their classes. The course implements a rigorous college preparatory curriculum, tutor-facilitated study groups, goal setting, community building activities, and academic success skills, behaviors, and strategies. Students will practice interpersonal communication skills in small and large group settings. Its curriculum addresses the following strands of standards: Student Agency (Student Empowerment and Leadership of Others), Rigorous Academic Preparedness (Writing, Inquiry, Collaboration, Organization, Reading), and Opportunity Knowledge (Advancing College Preparedness and Building Career Knowledge). Students visit a minimum of two local colleges/universities.

AVID 11 Elective

Grade: 11

Prerequisites: AVID 10

Semester: 1-2, Two credits

The AVID Elective requires students to take ownership of their learning, independently advocate for themselves and their learning, and collaborate productively and purposely with peers. The AVID 11 Elective is an academic elective course that supports students to use the intellectual and behavioral skills needed for achievement in rigorous coursework in all of their classes. It also focuses on college information, including financial aid, resume, cost of attending college, applications, and college entrance essays in addition to ACT and SAT prep. The course implements a rigorous college preparatory curriculum, tutor-facilitated study groups, goal setting, community building activities, and academic success skills, behaviors, and strategies. Students will practice interpersonal communication skills in small and large group settings. In addition, Students visit a minimum of two out of state colleges/universities.

AVID 12 Elective

Grade: 12

Prerequisites: AVID 11

Semester: 1, One credit

This final AVID Elective course requires students to take ownership of their learning, independently advocate for themselves and their individual learning needs, and collaborate productively and purposely with peers. The AVID 12 Elective is an academic elective course that requires students to use the intellectual and behavioral skills needed for achievement in rigorous coursework in all of their classes and post-secondary. It also focuses on a number of “college bound” activities including application to college and for grants/scholarships, confirming post-secondary plans, completing the FAFSA, and many others activities to prepare for college life including academic, social, and financial factors. The course implements a rigorous college preparatory curriculum, moves to student-facilitated study groups, goal setting, community building activities, and academic success skills, behaviors, and strategies.

BUSINESS

Accounting

Grades 10-12

Semester 1 or 2, One credit

Prerequisite: None

Accounting is the language of business, knowledge of accounting enhances career opportunities regardless of the individual's chosen field. This class provides an excellent foundation for college level courses involving multiple aspects of business. Sample topics include recording daily transactions, preparing an income statement and balance sheet, projecting future production costs, calculating ROI and inventory management, among other. This course is highly recommended for those students planning to pursue a career or college degree in business.

Business Law

Grades 10-12

Semester 1 or 2, One credit

Prerequisite: None

Knowledge of law is crucial to long-term success in many professional fields. Legal principles impact organizational form, product design, contracts, hiring and firing practices, and daily business operations. Students will refine their research, analytical and communication skills for college as they explore fundamental concepts of business law. This class requires students to perform limited research and then communicate their findings to the class. Business Law uses mock trial performances to allow each student to apply their legal content knowledge while refining their analytical and communication skills. This class benefits from presentations made by attorneys in practice who share their legal expertise and career experiences with the class.

Introduction to Business

Grades 9-12

Semester 1 or 2, One Credit

Prerequisite: None

This semester-long, orientation course is designed to provide students of all interests the ability to explore the many areas within the field of business. Areas of study include, but are not limited to: Management, Leadership, Entrepreneurship, Marketing, and Finance. With business majors consistently being one of the most popular majors in college, this course provides an excellent opportunity for exploration within that field.

Keyboarding

MATC Transcribed Course, Office Tech 103:
Keyboard and Keypad (1 Credit)

Grades 9-12

Prerequisite: None

Semester 1 or 2, One Credit

Keyboarding is an essential skill for effective use of a computer. If the student cannot type at least 45 words per minute with very few errors, he or she should consider this one semester course. Students are encouraged to take Keyboarding as early in high school as possible so that they can apply their skills in other courses. Keyboarding improves the speed and accuracy of keyboard input. Successful completion of Keyboarding will offer significant benefits in future high school and college classes. This class can help balance a difficult and busy student schedule with a class that is wholly contained within the school hour while offering significant long term benefits to the student.

Marketing Principles

Grades 10-12

Semester 1 or 2, One credit

Prerequisite: None

This semester course will cover the principles and practices of marketing and will prepare students for post-secondary studies and careers in the area of marketing or business. Areas of study will include the functions of marketing, market segmentation, market research, product development, pricing, channels of distribution, promotion and advertising, managing the marketing mix and the evolution of social media marketing. This project-based class utilizes case studies, videos, virtual simulations and outside speakers to assist the student in applying their creative and critical thinking skills to help solve real world business and marketing issues.

Personal Finance

Grades 10-12

Semester 1 or 2, One credit

Prerequisite: None

Personal Finance helps build the student's financial literacy for lifetime decision-making. All students benefit from training in personal finance prior to entry into college or the workforce. Students will be exposed to the most current, up-to-date information on the following areas of study: consumer decision making, taxes, credit cards, services banks offer, buying a car and home, insurance, investing, the stock market, retirement planning and career exploration. This class might be considered an elective but is a required course for students to gain financial literacy, regardless of their career path.

Sports and Entertainment Marketing

Grades 10-12

Semester 1 or 2, One credit

Prerequisite: One previous business course or concurrent enrollment in second business course

Sports and Entertainment Marketing helps students to understand marketing concepts that apply to the Sports and Entertainment industries. Students will apply key business and marketing concepts to projects and daily work that emphasize economic and business foundations, branding, licensing, naming rights, concessions, on-site merchandising, promotion, safety and security and human relations. The course will utilize outside speakers and class trips to connect the class instruction to the exciting world of Sports and Entertainment Marketing.

***SUFFICIENT ENROLLMENT IS REQUIRED
IN ORDER FOR COURSES TO RUN***

COMPUTER SCIENCE

Computer Concepts

Grades 10-12 (Grade 10 Recommended)

Prerequisite: Algebra 1

Semester 1 or 2, One Credit

This course fulfills the one semester computer science requirement. The main objective of this course is to assist students in acquiring the knowledge and ability to apply technology in academic, personal and professional settings. Students will learn how to effectively integrate various software in their daily lives in order to create professional documents, spreadsheets, and presentations. Areas of study include, but are not limited to: Keyboarding, Google Sheets, Google Docs, Presentations, Coding and Digital Citizenship.

Essentials of Computer Concepts

Grades 11-12

Prerequisites: Teacher/Counselor Recommendation

Semester 1 or 2, One credit

Essentials of Computer Concepts is similar to Computer Concepts, but covers topics at a more manageable pace and in less depth. This affords recommended students an opportunity for meeting Whitefish Bay High School's one credit computer science graduation requirement. Only students recommended by teachers or counselors may take this course.

Computer Science Principles 1

Grades 9-12

Prerequisites: B or better in Algebra 1

Semester 1, One credit

This course fulfills the one semester computer science requirement. The course will introduce students to programming, and will also give them an understanding of the fundamental concepts of computing, its breadth of application, and its potential for transforming the world. Students will engage in computational thinking and problem solving through programming and non-programming activities.

The course will cover 7 Core Principles:

1. Creativity: Computing is a creative activity
2. Abstraction: Reduces detail to focus on relevant concepts
3. Data: Data facilitates creation of knowledge
4. Algorithms: Express solutions
5. Programming: Enables problem solving, expression, and creation
6. Internet: Pervades Modern Computing
7. Impact: Computing has global impacts

This course will provide students going into business, computer science, engineering, mathematics, and sciences with an introduction to computer programming skills that they will be expected to have when they get to college as well as introduce them to a variety of computer science related fields. This course meets the one semester computer science graduation requirement.

Computer Science Principles 2

Grades 9-12

Prerequisites: Computer Science Principles 1 Semester 2, One credit

This course fulfills the one semester computer science requirement. This is the second course in our computer science sequence and it builds on the work in Computer Science Principles 1. Students will learn and apply more complex programming techniques in a variety of settings including text and block based languages. Areas of student include, but are not limited to: Python, Robotics, Machine Learning, Artificial Intelligence, Data Science, Digital Circuitry, and E-textiles.

Advanced Placement Computer Science

Principles

Grades 9-12

Prerequisites: Algebra 1

Semester 1 and 2, Two credits

This course fulfills the one semester computer science requirement. AP Computer Science Principles introduces students to the foundational concepts of Computer Science and challenges them to explore how computing and technology can impact the world. Students design and create apps using a development environment that offers both block based and text based options for the JAVAscript language. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles prepares students for college and career.

In addition to programming, abstraction and algorithms, AP Computer Science Principles teaches the creative nature of computing, use of computers to analyze data, and how computation has changed the way people live and work. This AP exam will include a portfolio submission as well as a multiple choice assessment. Students will earn college credit for successful completion of the AP exam.

Advanced Placement Computer Science (Java)

Grades 9-12

Prerequisites: Another Computer Science Course or consent of instructor

Semester 1 and 2, Two credits

This course fulfills the one semester computer science requirement. AP Computer Science is designed for students who are interested in learning JAVA programming. This course is recommended for anyone interested in pursuing additional coursework in any STEM field (Science, Technology, Engineering or Mathematics). In this course, students will learn all of the standard aspects of the Java programming language using an object oriented programming (OOP) perspective. AP Computer Science A presents the material using an objects first philosophy.

Java is a powerful language that is used to develop programs in many areas. AP Computer Science A closely matches the content of the College Board's AP Program in computer science, and students will be prepared to take the Advanced Placement examination offered in May.

