

TRADITION OF EXCELLENCE

2024-2025 Course Guide and Summer School Guide



Arrowhead High School 700 North Avenue Hartland WI 53029 Phone: (262) 369-3611

Administration

Principal: Mr. Adam Kurth: Ext. 4102

Associate Principal North Campus: Ms. Becky Gordon Ext. 4210 Associate Principal South Campus: Ms. Debra Paradowski Ext. 4199

Director of Learning: Mrs. Sue Casetta Ext. 4204

Director of Student Services: Mr. Adam Boldt Ext. 4112

Counselors

North Campus:

A-G: Mrs. Kelly Matthias Ext. 4212 H-O: Mr. Todd Reineking Ext 4215 P-Z: Mrs. Angie Rodenkirch Ext. 4218 Counseling Secretary: Ann Olson: Ext. 4209

South Campus

A-G: Mr. Thomas Stuber Ext. 4124 H-O: Mrs. Barbara Whyte Ext. 4115 P-Z: Mrs. Molly Sroka Ext. 4118

Counseling Secretary: Michelle Hill Ext. 4114

Counseling Assistance in Program Selection

The primary goal of counseling is to help each student obtain the best possible education throughout high school. Contact the school counseling office for further assistance. Additional information may be obtained through Arrowhead's website:

www.arrowheadschools.org

Department Program and/or Teacher Leaders can further assist with course selection. Names of Program and/or Teacher Leaders can be found at the start of each department.



Arrowhead High School Vision and Mission

Vision

Arrowhead will be an educational leader in creating pathways for students to embrace the opportunities of tomorrow.

Mission

Empower students to be engaged, confident, continuous learners who utilize the essential skills to collaborate and contribute within the local and global community.

Equal Educational Opportunity

It is the policy of Arrowhead High School that no person may be denied admission in this district or be discriminated against in any curricular, extracurricular, pupil service, recreational, or other program or activity because of the person's sex, race, national origin, ancestry, creed, religion, limited English-speaking, pregnancy, marital or parental status, sexual orientation or physical, mental, emotional, or learning disability or handicap as required by S.118.13 (P.I. 9.04), Wisconsin Statutes. This policy also prohibits discrimination as defined by Title IX of the Education Amendments of 1972 (sex), Title VI of the Civil Rights Act of 1964 (race and national origin), and Section 504 of the Rehabilitation Act of 1973. The district encourages informal resolution of complaints under this policy. A formal complaint resolution procedure is available, however, to address allegations of violations of the policy in the Arrowhead School District.

Any questions regarding this policy should be directed to the following:

Conrad Farner Superintendent Arrowhead School District 700 North Avenue Hartland, WI 53029 (262)369-3611, Ext. 4111



Table of Contents

Arrowhead Website: www.arrowheadschools.org

Programs and Information	Page
Course Selection Information.	5
How to Use the Course Guide	6
New Courses, Major Revisions and Name Changes for 2024-25	7
Arrowhead Schedule	7
Additional Learning Opportunities	8
Additional Information	9
College and Career Exploration	11
Career Pathways	
CTE: Business and Marketing	21
CTE: Family and Consumer Eduction	25
CTE: Health Science	28
CTE: Technology and Engineering	31
Computer Science	37
English	38
General Electives. Global Experience. Mathematics. Music.	44 46
Physical Education and Health	55
Science Social Studies. Visual Arts World Languages.	
Summer School.	81
Arrowhead Device Guidelines	91



Course Selection Information

The array of courses offered at Arrowhead High School are designed to prepare students with differing interests and abilities for a variety of post high school options.

Some English, Social Studies, Mathematics, or Science courses do not meet academic unit requirements for admission to the University of Wisconsin system and other colleges and universities. Remedial and basic courses do not offer the subject matter or level of academic rigor demanded by the college preparatory courses.

University of Wisconsin System admission requires 34 "college-preparatory units" including four years of English, three years of Social Studies, three years of Mathematics (algebra and higher), three years of Science, and four years of additional college preparatory electives. All colleges and universities highly recommend four years of core classes: English, Math, Science, and Social Studies. Two years of a Language is required, but three to four years of a single World Language is highly recommended by UW-Madison. All universities view World Language as strong college preparation.

There is a general agreement between the universities and high schools regarding acceptable college preparatory credits. However, this may vary between one institution of higher education and another. We have, to the best of our knowledge and experience, indicated these courses in the Course Guide with an asterisk (*) before the course title. These courses generally meet the NCAA's definition of core courses. Details are available from the NCAA Eligibility Center (www.ncaa.org) and the Arrowhead Counseling Office. It is the responsibility of the student to confirm this information with the university/college admissions office and/or their compliance official.

Students should select courses carefully as there are limited opportunities to make schedule changes. It is important to check their Arrowhead email for directions, dates and options regarding student schedules. Changes may be made in the first six days of each semester dependent upon course availability during open hours. Students must have written permission from their parent/guardian to make any adjustments. Classes dropped after the first six days of the semester, result in an "F" grade on the transcript and require administrative approval. Consideration for extenuating circumstances requires administrative approval from the principal.

Flexible Scheduling Option

Flexible Scheduling Option (FSO) is an opportunity which allows qualified juniors and seniors to arrive at school later or leave early (one class period). Students must sign up for the option in the course selection process, complete/submit a <u>signed contract</u>, maintain a 3.0 cumulative GPA, and be on track to graduate. Specific details are on the FSO Contract. Students who have conflicts fitting in their classes in the scheduling process may be dropped from the FSO to resolve the schedule issue.

Teacher Requests

Requests to change a teacher will not be honored. In the rare situation where extenuating circumstances may exist, written principal approval is required. Please note that all courses are scheduled by semester. Students earn a grade for each separate semester. It is common practice, particularly at North Campus, for classroom teachers to change at semester.



How to Use the Course Guide

The Arrowhead Course Guide provides information about courses and credits for both the full school year and Summer School. Please refer to other guides: <u>Career Planning Guide</u> and <u>Arrowhead Student and Parent Information Guides</u>.

The Arrowhead High School Course Guide is organized alphabetically by department and within each department by name. Specifics about each class including credits earned, duration of course, and prerequisites are on the right side of the description. Please refer to the table of contents for information on graduation, policies and procedures, and academic and career planning.

Students will register for their school year and summer school classes in early February.

Please note: All courses require minimum student enrollment to be offered.

Graduation Credit Requirements

8 CREDITS ENGLISH

- Must include English 9 1&2 (English 9 or English 9 Honors)
- Must include English 10 1&2 (English 10 or English 10 Honors)
- Must include English 11 1&2 (English 11 or AP Language and Composition- beginning with the class of 2026)

6 CREDITS SOCIAL STUDIES

- Must include Social Studies 9 (Social Studies 9 or *AP Human Geography)
- Must include U.S. History 1&2 or A.P. U.S. History 1&2

*Students who take AP Human Geography must take Political Science or AP US Government and Politics in 10th, 11th or 12th grade

6 CREDITS SCIENCE

• Must include two credits of Life Science and two credits of Physical Science

6 CREDITS MATHEMATICS

2 CREDITS CAREER AND TECHNICAL EDUCATION

• Business and Marketing, Family and Consumer, Health Science, Technology and Engineering (Please NOTE: Starting with the class of 2028- students must complete <u>3 CTE CREDITS</u> which must include <u>Personal Finance.</u>)

3 CREDITS PHYSICAL EDUCATION

• Must include three different types of classes over three separate school years

1 CREDIT HEALTH

2 CREDITS FINE ARTS

Music, Art, or Acting

16 ADDITIONAL CREDITS

50 TOTAL (PLUS 65% or better on the Wisconsin Civics Test)

NEW COURSES, MAJOR COURSE REVISIONS AND PROCEDURE CHANGES FOR 2024-2025

Add: English 11 (Required for the class of 2026) Remove: American Literature Add: Personal Finance (Required for the class of 2028) Remove: Dollars & Sense

Add: Adobe Graphic I and Adobe Graphic II Remove: Graphic Design for Business

Remove: Computer Graphic Imaging (name change)

Can be taken concurrently

Remove: Geometry/Advanced Algebra Block

Remove: English 9/Social Studies Block

Remove: English 10/ Western Civilization Block

Add: Career & Employment SuccessRemove: Business Connections (name change)Add: Early Childhood EducationRemove: World of Children (name change)

Add: Child Development Remove: Parenting (name change)

Add: Food & Nutrition II Remove: Advanced Food & Nutrition (name change)

Add: Peer Mentor Physical Education Remove: SHAPE PE

Add: Functions/Pre Calc-Block

Change: Science 9/Biology Honors Block
Now: Science 9/Biology Accelerated Block

Change: Biology Honors

Change: Chemistry Honors

Now: Biology Accelerated

Now: Chemistry Accelerated

Arrowhead Block Schedule

Effective for the 2024-25 school year, Arrowhead courses will run on an alternate day block (A/B Block) schedule and include a daily resource period. Students are required to sign up for at least 7 classes (Periods) each semester.

Time	RED DAY	BLUE DAY		
7:25am - 7:55am	Resource	Resource		
8:02am - 9:27am	Block 1 Class	Block 5 Class		
9:35am - 11:03am	Block 2 Class	Block 6 Class		
11:03 - 11:33am	A lunch	A lunch		
11:37am - 1:02pm Block 3A Class		Block 7A Class		
	OR			
11:11am - 12:36pm	Block 3B Class	Block 7B Class		
12:36 pm -1:06pm	B lunch	B lunch		
1:10pm - 2:35pm	Block 4	Block 8		

Additional Learning Opportunities

Independent Study Contracts

Independent Study is an individualized method of learning where the student has a one-to-one relationship with a teacher. It requires considerable flexibility, motivation, discipline, persistence, and good study habits.

Students applying for Independent Study may qualify under one of the following stipulations:

- 1. Studying beyond what the course offers
- 2. Pursuing intense interest in the area of study
- 3. Working at a higher level after completing regular curriculum

Procedure:

- 1. Interested students and parents must apply through their counselor, in combination with the department chair/coordinator, and the respective classroom teacher. The application form is available in the school counseling office.
- 2. Students interested in Independent Study must complete the application process ten days prior to the end of the previous semester.
- 3. Students may be enrolled in one Independent Study per semester.
- 4. Exceptions due to schedule conflicts are rare and at the discretion of the principal and the program leader.
- 5. Students are graded on a pass/fail basis.

Teacher Assistant Program

Students interested in assisting teachers with classroom activities may apply to serve as a Teacher Assistant. These positions require a high degree of responsibility, dependability, cooperation and confidentiality. The application form is available in the school counseling office.

World Language Retroactive Credits

Many colleges and universities grant credit for high school world languages as long as additional world language course work is successfully completed at the college level. Students should check with their prospective university for specific information.

College Credit Opportunities

Transcripted Credit/CCIHS

Students may enroll in courses taught at Arrowhead that are the same as courses taught at Waukesha County Technical College (WCTC). Students receive both high school and WCTC credit, which allows the student to enroll in the next higher course at WCTC. Arrowhead offers College Credit in High School (CCIHS) through UW- Green Bay in our Engineering Program. See course descriptions for more details.

Early College Credit Program

Under the Early College Credit Program, any public high school pupil may enroll in an institution of higher education—defined to include a UW System institution, a technical college within the WTCS (this program is called Start College Now) or a private, nonprofit institution of higher education located in this state—for the purpose of taking one or more nonsectarian courses, including during a summer semester or session.

Pupils must apply to the institution of higher education during the previous semester (due dates are October 1 for second semester and March 1 for first semester) and must indicate on the application whether they will be taking the course or courses for high school credit or postsecondary credit or both, if applicable. An institution of higher education must admit a pupil to attend a course if the pupil meets the requirements and prerequisites of the course and there is space available in the course.

Students are limited to the total number of credits for which the school will pay to the equivalent of 18 postsecondary semester credits per pupil.

The pupil, if he or she is an adult, or the parent or guardian of a pupil who receives a failing grade in a course or fails to complete a course for which the school has made payment, must reimburse the school the amount paid on the pupil's behalf. If no reimbursement is received, the school board can block further access by the pupil to the Early College Credit program.

Students interested in the Early College Credit Program should see their counselor- well in advance of the due dates to explore options.

Early College Credit Applications

OTTOWA UNIVERSITY
UW SYSTEM
PRIVATE SCHOOLS
START COLLEGE NOW (WCTC)
DUAL ENROLLMENT ACADEMY (WCTC)

Credit Recovery

Credit Recovery allows students to earn credits in certain previously failed courses, and improve an "F" to a "D". This is a customized approach to earn up to 8 credits for Social Studies, Health, Science, Art and English. The transcript will reflect the name of the course followed by a notation (CR) for Credit Recovery. Students complete an academic intervention contract which provides more details.

APEX

Students and parents are encouraged to be in frequent communication with their assigned counselor regarding required credits for graduation. One option for regaining credits in failed classes needed for graduation may be APEX, an online computerized option for earning high school credits with state and national curriculum standards. Arrowhead utilizes this primarily for credit deficient students. The transcript will reflect the name of the course followed by a notation (AX) identifying it as online. It is the responsibility of the student to determine if the course is acceptable for college entrance requirements or NCAA eligibility. Students complete an academic intervention contract which provides more details. Students may earn up to 8 credits in APEX or Credit recovery. For more information regarding this program, see your student's school counselor.

Additional Information

Diploma Requirements

The Arrowhead Board of Education issues an Arrowhead High School diploma to students who successfully complete 50 credits in the areas specified and as outlined in School Board Policy.

Exchange Students

The Arrowhead High School Superintendent must approve an enrollment application for all International Student Exchange participants. The exchange students that qualify are enrolled for one year and must pass a full-time schedule (14 credits) that includes Social Studies and English. Arrowhead High School students who study abroad in a pre-approved exchange program will earn credits as a pass/fail which will not impact their GPA.

External Credit Transfer

The following procedures apply to students requesting external credits;

- 1. Pre-approval is required beginning with the school counselor, followed by the principal.
- 2. Online, correspondence and external credits must be earned from accredited institutions and not replace a course in the Arrowhead curriculum or be utilized to bypass courses in the Arrowhead Curriculum.
- 3. External credit costs are the responsibility of the student and his/her family.
- 4. Official transcripts must be submitted, from the awarding institution, at least five days prior to the graduation ceremony.
- 5. External credits will be awarded a Pass/Fail grade.

<u>Homeschooled Students</u>

Homeschooled students must be in full-time attendance at Arrowhead the final two semesters, senior year, to earn an Arrowhead diploma. Additionally, the students must pass senior year classes and meet all Arrowhead graduation requirements.

Transfer Students

Transfer students are expected to meet all Arrowhead graduation requirements. Students transferring from another high school will have credits previously earned transferred to Arrowhead credit system (1 credit per semester generally). Additionally, for all Arrowhead courses where a prerequisite is given, all prerequisites must be met for a transfer student to enroll. Extenuating circumstances must have administrative approval.

Enrollment

Grade Placement

Students registering to attend Arrowhead High School are required to complete the official enrollment process prior to admittance and assignment to a grade level or class schedule. Students transferring from other schools or home-based education programs must provide an original Social Security card, birth certificate, official transcripts and/or other records showing their level of academic achievement, subjects completed, credits earned, and standardized test results.

Early Enrollment

Elementary student residents of the Arrowhead Union High School District may be allowed, pending availability of space and approval by the Director of Learning, to enroll in a high school level course. Grades and credits earned in the early enrollment program are posted on their official high school transcript. This policy includes courses taught totally or in part at elementary schools within the district. Students participating in the early enrollment program will be considered students of Arrowhead and receive grades, credit, and transcript records.

Fees

The school board approves course fees for classes that include consumable materials. These fees will be included on the August registration in Skyward and are included with the course description. Advanced Placement test fees will be collected in February and will be approximately \$104 per test. Please see the course description for additional information on fees.

Grading

Students know at any given time what grades they are earning using the student information system: Skyward. Additionally, students receive feedback on progress and grades through our learner management system: Canvas. Parents and students have login and password information for access to both systems. Students receive grades at the end of nine weeks, and at the end of each semester. Nine-week grades are a progress report. The only grades reflected on a student's transcript is the semester grade.

Auditing a Class

Students may audit a course for no grade or credit. Arrangements must be made with the counselor and approved by the teacher no later than ten days after the first nine-week grading period of the semester. Audited classes must be maintained at passing level. If the student fails the class, a letter grade of F is recorded on the transcript. Audit contracts may be obtained from the counselors. They must be signed by the student, parent/guardian, the teacher, and the counselor before they are put into effect. Students are encouraged to investigate how this is viewed by colleges and universities.

Class Rank

Effective July 2012, Arrowhead High School implemented a policy that eliminated student rank in class. This information is published on the school profile/official transcript.

Grading System

The school year is divided into two semesters. Each semester contains two quarters, each lasting nine weeks. Report cards are available on Skyward at the end of each quarter and semester. The semester grades are also on Skyward as well as published to the student's permanent record/transcript. A uniform grading scale is used by all departments. Teachers will distribute their grading standards, Skyward procedures, and other components of grading at the start of each semester.

A 100% - 90% B 89% - 80% C 79% - 70% D 69% - 60% F 59% or less

Pass/Fail

Courses taken as Pass/Fail are not computed into the GPA. Administrative approval is required for all credits earned pass/fail.

Incompletes

When the student is missing work due to extended absence or extenuating circumstance, the teacher has the option of issuing an incomplete grade. If the work is not finished within ten days of the day the report card is issued, the incomplete grade reverts to the grade earned.