Students will work in the lab during class approximately 2 hours per week. Students will be able to write and test their programs on their school issued Chromebooks. Students will be expected to practice material outside of class by writing and testing programs, completing paper and pencil activities and studying using both online and print resources.

***SUFFICIENT ENROLLMENT IS REQUIRED
IN ORDER FOR COURSES TO RUN***

ENGINEERING/DESIGN

Introduction to Engineering Design

Grades 9-12

Prerequisites: Completion of or concurrent enrollment in Algebra 1

Semester 1 and 2 (Year Long), Two credits

Lab/Supply Fee - \$15 for engineering notebook and other supplies

Introduction to Engineering Design is a foundational course in the Project Lead the Way engineering coursework series. Students will apply problem-solving skills to a variety of real world problems as they develop, create, and analyze various product models. Students will learn how to apply the engineering process to product design and they will also learn the basics of statistical analysis. Students also learn how to use advanced 3D Design & Modeling software (Fusion 360) to “reverse engineer” a product as well as design and model a brand new product.

Principles of Engineering

Grades 10-12

Prerequisites: Concurrent enrollment in Geometry

Semester 1 and 2 (Year Long) - (Transcribed as two “Engineering” OR two “Science – Physics” credits. Talk to Counselor).

Lab/Supply Fee - \$15 for engineering notebook and other supplies

Principles of Engineering is a foundational course in the Project Lead the Way engineering course sequence that introduces students to the fields of engineering and physics. Through hands-on exploration of various engineering and physics concepts students will learn how engineers use math, science and technology to solve real world problems. The course covers several units including: Simple and Compound Machines, Energy Sources & Distribution, Electricity & Circuitry, Work, Power and Efficiency, Thermodynamics, Structural Properties, Force Vectors, Statics, Material Properties, Fluid Power and Dynamics. Students will also learn the fundamentals of robot/machine programming as

well as work with robotics kits to build, program and test an autonomous machine.

Engineering Design and Development (To Be Offered 2025 – 2026 School Year)

Grades 10-12

Prerequisites: Completion of “Principles of Engineering” and one other PLTW Engineering course (or instructor approval)

Semester 1 and 2 (Year Long), Two credits

Lab/Supply Fee - \$35 for engineering notebook and prototyping materials

This is the capstone course for Project Lead the Way course series. Engineering Design and Development is an engineering research course in which students work in teams to research, design and construct a solution to an open-ended, real world engineering problem. Students will apply principles developed in previous Project Lead the Way courses to a project of their own choosing. Students will:

- Brainstorm and define a real-world problem that can be solved through an engineering solution
- Do extensive patent research in the area of focus
- Correspond with experts in the area of focus
- Do market research to investigate and determine the merit of their problem & solution
- Design a solution to the engineering problem
- Build and test mock-ups and a working prototype of the engineering solution
- Analyze the test data to evaluate the effectiveness of the engineering solution
- Present the engineering solution and data to an outside panel of engineers

Civil Engineering and Architecture (To Be Offered 2024-25 School Year)

Grades 10-12

Prerequisites: Algebra 1

Semester 1 and 2 (Year Long), Two credits

Lab/Supply Fee - \$15 for engineering notebook and other organizational supplies

Civil Engineering and Architecture is a specialized course in the Project Lead the Way series. The course provides an overview of civil engineering and architecture, emphasizing how these two fields are related and interdependent, and covers topics such as project planning, site planning, building design, and project documentation. Students collaborate on the development of residential and commercial building projects, including conceptual design, architectural drawing, model building and project presentation. Students will also learn how to use industry standard Architectural 3D Software (REVIT) to model their architectural designs

NOTE:

WOODWORKING COURSES LISTED BELOW FULFILL THE CULTURAL ARTS REQUIREMENTS FOR THE INDICATED GRADE LEVELS

Woodworking 1

Grades 9-12

Prerequisites: None

One Semester, one credit

Lab/Supply Fee - Base Fee: \$50.00 (Students may incur additional material costs depending upon custom project choice/ design)

In Woodworking 1, students will complete basic woodworking projects beginning with a folding, portable chair and a small folding table. Students will also learn more complex woodworking skills and joinery techniques and will have the opportunity to design & create a custom project or projects. Shop safety will be stressed as well as proper tool usage for various woodworking machines and tools. Project planning, multi-view drawing, material cost calculations, project timeline projections and construction step sequencing will also be emphasized.

Woodworking 2

Grades 9-12

Prerequisites: Woodworking 1

One Semester, one credit

Lab/Supply Fee - Base Fee: \$50.00

(Students may incur additional material costs depending upon custom project choice/ design)

In Woodworking 2, students further develop their woodworking skills by designing, planning and creating more complex woodworking projects of their choice while learning and applying advanced joinery and design techniques. Students are expected to apply the skills learned in Woodworking 1 and be able to work semi-independently in the shop.

Woodworking 3

Grades 10-12

Prerequisites: Woodworking 1 & 2

One Semester, one credit

Lab/Supply Fee - Base Fee: \$50.00 (Students may incur additional material costs depending upon custom project choice/ design)

In Woodworking 3, students will apply the skills learned in Woodworking 1 & 2 to complete well-designed projects with advanced woodworking techniques. Students will develop challenging projects, learn new techniques and produce high quality pieces while working as independently as possible.

ENGLISH

English 1

Grade 9

Prerequisites: None

Semester 1, One credit

This first semester freshman course will focus on identification and analysis of archetypes along with the loss of innocence theme in literature. Writing will emphasize literary analysis. Students will also build a foundation for vocabulary and speaking and listening skills.

English 2

Grade 9

Prerequisites: None

Semester 2, One credit

This second semester freshman course will further examine archetypes in literature, including poetry and drama. Writing will include literary analysis, research skills and essay tests. Students will build a foundation in grammar skills and will continue developing speaking and listening skills.

English 3

Grade 10

Prerequisites: English 1 and English 2

Semester 1, One credit

This course introduces students to the application of literary theory to classic and contemporary works. Literary works include a memoir novel, *The Great Gatsby*, and *Things Fall Apart*. Students will also continue to work on their composition skills through written analyses of literature, as well as write their own narrative.

English 4 - Literature/Composition

Grade 10

Prerequisites: English 3

Semester 2, One credit

This course continues the introduction to application of literary theory to classic and contemporary works. Literary works include *Slaughterhouse Five*, *Hamlet*, and an

additional student choice between several novels. Students will also continue to work on their composition skills through written analyses of literature.

THE FOLLOWING COURSES FULFILL ENGLISH GRADUATION REQUIREMENTS FOR THE GRADES INDICATED

Advanced Composition and Critical Thinking

Grade 11

Prerequisites: English 1-4

Semester 1 or 2, One credit

Advanced Composition and Critical Thinking is intended to give students a wide variety of writing experiences in preparation for the demands of college. The College Writer will guide students through various modes of writing including rhetorical analysis, persuasive research, cause/effect, and more. In addition, students will study and apply sophisticated grammatical structures in their writing.

American Literature

Grades 11-12

Prerequisites: English 1-4

Semester 1 or 2, One credit

Key historical events and revolutionary ideas will be studied as they relate to the development of our American literary voice and cultural identity. Units will include: Native American, Puritan and Colonial Literature; Romanticism, Transcendentalism and Dark Romantics; Realism and Modernism; Contemporary Literature. Emphasis is given to developing analytical skills through close reading of the texts and articulating how history shapes our country's literature. Students who have taken AP Language and Composition may not take American Literature

British Literature

Grades 11-12

Prerequisites: English 1-4

Semester 1 or 2, One credit

British Literature provides exposure to the classic works which form the foundation of our English heritage. Course content focuses on representational literature from each of the major literary periods, and includes Seamus Heaney's translation of Beowulf, an excerpt from Geoffrey Chaucer's Canterbury Tales, Arthurian myths, William Shakespeare's tragedy Macbeth, Mary Shelley's nineteenth century novel Frankenstein, and an outside reading novel. Emphasis is given to developing analytical skills through close reading of the texts, and tying ideas and themes to contemporary concerns.

World Literature

Grades 11-12

Prerequisites: English 1-4

Semester 1 or 2, One credit

World Literature explores both the geographical and cultural uniqueness and universal themes of literature and culture by engaging in an in-depth study of literature from several world cultures. Students will play a major role in class by leading discussions, engaging in critical analyses, and completing a variety of standard and creative assessments.

Students will investigate cultural trends, moral and ethical perspectives, looking at how these varied contexts reflect universal similarities and help individuals shape a personal and collective identity. Readings include ancient works from mythological and epic literature with a focus largely on contemporary novels from authors such as Saramago, McCarthy, Martel, Satrapi, and Adiga. Parents and students should be aware of the mature nature of many readings in this course. Sensitive material will be read and analyzed in an academic context.

Modern Thought in Literature

Grades 11-12

Prerequisites: English 1-4

Semester 1 or 2, One credit

The course deals with literature as a reflection of the rapid changes occurring from the beginning of the 20th century through the present, creating the unique Modern and Postmodern themes and philosophies that define the art and literature of the age. Students will encounter oppressed, misunderstood characters, rebels monitored by their governments, and individuals living in absurdity, exploring life's meaning or lack thereof, how to cope with an ever changing reality, and the challenge of true connection and communication within a pluralistic society. The course reading will include both established and recently acclaimed authors, including Huxley, Orwell, Atwood, Stoppard, Gardner, Foer and others.

General Junior/Senior English

Grade 11-12

Prerequisites: Teacher Recommendation

Semester 1-2, One credit

This course is designed to give the student an introduction to important American, English and World literature. Students will be expected to read stories, novels, essays and poetry and will be asked to participate in discussion of these materials. Students will write essays pertaining to the literature. Students will be given instruction in the research process, college essays and personal writing. Teachers and counselors will determine placement.

AP English Language and Composition

Grade 11

Prerequisites: Semester grade of B or better in English 1 and 2 as well as English 3 and 4 or English Department approval and completion of assigned pre-course summer work
Semester 1 and 2, Two credits

As articulated in the AP English Course Description, the purpose of AP English Language and Composition is to "enable students to read

complex texts with understanding and to write prose...to communicate effectively with mature readers” (The College Board 2010). This course is constructed in accordance with those guidelines. Through close readings and focused written assignments, students become more aware of rhetorical strategies and the purposeful use of language. As this awareness grows, students are more readily able to incorporate these same strategies into their own writing and to cultivate personal writing styles. Additionally, students will learn how to use various grammatical structures in order to improve their writing. Expectations for students are appropriately high for a college introductory level course, and the work required of them is challenging.

Because AP English is designed as a year-long course, students who wish to drop at mid-year can do so only with the consent of their counselor and course teacher. Students who are approved to drop AP Language and Composition must take Advanced Composition as a replacement. Students who sign up for AP Language and Composition cannot take American Literature senior year.

AP English Literature and Composition

Grade 12

Prerequisites: Strong interest in literature and completion of assigned pre-course summer work. Semesters 1 and 2, Two credits

Through close reading, discussion, and critical analysis of literary fiction, AP Literature students deepen their understanding of how writers use language to create both meaning and pleasure. Required texts range from Ancient Greece to the 21st Century and include works from literary traditions in North America, Great Britain, Australia, and Western Africa. Students will read required core texts of short stories, poetry, plays, and novels from various genres and periods. They also read independently selected literary novels and plays to support their love of literature and appreciation of how literature “reflects and comments on a range of experiences, institutions, and social structures” (College Board Course Framework 11). Students analyze form, theme, and literary devices as they consider literary fiction

within its historical context and in relation to their own experiences.

Writing is an integral component of the course and is used to engage analytical thinking through creative, expository, and analytical essays. Students will write alone and in collaboration with others. They will engage in literary research and write both process-based research essays timed and in-class, timed essays. Regardless of the assignment, students will work to strengthen a mature academic style characterized by strong logic and reasoning, sophisticated analysis, precise diction, varied syntax, logical organization, coherence, and rhetorical effectiveness. Additionally, students will communicate their ideas by leading discussions and participating in both small group and whole-class discussions. This course prepares students to demonstrate strong writing and analytical skills in college and on the AP English Literature and Composition exam. Because AP English is designed as a year-long course, students who wish to drop mid-year can do so only with the consent of their counselor and instructor.

Historically students find success in this course if they’ve **earned course grades of B or better** in Advanced Composition and their junior year literature course OR AP Language and Composition. Students who earned a **23 or higher on the ACT English and reading** sections have statistically proven successful on the AP Literature Exam based on research from Radunzel and Allen ([“Predicting Success on Advanced Placement Exams using ACT Aspire, PreACT, and ACT Test Scores,”](#) 2020).

**THE FOLLOWING COURSES ARE
ELECTIVE OPTIONS FOR THE GRADES
INDICATED**

Acting (To Be Offered 2024-25 School Year)

Meets the Cultural Arts graduation requirement

Grades 9-12

Prerequisites: None

Have you ever wanted to perform? Acting provides fundamental tools in improvisation, character work, and scene development in order to interpret and perform improvised and scripted theatre. Have fun developing creative works individually and as a team.

Advanced Acting (To Be Offered 2024-25 School Year)

Meets the Cultural Arts graduation requirement

Grades 10-12

Prerequisites: Acting

Semester 1 or 2, One credit per semester

Advanced Acting builds upon foundational acting techniques to develop deeper understandings of theatre, characters, performance, and theatre's connection to the world. Where Acting 1 focused on improvisation and basic acting technique, this course will provide further performing opportunities by utilizing different genres such as Comedy, Drama, One Acts, Musicals, and acting for film. Studies have shown that employees want exactly what Theatre Arts teach us: collaboration, communication, problem solving, and teamwork.

Exploration of Theatre Design (To Be Offered 2025-26 School Year)

Meets the Cultural Arts graduation requirement

Grades 9-12

Prerequisites: None

Semester 1 or 2, One credit per semester

This semester-long class will introduce students to every aspect of designing a play. Students will use a model text in order to explore different tracks of design within the Theatrical world through a hands-on approach including, but not limited to, Scenic Design, Costume Design, and Lighting Design. At the end of the class, students will select a choice play to analyze and demonstrate command of theatrical design tracks. While students will learn about all parts of producing a play, acting is not a requirement and previous experience is not necessary

Journalistic Composition & Literature

Grades 11-12

Prerequisites: English 1-4

Semester 1 or 2, One credit

Does not count as an English required class

Journalistic Composition is a writing-based course, focusing on several aspects within the field of journalism. Students will be expected to research, observe, interview, write, edit, and publish material throughout the semester. Students may also be asked to manage a staff or serve as an editor. The class will post content online weekly and prepare written pieces for the school's online newspaper. Students will learn journalism law and ethics, providing a strong foundation for proper journalism practice. Recent articles will serve as examples and while this is a writing course, students may be expected to read nonfiction pieces that evoke discussion of current events and also serve as professional writing models for style. This is a student-run publication; your writing will set the conversation around the school! Parents and students should be aware of the mature nature of many readings in this course. Sensitive material will be read and analyzed in an academic context.

MATHEMATICS

The department encourages all students to take four years of math. Studies have shown that students do significantly better in post-secondary mathematics courses if they have taken a math class every year of their secondary education.

All prerequisites for a course inherit the prerequisites of previously required courses.

Pre-Algebra

Grades 9-12

**Prerequisites: Teacher Recommendation
Semester 1-2, One credit per semester**

This course is designed to prepare students for Algebra 1. Pre-Algebra is a foundational methods course where students will develop solid skills in basic algebra, reasoning and number sense. Students will have opportunities to use mathematics to model a variety of real-world situations and will learn to approach problems numerically, graphically, algebraically, and verbally. In general, the Pre-Algebra topics are aligned with our Algebra 1 course and include problem solving, integers, solving equations and inequalities, percent, fractions, decimals, proportions, linear equations, exponents, polynomials and factoring, square roots, and quadratics. Non-algebra topics include measurement, perimeter, area, right triangles and statistics. A scientific calculator is required. This course **does not** meet algebra requirements for college.

General Pre-Algebra

Grades 9-12

**Prerequisites: Teacher Assigned
Semester 1-2, One credit per semester**

This course reviews and extends the study of variables, constants, expressions, and equations in preparation for General Algebra 1. Students will learn to approach problems numerically, graphically, algebraically and verbally, and use mathematics to model a variety of real-world situations. Topics covered include solving equations, simplifying expressions, understanding order of operations, working with positive and negative numbers, factoring, and graphing. Teachers and counselors will determine placement.

Algebra 1

Grades 9-12

**Prerequisites: Grade 9 - Teacher recommendation, Grades 10-12 - Pre-Algebra
Semester 1-2, One credit per semester**

Algebra 1 is the first course in abstract mathematics and the initial step in the regular sequence of high school mathematics. It provides the student with fundamental tools to explore mathematical concepts, search for patterns, and solve problems. Topics include the study of linear, exponential, quadratic and rational functions. Students will be encouraged to comprehend algebraic concepts, to make conjectures while persevering through challenging problems, and to develop a conceptual understanding of mathematics. Major concepts are balanced with procedural skill knowledge (simplifying expressions, solving equations and inequalities, translating mathematical sentences, graphing, and solving systems of equations) A graphing calculator is required for this course, which allows students to more thoroughly investigate the mathematics being learned. Preferred model: TI-84+

Algebra 1 Block

Grade 9-10

**Prerequisites: Teacher Recommendation
Semester 1-2, Two course credits per semester –
one math credit per semester**

Research shows that doubling up on Algebra instruction has a positive and substantial impact on college entrance exams and enrollment rates. With this research in mind, Algebra 1 Block is designed for students who have the potential to be successful in Algebra 1 given a second period of math instruction. Algebra 1 Block offers two periods of Algebra, designed specifically for a double period,

(versus 51 minutes of regular Algebra and another period of support). Students in this course will be held to the same learning standards as Algebra 1 with additional instructional opportunities for conceptual learning, discussion, etc. Teachers and counselors will determine placement.

General Algebra 1

Grades 9-12

**Prerequisites: General Pre-Algebra
Semester 1-2, One credit per semester**

General Algebra 1 continues the study of variables, constants, expressions and equations. This course provides students with fundamental tools to explore mathematical concepts, search for patterns, and solve problems. Topics covered include solving equations and inequalities, translating mathematical sentences, graphing, solving systems of equations, and investigating the relationship between various quantities. Teachers and counselors will determine placement

Geometry

Grades: 10-12

Prerequisites: Algebra 1 and Teacher Recommendation

**Can be taken concurrently with Advanced Algebra 2 and Trigonometry
Semester 1-2, One credit per semester**

Geometry provides students with the essentials of geometry along with the reinforcement of algebraic concepts. Emphasis will be placed on discovering the principles of geometry, logical thinking, and visualization of 2 and 3 dimensional objects. Topics include parallel and perpendicular lines, congruent triangles, relationships within triangles, quadrilaterals, similarity, right triangles and trigonometry, area, surface area, volume, and circles. Instruction is guided with hands-on explorations and real-world problems which make concepts more meaningful for students.