Repeating Courses

Current Arrowhead High School procedure allows students to repeat courses to improve their grades. Upon successful completion of the repeated course, the higher of the two grades will remain on the permanent record. It is important to note that students may only earn credit for the course once. The transcript will reflect the higher of the two grades and an "R" replaces the lower grade to identify that the course was repeated. This procedure will provide a record that is historically accurate and will not penalize the student's GPA. The goal is for students to achieve at a high level and promote excellence.

Weighted Grades for Honors or AP Coursework:

It is the consensus of Arrowhead High School that unweighted grades better reflect the mission and values of the school and to grade students on their mastery of the work in a given class. Students who take rigorous classes generally earn higher ACT/SAT scores, develop good work habits, and receive additional consideration by colleges and universities during the admission process.

College & Career Exploration

Arrowhead High School offers guidance and course opportunities to develop awareness and skills for future careers. As students plan their high school program and participate in course offerings each year, they will begin to develop ideas of their strengths, interests, and capabilities related to their future plans and engage in Academic & Career Exploration (ACE) using the XELLO system.

An Academic and Career Plan (ACP) includes a program of study that reflects a student's unique set of interests, needs, goals, and graduation requirements. It goes beyond the traditional "four-year plan" by recording the student's connections to the larger community including examples of service and volunteerism; involvement in mentorships and/or apprenticeships; and the pursuit of skill development through hobbies, athletics, and fine arts. See the school counseling tab or the Arrowhead website for more information on Academic and Career Exploration.

Students and parents are invited to visit the Arrowhead High School Website at www.arrowheadschools.org to learn more about the high school opportunities for career exploration and postsecondary planning. Teachers and counselors organize field trips, guest speakers, classroom presentations, informational materials and a variety of assessments to assist with career and educational planning. Students and parents can also find a link to XELLO in this section to log in to their personalized account for academic and career planning tools.

Career exploration occurs throughout high school as students take a variety of classes and make the connection between what they are learning and future occupational options.

Career Cluster Framework

Career Clusters are broad occupational groupings based on a set of common knowledge and skills required for a broad group of careers. Wisconsin has adopted the National 17 Career Clusters that also serves as a tool for organizing curriculum and instruction. Career Clusters provide opportunities for all students regardless of their career goals and interests. They are a tool for a seamless educational system that blends rigorous academic/technical preparation, provides career development, offers options for students to experience all aspects of a business or industry, and facilitates/assists students and educators with ongoing transitions.

Career Pathways are a sub-grouping of careers used as an organizing tool for curriculum design and instruction. Similar to Career Clusters, Career Pathways are grouped based on their requirements for a set of core and similar knowledge and skills for career success. Each pathway highlights a specific part of each cluster. Please see Career Planning Guide for more information.(LINK)

Career Clusters

riculture, Food & Natural Resources	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.
rchitecture & Construction	CAREERS IN DESIGNING, PLANNING, MANAGING, BUILDING AND MAINTAINING THE BUILT ENVIRONMENT.
ts, A/V Technology & Communications	DESIGNING, PRODUCING, EXHIBITING, PERFORMING, WRITING, AND PUBLISHING MULTIMEDIA CONTENT INCLUDING VISUAL AND PERFORMING ARTS AND DESIGN, JOURNALISM, AND ENTERTAINMENT SERVICES.
de Administration	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.
A ducation & Training	PLANNING, MANAGING AND PROVIDING EDUCATION AND TRAINING SERVICES, AND RELATED LEARNING SUPPORT SERVICES.
inance	PLANNING, SERVICES FOR FINANCIAL AND INVESTMENT PLANNING, BANKING, INSURANCE, AND BUSINESS FINANCIAL MANAGEMENT.
overnment & Public Administration	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.
ealth Science	PLANNING, MANAGING, AND PROVIDING THERAPEUTIC SERVICES, DIAGNOSTIC SERVICES, HEALTH INFORMATICS, SUPPORT SERVICES, AND BIOTECHNOLOGY RESEARCH AND DEVELOPMENT.

dspitality & Tourism	HOSPITALITY & TOURISM ENCOMPASSES THE MANAGEMENT, MARKETING AND OPERATIONS OF RESTAURANTS AND OTHER FOOD SERVICES, LODGING, ATTRACTIONS, RECREATION EVENTS AND TRAVEL RELATED SERVICES.
uman Services	PREPARING INDIVIDUALS FOR EMPLOYMENT IN CAREER PATHWAYS THAT RELATE TO FAMILIES AND HUMAN NEEDS.
n formation Technology	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.
97 Public Safety, Corrections & Security	PLANNING, MANAGING, AND PROVIDING LEGAL, PUBLIC SAFETY, PROTECTIVE SERVICES AND HOMELAND SECURITY, INCLUDING PROFESSIONAL AND TECHNICAL SUPPORT SERVICES.
anufacturing	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.
arketing, Sales & Service	PLANNING, MANAGING, AND PERFORMING MARKETING ACTIVITIES TO REACH ORGANIZATIONAL OBJECTIVES.
cience, Technology, Engineering & Mathematics	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.
ransportation, Distribution & Logistics	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.
Sciences	Majors in the Liberal Arts and Sciences provide avenues to a wide array of 21 st century careers through preparation in such areas as knowledge of human cultures and the natural world: critical and creative thinking skills; effective communication skills; intercultural knowledge and competence; and individual, social and environmental responsibility.

Academic and Career Planning Student Reflection:

Throughout the Academic and Career Planning Process, students are encouraged to reflect on four main questions to help develop their ACP.

KNOW: Who am I?

- What interests me?
- What are my strongest skills?
- What are my dispositions?
- What skills would I like to develop before I graduate?
- How do I learn best?

EXPLORE: What do I want to do?

- What courses interest me most?
- What are the career- focused courses that interest me most?
- What type of degree or certificate do I need to support my postsecondary goals?
- What jobs or careers would I like to shadow and when do I do that?
- What schools offer a related degree/majors to what I am interested in?
- What are the typical credits I need to earn in each subject for college admissions?
- What will I need to provide a competitive admissions application for schools/majors I might be interested in? For example:
 - What level of math must I complete?
 - Which specific science courses are required?
 - Should I take a world language?
 - Should I take fine arts classes?
 - What ACT scores are required for admission?

PLAN: How do I want to get there?

- How much will post high school education cost and how will I pay for it?
- Will I qualify for Financial Aid and Scholarships?
- Will I have any savings from employment during high school?
- Which co-curricular activities will support my interests after high school?
- What skills and work-based experiences will help me develop desired skills?
- What credentials should I explore?
- Who are the adults in my life that could act as mentors as I continue to explore opportunities for my future?

GO: Do I need to review, adapt and modify my plans?

Students are in the driver's seat of their Academic and Career Planning process. Students should reflect often on their choices and update their plans as often as possible (yearly):

- Review, adapt and modify course selections
- Review, adapt or modify personal goals
- Conference with counselors, parents and teachers

For more information about Academic and Career Exploration, please visit the Arrowhead Website at: https://www.arrowheadschools.org/academics/Student_lessons.cfm

Arrowhead Career Pathways

Within students' Academic and Career Planning, Arrowhead has recently reframed some of our curricular coursework in a way that helps students see their career goals come to life in a ready-made Academic and Career Plan. We do these two ways, through our locally developed pathways and through Regional Career Pathways.

The Wisconsin **Regional Career Pathways** (**RCP**) approach is a statewide effort to deliver high-quality career pathways in high schools that reflect the needs and vision of a regional collaborative group of employers, education, and economic and workforce development.

The regional collaboratives adopt, implement, promote, and monitor high school career pathways in high-skill, in-demand industry sectors. They act as an advisory group, on behalf of regional districts, to identify and overcome barriers that prevent students in the region from accessing the pathway. An example of such a barrier may include college curriculum that is not aligned with the career pathway. In addition, the collaborative provides the means necessary for students to participate and complete a pathway by:

- Taking a sequence of aligned courses,
- Earning an industry-recognized credential,
- Enrolling in dual college credit classes,
- Participating in career-based and work-based learning experiences, and
- Accessing related Career and Technical Education (CTE) student organizations

What are the Benefits of Regional Career Pathways?

- For high school students, regional career pathways align education and training with the needs of the local job market, provide a range of postsecondary 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 ACP plan for occupations that are in demand in Wisconsin. This allows schools to focus on student and curriculum activities with input and support from regional employers and higher education.
- For employers, regional career pathways make partnerships with a greater number of schools possible. This allows employers to shape the future talent pipeline, foster young talent, and highlight local career opportunities across an entire region.



CTE CAREER PATHWAYS

STATE ENDORSED REGIONAL CAREER PATHWAYS

HEALTH SCIENCE - PATIENT CARE				
CTE COURSES	College Credit Opportunities	Industry Recognized Credentials	Work Based Learning Experiences	Career and Technical Student Organization
Health Occupations (10th - 12th) Medical Terminology & Business Practices (10th - 12th) Health Practicum (12th) EMT - B (12th grade)	Nursing Assistant Nationally Recognized Emergency Medical Technician	Basic Life Support (CPR) Certified Nursing Assistant	Health Youth Apprenticeship Program (Resident Aide, Nursing Assistant, Pharmacy Technician, Dental Assistant) (11th - 12th grade)	HOSA: Future Health Professionals









STATE ENDORSED REGIONAL CAREER PATHWAYS

ADVANCED MANUFACTURING			
CTE COURSES	College Credit Opportunities	Industry Recognized Credentials	Work Based Learning Experiences
Intro to Engineering & Manufacturing (9th - 12th grade)	UWGB		
Manufacturing & Engineering with Materials (10th grade)			
Computer Integrated Manufacturing (11th - 12th grade)			Youth Apprenticeship (11th - 12th grade)
Woods Production I (11th - 12th grade)			Warhawk Manufacturing & Employability Skills
Woods Productions II (11th - 12th grade)		Sawblade	(12th grade)
Cabinetmaking (12th grade)			
Metals Fabrication I (11th - 12th grade)	Gas Arc Welding I through		
Metals Fabrication II (12th grade)	Metals Fab I - WCTC		
Machining I (11th - 12th grade)			
Warhawk Manufacturing (12th grade)			





CTE CAREER PATHWAYS

BUSINESS MANAGEMENT AND ADMINISTRATION			
CTE COURSES	College Credit Opportunities		Career and Technical Student Organization
Introduction to Business (9th - 10th grade) Careers & Employment Success (9th - 12th grade) Business Law (11th - 12th grade) Marketing & Business (9th -12th grade)	Entrepreneurship Venture (11th - 12th grade) - WCTC AP Microeconomics (11th - 12th grade)		DECA
I	EDUCATION A	ND TRAINING	3
CTE COURSES		INDUSTRY R	RECOGNIZED CREDENTIALS (IRC)
Study Skills & Strategies (9th	- 10th grade)	Infant & Toddler Certification	
Early Childhood Education ((9th	n - 12th grade)	Abusive I	Head Trauma Certification
Child Development (11th	n - 12th)	Certi	fied Nursing Assistant
Human Relations (11th	- 12th)		
FINANCE			
CTE COURSES		COLLEGE	CREDIT OPPORTUNITIES
Accounting (10th - 12th grade) Personal Finance (10th - 12th grade)			counting (11th - 12th grade)

CTE CAREER PATHWAYS				
MARKETING, SALES AND SERVICE				
CTE COURSES	College Credit Opportunities	Career and Technical Student Organization		
Introduction to Business (9th - 10th grade) Marketing & Business (9th - 12th grade) Sales & Promotions	Entrepreneurship Venture (11th - 12th grade) - WCTC	DECA		
(11th - 12th grade) Sports & Entertainment Management (11th - 12th grade)				
SCIENCE, TECHNOLO	DGY, ENGINEERING AND M	ATHEMATICS (STEM)		
CTE COURSES	College Credit Opportunities	Work Based Learning Experiences		
Computer Integrated Manufacturing (9-12th grade) Civil Engineering and Architecture (PLTW) (10th - 12th grade) - UWGB	Intro to Engineering & Manufacturing (9th - 12th grade) - UWGB Engineering & Mechanics (PLTW) 1 & 2** (Principles of Engineering AND Physics/ AP Physics) (10th - 12th grade) - UWGB Engineering Design & Development (PLTW) (11th - 12th grade) - UWGB	Youth Apprenticeship (11th - 12th grade) Warhawk Manufacturing (12th grade)		
TRANSPORTATION, DISTRIBUTION AND LOGISTICS				
CTE COURSES	College Credit Opportunities	Work Based Learning Experiences		
Consumer Automotive (11th - 12th grade) Auto Tech I (11th - 12th grade) Auto Tech II (11th - 12th grade)	Advanced Automotive (12th grade)	Youth Apprenticeship (11th - 12th grade)		

CAREER AND TECHNICAL EDUCATION (CTE)

Vision

Career and Technical Education (CTE) provides comprehensive course offerings that prepare students for independent living, responsible citizenship, and career readiness. The culture of CTE encourages students to be engaged in applicable skills and knowledge, hands-on learning, and career-based learning experiences.

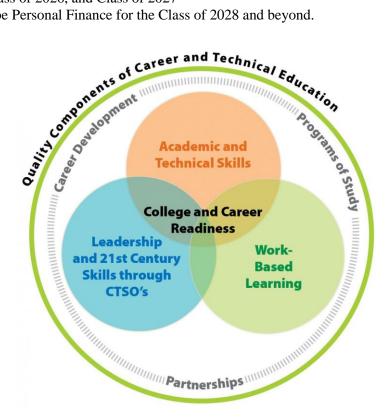
Departments

Business & Marketing, Family & Consumer Science, Health Science, and Technology & Engineering

Graduation Requirements

2 credits- Class of 2025, Class of 2026, and Class of 2027

3 credits- of which 1 must be Personal Finance for the Class of 2028 and beyond.



Department of Public Instruction states:

"The benefits of a quality CTE program go well beyond the classroom. Data shows that students concentrating in CTE courses have better academic performance and higher graduation rates than the general school population. These outcomes ultimately lead to an improved economy, a skilled workforce, and healthy communities."

Career and Technical Education: Business and Marketing

Our mission is to offer Arrowhead students a comprehensive Business & Marketing program through **Rigorous**, **Relevant**, and **Ever-Changing** curriculum. Business and Marketing Education Department courses provide pathways to knowledge and skills needed to live and work in today's world: communication skills, work-based skills, and computer applications. Two credits of Career and Technical courses are required for graduation. This can be met by taking courses in the Business and Marketing, Family and Consumer Science, Health Science and Technology and Engineering departments.

	Business Administration/ Management	Marketing & Sales	Finance/ Accounting	Information Technology
9th Grade	Introduction to Business Career & Employment Success Study Skills & Strategies	Introduction to Business	Introduction to Business	Computer Essentials Multimedia/Graphic Applications
10th Grade	Introduction to Business Career & Employment Success Study Skills & Strategies	Introduction to Business Marketing & Business	Accounting 1 & 2 Personal Finance	Computer Essentials Multimedia/Graphic Applications
11th & 12th Grade	Business Law Personal Law Personal Finance Career & Employment Success	Entrepreneurship Venture Marketing & Business Sales & Promotions Sports & Entertainment Management	Accounting 1 & 2 AP Microeconomics 1 & 2 College Accounting 1 & 2 Personal Finance	Web Design Yearbook
College Level Credit Available		Entrepreneurship Venture	AP Microeconomics 1 & 2 College Accounting 1 & 2	

Available opportunities connected through coursework

⁻DECA (an Association of Marketing Students)

CTE BUSINESS AND MARKETING

DESCRIPTION COURSE TITLE

Accounting 1 & 2 is a course intended for all students - for those intending to explore the field as a career, for those going into other occupations in the business world, and for those who want to learn record-keeping for personal use. This course provides an understanding of the basic elements and concepts of double-entry accounting systems. Students will acquire an in-depth knowledge of procedures and techniques utilized in solving business problems and making financial decisions. The complete accounting cycle, from the opening of the books to their closing at the end of the accounting period, will be covered. QuickBooks Pro and Excel will be used throughout the course to keep the financial records of a business.

ACCOUNTING 1 & 2

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year Fee: None

Advanced Placement Microeconomics is a class designed to give students a thorough understanding of the principles of economics that affect the decision-making process of both consumers and producers within our economic system. The course covers basic economic concepts, supply and demand, product markets, factor markets, and the role of government in promoting greater equity and efficiency in the economy. The course is designed to help students develop critical-thinking skills through the understanding, application, and analysis of fundamental economic concepts. Students will be expected to apply economic logic to a wide variety of real-world and hypothetical situations. Solid reading and analytical skills are essential for success.

ADVANCED PLACEMENT MICROECONOMICS 1 & 2

Credit: 2 Grade: 11-12 Prerequisite: None Duration: Year Fee: AP Test Fee

Career & Employment Success will explore different areas of career interests and will have a strong focus on developing essential employability skills. Students will gain a thorough understanding of the employment process and how to best represent these skills. Students will focus on career exploration and development while gaining skills in business communications. Students in the course will have an advantage in many employment situations and ensure success in the workplace.

CAREER & EMPLOYMENT SUCCESS

Credit: 1 Grade: 9-12 Prerequisite: None Duration: Semester Fee: None

Business Law is designed to inform students of their rights and obligations in business and personal encounters. Topics will include criminal and civil law, the state and federal court systems, the law of torts, ethics and values, as well as contracts and their elements. In addition, students conduct mock trials, listen to guest speakers, and discuss current legal issues pertaining to course content.

BUSINESS LAW

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester Fee: None

College Accounting 1 & 2 is a required course for all business majors in college. Participants who successfully complete the course receive three college credits in addition to the high school credit earned if enrolled in the CAPP program. College Accounting is designed to prepare students to pursue a variety of college business majors, including accounting, marketing, management, finance, international business, or economics. Primary areas of study include notes, receivables and payables, accruals and deferrals, depreciation, inventory calculation, bond and stock transactions, and the preparation of financial statements. The coverage of practical accounting procedures taught in this course will be integrated with the computer throughout the course using a variety of software including QuickBooks and Excel.