General Geometry

Grades 10-12

**Prerequisites: General Algebra 1
Semester 1-2, One credit per semester**

General Geometry provides the students with the essentials of geometry along with reinforcement of algebraic concepts. Emphasis will be placed on discovery of the principles of geometry, logical thinking, and visualization of 2 and 3 dimensional objects. The course is a blend of arithmetic, algebra, and geometry. Each chapter ends with a review of not only the current chapter, but also every chapter from the beginning of the book. Teachers and counselors will determine placement.

Algebra 2

Grades 11-12

Prerequisites: Geometry and Teacher Recommendation

Semester 1-2, One credit per semester

This course is designed for students intending to satisfy a third year math requirement for colleges, but who will not be taking Pre-calculus. Together with Functions and Trigonometry, it provides a sound foundation in advanced algebra concepts with less rigorous pace than Advanced Algebra 2 and Trigonometry. A review of Algebra 1 is included along with new topics such as arithmetic and geometric sequences and series, a study of function families and their graphs, graphical transformations of function graphs, introduction to trigonometry, exponential functions, logarithms, polynomials, systems of equations, and probability and statistics. Triangle trigonometry will be emphasized with an introduction to circular trigonometric functions. A strong emphasis will be placed on using real-world data and hands-on explorations to investigate the topics mentioned above. A graphing calculator is required for this course, which allows students to more thoroughly investigate the mathematics being learned.

Advanced Algebra 2 and Trigonometry

Grades 10-12

Prerequisites: Algebra I, Geometry and Teacher Recommendation OR Algebra 1 and concurrent enrollment in geometry with teacher recommendation

Semester 1-2, One credit per semester

Advanced Algebra 2 and Trigonometry is a transitional course between elementary studies in mathematics and more analytical and graphical reasoning. Throughout the course, topics build on the foundational concepts that students have mastered in Algebra 1. New topics that are introduced include parent functions, complex numbers, exponential and logarithmic functions, rational and inverse functions, trigonometric and circular functions, and probability. Graphing functional relationships will be emphasized and problem solving based on real-world applications of these functional relationships is a central part of the course. Students will be encouraged to comprehend abstract algebraic concepts, to make conjectures while persevering through challenging problems, and to develop a deeper understanding of mathematics. Throughout this course, students will be asked to solve problems numerically, algebraically, graphically and verbally. A graphing calculator is required for this course. Preferred model: TI-84

Accelerated Algebra 2

Grades 9-10

Prerequisites: Algebra I and Teacher Recommendation

Must be taken concurrently with Geometry Semester 1 or 2, One credit

Accelerated Algebra 2 is a one-semester course taken concurrently with Geometry and in lieu of Advanced Algebra 2 & Trigonometry. The purpose of the course is to provide freshmen in Algebra a pathway to AP Calculus as seniors. The topics covered in this are designed to prepare students to be successful in AP Pre-calculus. Topics introduced include complex numbers, rational exponents, absolute value equations and inequalities, types of functions, transformations of functions, and trigonometry. Students will be encouraged to comprehend abstract algebraic concepts, persevere

through challenging problems, and develop a deeper understanding of mathematics. A graphing calculator is required. Teachers demonstrate with the TI-84+, the preferred model for students.

College Algebra

Grades 11-12

Prerequisites: Algebra 2 and Teacher Recommendation

Semester 1 - 2, One credit per semester

College Algebra is intended for students who have completed the Algebra-Geometry-Algebra 2 sequence of courses, but either do not wish to take AP Pre-calculus or wish to further develop their mathematical skills prior to taking Pre-calculus. The course addresses function concepts, including polynomial, rational, exponential, and logarithmic functions. Other topics include systems of equations and inequalities; matrices and determinants; sequences and series; analytic geometry and conic sections; and induction. A graphing calculator is required. Teachers demonstrate with the TI-84+, the preferred model for students.

AP Pre-calculus

Grades 11-12

Prerequisites: Advanced Algebra 2 and Trigonometry OR Algebra 2

Semester 1-2, One credit per semester

Pre-calculus is the study of functions, their graphs, and their applications. Students will learn how to approach problems numerically, graphically, algebraically, and verbally. Topics include function families, rates of change, transformations, composition, inverse functions, logic, trigonometry, vectors, polar graphs, parametric equations, optimization, and limits. Students will be encouraged to comprehend abstract concepts, to make conjectures while persevering through challenging problems, and to develop a deeper understanding of pre-calculus topics. Students will routinely use graphing calculators to investigate graphs, discuss real-world problems, and explore concepts which lay the foundation for calculus or other advanced mathematics courses. A graphing calculator is required for this course, which allows

students to more thoroughly investigate the mathematics being learned. Preferred: TI-84+.

AP Calculus AB

Grade 12

Prerequisites: AP Pre-calculus

Semester 1-2, One credit per semester

Through intuitive, analytic, numerical, and graphical thinking, students will explore the fundamental concepts of Calculus. Topics include limit theory, continuity, the derivative, the definite integral, techniques of integration, applications of the derivative and definite integral, and differential equations. The use of technology and applications will be discussed throughout the course. Upon successful completion of the course, students will take the College Board Calculus AB Advanced Placement Exam. Students with qualifying scores on this exam will receive equivalent credit for one semester of calculus at many colleges and universities. (See counseling department for list and qualifying score.) A graphing calculator is required for this course. Preferred model: TI-84+

AP Calculus BC

Grade 12

Prerequisites: AP Pre-Calc

Semester 1-2, One credit per semester

This course covers all of the topics in Calculus AB, but includes additional topics that prepare students to take the College Board Calculus BC Advanced Placement Exam. Additional topics include limit theory, techniques of integration, logistic functions, series, additional theory of calculus, derivatives of parametric and polar functions, and possibly systems of differential equations, partial derivatives, multiple integrals and vector calculus. Student with qualifying scores on this exam will receive equivalent credit for two semesters of calculus at many colleges and universities. Students will also receive an AB subscore. (See counseling department for list and qualifying score.) A graphing calculator is required for this course, which allows students to more thoroughly investigate the mathematics being learned

AP Statistics

Grades 11-12

Prerequisites: Advanced Algebra 2 and Trigonometry or Algebra 2 with Teacher Approval

Semester 1-2, One credit per semester

This is a year-long course in statistics that will culminate in an AP test and advanced placement credit at many colleges and universities. (See counseling department for list and qualifying score.) In an ever-more technical world, it has become increasingly important for students to develop a serious understanding of the basics of statistics. This includes data collection and presentation, the planning of a statistical study, the use of probability models and simulation to predict occurrences of events, and statistical inferences via confidence intervals and hypothesis testing. This course will prepare students who are seeking college/university majors in social sciences, health sciences, education, or business for further studies in their field. Writing and problem solving skills are essential qualities for students that take this course. A graphing calculator is required for this course. Preferred model: TI-84+

Please refer to the Computer Science Section for information on Computer Science Principles 1 and 2 and AP Computer Science.

***SUFFICIENT ENROLLMENT IS REQUIRED
IN ORDER FOR COURSES TO RUN***

MUSIC

ALL MUSIC COURSES LISTED BELOW FULFILL THE CULTURAL ART GRADUATION REQUIREMENTS FOR THE GRADES INDICATED

BAY BANDS

There is a place for everyone who wants to make music at Whitefish Bay High School, from our entry-level Band 101 for new/rusty players to our outstanding Concert Band and up-and-coming Jazz II program, to our world-class Wind Ensemble and hard swinging Jazz I big band. Bay Bands perform a wide range of fantastic music throughout the year. Participating in band also unlocks opportunities to rock out with Pep Band, be a part of our tremendous high school musicals with Pit Orchestra, form your own student groups through Solo/Ensemble, and even travel around the country with Travel Band. There's something for everyone!

Concert Band

Grade 9-12

Prerequisites: Wind and percussion instrumentalists with previous middle or high school band experience
Semesters 1-2, One credit per semester

The Concert Band is our CORE wind band and is a year-long course. This group is the primary performing ensemble focusing on fundamental performance concepts which lay the foundation for competency in instrumental music performance. Emphasis is placed on building ensemble skills such as balance, tuning, and non-verbal communication, as well as teaching music literacy through performance in band. Musicians who desire a relaxed pace while enjoying the rewarding aspects of making music should register for the Concert Band. Although no audition is required, previous experience in middle or high school band is expected. Attendance at performances such as home football games, a few basketball games as well as major concerts is required. The Concert Band shares performances with the Wind Ensemble and will often combine with them on many musical selections.

Wind Ensemble

Grade 10-12

Prerequisites: Wind and Percussion instrumentalists, completion of Concert Band and/or by director recommendation.
Semesters 1-2, One credit per semester

The Wind Ensemble is our year-long, advanced wind band where the emphasis is placed on playing complex repertoire. Wind Ensemble is open to selected wind and percussion students by director selection only. Musicians who are self-motivated, independent, and challenge-driven should consider the Wind Ensemble. This course is typically preceded by the Concert Band. Wind Ensemble students should possess mature technique on their instruments and display proper rehearsal etiquette. Participation in the WSMA Solo/Ensemble Festival and enrollment in private lessons are additional considerations. Emphasis in class will be placed on reading a large amount of literature, and students will continue to independently develop skills and fundamentals through home practice. Instrumentation of the Wind Ensemble is limited. Attendance at performances such as home football games, a few basketball games and major concerts is required.

Jazz Band II

Grade 9-12

Prerequisites: No jazz experience necessary, but students must be able to read music. All instruments welcome.

Semesters 1-2, One credit per semester

Jazz Band II is a year-long course built around a traditional jazz big band (saxes, trombones, trumpets, drums, bass, piano, guitar), but it is also available to ALL musicians, regardless of instrumentation (from classical winds and strings to garage band musicians). Students in Jazz II will learn to play in a number of different styles, and we will also explore improvisation, music theory, and creativity on our instruments. Students must be able to read music at a basic level or be willing to learn. Previous jazz experience is helpful but not required. Students in Jazz II will share performances with Jazz I around our school and community throughout the year.

Jazz Band I

Grade 10-12

Prerequisites: Completion of Jazz Band II and/or permission from instructor. Standard instrumentation (saxes, trumpets, trombones, drums, bass, piano, guitar)

Semesters 1-2, One credit per semester

Jazz Band I is a year-long, advanced traditional jazz big band consisting of saxophones, trombones, trumpets, and a rhythm section (piano, drum set, guitar, bass). We will explore a number of musical styles including: swing, latin, funk, rock, fusion, and more. Jazz history is also learned during the year. Students will also learn principles of music theory and how to improvise over chord changes. We hold multiple performances throughout the school year, including: concerts, festivals, assemblies, and within the community. Students who participate in Jazz I should be able to read music at an intermediate level and have prior jazz experience, either at the middle or high school level.

Extra-Curriculars for Band Members

WSMA Solo/Ensemble Festival is available to all band students enrolled in a performing music class.

Travel Band is offered every other year and is available to all students enrolled in year-long band courses.

BAY CHOIRS

“Find your voice and share it with others” is at the heart of who we are. The Choir program is a place where all students can share a common bond of performing in a safe, inviting, and inclusive atmosphere. Choir will also challenge you to become a stronger musician and develop as a singer. The choir program at Whitefish Bay High School offers students the opportunity to study and perform masterpieces of choral music as well as other styles such as multicultural, Vocal Jazz, Pop, A’ cappella, Patriotic, and Musical Theater. We perform in 4-5 concerts per year. Additional opportunities include participating in the annual January weekend Choir Retreat, April Pops Concert production, all-school musical production, WSMA Solo and Ensemble Music Festivals, and the Choir tour for select choirs to cities within the USA. Add your voice to WFBHS Choirs!

Concert Choir

Grades 9-12

Prerequisites: None

Semester 1-2, One credit per semester

Concert Choir is a mixed choir designed for first- and second-year HS choir students from any grade. This course focuses on the development of basic skills, vocal technique, music reading, and musicianship. Students may participate in the course regardless of prior experience and may register without an audition.

Treble Choir

Grades 10-12

Prerequisites: Concert Choir and consent of instructor

Semester 1-2, One credit per semester

Treble is a choir of treble voices designed for the intermediate choir student. The required spring auditions measure music reading ability, tone quality, hearing ability, and previous choral experience. This course focuses on more challenging repertoire for treble voices and seeks to enhance vocal and musical skills at a higher level.

Bel Canto

Grades 10-12

**Prerequisites: Audition and consent of instructor
Semester 1-2, One credit per semester**

Bel Canto is a mixed choir designed for the advanced choir student. The required spring auditions measure music reading ability, tone quality, hearing ability, and previous choral experience. Students need to have taken Concert Choir and Treble Choir. This course requires strong skills and commitment and focuses on a vast, difficult, and comprehensive repertoire for performance at school and community events as well as competitions and festivals.

Extra-Curricular Choirs

Extra-curricular choirs are open to the entire student body, regardless of prior experience or ability. Tower Singers (for bass voices), and Bay Belles (for treble voices), meet outside of class periods at either lunches or evenings. These groups include many students from the curricular choirs, but they also include other students who are not enrolled in choir for credit. Cantorei is a select chamber ensemble of 12-14 mixed voices chosen by audition each spring. Cantorei provides more experienced singers with further opportunities to explore unique and challenging repertoire. Cantorei performs frequently at school and community events. Students must be enrolled in a choir class to audition.

BAY ORCHESTRAS

String Orchestra is for students who wish to advance in ability to play an orchestral instrument (violin, viola, cello or double bass). Students are required to perform in several public concerts each year. A varied and challenging repertoire is studied for the development of technical skills and advanced musicianship, with selected band students incorporated for the purpose of full symphonic literature. Periodic playing tests, written exams and clinics are given with an emphasis on musical growth and personal expression. Individual practice at home is expected and required. Orchestra members are also called upon to play in the pit orchestra for the annual high school musical. Special supplies are required, including the purchase of specified performance attire and an orchestra instrument, some of which may be rented from the school.

Concert Orchestra

Grade 9-12

Prerequisites: Attainment of beginning level skills and director's permission

Semester 1-2, One credit per semester

This course offers instruction in the development of intermediate and advanced performing skills, including individual playing and ensemble techniques and disciplinary skills needed for performance. After school rehearsals and performances are required of all students as a part of the course.

Chamber Orchestra

Grades 10-12

Prerequisites: Successful audition and director's permission

Semester 1-2, One credit per semester

This course is designed to provide the advanced string musician the opportunity to develop and refine technical, musical, and ensemble skills necessary for advanced rehearsals and performances in and out of school. After school rehearsals and performances are required of all students as part of the course.

General Music Non-Performance Based Courses

Digital Music

Grades 10-12

Prerequisites: None

Semester 1 or 2, One credit per semester

Have you ever wondered how an album is produced? Are you interested in beat making and working with creating music? In Digital Music, students learn to produce, mix, edit, engineer, and add special effects to music projects. There is also instruction on sampling, mash-ups, and cloud based software. The projects include personal compositions, mastering of pre-recorded performances and sound mixing. This is a hands on course designed to teach your basic piano skills, songwriting, and the history of the last 100 years of recorded music. We also study film scoring and create video soundtracks.

Advanced Digital Music

Grades: 10-12

Prerequisites: Successful completion of Digital Music or teacher approval

Semester 1 or 2, One credit per semester

In Advanced Digital Music students will further their abilities to produce, mix, edit, engineer, and add special effects to a variety of digital recording projects. The projects include personal compositions, mastering of pre-recorded performances, capturing, re-mixing, and mastering of live performances. Topics covered will include: Sampling, Live audio production, MIDI production, art of mixing and mastering, creating music for movies, working with musicians, and recording studio basics. Students will create a semester long album and project as part of this class. This level also explores different DAW's (digital audio workstations) and uses the recording studio as well. We also study film scoring and create video soundtracks.

Music Theory

Grades: 9-12

Prerequisites: Background or experience in music

Semester 1 or 2, One credit per semester

Lab/Supply Fee - \$16.00

Music Theory is a one semester course that is designed to provide students the opportunity to build and expand upon their knowledge of music and its theoretical elements. Students will develop musical skills that will lead to a greater understanding of music composition and music theory. Through this course of study, students will learn to analyze, synthesize and create music with an understanding of the various techniques used in western music. Topics covered will include the fundamental elements of music (scales, tonality, intervals, chords) and the structural elements of music (cadences, harmony, melody, tonality, form). This class is designed for beginners.

AP Music Theory

Grades: 9-12

Prerequisites: Ability to read and write musical notation, or consent of instructor

Semester 1-2, One credit per semester

This college preparatory music theory curriculum introduces the student to musicianship, theory, musical materials, and procedures. The course will integrate aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and, to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony are important parts of the theory course. In a nutshell this course covers compositional elements, analysis, musical form, how to listen to music with a critical ear, and how the history of western classical music has informed the music of today. Ultimately we prepare AP theory students to take the College Board AP Theory Exam. After the exam we study Jazz music history and composition.

American Pop Music: Evolution and Revolution

Grades: 9-12

Prerequisites: None

Semester 1 or 2, One credit per semester

American Pop Music: Evolution and Revolution is a semester-long elective that will dive deeper into the past, present, and future of American pop music. With a lens on how popular music has evolved from the family parlor to the clubs of Harlem to today's internet access to millions of songs, this active-discussion and listening-based course sheds light on how studying the past 100 years might give us a glimpse of what we can expect to hear in the next century. If you enjoy discovering new music, exploring older influences on modern artists, and learning how to listen with an educated, critical ear, this is the class for you.

PHYSICAL EDUCATION/HEALTH

According to Wisconsin Department of Public Instruction, students in grades 9-12 need at least 1.5 credits of physical education to graduate. Credits must be earned over three separate years.

The student must pass the course requirements in order to pass the course. In addition, all students are swim tested each year and must pass the swim requirement before they graduate. All courses are coeducational, meet daily, are one credit and are included in the student's GPA. Physical education at Whitefish Bay High School is a "lifetime wellness-based" program. Students will experience a variety of fitness activities, lifetime activities, and sports, all aimed at developing present and lifetime wellness advocacy.

"0" Hour classes are conducted from 7:15am - 8:06am.

**All students must pass the swim test or enroll in PE-9 Swim.

Physical Education 9

Grade: 9

Prerequisites: Pass swim test

The main goal of this class is to provide a foundation of skill development in various activities along with the understanding and application of exercise science concepts.