COLLEGE ACCOUNTING 1 & 2

Credit: 2 Grade: 11-12

Prerequisite: Accounting 1 & 2

Duration: Year Fee: None

CTE BUSINESS AND MARKETING

DESCRIPTION COURSE TITLE

Computer Essentials will provide a foundation for the ever-changing technology skills used in day- to- day life. Students will develop an understanding of word processing skills, spreadsheet skills, presentation software skills, as well as other Internet applications. Students will complete various projects and real-world simulations to develop a connection to technology use in the business and IT world. Career research and development will be done in IT fields and virtual field trips will be taken to dive deeper into various careers available to students in the IT industry. The overall goal of the course is to improve students' efficiency and skills while utilizing technology in a business and educational environment.

COMPUTER ESSENTIALS

Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester

Fee: None

Entrepreneurship Venture is for students interested in starting their own business and focuses on the following topics: running a successful business, financing and managing a small business, including legal responsibilities, and marketing a small business. Career opportunities in the field of entrepreneurship will be discussed. A business plan is student's dream business is developed online. Course ends with a Shark Tank presentation. In addition, students will be a part of DECA (an association of marketing students) where they may participate in activities including local and state leadership conferences, competitions, and other marketing community activities. A requirement of the class is that students participate in the planning and execution of Hawk Fest/Marketing nights.

ENTREPRENEURSHIP VENTURE

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Transcripted Credit with WCTC

(optional)

Fee: DECA dues of \$16 (paid only

once each year)

Introduction to Business is an exploratory business course designed to expose students to the ins and outs of corporate America. Students will gather a basic understanding of general business terms and functions in areas including: business communications, economics, types of ownership, marketing, law, real estate, and business finance. Overall, the course gives students a broad exposure to business operations and a foundation for the additional business courses offered in the Business Department. This course gives students the option to enroll in DECA.

INTRODUCTION TO BUSINESS

Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester

Fee: None

Marketing & Business focuses on the marketing mix: product planning, pricing, promotion, place (distribution) and target marketing. Students develop a marketing plan for a product or service of their choice. Included is an introduction to social media marketing. Students can also work in the school store, either as a sales associate or manager. In addition, students will be a part of DECA (an association of marketing students) where they may participate in activities including local and state leadership conferences, competitions, and other marketing community activities. A requirement of the class is that students participate in the planning and execution of Hawkfest/Marketing nights

MARKETING & BUSINESS

Credit 1: Grade: 10-12 Prerequisite: None Duration: Semester

Fee: DECA dues of \$16 (paid only once

per year

Students will combine various media (video, music, graphics, text, photo edition, and other online tools) for communication and educational purposes to create a variety of unique projects. Students will connect these skills to also learn about various career options that allow for the incorporation of media in a business and marketing setting. Where applicable, students will begin to design media for our school or other client-based scenarios.

MULTIMEDIA/GRAPHIC APPLICATIONS

Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester

Fee: \$5

Personal Finance is designed to prepare students with the skills and knowledge needed to shape their financial futures. The course will provide a tool-kit of knowledge, resources and skills that will empower students to make informed financial decisions. Topics include income, money management, risk management, credit, banking (checking and savings), budgeting, taxes and investment options.

PERSONAL FINANCE

Credit: 1 Grade: 10-12 Prerequisite: None Duration: Semester Fee: None

PLEASE NOTE: CLASS OF 2028 must take Personal Finance as part of Graduation Requirements.

Personal Law prepares students for many of the changes they will experience when they are on their own. From getting married to purchasing a first home, this course will provide students with knowledge pertaining to legal rights and responsibilities so when they reach these life events they can plan accordingly. In addition, the course will prepare students for making smart choices as a consumer.

PERSONAL LAW

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: None

Sales & Promotions introduces students to the principles and concepts of marketing communication. Focus is on the development and implementation of an effective promotion campaign and sales plan for their own business or product. Emphasis is on digital marketing, social media, marketing relationships, buyer motivation and behavior, selling strategy and sales management techniques. Students learn by "doing" including a real-life product demonstration. Students will be a part of the student organization DECA (an association of marketing students) and can work in the school store.

SALES & PROMOTIONS

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: \$16 DECA dues (paid only once per

ear)

Sports & Entertainment Management focuses on the promotional strategies of sports and entertainment activities and events. Students explore the content areas of event planning, sponsorships, public image, endorsements, legal issues, recreation marketing, music, and the entertainment industry. Marketing Arrowhead sports and entertainment events will be part of the course curriculum including Hawkfest and Marketing Nights. Students are required to attend the event they market. Guest speakers from industry and field trips provide insight into this segment of the marketplace. Students will be a part of the student organization DECA (an association of marketing students) and can work in the school store. Students in the class participate in the planning and execution of Hawkfest and/or Marketing nights.

SPORTS & ENTERTAINMENT MANAGEMENT

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: \$16 DECA dues (paid only once per

year)

Study Skills & Strategies introduces and reinforces the following: discovering your learning style, organization, test-taking strategies, time management, memory, concentration, goal setting, mindset, accountability, and critical thinking. Students will learn, practice, and apply these skills and strategies in order to become more successful in their classes.

STUDY SKILLS & STRATEGIES

Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester

Fee: None

Webdesign.com will introduce students to the basics of website design and development. Students will learn a variety of design principles and apply those principles while learning to code HTML and CSS. Students will also receive an introduction and basic understanding of Adobe Dreamweaver and how it is used to create, publish, and manage websites. Beyond design, students will also focus on the fundamentals behind websites from obtaining a URL to site hosting to utilizing online free design programs. Course concepts will be applied through a variety of projects and students will leave the course with a web portfolio, demonstrating their work and skills.

WEB DESIGN

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: \$5

Career and Technical Education: Family and Consumer Education

Family and Consumer courses assist students in becoming self-sufficient and independent adults. Through coursework, students are motivated to work cooperatively and develop a respect for themselves and others. Exploration and preparation for careers related to fashion, culinary arts, child care/education, and healthcare fields are a major part of this program. Two credits of Career and Technical courses are required for graduation. This can be met by taking courses in the Business and Marketing, Family and Consumer Science, Health Science, and Technology and Engineering departments, and Family and Consumer Education.

Brenda King, Teacher Leader, 369-3611, Ext. 3128

Family & Consumer Class at South Campus

Food & Nutrition 9th - 12th grade Prerequisite for other Food classes Prod & Nutrition II 9th & 10th grade 9th & 10th grade 10th grade 10th grade

Family & Consumer Class at North Campus

Food & Nutrition 9th - 12th grade Prerequisite for other Food classes	Design & Clothing 9th - 12th grade	Early Childhood Education 9th- 12th grade
Food & Nutrition II 9th - 12th grade	Fashion Analysis 11th - 12th grade	Child Development 11th - 12th grade
World of Food 11th & 12th grade	Interior Design 11th - 12th grade	Human Relations 11th - 12th grade
Culinary 11th & 12th grade		

CTE FAMILY AND CONSUMER EDUCATION

DESCRIPTION COURSE TITLE

This class is for students who want to be a positive influence in a child's life—through careers that relate to child development or through being a parent. Students will learn about all stages of development from reproduction to labor and delivery. Additionally, students study the physical, intellectual, social and emotional growth and development of children. This course includes activities such as taking care of a baby using a RealCare Baby Infant simulator, wearing the Empathy Baby Simulator and more.

CHILD DEVELOPMENT (formerly) PARENTING)

Credit: 1 Grade: 11-12 Prerequisite: None Duration: First Semester

Fee: None

Culinary Foods will explore the techniques used to create culinary dishes through class projects and lab experiences. Class-based competitions such as Chili Contest, Cupcake Wars, and Food Truck Challenge provide opportunities for students to demonstrate understanding of ingredients and cooking skills. Students will study food industry principles as it relates to menu items such as appetizers, soups, entrees, and desserts.

CULINARY FOOD

Credit: 1 Grade: 11-12

Prerequisite: Food and Nutrition

Highly recommend taking Advanced Food

and Nutrition

Duration: Second Semester

Fee: \$30

This course offers almost 100% hands-on learning, where students explore a variety of sewing techniques. This semester course introduces students to the areas of fabric, textile design, and sewing construction. Students will learn how to hand stitch, operate the sewing machine, apply pattern directions to garment construction, become environmentally friendly sewers, and practice basic quilting techniques. Problem solving and time management will be emphasized in this course. Careers associated with fashion and textiles may be highlighted throughout the course as well.

DESIGN & CLOTHING (SC)

Credit: 1

Grade: 9-12 Prerequisite: None

Duration: First Semester

Class Period: Alternate Day (80)

Fee: \$6

Developing Relationships helps to strengthen skills that lead to better relationships. Topics help individuals understand themselves and develop personal skills to help them relate to others in meaningful ways. Students realize the impact their choices have on shaping the person they are, and how their choices will influence their future. Students who have taken Developing Relationships can also take Human Relations at North Campus.

DEVELOPING RELATIONSHIPS

Credit: 1 Grade: 10

Prerequisite: None Duration: Semester

Fee: None

The course focuses on the physical, intellectual, social and emotional development of children ages three through eight. Students will learn how to create and evaluate a safe and healthy environment for children and plan age-appropriate activities including healthy snacks/meals, art, reading, music, science, fine and gross motor experiences. Developmentally appropriate practices will be followed while developing a variety of learning activities for children ranging in ages 3-8. Careers associated with children will be highlighted including child care, education, healthcare and human services careers.

EARLY CHILDHOOD EDUCATION (formerly World of Children)

Credit: 1 Grade: 9-12 Prerequisite: None

Duration: Second Semester

Fee: \$5

CAN BE OFFERED AT NC AND SC

CTE FAMILY AND CONSUMER EDUCATION

DESCRIPTION COURSE TITLE

Fashion Analysis includes cultural aspects of clothing, fashion personalities, designers, fibers and fabrics, and application of elements and principles that create well-designed fashions. Students work with principles and elements of design to create illustrations of apparel and/or accessories. Students determine their most flattering styles and colors and act as their own "client" to create a CORE wardrobe applying principles learned throughout the semester. The final project challenges students to create a fashion based upon the specifications given by the teacher. Career information is provided throughout the semester.

FASHION ANALYSIS

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: \$10

Are you ready to embark on a culinary journey that not only enhances your kitchen skills but also nourishes your body and mind? This interactive course is designed to empower you with the knowledge, skills (cooking and baking techniques) and confidence to excel in the kitchen while exploring nutritious and delicious recipes.

FOOD & NUTRITION

Credit: 1 Grade: 9-12 Prerequisite: None

Duration: First Semester North Campus Either semester at South Campus

Fee: \$30

Food & Nutrition II moves beyond the basics to build more complex food-preparation skills. Students will use concepts learned in Food and Nutrition to develop a new understanding of how to utilize food for their health and enjoyment. Food science principles are introduced. Students will research and plan a meal that incorporates special dietary needs of family members. This course is recommended prior to taking World of Food or Culinary Food

FOOD & NUTRITION II

Credit: 1 Grade: 9-12

Prerequisite: Food and Nutrition

Duration: Semester

Fee: \$30

Students will assess personal traits that lead to positive relationships in professional and personal areas. Students will study the characteristics of effective leadership styles by examining communications skills, decision making processes, stress management techniques, effects of attitude and awareness, and developing a healthy sense of self.

HUMAN RELATIONS

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: None

Interior Design is a project-based class. Students will develop skills to enable them to establish what makes an inviting environment. Topics include reading blueprints, creating color schemes, and exploring career possibilities. Principles of color, line, and form will be applied to room planning, arrangement, and design. Students will be encouraged to develop their own individual style preferences and create interior environments throughout the semester. This class can be transcripted with WCTC and follows their curriculum.

INTERIOR DESIGN

Credit: 1
Grade: 11-12
Prerequisite: None
Duration: Second Semester

Duration: Second Semester
Transcripted Credit with WCTC

Fee: \$10

World of Food is designed for the experienced cook. Cultures and cuisines of the world provide the framework for learning new techniques of food preparation and new insights into healthier food choices while developing diversity in eating habits. Areas of study include seven international cultures (China, Japan, Italy, France, Germany, Mexico & Spain) with possibly some regional cuisines of the U.S. Students choose a cuisine to research and present their information to the class using technology.

WORLD OF FOOD

Credit: 1 Grade: 11-12

Prerequisite: Food and Nutrition and highly recommend Advanced Food and Nutrition

Duration: First Semester

Fee: \$30

Career and Technical Education Health Science

Health Science Education (HSE) provides opportunities for students to explore and prepare for a variety of careers such as medicine, nursing, physical therapy, dentistry, surgery, animal science, behavioral science and allied health careers. Students can gain valuable career information and network with professionals by participating in career-based learning experiences throughout our program. Our courses allow students to analyze aspects of healthcare practices and facilities while developing technical skills and health care competencies. There are also options to earn industry certifications.

Two credits of Career and Technical courses are required for graduation. This can be met by taking courses in the Business and Marketing, Family and Consumer Science, Health Science and Technology and Engineering departments.

Health Science courses and recommended related courses with health science components.

Grade	Health Science Courses	Related Science Courses	Recommended Related Courses
9th		Science 9 Science 9 / Biology Accelerated Block	Career & Employment Success Food & Nutrition Early Childhood Education
10th	Health Occupations Medical Terminology & Business Practices	Biology / Biology Accelerated Chemistry / Chemistry Honors	Career & Employment Success Developing Relations Food & Nutrition Early Childhood Education
11th & 12th	Health Occupations Medical Terminology & Business Practices Health Youth Apprenticeship Program	Anatomy & Physiology AP Biology AP Chemistry Chemistry / Chemistry Honors Chemistry for the Health Sciences	Career & Employment Success Human Relations Organizational Communication Early Childhood Education
12th	Health Practicum (Block class, full year) EMT-B (Block class, full year)		

CTE HEALTH SCIENCE

DESCRIPTION COURSE TITLE

EMT-B is to be taught in accordance with the Wisconsin EMT-Basic Curriculum, which is based upon the National Emergency Medical Services Education Standards document http://www.ems.gov/pdf/811077a.pdf and the National EMS Scope of Practice document http://www.ems.gov/education/EMSScope.pdf.

Emergency Medical Technicians' scope of practice includes basic, non-invasive interventions to reduce the morbidity and mortality associated with acute out-of-hospital medical and traumatic emergencies. Emergency care is based on assessment findings. Additionally, Emergency Medical Technicians provide care to minimize secondary injury and provide comfort to the patient and family while transporting the patient to an emergency care facility.

EMT-B

Credit: 1.5 credits/semester

Grade: 12

Prerequisite: Health Occupations Or Medical Terminology & Business

Practices
Duration: Year

Class Period: Last Block 3 days a week Fee: Costs for textbook and uniform **REQUIRED:** Application process occurs

spring of junior year.

Health Occupations provides rich opportunities for students to examine a variety of medical and health-related careers. Healthcare professionals are used as guest speakers to present useful information to help students transition from high school to post-secondary education and/or get a jump start on their career while in high school. Valuable skills used in health care, including therapeutic communication, measuring vital signs, and functioning in a team environment will be taught. Students will develop sensitivity to the needs of patients. Students are required to complete one career-based learning experience (i.e.: job shadow, healthcare expo, career webinar, etc.) by the end of the semester. Completion of this course is a prerequisite for Health Practicum and the EMT-B course. It is also required if the student participates in the Health Youth Apprenticeship Program.

HEALTH OCCUPATIONS

Credit: 1 Grade: 10-12 Prerequisite: None Duration: First Semester

Fee: None

Health Practicum is designed for students who wish to further their comprehension and skills related to health care professions. Units include disease pathology, supporting wellness through healthy eating, mental health and community resources, healthcare book study, and CPR/First Aid certification. Students will also advance employability skills and technical skills through the enrollment of either the Health-Youth Apprenticeship Program or the WI- Youth Leadership Program. These career-based learning experiences (internships or paid work experiences) can be customized to student's interests and personal schedules. Additionally, students have the opportunity to be engaged in community service learning or state competitions through HOSA: Future Health Professionals.

HEALTH PRACTICUM 1 & 2

Credit: 3 (1.5 each semester)

Grade:12

Prerequisite: Health Occupations Highly Recommended: Medical Terminology & Business Practices

(Business)
Duration: Year
Fee: \$20

Certified Nursing Assistant (CNA): Students must apply and be accepted into this two-year program during their sophomore year. The summer prior to their junior year, students will receive their CNA (Certified Nursing Assistant) training at WCTC. Students must complete both Arrowhead's Medical Terminology & Business Practices course and the Health Occupations course during their sophomore or junior year. In addition, they are required to take the Health Practicum course during their senior year. Students will receive on-the-job training at a local health care facility. To receive an application, the student and parent must attend 2 mandatory informational meetings: one held by Arrowhead and the other held by WCTC in January/February. WCTC and Arrowhead credits may be earned through this program.

<u>Pharmacy Technician:</u> Offered junior or senior year. (Junior year as independent study, senior year through Health Practicum with work release time). Students must apply and be accepted in the spring of their sophomore or junior year. Full

HEALTH YOUTH APPRENTICESHIP 1 & 2 (NC)

Credit: Up to 4 credits

Grade: 11-12

Prerequisite for CNA: Completion of the Medical Terminology & Business Practices course and the Health Occupations course by the end of their junior year. Students must take Health Practicum during their senior year.

Must be 16 years old before the first day of

the CNA summer course.

Duration: 2 years Fee: none*

*Students must purchase uniform, class materials, and state certification test

acceptance into the program is contingent on the ability to secure an approved job. This is a one-year program, 2 credits.

<u>Dental Assistant:</u> Offered senior year through enrollment in the Health Practicum course. Students must apply and be accepted in the spring of their junior year or prior to senior year. Full acceptance into the program is contingent on the ability to secure an approved job. This is a one-year program, 2 credits.

Prerequisite for Pharmacy Technician and Dental Assistant: Completion of Health Occupations and Medical Terminology by end of junior year.

Medical Terminology & Business Practices is designed for students interested in a career in the health science field. The course includes instruction of over 200 medical terminology elements, resulting in students being able to know and use over 10,000 terms This class also covers the business side of working in the medical field. Students learn professional communication, online scheduling, charting with SOAP notes, coding and billing. Upon mastery of the entry level skills, students will work in the Warhawk Health & Wellness Center. This hands-on experience gives students an opportunity to work in a simulated health clinic and take on the responsibilities of a Medical Assistant, Office Manager, Receptionist and Billing Clerk. Completion of this course is required if the student participates in the Health Youth Apprenticeship Program.

MEDICAL TERMINOLOGY AND BUSINESS PRACTICES

Credit: 1 Grade: 10-12 Prerequisite: None

Duration: Second Semester

Fee: \$15

Career and Technical Education: Technology and Engineering

The Technology and Engineering curriculum aims to successfully apply real-world skills by utilizing the latest technological trends and applications. Students can apply their knowledge to project work and advanced hands-on activities. The Technology and Engineering curriculum had been designed to nurture a greater understanding of engineering principles and problem-solving strategies while allowing students to develop manufacturing skills and techniques. Students are encouraged to explore offerings in manufacturing, engineering and automotive.

Arrowhead offers the nationally accredited Project Lead the Way (PLTW), which includes five courses. Students taking PLTW courses can earn dual credit (high school and college credit) through a partnership with the University of Wisconsin – Green Bay (CCHIS). The credits earned are transferable to UW system schools and many others. Arrowhead has become an accredited school through the National Automotive Technicians Education Foundation (NATEF) and Automotive Youth Education Systems (AYES). Both associations provide graduates with job opportunities, scholarships, free tools, and advanced placement at WCTC and MATC.

Technology and Engineering course fees cover all class consumables (paper, toner, pencils, markers, etc.) All <u>EXTRA</u> materials, including materials for projects that the students take home, must be purchased by the student during the course. This includes materials like lumber, plastic, and metal. (Pricing lists are posted in each lab.)

Jeremy Schlitt and Anthony Christian, Teacher Leaders, 369-3612, Ext. 3258

9 th Grade	 Introduction to Engineering & Ma Introduction to Engineering & Man 	nufacturing (PLTW) 1 & 2 nufacturing (PLTW) 1 & 2 - Female Only	
10 th Grade		h Materials 1 & 2 nufacturing (PLTW) 1 & 2 Female Only (1) 1 & 2** (Principles of Engineering AND Physics/ (PLTW) 1 & 2	AP Physics)
11 th and 12 th Grade	Manufacturing Courses Computer Integrated Manufacturing 1& 2 Metals Fabrication I Metals Fabrication II** Machining 1 & 2 Woods Production I Woods Production II** Cabinetmaking 1 & 2** Technology & Engineering Youth Apprenticeship 1 & 2** Warhawk Manufacturing 1 & 2 **	 Engineering Courses (PLTW) Computer Integrated Manufacturing 1&2 Civil Engineering & Architecture (PLTW) 1 & 2 Engineering & Mechanics (PLTW) 1 & 2** (Principles of Engineering AND Physics/ AP Physics) Engineering Design & Development (PLTW) 1 & 2** Technology & Engineering Youth Apprenticeship 1 & 2** 	 Automotive Courses Consumer Auto Consumer Auto-Female Only Automotive Technology I Automotive Technology II* Advanced Automotive Technology 1 & 2** Technology 1 & 2** Technology & Engineering Youth Apprenticeship 1 & 2**

DESCRIPTION COURSE TITLE

Advanced Automotive Technology is for the student who has an interest in pursuing a higher level of automotive repair skills or an automotive career. Emphasis is placed on the practical application of knowledge and the development of skills required of automotive technicians. A major portion of the course involves advanced work with newer automotive technology. The career information phase of this course presents employment opportunities, post-high school automotive education, certification of technicians, and procedures in gaining employment.

ADVANCED AUTOMOTIVE TECHNOLOGY

1 & 2 Credit: 2

Grade: 12

Prerequisite: 2 semesters of Autos or 1 semester Autos and Instructor's Approval

Duration: Year FEE: \$20

This class offers Youth Apprenticeship options through Automotive Youth Educational Systems (AYES).

Automotive Technology I is the beginning of Automotive Mechanics for students preparing for this field as an occupation or gaining a higher level of automotive repair skill. This may **not** be taken with Consumer Auto. The course presents a series of jobs each student is required to complete, including brake servicing and checking front end alignment. Students will be given opportunities to perform under realistic shop conditions on actual automobiles. In order for students to gain a more realistic understanding of automotive suspension, the engine and necessary systems will also be reviewed.

AUTOMOTIVE TECHNOLOGY (I)

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: \$10

Automotive Technology II (Previously Automotive Technology and Diagnostics) is designed to learn more about current and advanced technical systems used on late-model vehicles. The units to be studied include electronic ignition systems, on-board computers, computer-controlled fuel injection, direct fuel injection, and emission control systems. Emphasis is placed on diagnosing, troubleshooting, and performing manufacturer's recommended service procedures.

AUTOMOTIVE TECHNOLOGY (II)

Credit: 1 Grade: 11-12

Prerequisite: Consumer Auto or Auto

Technology (I) Duration: Semester

Fee: \$10

Cabinetmaking allows students to gain a complete understanding of the manufacturing and design process used to create products for the cabinetmaking industry. Students will interpret technical drawings and build a cabinet (nightstand) by safely using industrial machinery and modern woodworking techniques. Students will then utilize their prior knowledge to develop a product(s) of their own using the design process. Students will have the opportunity to earn their Sawblade Certificate through the Woodwork Career Alliance by demonstrating knowledge of tools used in the woodworking industry.

CABINETMAKING 1 & 2

Credit: 2 Grade: 12

Prerequisite: Woods Production I

Duration: Year Fee: \$20

Civil Engineering & Architecture (CEA) is a Project Lead the Way specialty course designed to provide students with an overview of Civil Engineering and Architecture and their relationship to one another. Students will build architectural models, use professional software Revit to design a residential house, and design a completely furnished library. Students will also understand the role of a Civil Engineer as they design a variety of developments such as a highway system, waterpark, or urban community.

CIVIL ENGINEERING & ARCHITECTURE 1 & 2 (PLTW)

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year Fee: \$20

Potential for college credit (link)

DESCRIPTION COURSE TITLE

Computer Integrated Manufacturing (CIM) is a year-long course that will introduce students to the concepts required for Computer Numerical Control (CNC) operation. Students will learn entry-level skills on machine set up with the CNC mill, lathe, wood router, plasma, and laser. Students will produce parts and check quality and tolerances. Students will also learn 3D design and Computer-Aided Manufacturing (CAM) to control the CNCs. Material selection, programming, tooling, speeds and feeds, runtime and automation are other topics that they will dive into as they discover the future of CNC implementation into manufacturing. This course (along with others in the pathway) leads to a career as CNC Set-Up Technician, Machine Operator, CNC Programmer and CNC Operator, as well as careers in the fields of Manufacturing, Mechanical and Automation Engineering.

COMPUTER INTEGRATED MANUFACTURING 1 & 2 (PLTW)

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year Fee: \$20

Consumer Auto is for anyone who owns or operates a car. This course will concentrate on light duty maintenance and minor repairs that nearly anyone can perform. Consumer Auto students will study the theory and practical application of automotive engines, heating and cooling, batteries, starting and charging, fuel and electrical, tires, bearings, and brake systems. This course cannot be taken with Automotive Technology.

CONSUMER AUTO

Credit: 1 Grade: 11-12 Prerequisite: None

Duration: Semester (either)

Fee: \$10

Engineering & Mechanics is the first course within the Engineering Experience. It is for students interested in learning about physics and engineering in a project-based, hands-on learning environment. Students interested in engineering, manufacturing, and STEM-related fields enrolling in Physics should strongly consider taking the Engineering and Mechanics course. Credit is earned for both Physics and Principles of Engineering but creates an entirely different experience. Students can learn the essential physics ideas by applying real-world engineering problems such as constructing projectile launchers, survival shelters, bridge/truss designs, robotics and programming and more. Students who enroll in Engineering and Mechanics are not required to continue within the Engineering Experience. This course will serve as excellent preparation for the capstone experience, Engineering Design and Development.

ENGINEERING & MECHANICS

Students receive credit for:

Physics

Principles of Engineering (PLTW)

Credit: 4 Grade: 10-12

Prerequisite: Completion or concurrent

enrollment in Biology.

Concurrent enrollment in Advanced Algebra or Advanced Math and Stats II

(AMS II) Duration: Year Fee: \$20

Potential for college credit (link)

Note: New in 2023-2024 is a dual credit option through the University of Wisconsin – Green Bay (CCIHS). Students can elect to earn three college credits through UWGB, which are transferable to all UW schools and many others. UWGB's equivalent course is ENGR 220: Mechanics of Materials. The process for earning credits take place with the instructors during the first week of class. Some students enrolling in Engineering and Mechanics would prefer to receive credit for AP Physics 1 instead of Physics. Students may select to have AP Physics 1 appear on their transcript, but must agree to take on additional work and are expected to take the AP Physics 1 exam. This process takes place with the instructor during the first week of class.

DESCRIPTION COURSE TITLE

Engineering Design & Development (**EDD**) is a Project Lead the Way specialty capstone course designed to help students solve real-world problems while working in teams to research, design, and construct the final solution. The product development lifecycle and the design process will be used to guide and help the team solve the problem. Teams will present and defend a solution to a panel of outside Arrowhead area community and business representatives.

POTENTIAL FOR COLLEGE CREDIT: New in 2023-2024 is a dual credit option through the University of Wisconsin – Green Bay (CCIHS). Students can elect to earn two college credits through UWGB, which are transferable to all UW schools and many others. UWGB's equivalent course is ET 207: Parametric Modeling. The process for earning credits take place with the instructors during the first week of class.

Introduction to Engineering & Manufacturing (**IEM**) is designed to introduce the fundamentals of both engineering and manufacturing. Students will use state of the art 3D modeling software, laser engravers, CNC routers, and 3D printers. Students will use problem solving skills to complete a variety of projects that they design, build, and test. IEM is offered to <u>ALL students</u> and is the recommended first course for all students interested in future Technology and Engineering Education courses.

Potential for college credit (link)

Note: New in 2023-2024 is a dual credit option through the University of Wisconsin – Green Bay (CCIHS). Students can elect to earn two college credits through UWGB, which are transferable to all UW schools and many others. UWGB's equivalent course is ET 101: Fundamentals of Engineering and Technology. The process for earning credits take place with the instructors during the first week of class.

Manufacturing & Engineering (MEM), is designed to offer students a foundation in manufacturing processes, through project-based learning. Students utilize wood, metal and other materials to create products. Students will 3D model, CNC program, weld, machine, and use woodworking manufacturing techniques. This course will help to show students the vital connections between engineering and manufacturing.

Metals Fabrication (I) is a yearlong course that involves cutting, altering and shaping steel or other materials through the use of different tools, techniques and processes. Welding is used to fuse or join metal parts together. Fabrication and welding projects can involve simple, basic techniques, but they are all around us. From the chairs we sit on to the beds we sleep on, metal fabrication has been a part of that product's creation. Metals Fabrication will introduce safe and proper procedures of cutting, welding, fastening, and fabricating of metal. Students will learn print reading, layout, written specifications and material properties to create products from blueprints they design.

Potential for College Credit (Transcipted with WCTC)

ENGINEERING DESIGN & DEVELOPMENT 1 & 2 (PLTW)

Credit: 2 Grade: 11-12

Prerequisite: Engineering & Mechanics OR 2 Technology and Engineering Courses, 1

of which can be concurrent.

Duration: Year Fee: \$20

INTRODUCTION TO ENGINEERING & MANUFACTURING 1 & 2 (SC) (PLTW)

Credit: 2 Grade: 9-12 Prerequisite: None Duration: Year

Fee: \$25 Engineering Notebook Included

MANUFACTURING & ENGINEERING WITH MATERIALS 1 & 2

Credit: 2 Grade: 10

Prerequisite: None Duration: Year Fee: \$20

METALS FABRICATION (I) 1 & 2

Credit: 2 Grade: 11-12 Prerequisite: None Duration: Year Fee: \$20

DESCRIPTION COURSE TITLE

Metals Fabrication (II) is a yearlong course that will introduce advanced cutting, welding, fastening, and fabricating of sheet metal to students as they create products from blueprints. Transitions, cones, boxes, trays and frames are examples of products students will create. Students will learn advanced print reading, layout, written specifications and material properties as they create products on the plasma CNC from blueprints or from their design.

METALS FABRICATION (II) 1 & 2

Credit: 2 Grade: 12

Prerequisite: Metal Fabrication (I)

Duration: Year Fee: \$20

Machining is a yearlong course that will introduce students to the skills needed in manufacturing. Students will learn entry-level skills on basic machine tools, including lathes, drill presses, grinders, and milling machines. Students produce parts from engineering drawings, and make measurements using inspection tools such as micrometers, height gages, thread gages, and dial calipers. Students will develop the machine operating skills needed to produce parts to the tolerances commonly found in industrial situations.

MACHINING 1 & 2

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Year Fee: \$20

ons.

Principles of Engineering (**POE**) is a course designed to provide students with an understanding of the field of engineering and engineering technologies. This course makes science, technology and mathematics more engaging, interesting, concrete, and relevant. While providing a STEM-based education for all students, those interested in becoming practicing engineers clearly benefit from this course content. Numerous exciting hands-on design challenges will be completed to take students through all phases of the design process to bring their ideas from concept to working prototype. Students will utilize modern manufacturing techniques such as CNC milling, laser cutting and 3D printers to complete their design challenges and prototypes. **Potential for college credit (link)**

Note: New in 2023-2024 is a dual credit option through the University of Wisconsin – Green Bay (CCIHS). Students can elect to earn three college credits through UWGB, which are transferable to all UW school and many others. UWGB's equivalent course is ENGR 220: Mechanics of Materials. The process for earning credits take place with the instructors during the first week of class.

PRINCIPLES OF ENGINEERING 1 & 2 (PLTW)

To enroll in this course please <u>see</u>
<u>Engineering and Mechanics</u>, this course is part of the Engineering Experience.

The Technology & Engineering Youth Apprenticeship class is designed for students who wish to further their comprehension and skills related to a specific career in one of the following areas: Automotive, Building Trades, Manufacturing, Architecture, or STEM. Through the enrollment of the Youth Apprenticeship Program and WCTC, students will have the opportunity to be mentored by professionals outside of school and be paid for their employment. An approved employment location allows for students to complete a skills-based competency checklist to earn a Wisconsin State Certificate of Completion. For more information and/or to apply please contact:

Brenda King: king@arrowheadschools.org

TECHNOLOGY & ENGINEERING YOUTH APPRENTICESHIP 1 & 2

Credit: 2 Grade: 11-12

Prerequisite: Enrolled in one or more concurrent Technology and Engineering

program pathway class(es)

Duration: Year

Class Period: Schedule as an 11th hour (after school) with monthly check in by

appointment. Fee: none

DESCRIPTION **COURSE TITLE**

Warhawk Manufacturing is a student-run business that is run out of the North Campus Tech Ed area. Students will use previously learned skills from other classes that will help them contribute to the success of the business. The student employees will be responsible for quoting jobs, ordering material, manufacturing parts, quality control, shipping, receiving, invoicing, customer service, accounting, payroll, project management, maintaining equipment, and everything else it takes to run a business. Students earn profit sharing, scholarships, and credit toward high school graduation. Students who wish to be hired or accepted into the Warhawk Manufacturing program must apply and have completed prerequisites to be considered. This everyday block course is a way to foster a rich in-house work experience at Arrowhead.

WARHAWK MANUFACTURING 1 & 2

Credit: 4 Grade: 12

Prerequisite: Completion of 1 of the following courses AND required Instructor's approval-based on student

portfolio AND interview

- **Engineering Mechanics**
- System and Controls
- Metals Fabrication I
- Woods Production II
- Business Experiences (courses) Preferred
- Student Portfolio and Interview

Duration: Year

Class Period: Every Day Block (84)

Fee: \$0

Woods Production I is designed to build fundamental skills that are needed for woodworking, cabinetmaking and construction fields. Students will take information from technical drawings and complete projects by safely using industrial machinery and modern woodworking techniques. Students will gain an understanding of machine safety, order of operations, measurement, joinery, quality control, technical drawings, computer-aided machining and career exploration. Students will get a chance to expand on knowledge gained from Manufacturing with Materials (MEM) or use the course as their first offering in woodworking.

WOODS PRODUCTION I

Credit: 1 Grade: 11-12 Prerequisite: None

Duration: Semester (either)

Fee: \$10

Woods Production II is the follow-up to Woods Production I for students wishing for a year-long experience in woodworking. This course offers a comprehensive study and application of advanced woodworking processes. Students will continue to hone their skills and will construct a cabinet which contains a door and drawer. Students will learn the methods of installing door hinges and drawer slides. This is in an effort to create awareness of the industry and possible future employment opportunities. Students will also program operations on a CNC router to demonstrate technological advances in the wood products industry.