Physical Education 9 - Swim

Grades: 9

Prerequisites: Did not pass swim test

This course is designed for students who do not show evidence of being a proficient swimmer. During the first week of school, every student who is enrolled in the swim class will be assessed to see their current swim levels and divided into two groups (*if class size exceeds 16 students*). While enrolled, students receive daily swimming lessons until they demonstrate proficiency in each of the required swimming skills tests. If students are able to demonstrate proficiency, they will switch over to the PE 9 (or elective) course that runs during the same hour at the end of the first quarter or progress report (2nd Quarter.)

Health

Grade: 10

Prerequisites: None

The purpose of this course is to enable each student to acquire the knowledge and skills to make important decisions in mental, physical, emotional, and social well-being. Emphasis is placed on developing "health literate" students with the skills to practice life-long health-enhancing behaviors and reduce health risks.

THE FOLLOWING COURSES FULFILL PE GRADUATION REQUIREMENTS FOR THE GRADES INDICATED

Team Challenge

Grades: 10-11

Prerequisites: PE 9

This course appeals to those students who desire competitive settings and engaging team sport activities. Students will utilize previously learned skills and concepts while engaging in game play activities. This course may include football, soccer, lacrosse, hockey, basketball, volleyball, water polo, team handball, speedball, eclipse ball, etc.

Lifetime Activities

Grades: 10-12

Prerequisites: PE 9

In this course students explore areas including fitness training in areas such as cardiovascular training, weight training, yoga, etc. Students will also take part in other lifetime activities that include racket sports like badminton, tennis, and pickleball, as well as table tennis, kayaking, golf, paddleboarding, frisbee golf, spike ball. At the end of the course, students will design and implement a personalized fitness/activity plan.

Zero Hour PE

Grades: 10-12

Prerequisites: PE 9

This class is for those who desire more scheduling flexibility and are self-motivated to perform well. Some of the unit offerings in this unique course include: outdoor education, team and individual sports and activities, weight training, yoga, stress management, and overall fitness training

Personal Training

Grades: 10-12

Prerequisites: PE 9

This course is for students who prefer a more individualized setting for fitness and training. In this course, students will be creating their own fitness plan using various resources, and collaborating with coaches, trainers, and other fitness professionals, to design a program that best meets their personal fitness goals or athletic training needs. Students will then implement their individualized fitness plans throughout the duration of the semester. Students will be setting goals and performing self-reflections on their progress towards meeting those goals.

Everyday Yoga

Grades: 10-12

Prerequisites: PE 9

Yoga means to “unite” – the breath with the body. It famously has a style for all needs – from the powerful/strength building, relaxing, building balance, flexibility, to just finding inner calm, concentration, and peace. It’s also great for self-discipline. Everyday Yoga will offer an opportunity for a diverse experience of many styles of yoga to meet the needs of the physically, mentally, or emotionally challenged, athletes, inflexible, injured, or stressed out. Perhaps

you just don’t have the time or money to join an evening class! Mrs. Rodriguez is an RYT (Registered Yoga Teacher) and practicing enthusiast who will, joyfully, teach the class. Yoga can only be taken 1 time to fulfill PE graduation requirement, but can also be taken a second time for elective school credit.

<p>THE FOLLOWING COURSES ARE ELECTIVE OPTIONS FOR THE GRADES INDICATED</p>

Advanced Health

Grades: 11-12

Prerequisites: Health 10

This class will be more focused on individual advocacy and skill development in all areas of wellness as well as environmental health. School and community projects will be a significant portion of this class, and will be student driven and teacher guided. Students will also have the opportunity to pick subject areas they are passionate about and design their own learning opportunities around them. This class will also cover greater detail in other topics that will prepare students for post high school life /adulthood.

Senior Team Challenge

Grade: 12

Prerequisites: PE 9

This course appeals to seniors who desire to continue their participation in team sports and competitive activities. The course will follow a similar format as Team Challenge.

<p>SUFFICIENT ENROLLMENT IS REQUIRED IN ORDER FOR COURSES TO RUN</p>

SCIENCE

Science Course Requirements:

1. 1 year of Biology (“Biology”)
2. 1 year of Chemistry (“Chemistry in the Community” or “Chemistry”)
3. 1 year of Physics (“Physics Concepts and Applications”, “Physics”, “Principles of Engineering” or “AP Physics C – Mechanics”)

*The Whitefish Bay High School science staff strongly believe all students should develop a broad understanding of biology, chemistry and physics by completing coursework in each of these areas prior to graduation.

Biology

Grades 9-12

Prerequisites: Grade 9

Semester 1-2, One credit per semester

Biology is a laboratory science course required for graduation. It provides students with a general overview of biological subject matter, including major characteristics of life, cell biology, molecular science, cellular transport, protein synthesis, genetics, evolution, and energy flow.

Chemistry in the Community (Chem Comm)

Grades 10-11

Prerequisites: Biology

Semester 1-2, One credit per semester

This is a laboratory intensive chemistry course where emphasis is placed upon real-world applications of chemistry and the relationship between chemistry, personal health, and life in the community. Chem Comm includes quantitative calculations but with less emphasis on theoretical and mathematical applications than in Chemistry.

Chem Comm is not an automatic prerequisite for AP Biology or APES. Teacher approval will be required if you want to register for those courses. Chem Comm is not an acceptable prerequisite for AP Chemistry.

Chemistry

Grades 10-12

Prerequisites: Successful completion of Biology and Algebra 1

Semester 1-2, One credit per semester

Chemistry is a high school chemistry course which involves scientific measurement, problem solving, classifying matter, studying atomic structure, using the periodic table, understanding the types of chemical

bonds, molecular geometry, writing chemical formulas and balancing equations, stoichiometry, kinetic molecular theory, states of matter, solutions, and acid-base chemistry. Through lecture, discussion, and hands-on experiences, Chemistry emphasizes practical applications, problem solving and critical thinking skills that will prepare students for their future.

Physics Concepts and Applications

Grades 11-12

Prerequisites: Completion of Algebra 1

Semester 1-2, One credit per semester

Students in this course will explore the major topics of Physics through the use of hands-on laboratory explorations, teacher demonstrations, and projects.

Students will learn proper laboratory and analysis techniques that will be used throughout the course to learn the main concepts of topics such as electricity, waves, energy, dynamics, and kinematics. Students will demonstrate their knowledge on these topics through traditional tests as well as hands-on projects that have strong connections to our everyday lives.

Physics

Grades 11-12

Prerequisites: Completion or concurrent enrollment in Advanced Algebra 2 / Trigonometry

Semester 1-2, One credit per semester

Physics is the study of energy, space, and time at the most fundamental level. Physics principles provide the foundation for engineering, technology, and other scientific disciplines. Students will use empirical evidence to formulate and describe the relationships between physical quantities. These formulations are constituents to theories or models that provide a predictive and testable framework for describing the

behavior of matter/energy in the universe. Physics is a college preparatory science course with emphasis on problem solving, laboratory techniques, and data analysis. Students will learn topics in both classical and modern physics that include kinematics, dynamics, gravitation, rotation, energy, momentum, mechanical waves, EM waves, and Relativity.

Principles of Engineering

Grades 10-12

Prerequisites: Successful completion of Geometry.

Semester 1 and 2, One credit per semester

Lab/Supply Fee: \$15 for engineering notebook and other supplies

Principles of Engineering is a foundational course in the Project Lead the Way engineering course sequence that introduces students to the fields of engineering and physics. Through hands-on exploration of various engineering and physics concepts, students will learn how engineers use math, science and technology to solve real world problems. The course covers several units including: Simple and Compound Machines, Energy Sources & Distribution, Electricity & Circuitry, Work, Power & Efficiency, Thermodynamics, Structural Properties, Force Vectors, Statics, Material Properties, Fluid Power and Dynamics. Students will also learn the fundamentals of robot/machine programming as well as work with robotics kits to build, program and test an autonomous machine.

Students may also elect from the following science course offerings. These courses should be selected upon completion of, or in addition to – not in place of – biology, chemistry and physics sequence of courses.

Environmental Science

Grades 11-12

Prerequisites: Successful completion of Biology, and Chem Comm or Chemistry

Semester 1-2, One credit per semester

Environmental Science is designed to provide students with the scientific principles and methodologies required to understand the interrelationships of the natural world and to apply that understanding to environmental problems and issues. Topics will include earth science, populations, ecology, agriculture, air, water, and climate. This course is designed to use scientific methodologies to understand ecosystems and assess human impact as well as evaluating solutions to environmental problems in the context of our culture.

AP Biology

Grades 11-12

Prerequisites: B- or better in both semesters of Biology and Chemistry.

Semester 1-2, One credit per semester

Lab/Supply Fee: \$25.00 additional supplies

AP Biology will satisfy a year of science toward Whitefish Bay High School graduation and will provide one year (two semesters) of laboratory science for college entrance requirements. AP Biology covers the general areas of biochemistry, cellular processes, genetics, evolution, and ecology. AP Biology has a strong laboratory emphasis and provides students with the conceptual framework, factual knowledge and analytical skills required to pass the College Board AP Examination given each May. Students passing the AP exam may earn college credit and may avail themselves of advanced placement opportunities at many colleges and universities. Students enrolled in AP Biology may be required to complete a summer assignment prior to the beginning of the AP course. Dissection is a required part of the course expectations and will count toward the fourth quarter grade.