WOODS PRODUCTION II

Credit: 1 Grade: 11-12

Prerequisite: Woods Production I Duration: Semester (either)

Fee: \$10

Computer Science

A background in computer science principles provides students with specific programming skills and knowledge as well as experience with problem solving in a computational setting. Opportunities for continued study at the college level are numerous as are the pathways to careers that require computer literacy, coding and problem-solving skills. **Students earn general elective credit for both Computer Science Methods and AP Computer Science A.**

Cheryl Bonlender, Program Leader, 262-369-3611 x4661

COMPUTER SCIENCE

DESCRIPTION COURSE TITLE

AP Computer Science A is designed to prepare students to take the AP Computer Science test for college credit. The course is equivalent to a one semester college computer science class. The major focus of the course is on problem-solving strategies and elementary programming techniques. Using the Java programming language students study the object-oriented programming paradigm. Students will design and analyze programs that implement decision-making structures, looping, data structures, class design, Java library classes, and object interaction. The course highlights broader topics within computer science including the project development models and the ethical and social implications of computer use.

*AP COMPUTER SCIENCE A (NC)

Credit: 2 Grade: 10 - 12

Prerequisite: B or better in Advanced Algebra and concurrent enrollment in Functions or Trig/Precalculus and a B or better in Computer Science Methods or an accepted Arrowhead Computer Science Application (which includes a passing grade on the Arrowhead Computer Science Assessment) are required.

Duration: Year Fee: AP test fee

Computer Science Methods is designed to introduce students to the breadth of the field of computer science. The course is designed to focus on the conceptual ideas of computing and helps students understand how certain methods or languages might be utilized to solve problems. Fundamental programming concepts such as memory usage, decision structures, looping, and objects will be introduced primarily using a drag and drop programming language. Students will apply new skills to programming applications that will help them transition to text-based computer languages. The goal is to help students to develop the skills of algorithm development, problem solving and programming as they apply to a wide range of applications.

*COMPUTER SCIENCE METHODS

(**NC**) Credit: 1 Grade: 10 - 12

Prerequisite: A B or better in Geometry and concurrent enrollment in Advanced Algebra is required in order to ensure mastery of basic math concepts including functions, iterative processes, and problemsolving skills necessary for the course.

Duration: Semester

English

The study of English includes reading, writing, speaking, and listening—the fundamental skills necessary for expression, interpretation, and communication. To function with self-confidence in today's world, students will be expected and encouraged to use these skills to the best of their abilities.

The English Department has a varied curriculum to help develop these skills. To graduate from Arrowhead High School, students must pass eight credits of English including both semesters of English 9, English 10 and English 11. These requirements can also be met through English 9 Honors, English 10 Honors, and AP Language and Composition.

Parents and students can access rationales for any book taught in English courses by visiting the English Department page on the Arrowhead website.

Dave Gierach, Program Leader, 369-3611 x 3252

9 th Grade	English 9 1 & 2 English 9 Honors 1 & 2
10 th Grade	British Literature English 10 1 & 2 Honors English 10 1 & 2
11 th Grade	English 11 1 & 2 AP Language & Composition 1 & 2
11 th & 12 th Grade	Advanced Composition Advanced Speech A.P. English Language & Composition 1 & 2 A.P. English Literature 1 & 2 British Literature Composition Creative Writing Modern Literature Organizational Communication World Literature

ENGLISH

DESCRIPTION COURSE TITLE

Advanced Composition is a rigorous writing course that will build on and enhance the concepts taught in Composition. Students will further develop their own clear, coherent writing style, while producing publication-ready writing. Students will complete sustained research, synthesize and evaluate the credibility of sources, use citation styles appropriate to essay formats, and interact and collaborate with technology. Students will compile a portfolio of work including narrative, persuasive, analysis, on demand, research and syntheses.

*ADVANCED COMPOSITION

Credit: 1 credit Grade: 11-12

Prerequisite: Composition

Duration: Semester

Fee: None

Advanced Placement English Language & Composition is an intensive year-long course meant to replicate a college freshman English course in content, pace, and difficulty. Students will discuss, read, and write about personal, national, and international topics and issues while honing their analytical, synthesis, and argumentative skills. The majority of writing in this course will be timed, persuasive writing. Students who take this course must manage their time well, commit to being prepared, and be able to read and write a large volume of pieces.

*ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION 1 & 2 (SC & NC)

Credit: 2 Grade: 11-12

Prerequisite: English 10 Honors or Junior Standing, Pre ACT score above a 22 in reading and Lexile score of 1300 is a strong predictor of success.

Duration: Year Fee: AP Test Fee

Advanced Placement English Literature & Composition is an intensive course meant to replicate a college freshman English course in content, pace, and difficulty. Students in this fast-paced course must have excellent writing and oral skills and must also read large volumes in a limited time. Intensive study of dramas, poetry, novels, and short stories will be considered in terms of their language, characters, theme, structure, and meaning. The majority of writing in this class will be timed, formal literary analysis.

Summer Reading: Students are expected to read several novels prior to the beginning of the course and attend one after-school meeting in late May for titles and instructions

*ADVANCED PLACEMENT ENGLISH LITERATURE & COMPOSITION 1 & 2

Credit: 2 Grade: 12

Prerequisite: None

RECOMMENDATION: British Literature or World Literature or AP Language during the Junior year. A Lexile score of 1300 would be an appropriate indicator of success in A.P.

English.
Duration: Year
Fee: \$7, AP Test Fee

In Advanced Speech, students will improve their oral communication skills and confidence, while reducing their fears of speaking in public. Students will learn and apply strategies for preparing and presenting both formal and informal speeches. Emphasis will also be placed on peer critiquing of speeches. Students will deliver a wide variety of speeches, including critical analysis, informative, sales, persuasive, news reports, and more.

*ADVANCED SPEECH

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

ENGLISH

DESCRIPTION COURSE TITLE

British Literature is a survey of the development of the language and literature of Great Britain. Major works include Beowulf, Geoffrey Chaucer (*Canterbury Tales*), Malory (*The King Arthur Legend*), Shakespeare, (sonnets and Macbeth), the Carpe Diem and Romantic poets, and George Orwell (1984).

This course is strongly recommended for students considering A.P. English Literature. A Lexile of 1300 is strongly recommended.

*BRITISH LITERATURE (NC)

Credit: 1 Grade: 10-12 Prerequisite: none Duration: Semester

Fee: None

Composition is a rigorous course that will focus on the writing process. This will include the concepts of writing well: brevity, clarity, word choice, mechanics, voice, style, organization, audience, and paragraph development. Students will also study vocabulary with application to ACT-timed writing. The course will provide a background in writing formats, determining purposes, punctuation, and grammar. Students will compile a portfolio of work including narrative, informative, explanatory, impromptu, and opinion pieces.

*COMPOSITION

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: None

Creative Writing is for students who enjoy writing for a variety of audiences—or for students who enjoy expression through writing. This course focuses on writing for a purpose (submitting and publishing pieces). Creative Writing content may include poetry, drama, short stories, humor, satire or parody, feature pieces, children's writing, and journaling.

*CREATIVE WRITING

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester Fee: None

*FNCLIS

Students enrolled in English 9 will focus on grammar skills, writing and mechanics, reading, research, and speech. The course content and teaching methods are designed to appeal to all students. Students will learn college and career skills. English 9 or English 9 Honors is required for graduation.

*ENGLISH 9 1 & 2

Credit: 2 Grade: 9

Prerequisite: None Duration: Year Fee: \$23

English 10 focuses on grammar skills, writing and mechanics, reading and speech. The course content and teaching methods are designed to appeal to all students. Students will learn about college and career skills. English 10 or Honors English 10 is required for graduation.

*ENGLISH 10 1 & 2

Credit: 2 Grade: 10

Prerequisite: None Duration: Year Fee: \$10

English 11 students will read, respond to, and reflect upon literary and informational texts as they explore facets of the American identity. Thematic selections include novels, short stories, poems, biographies, critical commentaries, films, and other media. Additional focus areas include comprehension strategies, grammar study, and impromptu writing. Students' understanding of each unit's content and skills will be measured through formative and summative assessments. English 11 or AP Language and Composition is required for graduation.

*ENGLISH 11 1 & 2

Credit: 2 Grade: 11

Prerequisite: None Duration: Year Fee: \$22

ENGLISH

DESCRIPTION COURSE TITLE

English 9 Honors 1 & 2 is an intensive year-long course designed for students intending on taking AP English courses as early as the sophomore year. The course provides accelerated learning of skills taught in English 9 and English 10 including analysis and synthesis of complex fiction and nonfiction texts, writing for a variety of purposes and audiences, and informal and formal discussions and speech presentations. Students who take direction well, manage their time, commit to being prepared, and are motivated to challenge themselves with complex reading and writing will find success in this course. English 9 or English 9 Honors is required for graduation.

*ENGLISH 9 HONORS 1 & 2

Credit: 2 Grade: 9

Prerequisite: Pre- ACT test is required. A 22 in reading, an 18 in English, and/or a Lexile score of 1200 is a strong predictor of success in English 9 Honors

Duration: Year Fee: \$23

English 10 Honors 1 & 2 is an intensive year-long course designed for students intending on taking AP English courses. The course provides accelerated learning of skills taught in English 10 and an introduction to the skills taught in AP courses including analysis and synthesis of complex fiction and nonfiction texts, writing for a variety of purposes and audiences, and informal and formal discussions and presentations. Students will be expected to complete summer homework and maintain a writing portfolio throughout the school year. Students who take direction well, manage their time, commit to being prepared, and are motivated to challenge themselves with complex reading and writing will find success in this course. English 10 or English 10 Honors is required for graduation.

*ENGLISH 10 HONORS 1 & 2

Credit: 2 Grade: 10

Prerequisites: English 9 Honors or the

following criteria

Pre ACT- Reading Score of 22 Pre ACT-English Score of 18

Lexile of 1200+

Written recommendation from English 9

teacher.
Duration: Year
Fee: \$10

In Modern Literature, students read award-winning, contemporary novels from a wide range of genres, at an average pace of 30 pages per night. Students learn how to apply literary and other critical terms to analyze multiple texts. Students synthesize a common idea between all texts and practice both oral and written communication skills. Modern Literature addresses current topics which may be sensitive.

*MODERN LITERATURE

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: None

Organizational Communication is a group- and presentation-driven course where students learn to analyze audience, mode, and visual design of message. Students will deliver polished, professional presentations on a variety of topics to strategically-chosen audiences. Students will gain experience in focused technical writing through memos and reports. Organizational Communication is an examination and analysis of communication theories within the framework of an organization. Attention will be given to strategies for diagnosing and effecting change in communication behaviors. Students will learn the major theories of organizational communication, identifying and defining primary concepts. The role of technology, corporate culture, leadership, teamwork, ethics, and diversity in communication is examined.

*ORGANIZATIONAL COMMUNICATION

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: None

In World Literature, students develop a global mindset through the study of texts from a variety of geographic regions, cultures, and time periods. Students work through course content by reading an anchor text and use supplemental materials such as short stories, non-fiction excerpts, and other media to inform their study. Students' mastery of each unit's content and skills will be evaluated through formative and summative assessments including daily in-class activities, mini-projects, Socratic Seminars, unit tests, and weekly online discussions.

*WORLD LITERATURE

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

General Electives

9 th Grade	The Leader's Mindset
10 th , 11 th , & 12 th Grade	#Acting The Leader's Mindset Journalism Leadership II
11 th & 12 th Grade	College Strategies Computer Science Coaching & Officiating Global Capstone Global Seminar Journalism Yearbook 1 & 2

#Acting is considered a Fine Arts credit

GENERAL ELECTIVES	
DESCRIPTION	COURSE TITLE
Acting class begins with the basics: participation in theatre games and improvisation exercises. Later, students will increase their acting skills by presenting several monologues and scenes from various genres and time periods. Also, students will read, view, and analyze scenes and plays.	ACTING (NC) Credit: 1 (FINE ARTS) Grade: 10-12 Prerequisite: None Duration: Semester (either) Fee: None
This course is designed to develop an appreciation and increased understanding of sport in American society. The course will offer the student the chance to study the philosophy, psychology, motivation, and rewards of coaching, as well as focus on officiating and personal wellness. Any person who appreciates or is involved in athletics will enjoy the course.	COACHING & OFFICIATING Credit: 1 Grade:11-12 Prerequisite: None Duration: Semester (either) Fee: None

GENERAL ELECTIVES

DESCRIPTION COURSE TITLE

College Strategies is designed for the motivated, college-bound student. This course includes practice in the types of reading college students need: fiction and nonfiction. The goal of the course is to improve comprehension through pre-reading, during-reading and post-reading strategies. College Strategies uses assigned reading materials to improve test-taking strategies, comprehension, and reading rate. College Strategies will also focus on everything students need to be successful in college. This course does not count as an English credit toward graduation nor is it accepted as a college preparatory course.

COLLEGE STRATEGIES

Credit: 1 Grade: 11-12 Prerequisite: None

Duration: Semester (either)

Fee: None

Sports, features, news, and editorial columns are all essential in putting together a quality newspaper; students will be taught how to report in each of these sections. The class is responsible for the production of the school newspaper, The Arrowhead. Students who show leadership will be given the roles of print editors. Students are expected to enroll in the course for the full year. Journalism does not qualify as an English or Fine Arts credit for graduation, but qualifies as a general elective.

JOURNALISM 1 & 2 (NC)

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year Fee: None

Leadership II will emphasize character, relationship building and learning to work from the inside out. Students will become more self-aware and be able to translate that awareness into how to lead others. This course will challenge students to build their character and strive to be the best version of themselves. Further, students will be challenged to consider the ways in which their leadership can impact others.

LEADERSHIP II

Credit: 1 Grade: 10-12

Prerequisite: The Leader's Mindset (teacher

recommendation)

Duration: Semester (either)

Fee: None

The Leader's Mindset provides a structured course for students to learn, practice, and engage in leadership roles in classrooms, co-curricular, and the community. The Leader's Mindset provides a platform for students to grow and reflect on their personal mindset and leadership skills in a safe and engaging environment while building a culture of collaboration. This course will also emphasize the importance of a positive, growth-oriented mindset and its effect on leadership. The Leader's Mindset will benefit students by allowing them to practice their leadership skills and gain valuable feedback to continue building their skills. Students who are interested in enrolling in the course may do so by selecting it on the course selection sheet, but may be asked to fill out an application as a follow-up step to enrolling.

THE LEADER'S MINDSET

Credit:1 Grade 9-12 Prerequisite: None Duration: Semester Fee: None

Yearbook students will gain skills in page design, advanced publishing techniques, copywriting, editing, and photography while producing a creative, innovative yearbook which records school memories and events. There is an emphasis on journalism skills in this class. Participants gain useful, real world skills in leadership, time management, marketing, teamwork, problem solving, communication, and design principles. Students will be given challenging real-world projects and assignments typical of the graphic design and publishing industries. High quality work is expected and work outside of the school day is common to attend events to photograph. Yearbook does not qualify as an English or Fine Arts credit for graduation or college admission, but qualifies as a general elective.

YEARBOOK 1 & 2

Credit: 1 Grade: 11-12

Prerequisite: Application for enrollment is required. Please see Mrs. Danay for an

application.
Duration: Year
Fee: None

Global Experience

Global Coordinators: Heather Williams (williams@arrowheadschools.org)

The Global Experience at Arrowhead High School supports students who are interested in preparing themselves for their roles as global citizens in an ever-changing global society. This experience aims to help students become globally competent by practicing these skills across a variety of subject areas:

- 1. investigate themes of global significance
- 2. recognize one's own perspective and gain perspectives from others
- 3. communicate with a number of different audiences far and near
- 4. act on issues of global significance in an effort to improve our world

This experience is enhanced by the State of Wisconsin Department of Public Instruction in that students can also, in addition to participating in the AHS Global Experience, earn the Certificate of Global Competence (CGC) awarded to graduating seniors who have fulfilled all DPI requirements. Successful participation in the Arrowhead Global Experience will fulfill the DPI requirements. Graduating seniors will receive a certificate from the DPI and a stamp on their diploma acknowledging them as "Global Scholars".

CGC Requires:

- 4 years in one high school-level World Language
- 8 cultural literacy reflections (at least four books among them)
- Active participation in and reflection on at least four globally focused activities / co-curricular groups at Arrowhead
- Global Capstone and Seminar along with additional credits in available courses
- 20 hours in globally-themed community service project (during Senior Capstone)
- A grade of B- (80%) or higher is required in all Global Pathway Courses

Grade	Available Courses
9th Required: Social Studies 9 OR AP Human Geography AND 2 credits in one World Language	Possible Enrollment in more than one World Language (2 credits)
10th Required: 2 credits in level 2 of the <u>same</u> World Language started in grade 9.	Economics (1 credit) Global Relations (1 credit) World Language 1 (2 credits) World Language 2 (2 credits) British Literature (1 credit)
11th Required: Junior Global Experience Seminar (2 credits) Description on the next page	The list of available courses for Juniors and Seniors is found in the table on the next page. Juniors enrolled in the AHS Global Seminar and Seniors enrolled in Global Capstone must also enroll in courses listed as "Interdisciplinary" in the next table. They must earn a total of 6 credits from at least two different fields among the courses
12th Required: Senior Global Capstone (1 credit) Description on the next page	listed in Language Arts / Social Studies / Science / and/or World Language over the course of Sophomore, Junior, and/or Senior year.

Interdisciplinary Course Offerings

(required for the Wisconsin Certificate of Global Competence)

Choose at least 6 credits from at least two different fields among the courses below. These may be taken any time during Sophomore, Junior or Senior year.

Students must earn a B- (80%) or higher in all required courses in the pathway to be eligible for the Wisconsin Certificate of Global Competence.

Language Arts World Literature (1 credit) British Literature (1 credit) Organizational Communications (1 credit) AP English Literature (2 credits) AP English Language and Composition (2 credits)	Social Studies Global Relations (1 or 2 credits) American Problems (1 credit) AP European History (2 credits) Sociology (1 credit) Economics (1 credit) AP Macroeconomics (2 credits)
Science Environmental Biology (1 or 2 credits) Landscape Ecology (1 credit) Biotechnology (1 credit)	World Languages Any level of a second World Language (in addition to the one you take for four years) Chinese (2 credits) French (2 credits) German (2 credits) Spanish (2 credits)

World Language Requirements

Juniors and Seniors must continue studies of their first World Language in order to have 4 years of ONE World Language by graduation.

The course will be team-taught by staff members who have expertise in a variety of different disciplines. Students will:

- investigate the world through the sciences, social studies. English, language, arts, culture, and business views.
- contribute knowledge from previous and concurrent classes to enhance interdisciplinary learning.
- recognize/gain perspectives from a variety of sources that represent a wide range of global cultures.
- communicate with a variety of audiences to inform and to inspire.
- take action to make the world a better place.

GLOBAL SEMINAR

Credit: 2 Grade: 11 *Prerequisites:

- 1. Minimum of two consecutive years of one high school level world language
- 2. Concurrent enrollment in third year of world language
- 3. Minimum grade of B- in all prerequisite courses for Global Certificate

Duration: Year Fee: none

The Global Capstone is the culminating course in the Global Experience. Students act to foster positive change as a globally competent citizen in a globally complex world.

Students will:

- identify their individual passion for a locally and globally significant cause.
- investigate underlying issues.
- assimilate knowledge across disciplines.
- discuss knowledge and perspectives with classmates.
- communicate with a variety of audiences.
- propose solutions to a global challenge related to their personal interests.
- write and implement an action plan to make positive change.

GLOBAL CAPSTONE

Credit: 1 Grade: 12 Prerequisites:

- 1. Global Seminar
- 2. Minimum of three consecutive years of one high school level world language
- 3. Concurrent enrollment in fourth year or higher of world language
- 4. Minimum grade of B- (80%) in all prerequisite courses for Global Certificate

Duration: First Semester only

Mathematics

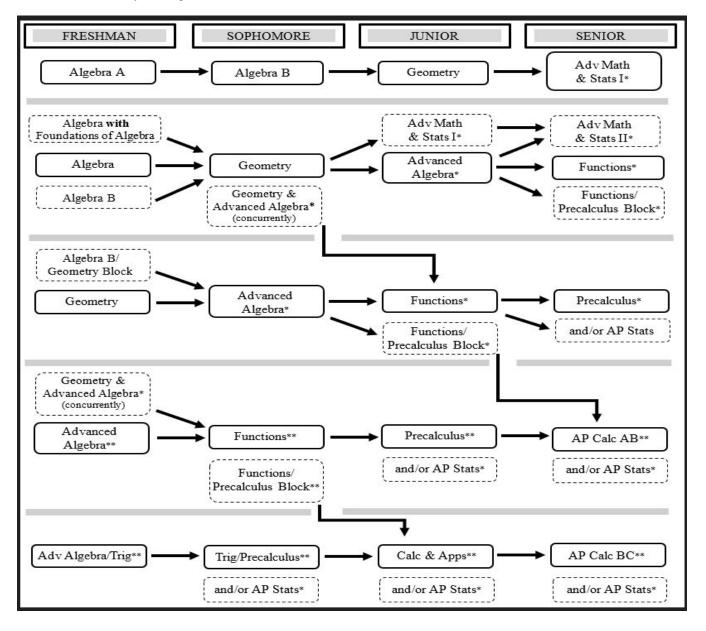
Students must complete three years of mathematics to satisfy the Arrowhead graduation requirement. It is strongly recommended that every student take four years of high school mathematics. All math classes are year-long classes. The pathways of mathematics courses are listed below. A grade of a C- (70%) or better in second semester math is required to move to the next math course in the sequence, unless otherwise specified in the course description.

A scientific calculator is required for each mathematics course.

- *=A graphing calculator is required for this course. The TI Nspire CX or CAS calculator is recommended.
- **=Students who plan to take AP Calculus AB or BC should purchase the CAS version.

Cheryl Bonlender, Program Leader, 369-3611, Ext. 4661

*All math classes are year-long classes



MATHEMATICS

DESCRIPTION COURSE TITLE

Advanced Algebra emphasizes algebraic expressions and forms, especially linear and quadratic forms, powers and roots, and functions based on these concepts. Students study logarithmic, trigonometric, polynomial and other special functions both for their abstract properties and for modeling real-world situations. A graphing calculator is required.

*** Please note- Students who earned a C in Geometry should strongly consider Advanced Math and Statistics I (AMS I) instead of Advanced Algebra. AMS I and AMS II include all of Advanced Algebra concepts over two years along with additional math concepts such as data, probability and statistics. Students and parents are encouraged to discuss these options with their current math instructor.

*ADVANCED ALGEBRA 1 & 2

Credit: 2 Grade: 9 - 12

Prerequisite: Incoming freshmen must successfully complete the District Algebra Assessment. Students in grades 10-12 must have a C or better in High School Credit Geometry, or can take the course concurrently

with Geometry. Duration: Year Fee: None

This course is designed for freshmen students who plan to take the AP Calculus BC course in their senior year. This course is for students with strong abilities and interest in the study of mathematics and is a prerequisite to the Trigonometry/Precalculus course offered for students in their sophomore year. A TI-Nspire CAS graphing calculator is required.

*ADVANCED ALGEBRA/TRIGONOMETRY

1 & 2 Credit: 2 Grade: 9

Prerequisite: Incoming freshmen must successfully complete the District Algebra

Assessment and have a teacher recommendation. An A in the previous course is highly recommended (High School

Geometry). Duration: Year Fee: None

This class is designed as the first course in an alternative to one year of Advanced Algebra. Advanced Math and Statistics I and II together cover all of the standards in the Advanced Algebra course and also include standards in data, probability, and statistics. A graphing calculator is required.

*ADVANCED MATH AND STATISTICS I 1 & 2

Credit: 2 Grade: 11-12

Prerequisite: C or better in Geometry

Duration: Year Fee: None

This class is designed as the second course in an alternative to one year of Advanced Algebra. Advanced Math and Statistics I and II together cover all of the standards in the Advanced Algebra course and also include standards in data, probability, and statistics. A graphing calculator is required.

*ADVANCED MATH AND STATISTICS II 1 & 2

Credit: 2 Grade: 11-12

Prerequisite: C or better in Advanced Math & Stats I or a C or better in Advanced

Algebra Duration: Year Fee: None

MATHEMATICS

DESCRIPTION COURSE TITLE

Advanced Placement Calculus AB is designed to prepare students to take the AP Calculus AB test for college credit. This is the equivalent of a one semester college calculus class and covers differential and integral calculus. A TI-Nspire CAS graphing calculator is required.

*ADVANCED PLACEMENT CALCULUS AB

1 & 2 Credit: 2 Grade: 12

Prerequisite: B or better in Functions/Pre-Calculus block, Precalculus and Discrete Math or B or better in Calculus and Applications and teacher recommendation.

Duration: Year Fee: AP Test fee

Advanced Placement Calculus BC is designed to prepare students to take the A.P. Calculus BC test for college credit. This is the equivalent of two semesters of college calculus and covers differential and integral calculus. Students taking the BC test earn a score on both the Calculus AB and BC topics. A TI-Nspire CAS graphing calculator is required.

*ADVANCED PLACEMENT CALCULUS BC

1 & 2

Credit: 2 Grade: 12

Prerequisite: B or better in Calculus and Applications and teacher recommendation.

Duration: Year Fee: AP test fee

Advanced Placement Statistics is designed to prepare students to take the AP Statistics test for college credit in a non-calculus-based statistics course. The topics for AP Statistics are divided into four major themes: exploratory analysis, planning a study, probability, and statistical inference. An introductory statistics course, similar to the AP Statistics course, is typically required for majors in the social sciences, health sciences, education, and business. The AP Statistics course is also preparation for students who plan to take upper-level statistics courses in college through math, science, or engineering departments. AP Statistics may be taken concurrently with Trigonometry/Precalculus, Precalculus and Discrete Mathematics, or AP Calculus. A graphing calculator is required.

*ADVANCED PLACEMENT STATISTICS 1 & 2

Credit: 2 Grade: 10-12

Prerequisite: B or better in Functions, Statistics, and Trigonometry 1 & 2, or Functions/Precalculus Block, or B or better on Advanced Algebra/Trigonometry and teacher recommendation

Duration: Year Fee: AP Test fee

Algebra A covers the first half of Algebra over one year. Students are placed in the course based on teacher recommendation. This course does not appear on the course selection materials.

ALGEBRA A (NOT ON COURSE SELECTION SHEET)

Credit:2 Grade:9

Prerequisite: Completion of Transitional

Math (Pre-Algebra) and teacher

recommendation Duration: Year Fee: None

MATHEMATICS

DESCRIPTION	COURSE TITLE
DESCRIPTION	COURSE IIILE

Algebra examines functional relationships and the use of symbols to describe patterns, number sense, and algorithmic thinking. The concepts in a first-year algebra course are described through verbal, symbolic, graphical, and numerical representations, and are used throughout the remainder of the high school and college math curricula. Real-world applications are used throughout the course.

*ALGEBRA 1 & 2

Credit: 2 Grade: 9-12

Prerequisite: C or better grade in

Transitional Math/Pre-Algebra (in 8th grade)

Duration: Year Fee: None

Algebra B covers the second half of Algebra over one year.

*ALGEBRA B 1 & 2

Credit: 2 Grade: 9-12

Prerequisite: C or better in Algebra A (1st half of Algebra in 8th or 9th grade) and

teacher recommendation

Duration: Year Fee: None

This course is highly recommended for students who are planning to take Advanced Algebra in the next school year. The course provides further opportunity for mastery of algebraic thinking while allowing students to complete Geometry in the same year. Algebra B is completed in the first semester, and Geometry is completed in the second semester. Students who complete the course benefit from further algebraic learning that assists them in their remaining studies in math and science.

*ALGEBRA B/GEOMETRY BLOCK 1 &

Credit: 4
Grade: 9-10

Prerequisite: B or better in Algebra A (1st half of Algebra in 8th grade) or Algebra and teacher recommendation. Students must successfully complete the district Algebra

Assessment Duration: Year Fee: None

Calculus and Applications introduces juniors to the formal study of Calculus through limits, derivatives, and integrals. The focus on applications and theory provide students with the background and skills necessary for successful completion of AP Calculus BC during the senior year. A TI-Nspire CAS graphing calculator is required.

*CALCULUS AND APPLICATIONS 1 &

Credit: 2

Grade: 11

Prerequisite: B or better in Trigonometry/Precalculus or Functions/Precalculus Block

Duration: Year Fee: None

Foundations of Algebra is an elective course offered in the Arrowhead Math Department. It is designed for students who are taking Algebra in 9th grade and have received a recommendation for additional learning support at the high school level. The Foundations of Algebra curriculum targets the key concepts of algebraic thinking, place value, computational fluency, concepts of fractions, measurement, and data. Students will earn an elective pass/fail credit for each semester of the course and significant support for success in the Algebra course.

FOUNDATIONS OF ALGEBRA

Credit: 2 Grade: 9

Prerequisite: Concurrent enrollment in

Algebra 1 & 2 and teacher recommendation

Duration: Year Fee: None

MATHEMATICS DESCRIPTION COURSE TITLE		
Functions, Statistics, and Trigonometry integrates statistical and algebraic concepts and previews calculus in work with functions and intuitive notions of limits. Graphing calculators and computers are used to plot functions, analyze data, and simulate experiments. Trigonometry and circular functions are a major emphasis. A graphing calculator is required.	*FUNCTIONS, STATISTICS, AND TRIGONOMETRY 1 & 2 Credit: 2 Grade: 10-12 Prerequisite: C or better in Advanced Algebra or C or better in Advanced Math & Stats II Duration: Year Fee: None	
The EVERYDAY block course is intended for students who have performed at a high level in the Advanced Algebra course and have received their teacher's recommendation to accelerate through the Arrowhead math sequence. Students should have strong capabilities and an interest in studying mathematics at a high level in high school. The course will integrate the curriculum of Functions, Statistics and Trigonometry and Precalculus and Discrete Mathematics in a unified manner. Students will incorporate statistical reasoning, algebraic modeling, trigonometric functions, and logical reasoning. A graphing calculator is required.	*FUNCTIONS/PRECALCULUS BLOCK 1 & 2 (NEW FORMAT OPTION -24-25) (NC) Credit: 4 Grade: 10, 11,12 Prerequisite: Completion of Advanced Algebra with an A (highly recommended) and teacher recommendation. Duration: Year Fee: None	
The Geometry course emphasizes coordinate and transformational geometry. The development of logic patterns is used to build the concept of mathematical proof. There is also a strong focus on measurement formulas and three-dimensional figures.	*GEOMETRY 1 & 2 Credit: 2 Grade: 9-12 Prerequisite: Incoming freshmen must successfully complete the District Algebra Assessment or take concurrently with Algebra or Algebra B. Students must have a C or better in Algebra or Algebra B Duration: Year Fee: None	
Pre-calculus and Discrete Mathematics emphasize the content necessary to be successful in Calculus and Computer Science. A graphing calculator is required.	*PRECALCULUS AND DISCRETE MATHEMATICS 1 & 2 Credit: 2 Grade: 11-12 Prerequisite: C or better in Functions, Statistics, and Trigonometry. Duration: Year Fee: None	
This course is designed for sophomores who have completed Advanced Algebra/Trigonometry as freshmen. This course is for students with strong abilities and interest in the study of mathematics and is the prerequisite for Calculus and Applications in the 11th grade. A Ti-Nspire CAS graphing calculator is required.	*TRIGONOMETRY / PRE-CALCULUS 1 & 2 Credit: 2 Grade: 10 Prerequisite: B or better in Advanced Algebra/Trigonometry Duration: Year Fee: None	

Music

The music department is designed to provide all vocal and instrumental students with meaningful and artistic opportunities, encouraging a lasting appreciation for the arts. Music courses may carry a \$25 to \$50 class/year fee. Students are required to take 2 credits of fine arts for graduation. They may be met by arts, music, theater or video production courses.

Jacob Polancich, Teacher Leader, 369-3612, Ext. 3117

INSTRUMENTAL MUSIC

The instrumental music program is open to students who play wind, string or percussion instruments. It is expected that all students choosing to be a part of the instrumental music program will participate in an audition process each spring semester in order to allow for proper placement for all of the ensembles for the coming school year. Students with no previous instrumental experience may enroll only with the consent of the instrumental music director. All members of performing ensembles will be required to attend all performances throughout the school year. Members of Concert Band, Symphonic Band, Jazz Ensemble, and Wind Ensemble are required to participate in one Marching Band performance/game for their first semester performance grade and three scheduled Pep Band performances/games for their second semester performance grade. *All music classes are year-long

CHORAL MUSIC

Choral Music is open to students with an ability and interest in singing. In all of the Arrowhead Choirs teamwork and self-discipline are expected. This disciplined, cooperative approach is combined with an emphasis on professionalism and musical excellence. Each choir gains knowledge in music theory and terminology and a variety of musical styles including madrigals, barbershop quartets, vocal jazz, and standard choral repertoire. All students enrolled are expected to participate in all of the scheduled performances including a concert event. There are additional extracurricular opportunities throughout the year for students wishing to perform further. These opportunities may include the Wisconsin School Music Association State Honors Choir (WSMA), WSMA Solo and Ensemble and other events that may arise. The extra events are not required and are prepared on an individual basis by the student outside of the choral classroom. Three of the groups require an audition - South Select, North Choir (both junior and senior year), and Broadway Company. It is expected that all students choosing to be a part of the choral music program will participate in an audition process each spring semester in order to allow for proper placement for South Select, North Choir, and Broadway Company for the coming school year. *All music classes are year-long

GENERAL MUSIC

General Music classes include Music Foundations and Music Production. The goal of the Music Foundations course is to help students become better musicians through the study and practice of music theory and history. By the end of the course, students should be able to visually and aurally analyze music, write music in a variety of compositional styles, understand a basic historical progression of music and culture, and better internalize music through ear-training. Music Production allows students to create and express themselves through songwriting, recording, technology, real-life music situations, industry-related problem-solving, and collaboration.

Grade	Choral Music	Instrumental Music	General Music
9 th Grade	Baritone Chorale (boys) Treble Choir (girls) Music Foundations	Concert Band Jazz Ensemble— Audition Symphonic Band South Campus - Audition Wind Ensemble — Audition Music Foundations	Music Foundations Music Production
10 th Grade	Baritone Chorale (boys) Broadway Company—Audition South Select—Audition Treble Choir (girls) Music Foundations	Concert Band Jazz Ensemble—Audition Music Foundations Symphonic Band South Campus—Audition Wind Ensemble—Audition	Music Foundations Music Production
11 th & 12 th Grade	North Concert Choir—Audition Broadway Company—Audition Music Foundations	Concert Band Jazz Ensemble- Audition Music Foundations Symphonic Band North Campus - Audition Wind Ensemble - Audition	Music Foundations Music Production

MUSIC

DESCRIPTION COURSE TITLE

Students study vocal production and learn to access their falsetto voice and identify bass, baritone, tenor, and falsetto ranges. In addition, students will learn the fundamental elements of reading music. Students singing in this ensemble present two concerts per year. Additional extracurricular performances may include WSMA State Honors Choir auditions, WSMA Solo and Ensemble, and other performance opportunities. Any preparation for solo work/auditions is primarily done individually by the student outside of the choral classroom. IF there are ensembles representing this course at the WSMA Solo and Ensemble, they will be put together by the instructor.