AP Chemistry

Grades 11-12

Prerequisites: B or better in both semesters of Chemistry

Semester 1-2, One credit per semester

Lab/Supply Fee: \$25.00

AP Chemistry will satisfy a year of science toward Whitefish Bay High School graduation and will provide one year (two semesters) of laboratory science for college entrance requirements. AP Chemistry is a course designed for students interested in science-related majors and careers. There are ten major units of study based on the AP Chemistry Curriculum Framework, including atomic theory, reaction types and stoichiometry, chemical bonding, states of matter, kinetics, thermodynamics, equilibrium, acids/bases, solution chemistry (buffers, titrations, solubility), and electrochemistry. College preparatory skills are developed through advanced problem solving, guided inquiry labs, and use of technology. *AP Chemistry lab and test days might extend through ISH or after school until 4:00.* Students enrolled in AP Chemistry will be required to complete a summer assignment prior to the beginning of the AP course.

AP Environmental Science (APES)

Grades 11-12

Prerequisites: B- or better in both semesters of Biology and Chemistry. Chem Comm students require teacher approval.

Semester 1-2, One credit per semester

Lab/Supply Fee: \$20.00

AP Environmental Science is designed to provide students with the scientific principles and methodologies required to understand the interrelationships of the natural world and to apply that understanding to environmental problems and issues. Lectures, discussions, laboratory investigations, and field data collection and analysis will be used to identify and investigate environmental problems. Students will also evaluate the risks associated with these problems and examine potential solutions. The course is an application of biology, chemistry, and physics and integrates elements of history, politics, and economics into quantitative and qualitative assessment of the environment. The course is intended as preparation for the College Board Advanced Placement Exam given in May of each year. Because of this intent, APES is significantly more difficult and will require larger time commitment than the regular Environmental Science course.

Calculus III / AP Physics C EM

Prerequisite: Completion of a Physics course and completion of AP Calculus AB or BC

Semester 1-2, One credit per semester (see instructor for math/science credit options)

Lab/Supply Fee: \$25.00

Calculus III/AP Physics C EM is an advanced integrated course in mathematics, science, and technology. Calculus III concepts are introduced and applied to both physics and engineering applications related to Electromagnetic Theory which describes the behavior of the fundamental mechanisms of the universe. This course breaks out of the traditional mode of teaching advanced mathematics independent of rigorous science and technological applications. Core physics principles of kinematics, dynamics, and energy are covered in great depth along with advanced mathematical content such as vector products, partial derivatives, and line, surface and volume integrals. The lab component of the course covers the statistical treatment of data and includes the use of measurement hardware and data analysis software. Students will learn the integrated language of advanced mathematics and science so that they are able

to express their ideas and understanding of applications through collaborative problem solving groups, projects, and presentations.

AP Physics C - Mechanics

Prerequisites: Concurrent or completion of AP Calculus AB or BC

***Students that are juniors may take Mechanics concurrently with Calculus AB or BC with consent of instructor.**

Semester 1-2, One credit per semester

Lab/Supply Fee: \$25.00

AP Physics C is a calculus based physics course with emphasis on classical mechanics, data analysis, and project engineering. This is "Rocket Science!" Students will explore the dynamics of model rocketry through the use of computer aided design, flight modeling, model construction, and flight testing. AP Physics C is equivalent to a one semester college physics course in mechanics that is required for science and engineering majors. Topics include kinematics, dynamics, energy, momentum, rotation, oscillations, and orbital mechanics.

The following courses are also options for students to fulfill an additional year of science. These courses can be taken for either science credit OR general electives towards graduation. These courses are to be selected upon completion of, or in addition to (not in place of) biology, chemistry and physics sequence.

Principles of Biomedical Sciences

Grades 9-12

Prerequisites: None

Semester 1 and 2 (Transcript as either two "Engineering" credits or one "Science- Elective" credit)

Semester 1 and 2, One credit per semester

Lab/Supply Fee: \$25

This Project Lead the Way Biomedical Science Course sets the foundation for understanding Biomedical Sciences. Students begin with a Forensics unit surrounding a mysterious death where they learn about evidence collection and evaluation to determine the cause of death. They will then explore Clinical patient care and learn a variety of skills related to health care and professionalism. Following that is a unit on Outbreaks & Emergencies where students explore how to determine a course of action with EMT skills as well as learning how to prioritize patients, staff, and resources in an emergency. Students will learn how to act as a Biomedical Scientist, developing important laboratory skills in addition to content understanding. Students will also have the opportunity to explore many careers related to Biomedical Lab Sciences.

Medical Interventions

Grades 10-12

Prerequisites: Completion of or concurrent enrollment in Chemistry or Chem Comm Semesters 1 and 2 (Transcript as either two “Engineering” credits or one “Science -Elective” credit)

Lab/Supply Fee: \$25

In this Project Lead the Way Biomedical Science course, students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Students will gain experience with high level biological laboratory skills including micropipetting, bacterial culturing, gel electrophoresis and recombinant DNA.

Human Body Systems

Grades 10-12

Prerequisites: Completion of or concurrent enrollment in Chemistry or Chem Comm Semester 1-2, One credit per semester

Lab/Supply Fee: \$25

In this Project Lead the Way Biomedical Science course, students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

***SUFFICIENT ENROLLMENT IS REQUIRED
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SOCIAL STUDIES

Global Studies: Past & Present

Grade 9

Prerequisites: None

Semester 1-2, One credit per Semester

Global Studies builds upon the World History segment begun in grades 6 and 7. It is an introductory level survey course of world events from 1800 to the present. The end goal of this course is to equip students with the skills, tools, and analytical thinking abilities to fully participate as a productive citizen in a changing world through analysis and understanding of past historical events and the relationship of those past events to today. This yearlong course is structured in 10 chronological units: A Review Bridge Unit (reviewing the building blocks of modern societies taken from the Renaissance, the Scientific Revolution, the Enlightenment, the English Civil War and finishing with the French Revolution), Industrial Revolution, Imperialism (Africa & SE Asia), Imperialism (China & Japan), World War I and the Russian Revolution, Between the Wars and the Rise of the Dictators, World War II, The Cold War, Emerging Nations and Struggles for Democracy, and Global Interdependence and Unresolved Problems in the Modern World.

Economics

Grade 10

Prerequisites: Global Studies

Semester 1 or 2, One credit

**Meets the financial literacy requirement for the State of Wisconsin*

This course is designed to introduce students to the economic realities of the modern world. It is a myth that economics only involves the use of money. Economics focuses on the choices that people make every day as consumers, the choices made by business, and the choices made by government. Economics explores the reasons why society makes the choices it does and how those decisions may affect both the individual and the group. Economics is, in reality, a study of human behavior within the

confines of various economic systems and laws. This course will introduce the concept that every decision made by our society, from consumer to business to government, has an economic cost and/or consequence. The process should allow the students to choose what for them or society in general would be the best combination of costs and benefits.

United States History

Grade 11

Prerequisites: None

Semester 1-2, One credit per semester

This is a survey course based on the history of America from the late 19th Century to the present. The first semester focuses on America from the late 19th Century through World War II. Second semester the content emphasizes post war America to the present. Emphasis is placed on major trends, historical inquiry, significant documents and relationships to present day events within the context of aiding students in the art of critical thinking and thinking like historians.

AP United States History

Grade 11

Prerequisites: Semester grades of B or better in freshman and sophomore English and Social Studies courses is encouraged

Semester 1-2, One credit per Semester

AP United States History is a challenging course that is meant to be the equivalent of a freshman college course and can earn students' college credit. It is a two-semester survey of American history from the age of exploration and discovery to the present, with political, social, economic, intellectual, diplomatic, and cultural approaches. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, essay and research writing,

interpretation of original documents and literature, and historiography, or the "history of history".

AP United States Government and Politics

Grade 12

Semester 1-2, One credit per semester

Advanced Placement United States Government and Politics is a full year course designed to give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret the United States government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute US government and politics. Upon completion of the course, students will take the spring AP exam.

American Government

Grade 12

Prerequisites: Junior year United States History
Semester 1 or 2, One credit

This course focuses on the principles and ideas behind our form of government and how it functions. The major topics of study include the Federal system, the US Constitution, state government, local government, the individual and the law, and the participating citizen.

Leadership for Social Justice

Grade 10-12

Prerequisites: None
Semester 1, One credit

This social studies elective course will consist of three main units. First, students will explore their own leadership strengths and areas of weakness, along with various leadership styles and their levels of effectiveness. Then, students will research and present on topics related to inequity, such as issues associated with gender, race, or sexual orientation. Finally, students will identify specific inequities they see in their school and community and, using a service learning format, will create an action plan including communication, networking and collaboration efforts to influence positive change.

Contemporary Issues

Grades 10-12

Prerequisites: None
Semester 1 or 2, One credit

In this course some current problems of society are studied. These problems may be international, national, state, or local. Through a study of current problems, the students discover ways in which the citizen can become better informed and actively involved in the democratic process. Student discussion is emphasized in this course. This semester long course may only be taken once.

This course will also include an additional fee for as the course text is a magazine subscription. Details by the teacher will be provided during the first week of the course.

World Cultures

Grades 10-12

Prerequisites: None
Semester 1 or 2, One credit

World Cultures is a course designed for those interested in studying the incredible diversity of our world by providing a tour of the history, cultures, and environments of our planet. Through the use of multiple sources, video, music, photography, literature, food and a whole host of experiences, students will discuss and explore topics that include life, death, religion, cultural traditions, family, the meaning of life, and stereotypes and prejudices. World Cultures provides a platform for students to learn about other cultures without traveling.