BARITONE CHORALE 1 & 2

Credit: 2 Grade: 9-10 boys Prerequisite: None Duration: Year Fee: \$25

Broadway Company is an auditioned ensemble devoted to the performance of musical theater. This class has an extensive rehearsal schedule outside of the school day. Students are required to participate in all scheduled Broadway Company Performances. These performances include the annual musical, musical theater nights, holiday caroling, choir concerts, and other performances scheduled throughout the year. Students present 2-3 solo projects in master class format. This format includes direct feedback from peers and the instructors. Students in Broadway Company are committed to being part of a group regardless of roles, solos or features.

BROADWAY COMPANY 1 & 2 (NC)

Credit: 2 Grade: 10-12

Prerequisite: Current membership in an auditioned choral ensemble and a vocal/

dance audition.

Duration: Year

Fee: \$25 in addition to costume and travel

costs

Concert Band is a comprehensive and standards-based class composed of wind and percussion players who have demonstrated a developmental level of ability on their instrument. Students will expand their understanding of fundamentals, music concepts, and technique on his or her instrument. This class prepares students and the class as a whole for concerts, small ensemble work, and solo playing opportunities. Each member of this ensemble must perform at one scheduled game for their first semester performance grade and three scheduled Pep Band games for their second semester performance grade.

CONCERT BAND 1 & 2

Credit: 2 Grade: 9-11 Prerequisite: None Duration: Year Fee: \$25

The goal of this course is to help students become better musicians through the study and practice of music theory and history. By the end of the course, students should be able to visually and aurally analyze music, write music in a variety of compositional styles, understand a basic historical progression of music and culture, and better internalize music through ear-training. While this is not an A.P. class, students will have the opportunity to take the A.P. test in May. Students interested in pursuing a career in music, developing songwriting skills or enhancing abilities on a particular voice or instrument should enroll in this class.

MUSIC FOUNDATIONS

Credit: 2 Grade: 9-12 Prerequisite: None Duration: Year Fee: none

Music Production allows students to create and express themselves through songwriting, recording, technology, real-life music situations, industry-related problem-solving, and collaboration. Students will become familiar with the elements of music used to analyze, compose, and arrange. This class will result in a portfolio of musical arrangements and compositions to demonstrate competencies in skills related to production. Students interested in pursuing a career in music, developing songwriting skills or enhancing abilities on a particular voice or instrument should enroll in this class.

MUSIC PRODUCTION

Credit: 1 Grade: 9-12 Prerequisite: None Duration: Semester

MUSIC

DESCRIPTION COURSE TITLE

Students will sing challenging choral literature spanning 4-8 + choral parts. This literature requires students to be independent musicians capable of singing their parts against other sections. Students continue to build on sight reading as well as vocal techniques. Students are expected to participate in two choir concerts in a school year. Additional extracurricular performances may include WSMA State Honors Choir auditions, WSMA Solo and Ensemble, and other performance opportunities. Any preparation for solo work/auditions is primarily done individually by the student outside of the choral classroom. IF there are ensembles representing this course at the WSMA Solo and Ensemble, they will be put together by the instructor.

NORTH CONCERT CHOIR 1 & 2

Credit: 2 Grade: 11-12

Prerequisite: Audition

Duration: Year Fee: \$25

Jazz Ensemble is an auditioned, skills-oriented class comprised of select wind, percussion, guitar, bass, and piano players. The ensemble instrumentation may vary slightly from year-to-year. Each student will work on advanced music skills with an emphasis on jazz theory, improvisation, jazz history, and ensemble awareness. Students in this ensemble maintain a more extensive performance schedule throughout the year. Each member of this ensemble must perform at one scheduled game for their first semester performance grade and three scheduled Pep Band games for their second semester performance grade.

JAZZ ENSEMBLE 1 & 2 (NC)

Credit: 2 Grade: 9-12

Prerequisite: Audition

Duration: Year Fee: \$25

Students study challenging choral literature that spans 3-4+ choral parts. Students continue to build on sight reading and vocal techniques. Students are expected to participate in 2 concerts in the school year. Additional extracurricular performances may include WSMA State Honors Choir auditions, WSMA Solo and Ensemble, and other performance opportunities. Any preparation for solo work/auditions is primarily done individually by the student outside of the choral classroom. IF there are ensembles representing this course at the WSMA Solo and Ensemble, they will be put together by the instructor.

SOUTH SELECT ENSEMBLE 1 & 2

Credit: 2 Grade: 10

Prerequisite: Must have completed one year in either Treble Choir or Baritone

Chorale. Audition Duration: Year Fee: \$25

The Symphonic Band is a comprehensive and standards-based class consisting of grades 9-12. Students will expand their understanding of fundamentals, music concepts, and technique on his or her instrument. Symphonic Band prepares students and the class as a whole for concerts, festivals, chamber music, and solo playing opportunities. Students are expected to fully prepare all parts individually outside of class to promote ensemble awareness within the rehearsal. Students are only accepted into this class upon completion of a successful audition. Each member of this ensemble must perform at one scheduled game for their first semester performance grade and three scheduled Pep Band games for their second semester performance grade.

SYMPHONIC BAND 1 & 2 (SC/NC)

Credit: 2 Grade: 9-12

Prerequisite: Audition Duration: Year

Fee: \$25

Students study vocal production and the difference in the treble register and quality choral sounds. Students will also learn the fundamental elements of reading music. Students are expected to participate in two concerts in the school year. Additional extracurricular performances may include WSMA State Honors Choir auditions, WSMA Solo and Ensemble, and other performance opportunities. Any preparation for solo work/auditions is primarily done individually by the student outside of the choral classroom. IF there are ensembles representing this course at the WSMA Solo and Ensemble, they will be put together by the instructor.

TREBLE CHOIR 1 & 2

Credit: 2 Grade: 9-10 girls Prerequisite: None Duration: Year Fee: \$25

MUSIC

DESCRIPTION COURSE TITLE

The Wind Ensemble is a comprehensive and standards-based class consisting of grades 9-12 and is the most advanced group of wind and percussion students in Arrowhead's Instrumental Music Program. Each student will work on general music skills and specific technical aspects of his or her instrument. This class will help prepare each student and ensemble for concerts, festivals, chamber music, and solo playing opportunities. Students are expected to fully prepare all parts before the first in-depth rehearsals may begin on that particular piece. Students are only accepted into this class upon completion of a successful audition. Each member of this ensemble must perform at one scheduled game for their first semester performance grade and three scheduled Pep Band games for their second semester performance grade.

WIND ENSEMBLE 1 & 2 (NC)

Credit: 2 Grade: 9-12

Prerequisite: Audition

Duration: Year Fee: \$25

Physical Education and Health

Physical Education classes are provided to help students acquire the knowledge, skills, and confidence for improved educational achievement and to lead healthy, productive lives. The primary goals are to improve physical fitness and to teach skills and knowledge that will enable students to be physically active and healthy for a lifetime.

Physical Education Requirements

- 1. All students must earn three credits of physical education to fulfill the graduation requirements.
- 2. Each credit is one semester long.
- 3. Credits must be taken in three separate years.
- 4. Summer school classes count for credit in the upcoming academic year.
- 5. No class may be taken twice to fulfill this requirement (i.e. no two identical summer school classes, no two Team PE 9).

Physical Education Electives

Students may take as many physical education classes for elective credits as they wish beyond the stated requirement.

Medicals

- 1. Medical excuses, written by a physician or trainer, do not have to be made up and points are not lost.
- 2. Students must participate in at least nine weeks of the semester to receive credit.
- 3. Medical excuses must include the dates the student is to be excused and specific restrictions

1 Credit of Health is required for graduation.

The Health program is designed to develop positive attitudes, skills for daily living and to help prepare individuals in their future roles as family members and citizens.

- Students will acquire the knowledge needed to attain health literacy
- Students will analyze and interpret valid health information and services using various resources
- Students will maintain health-enhancing behaviors and reduce health risks

Kari Sagal and Emily Martin-Teacher Leaders- 262-369-3611 x4838

Grade	Available Courses
9 th Grade	Individual Physical Education Performance Training (9/10) Team Physical Education Physical Education AM Health Peer Mentor PE
10 th Grade	Performance Training (9/10) Physical Education 10 Physical Education AM Health Peer Mentor PE
11 th & 12 th Grade	Adventure Physical Education Aerobic Fitness for Life Coaching and Officiating (See General Electives) Performance Training (11/12) Physical Education 11/12 Physical Education A.M. Peer Mentor PE

PHYSICAL EDUCATION AND HEALTH

DESCRIPTION COURSE TITLE

Adventure Physical Education includes high ropes course and low challenge courses, indoor climbing wall, and other outdoor pursuits that may include navigation skills with GPS and compasses, fishing, kayaking, archery, hiking, and appreciation of the outdoors.

*See Summer School Guide

ADVENTURE PHYSICAL EDUCATION

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: \$28

Students selecting Aerobic Fitness for Life can expect a dynamic class emphasizing cardiovascular fitness. Students interested in taking this class should be able to provide a working bike from home that they can ride as one of the outdoor activities. In addition, students will participate in a variety of outdoor games-capture the flag, kickball, ultimate frisbee, etc., as well as inline skating, step aerobics, water aerobics, yoga, ice skating, and indoor games. The class also provides one day snapshots of Zumba, Pilates, and Taekwondo.

AEROBIC FITNESS FOR LIFE

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: \$28

This course is designed to develop an appreciation and increased understanding of sport in American society. The course will offer the student the chance to study the philosophy, psychology, motivation, and rewards of coaching, as well as focus on officiating and personal wellness. Any person who appreciates or is involved in athletics will enjoy the course. This course will count as a GENERAL ELECTIVE. It does not count toward the graduation requirements for Physical Education.

COACHING & OFFICIATING (NC)

Credit: 1 Grade:11-12 Prerequisite: None

Duration: Semester (either)

Fee: None

Topics in Health include:

Personal wellness, nutrition, fitness, medicine, tobacco, alcohol, illegal drugs, mental and social health, human growth and development, relationships, CPR, First Aid, and injury prevention.

*WIS.ACT 56-Exemption for individual pupils. "No student may be required to take instruction in human growth and development or in the specific subjects under SUB, (2) If the pupil's parent files with the teacher or the school principal a written request that the pupil be exempted."

Sub. 2:

- a. Self-esteem, responsible decision-making and personal responsibility
- b. Interpersonal relationships
- c. Discouragement of adolescent sexual activity
- d. Family life and skills required of a parent
- e. Human sexuality, reproduction, contraception, HIV/AIDS, prenatal development, childbirth, adoption, available prenatal and postnatal support, and male responsibility
- f. Sex stereotypes and provocative behaviors

*If a parent wishes to have their child exempted from any or all of these areas, independent study materials will be provided for that student during the exemption. Requests for exemption of all or part of Human Growth and Development must be submitted by the first day of Health Class.

HEALTH

Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester

PHYSICAL EDUCATION AND HEALTH

DESCRIPTION COURSE TITLE

Individual Physical Education emphasizes skill development in activities that can be played alone or with another person, such as badminton, curl swimming, skating, yoga, archery, and tennis and personal fitness. Emphasis is on the promotion of lifelong activity as needed for lifelong fitness.	INDIVIDUAL PHYSICAL EDUCATION Credit: 1 Grade: 9 Prerequisite None Duration: Semester Fee: \$32
This class is for students interested in learning the pillars of physical education while supporting other students as a peer mentor. Students enrolled will be learning while supporting other students who need adaptive physical education in an inclusive environment. This environment with peer mentors is evidence-based and has a great overall positive impact on student growth and achievement in this area.	PEER MENTOR PHYSICAL EDUCATION Credit: 1 Grade: 9 -12 Prerequisite: None Duration: Semester
Performance Training 9/10 is offered as a component of a schoolwide fitness and conditioning program. Students will engage in movement through all planes of motion by establishing high levels of functional strength and neuromuscular efficiency. Classes will integrate flexibility, core, balance, plyometric, speed/agility/quickness, resistance, and cardio-respiratory training. Due to its flexibility, this course is an excellent choice for the beginner to the highly skilled and will focus on improvement at all skill levels.	PERFORMANCE TRAINING 9/10 (NC) Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester Fee: \$12
Performance Training 11/12 is offered as a component of a schoolwide fitness and conditioning program. Students will engage in movement through all planes of motion by establishing high levels of functional strength and neuromuscular efficiency. Classes will integrate flexibility, core, balance, plyometric, speed/agility/quickness, resistance, and cardio-respiratory training. Performance Training 11/12 is intended for student athletes, but appropriate for all students wishing to improve their strength and agility. Students who take Performance Training 9/10 can take Performance Training 11/12 for PE credits required for graduation.	PERFORMANCE TRAINING 11/12 (NC) Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester Fee: \$12
Physical Education AM (PE AM) is a one-semester course available for all students, but it is designed especially for the student who may have scheduling conflicts during the regular school day. The class will meet 40-minutes, every day, and prior to the first hour, from 6:20-7:00 a.m. Activities will be determined by the class size and the facilities and equipment available. This course will be offered first semester only.	PHYSICAL EDUCATION ZERO HOUR (NC) Credit: 1 Grade: 9-12 Prerequisite: None Duration: First Semester Class Period: Daily (40) Fee: \$16
Physical Education 10 class concentrates on activities students can pursue for a lifetime. Activities may include golf, tennis, curling, water games, skating, volleyball, fitness, biking, badminton, and softball.	PHYSICAL EDUCATION 10 Credit: 1 Grade: 10 Prerequisite: None Duration: Semester (either) Fee: \$32

PHYSICAL EDUCATION AND HEALTH

DESCRIPTION COURSE TITLE

Students selecting Physical Education 11-12 can expect an increased emphasis in advanced game play, strategies, and skill level. Teamwork, fair play, and fitness are Credit: 1 highly emphasized. Activities may include basketball, curling, swimming, Grade: 11-12 badminton, volleyball, inline skating, ice skating, floor hockey, and fitness. Fee: \$35

PHYSICAL EDUCATION 11/12

Prerequisite: None **Duration: Semester**

Class Period: Alternate Day

Team Physical Education utilizes team games such as volleyball, soccer, curling, water games, ice games, football, softball, and others. Teamwork, fair play, and fitness are the focus in this offering.

TEAM PHYSICAL EDUCATION

Credit: 1 Grade: 9

Prerequisite: None **Duration: Semester**

Fee: \$35

Science

Courses in the Science Department ask students to investigate and explain the world around them. The focus is on the use of evidence to develop models that can be used to explain the natural and manmade worlds. All science courses include a laboratory component for gathering data in order to build or verify the most important concepts within each discipline.

Each student must have six semester credits of science in order to graduate. It is strongly recommended that college-bound students take four or more years of science. College admissions requirements vary, so be sure to check these with your prospective colleges. A.P. Science courses are strongly recommended for students who would like to pursue a science-related major.

Many advanced science courses have math prerequisites or the requirement of specific grades in previous science courses. When considering a course, be sure to check that you have met the minimum requirements.

Brian Corry, Program Leader, 369-3612, Ext. 4707

9 th Grade	~	nce 9 1 & 2 Accelerated Block 1 & 2
10 th Grade	Biology / Biology Accelerated Chemistry / Chemistry Accelerated 1 & 2 Physics / A.P. Physics 1 1 & 2 Engineering and Mechanics 1 & 2	
11 th and 12 th Grade	A.P. Biology 1 & 2 A.P. Chemistry 1 & 2 A.P. Physics I 1 & 2 A.P. Physics II 1 & 2 A.P. Physics C 1 & 2 Anatomy & Physiology Biotechnology Chemistry / Chemistry Accelerated 1 & 2 Chemistry for the Health Sciences Engineering & Mechanics 1 & 2	Environmental Biology - Land Environmental Biology – Atmosphere & Aquatics Landscape Ecology Physics Physics of Electronics 1 & 2 STS - Space STS – Forensic Science Zoology

Regardless of which 9^{th} grade science course is chosen, there is no limitation to taking additional science courses during high school. Extended opportunities begin with the course choice made during the 10^{th} grade year. For students wishing to pursue advanced or multiple elective science courses at Arrowhead, it is highly recommended that students "double up" during their 10^{th} grade year by taking Biology along with Chemistry or Physics.

The Science 9 / Biology Accelerated Block allows students who meet the recommended standardized test scores to double up during their freshman year. This does not prevent them from doubling up again during their sophomore year.

DESCRIPTION COURSE TITLE

Advanced Placement Biology is designed to be the equivalent of an introductory course taken by biology majors during their first year of college. This course is designed to extend knowledge of biological theory and processes beyond the level of introductory biology. All aspects of the course, including lectures, lab experiments, homework assignments, class discussion, and tests, focus on integrating the immense amount of factual material with the following analytical themes: molecules and cells, heredity and evolution, and organisms and populations. Students interested in medicine, veterinary science, nursing, physical and occupational therapy, physician's assistant, marine biology, oceanography, limnology, and molecular biology should consider taking A.P. Biology. Collegelevel textbooks and lab guide materials will be used. Examinations and lab reports will be designed to simulate college standards. Students have an opportunity to gain 6-10 college credits with their A.P. exam performance. Students must earn a C or better in 1st semester to continue the course in 2nd semester.