Psychology

Grades 11-12

Prerequisites: None
Semester 1 or 2, One credit

This survey course introduces students to the study of human development. Using basic methods of psychological research, students will learn about the various factors influencing human behavior. Topics of study will include sensory processes and perception, learning and memory, the structure of

personality, abnormal psychology, and the biological basis of behavior. In-class experiments and demonstrations are frequently used to illustrate and clarify major concepts. An emphasis is placed upon students relating the course content to their own lives.

AP Economics

Grades 11-12

**Prerequisites: Economics, enrolled or completed Pre-Calculus or consent of the instructor
Semester 1 or 2, One credit per semester**

This course is actually two separate courses, with two separate AP Exams in the spring. The study of economics is divided into two main parts: macroeconomics and microeconomics. Using the university system as a base, the high school will offer a year-long microeconomics and macroeconomics survey. Microeconomics comes from the Greek work for "small". It is concerned less with the small elements in an economy that it is with the individual elements. It is the study of how the choices of individual decision-making units and the function of individual markets determine how society's scarce resources are allocated and how income is distributed among its members. Macroeconomics comes from the Greek word for "large". It is concerned less with the large elements in an economy than it is with the collective or aggregated elements, regardless of size. It is the study of how many and aggregate expenditure or investment behavior determines the levels of output, employment and prices within an entire economic system. Students will need to commit additional independent time and effort second semester for their preparation to take both the AP Macroeconomics Exam and the AP Microeconomics Exam in May.

AP Psychology

Grade 12

Prerequisites: None

Semester 1-2, One credit per semester

Through the use of a systematic and scientific method of study, this AP course in Psychology will introduce students to the behavior and mental

processes of human beings and other animals. Students will be exposed to the psychological facts, principles and theories associated with each of the major subfields of psychology - biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders and social psychology. Students will also learn about and use methods of study employed by psychologists. This class is designed to be comparable to an introductory college course in psychology. In addition, all students are expected to take the AP exam given in the spring.

Black History

Grades 9-12

Prerequisites: None

Semester 1 or 2, One credit per semester

An elective course that examines the history of Africa and the experience of Black Americans in an interdisciplinary format, including analysis of the unique historical, cultural, and social developments from the Middle Passage to the present day. This course will address the literary and artistic contributions of Blacks to the American culture.

The course will follow the C3 Framework, which contains the Whitefish Bay Historical Thinking Skills to create purposeful context. Cause and effect, primary source document analysis, change and continuity over time, etc., strategically align with the Common Core Standards of Social Studies.

Critical thinking, reading, writing, and oral presentation skills are emphasized as this course is designed to introduce students to the major themes, issues, and debates in Black History from its African origins to present day. It serves as a general introduction to the historical overview of the African-American experience through readings, technology, film, music, and more.

***SUFFICIENT ENROLLMENT IS REQUIRED
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WORLD LANGUAGE

- Students must earn a C- or better to advance to the next world language level unless granted teacher exception.
- If a student has a B- or higher for their level 1 language class, they may not repeat the class.
- The following World Language courses fulfill the Cultural Art graduation requirements for the grades indicated.

French Level 1

Grades 9-12

Prerequisites: None

Semester 1-2, One credit per semester

This beginning course aims at developing the basic skills of understanding, speaking, reading, and writing French within the limits of the vocabulary, grammar, structure, and cultural concepts of first level material. Students practice all skills, working from oral, written, and visual stimuli. The cultural emphases are daily life in French-speaking countries throughout the world and the geography of France.

French Level 2

Grades 9-12

Prerequisites: C- or better in French Level 1

Semester 1-2, One credit per semester

This course seeks to increase the student's ability to understand, speak, read and write French. Listening and speaking activities become more intense, and reading and writing practice continues on a more advanced level. The cultural emphasis is Paris.

French Level 3

Grades 10-12

Prerequisites: C- or better in French Level 2

Semester 1-2, One credit per semester

The goal of this third year French is to further develop the ability to understand and communicate orally and in writing. It includes a comprehensive review of levels 1 and 2 grammar, intensive vocabulary building, and reading short stories and plays. The cultural emphasis is French history.

French Level 4

Grades 11-12

Prerequisites: C- or better in French Level 3

Semester 1-2, One credit per semester

This course seeks to develop the student's ability to read unabridged French literature of moderate difficulty for both content and critical evaluation as well as to develop the student's ability to speak, understand, read, write, and make contemporary cultural references on a mature level. A grammar review is part of the course work.

AP French

Grade 12

Prerequisites: C- or better in French Level 4

Semester 1-2, One credit per semester

This is a college level course specifically designed to prepare students for the College Board AP Exam in French Language. Satisfactory achievement on this exam carries college credit and advanced course placement at many colleges and universities. Beyond AP Exam preparation, students will find this course very useful in sharpening their facility in speaking, writing, and reading. The course concentrates on refining language skills, with particular emphasis on speaking and writing. Some degree of independent study will be part of the course, and a wide variety of French literature is offered.

Students at all language levels are encouraged to participate in German Club and the biannual GAPP student exchange (16-21 days) with our partner school near Frankfurt, Germany

German Level 1

Grades 9-12

Prerequisites: None

Semester 1-2, One credit per semester

In this entry-level class, students will begin to develop basic listening, speaking, reading, and writing skills in the German language. Topics and grammatical structures follow the level 1 textbook and will be supplemented with short texts, videos, songs, news reports etc. to create cultural awareness about the German-speaking countries.

German Level 2

Grades 9-12

Prerequisites: C- or better in German Level 1

Semester 1-2, One credit per semester

This course continues to develop proficiency in the four language domains: listening, speaking, reading, and writing. Curricular units are based on the level 2 textbook and supplemented with reading selections, video and audio recordings, as well as current events to increase cultural understanding of the German-speaking countries.

German Level 3

Grades 10-12

Prerequisites: C- or better in German Level 2

Semester 1-2, One credit per semester

This intermediate course is designed to further develop students' abilities in the four language domains. Teaching units are based on the level 3 textbook and more advanced grammatical concepts are practiced to increase students' language proficiency. Additional video and audio recordings, fictional and non-fictional texts are used to help students understand cultural differences.

German Level 4

Grade 11-12

Prerequisites: C- or better in German Level 3

Semester 1-2, One credit per semester

In this course, students will expand their abilities to understand, write, and discuss topics in the German language. Teaching units are not based on a textbook but revolve around some of the six AP themes. The class is taught increasingly in German, and students learn to improve their listening, reading, writing, and speaking skills through tasks they will need to complete on the AP exam.

AP German

Grade 12

Prerequisites: C- or better in German Level 4

Semester 1-2, One credit per semester

This course is designed to follow a college level curriculum and to prepare students for the College Board German AP examination. Success on the exam carries college credit and advanced placement status. Content units are designed to address the six AP themes for World Languages and the course is taught primarily in German. Authentic materials in the form of non-fictional texts, audio and video recordings, movies, and literature are used to refine cultural understanding of the German-speaking world and language proficiency. Special focus is on preparing students for the specific AP Language exam tasks, such as persuasive essay, email response, conversation, and presentational speech.

Spanish Level 1

Grades 9-12

Prerequisites: None

Semester 1-2, One credit per semester

In this course, students are introduced to the fundamentals of understanding, speaking, reading, and writing Spanish. The culture of Spanish speaking countries is also a part of the course work. Practice in all skills is provided through written, oral, listening and reading exercises.

Spanish Level 2

Grades 9-12

**Prerequisites: C- or better in Spanish Level 1
Semester 1-2, One credit per semester**

This course provides a continuing opportunity for students to develop their ability to read, speak, write, and understand Spanish. Regular practice in the use of vocabulary is stressed with increasing emphasis placed on the structure of the language in writing and speaking exercises. Spanish culture is studied and reading skills are further developed.

Spanish Level 3

Grades 10-12

**Prerequisites: C- or better in Spanish Level 2
Semester 1-2, One credit per semester**

Students develop the ability to communicate and understand conversations of average tempo. Students reading and listening skills are further developed through the use of native sources pertaining to certain cultural aspects. Emphasis is on communication. A review of previous grammar learned and an extension into advanced grammar is part of the course.

Spanish Level 4

Grades 11-12

**Prerequisites: C- or better in Spanish Level 3
Semester 1-2, One credit per semester**

Students continue to develop the ability to read Spanish literature of average difficulty and to understand conversation of average tempo and to communicate successfully in the language.

Hispanic Literature

Grade 12

**Prerequisites: Concurrent enrollment or C- or better in Spanish Level 4
Semester 1-2, One credit per semester. May be taken as a single semester or as a yearlong course.**

Advanced class that may serve as an alternative to AP Spanish or taken concurrently with it that bridges the gap between high school and college level expectations. Introduces modern Hispanic, Spanish and Latin American literary texts and film and their historical, cultural, and theoretical contexts. Emphasizes critical reading and oral and written analysis of the literary works. Grammar is taught and used in context with the readings. Advanced work challenges students to be more analytical and creative through expanded assignments, real-world applications and enrichment opportunities.

AP Spanish

Grade 12

**Prerequisites: C- or better Spanish Level 4
Semester 1-2, One credit per semester**

This is a college level course designed to prepare students to take the College Board AP Spanish Language Exam and college placement tests. Satisfactory achievement on this exam carries college credit and advanced course placement in college. Emphasis is on building the skills of speaking, listening, reading, and writing within different themes and current events. This course requires the purchase of textbooks in the amount of approx. \$100.00.