*ADVANCED PLACEMENT BIOLOGY 1 & 2

Credit: 2 (Life Science)

Grade: 11-12

Prerequisite: B or better in Biology or Biology Accelerated and a B or better in Chemistry,

Functions (concurrent or beyond)

Duration: Year

Fee: \$10 for lab supplies, AP test fee

Advanced Placement Chemistry is a rigorous course. It involves weekly lab work and maintains a fast pace, requiring significant preparatory time. Major topics include a review with additional depth of all of the topics of General Chemistry, as well as a study of thermochemistry and thermodynamics, kinetics, equilibria in gas and aqueous phases and electrochemistry. Students should have a strong working knowledge of the chemistry concepts they learned in Chemistry or Honors Chemistry. Students have an opportunity to gain 6-10 college credits with their A.P. exam performance. Students interested in medicine, physical therapy, veterinary science, nursing, physical or occupational therapy, or pharmacy should strongly consider taking AP Chemistry in preparation for college. Students must earn a C or better in 1st semester to continue the course in 2nd semester

*ADVANCED PLACEMENT CHEMISTRY 1 & 2

Credit: 2 (Physical Science)

Grade: 11-12

Prerequisite: B or better in Chemistry. Functions (concurrent or beyond)

Duration: Year

Fee: \$10 for lab supplies, AP test fee

Advanced Placement Physics I is the equivalent of a first semester introductory algebra-based college physics course. It will prepare students to take the A.P. Physics I exam. The course is an overview of Newtonian mechanics, which includes motion and forces, work and energy, linear momentum, circular motion and dynamics, rotational dynamics and angular momentum, simple oscillations and fluids. Additional topics may include mechanical waves and sound. In addition to a history of academic success in math and science (A's and B's), students should have a strong interest in the topic. Students must earn a C or better in 1st semester to continue the course in 2nd semester.

*ADVANCED PLACEMENT PHYSICS I 1 & 2

Credit: 2 (Physical Science)

Grade: 10-12

Prerequisite: B- or better in Science 9 or Science 9/Biology Accelerated Block, concurrent enrollment in or completion of Biology or Biology Accelerated, concurrent enrollment in or completion of Functions.

Duration: Year Fee: AP test fee

Advanced Placement Physics II is equivalent to the second semester of introductory algebra-based college physics course. It will prepare students to take the A.P. Physics II exam. Students who are interested in physics, science, engineering, or advanced medical fields should consider this course. Major topics included in the course are thermodynamics; fluid statics and dynamics; electrostatics; electric circuits; magnetism and electromagnetic induction; geometric and physical optics, waves and sound; and topics in modern physics. Students must earn a C or better in 1st semester to continue the course in 2nd semester.

*ADVANCED PLACEMENT PHYSICS II 1 & 2

Credit: 2 (Physical Science)

Grade: 11-12

Prerequisite: A or B in Advanced Algebra and concurrent enrollment in Functions or beyond. A or B in Physics or AP Physics 1

Duration: Year Fee: AP test fee

DESCRIPTION COURSE TITLE

Advanced Placement Physics C is an advanced, calculus-based physics course that reflects the content and rigor of the first two semesters of an undergraduate engineering physics sequence. Students in this course will be prepared to take both the A.P. Physics C Mechanics **and** A.P. Physics C Electricity and Magnetism exams. Students who take this course should have a record of high achievement in advanced math and science courses, a willingness to complete nightly homework and frequent lab reports, and an interest in the field of physics or engineering. The major topics included in the course are: kinematics, Newton's laws of motion, work, energy, and power, systems of particles and linear momentum, circular motion and rotation, oscillations and gravitation, electrostatics, conductors, capacitors, and dielectrics, electric circuits, magnetic fields; and electromagnetism. Students must earn a C or better in 1st semester to continue the course in 2nd semester.

*ADVANCED PLACEMENT PHYSICS C 1 & 2

Credit: 2 (Physical Science)

Grade: 11-12

Prerequisite: A or B in Physics or AP Physics I, concurrent enrollment in AP

Calculus AB,

AP Calculus BC or Calculus and

Applications

(Pre-calculus with consent of science

department chair) Duration: Year Fee: AP test Fee (s)

Anatomy and Physiology is a one semester course that focuses on the structure and function of the human body. Students taking this course will develop the ability to use anatomical language while studying the skeletal, muscular, and circulatory systems. Anatomy is a lab-intensive course. Students will have the opportunity to work with skeletal models, as well as muscular and heart models. Anatomy is a college-preparatory course that will help develop study methods that will be beneficial in college, as well as provide students with a better understanding of their own body and how it works.

*ANATOMY & PHYSIOLOGY

Credit: 1 (Life Science)

Grade: 11-12

Prerequisite: Successful completion of Biology or Honors Biology (Biology

Accelerated)
Duration: Semester
Fee: None

Biology is devoted to the study of life, its molecular and cellular structure, energy requirements, reproduction, genetics and ecological relationships. The purpose of the biology curriculum is to facilitate an inquiry- based, hands-on discovery approach to science in order that the students develop an appreciation and awareness of natural phenomena. Students will use skills developed in Science 9 and apply them to biological processes and systems.

*BIOLOGY 1 & 2

Credit: 2 (Life Science)

Grade: 10

Prerequisite: None Duration: Year Fee: None

Biology Accelerated is a laboratory-centered survey of general biology concepts for highly motivated students with a great interest in the sciences who have demonstrated excellent study skills and high aptitude in math. The course will cover basic biochemistry, cellular biology, genetics, biotechnology, evolution, ecology, and classification in greater depth than regular biology. The class incorporates writing, critical-thinking, research and laboratory skills. Students are expected to design and carry out independent investigations, report on recent research in biology, explore biological careers, and demonstrate a more in-depth conceptual understanding of major biological processes. This class will be more challenging than the general biology course. It is great preparation for other advanced science courses. Ideally, students in Biology Honors are concurrently enrolled in a North Campus science course.

*BIOLOGY ACCELERATED 1 & 2

Credit: 2 (Life Science)

Grade: 10

Prerequisite: B- or better in both semesters

of Science 9.

A recommended Pre ACT score of 22 in science, 22 in math and a 22 in reading would be an appropriate indicator of success

Duration: Year Fee: None

DESCRIPTION COURSE TITLE

Biotechnology focuses on the molecular side of biology. Students will explore the basics of molecular biology and biotechnology through classroom and laboratory activities. Units include: "old" biotech, DNA, restriction enzymes, PCR, gel electrophoresis, genetically modified organisms, DNA barcoding, and more. Our goal is to become proficient in laboratory skills while becoming familiar with topics in biotech.

BIOTECHNOLOGY

Credit: 1 (Life or Physical)

Grade: 11-12

Prerequisite: A or B in

Biology or Honors Biology (Biology

Accelerated) or consent of instructor

Duration: Semester

Fee: None

Chemistry is a college preparatory, academically rigorous course. It is the study of the nature of matter and the changes which can take place. Basic units include atomic structure, bonding, formula and equation writing, chemical calculations, and the nature of chemical reactions. A high level of commitment to the course of study is required in order to assure fundamental principles are firmly established. Sophomores should be academically strong with an average grade of B or better. Juniors and Seniors should have a record of academic success in math classes (mostly A's and B's). Students must earn a passing grade in 1st semester to continue the course in 2nd semester.

*CHEMISTRY 1 & 2 (NC)

Credit: 2 (Physical Science)

Grade: 10-12

Prerequisite: C- or better in previous Science course. Concurrent enrollment in Advanced Algebra or Advanced Math and

Stats II or beyond. Duration: Year Fee: \$8

This is a college preparatory course designed to cover the topics in general Chemistry at a faster pace and a greater depth. Students with a strong commitment to the study of chemistry and considering a chemistry related major or career should consider this course option. Chemistry accelerated places emphasis on inquiry-based models and activities, reading for learning, and application of learning through labs. Topics include properties of matter, nomenclature, chemical quantities, chemical reactions, stoichiometry, atomic structure, periodicity, bonding, solutions, and acids & bases. Students must earn a passing grade in 1st semester to continue the course in 2nd semester.

*CHEMISTRY ACCELERATED 1 & 2 (NC)

Credit: 2 (Physical Science)

Grade: 10-12

Prerequisite: B- or better in previous

Science course (Sem II).

Concurrent enrollment in Advanced Algebra (B+ or better in Geometry or previous math class recommended) or beyond.

A recommended PreACT score of 22 in science, a 22 in math and a 22 in reading would be an appropriate indicator of

success.

Duration: Year

Fee: \$8

Chemistry for the Health Sciences is to expose students to the applications of chemistry in the health-related fields from a conceptual and experimental perspective. Organic chemistry and biochemistry are the primary fields of chemistry studied. Students will be able to apply previous knowledge from science courses and expand upon it as they focus on the health-related fields. Students will explore how scientific concepts are applied to techniques used in medical labs and facilities. Field trips and guest speakers may be components of the course.

CHEMISTRY FOR THE HEALTH SCIENCES

Credit: 1 (Life or Physical)

Grade: 11-12

Prerequisite: Successful completion of

Biology and Chemistry. Duration: Semester

DESCRIPTION COURSE TITLE

Engineering & Mechanics is for students interested in learning about physics and engineering in a project-based, hand-on learning environment. Students interested in engineering, manufacturing, and STEM-related fields and enrolling in Physics should strongly consider taking the Engineering and Mechanics course. Credit is earned for both Physics and Principles of Engineering but creates an entirely different experience. Students can learn the essential physics ideas by applying real-world engineering problems such as constructing projectile launchers, survival shelters, bridge/truss designs, robotics and programming, and more. Students who enroll in Engineering & Mechanics are not required to continue within the Engineering Experience. This course will serve as excellent preparation for the Capstone Experience, Engineering Design& Development.

Potential for college credit (link)

Note: New in 2023-2024 is a dual credit option through the University of Wisconsin – Green Bay (CCIHS). Students can elect to earn three college credits through UWGB, which are transferable to all UW schools and many others. UWGB's equivalent course is ENGR 220: Mechanics of Materials. The process for earning credits takes place with the instructors during the first week of class. Note: Some students enrolling in Engineering and Mechanics would prefer to receive credit for AP Physics 1 instead of Physics. Students may select to have AP Physics I appear on their transcript, but must agree to take on additional work and are expected to take the AP Physics I exam. This process takes place with the instructor during the first week of class.

*ENGINEERING & MECHANICS (PLTW)

Students receive credit for:

Physics

Principles of Engineering (PLTW)

Credit: 4 (2 Physical Science)

Grade: 10-12

Prerequisite: C- or better in previous science course. Completion or concurrent enrollment in Biology. Concurrent enrollment in Advanced Algebra or Advanced Math and

Stats II or beyond. Duration: Year Fee: \$20

Environmental Biology Atmosphere and Aquatics places major emphasis on lab experiences in the branch of biology known as ecology, the study of the relationships of living things to their environment and to each other. Topics dealing with the atmosphere and aquatics include greenhouse effect, ozone, acid rain, groundwater, wetlands, and water quality. Practical experiences dealing with conservation and the wise management and use of our natural resources are provided. Wisconsin environmental issues are emphasized.

*ENVIRONMENTAL BIOLOGY – ATMOSPHERE AND AQUATICS

Credit: 1 (Life Science)

Grade: 11-12

Prerequisite: Biology or Biology Honors

(Biology Accelerated)
Duration: Semester

Fee: None

Environmental Biology- Land places major emphasis on lab experiences in the branch of biology known as ecology; the study of the relationships of living things to their environment and to each other. Course topics include: soils, geology, glaciers and landforms, orienteering, wildlife management, and forestry. Practical experiences dealing with conservation and the wise management and use of our natural resources are provided. Wisconsin environmental issues are emphasized.

*ENVIRONMENTAL BIOLOGY – LAND

Credit: 1 (Life Science)

Grade: 11-12

Prerequisite: Biology or Biology Honors

(Biology Accelerated)
Duration: Semester

Fee: None

Landscape Ecology is an advanced course focusing on native ecological relationships. We utilize frequent lab activities to study plant anatomy and physiology, plant-animal interactions, and energy flow/nutrient cycles within native ecosystems. The course emphasizes hands-on activities and includes a plethora of readings on topics of interest. Much of the second half of the course involves planting and growing native plants and vegetable plants in the North Campus greenhouse.

LANDSCAPE ECOLOGY

Credit: 1 (Life Science)

Grade: 11-12

Prerequisite: Successful completion of Biology or Biology Honors (Biology

Accelerated)
Duration: Semester

DESCRIPTION COURSE TITLE

Physics is a college preparatory course. It is a study of natural laws and relationships that describe matter and energy. Major topics include: forces, motion, work and energy, oscillations, waves, and sound. The theoretical framework for these topics is developed with an emphasis on lab work, hands-on experience, and mathematical analysis. Students must have demonstrated previous success in all math and science courses (A's and B's). Students must earn a passing grade in 1st semester to continue the course in 2nd semester.

*PHYSICS 1 & 2

Credit: 2 (Physical Science)

Grade: 10-12 Prerequisite:

C- or better in previous science course (Sem

II).

Concurrent enrollment in Advanced Algebra or Advanced Math and Stats II or beyond. Concurrent or prior enrollment in Biology or

Biology Honors Duration: Year Fee: None

This year-long course will provide students with information in both content and theory to work with analog and digital circuit components. Students will have the opportunity to deepen their personal understanding of LED's, resistors, capacitors, logic gates and counters along with the diagnostic devices, such as multimeters, to analyze those components. Students will engage in longer projects to develop their understanding of and ability to apply key concepts. This course prepares students to take the PLTW Digital Electronics (DE) exam, but builds on that content to a greater depth.

*PHYSICS OF ELECTRONICS 1 & 2

Credit: 2 (2 credits Physical Science)

Grade: 11-12

Prerequisite: Completion of or concurrent enrollment in Physics, completion of or current enrollment Advanced Algebra or

AMS II. Duration: Year Fee: \$20

The Science 9 course has been designed to develop the thinking processes and laboratory skills needed for subsequent science courses while emphasizing the connections between science, mathematics, and real life. Strong emphasis is placed on student mastery of essential science, or baseline, skills through thematic units exploring sound experimental design, accurate and precise scientific measurement, proper data collection and presentation, analyzing and interpreting quantitative and qualitative data, and applying concepts to real-world situations.

*SCIENCE 9 1 & 2

Credit: 2 (Physical Science)

Grade: 9

Prerequisite: None Duration: Year

Fee: \$20 for goggles and lab notebook

The Science 9 / Biology Accelerated Block is an everyday block course offered to strongly motivated, interested and highly capable science students. The course allows 9th grade students to complete Science 9 and Biology within one academic year. The emphasis is on Physics, Chemistry, and Biology, but will also include Earth and Space science concepts. Laboratory work allows students to discover and apply important scientific principles within these disciplines. Students work at a faster pace and to a greater depth as preparation for advanced science courses in grades 10-12.

*SCIENCE 9 / BIOLOGY ACCELERATED BLOCK

Credit: 4 (Life and Physical)

Grade: 9

Grade: 9
Prerequisite: Geometry or beyond

8th Grade PreACT testing is required A recommended ACT score of a 22 in science, a 22 in math and a 22 in reading would be an

appropriate indicator of success

Duration: Year

Fee: \$20 for goggles and lab notebook

Science, Technology & Society (STS) — Forensic Science will provide opportunities for students to study science through problem-solving activities. Although this is <u>not a college preparatory course</u>, students tend to enjoy learning about science using this interactive, hands-on approach. Students will learn aspects of forensic science largely focused upon studies related to blood spatter, fingerprints, impressions, and crime scene analysis.

SCIENCE, TECHNOLOGY & SOCIETY (STS)- FORENSIC SCIENCE

Credit: 1 (Physical Science)

Grade: 11-12 Prerequisite: None Duration: Semester

DESCRIPTION COURSE TITLE

Science, Technology & Society (STS) – Space will provide opportunities for students to study science through problem-solving activities. Although this is <u>not a college preparatory course</u>, students tend to enjoy learning about science using this interactive, hands-on approach. Students will learn basic principles of space throughout a unit culminating in model rocket building. Furthermore, general engineering concepts are addressed while designing, building and testing a balsa wood structure.

SCIENCE, TECHNOLOGY & SOCIETY (STS) - SPACE

Credit: 1 (Physical Science)

Grade:11-12 Prerequisite: None Duration: Semester

Fee: None

Zoology, a college-level course, focuses on animal biology. Students study the major divisions of the animal kingdom. Students will study anatomy and physiology, classification, and identification of birds. Students will focus on the anatomy and physiology of fish, as well as their classification. Zoology is a lab intensive class. Students will have the opportunity to handle specimens, and complete a dissection of a pigeon and a shark.

*ZOOLOGY

Credit: 1 (Life Science)

Grade: 11-12

Prerequisite: Successful completion of Biology or Biology Accelerated

Duration: Semester

Social Studies

The Social Studies Department offers courses concerned with history, behavioral sciences, economics, geography and civics. Subjects in social studies explore the places people live and the impact the physical environment has on people, the development of civilizations and cultures through time, how people make their living, how they behave individually and in groups, how they govern themselves, and how people from various cultures react to their conditions.

Each student must have six credits of social studies to graduate. Two of these credits must be in United States History or A.P. United States History and both semesters of Social Studies 9. Students who take AP Human Geography must take AP U.S. Government and Politics or Political Science during 10, 11 or 12th grade.

A student with an interest in social studies and planning to attend college might consider a career in social work, law, teaching, sales, law enforcement, economics, urban analysis, psychology, international relations, labor economics, and many other areas. Students will find the social studies courses useful in understanding themselves and their world as well as helping them become better citizens.

Shanna Morgan, Program Leader, 369-3611, Ext. 3254

9 th Grade	A.P. Human Geography 1 & 2 Social Studies 9 1 & 2
10 th Grade	A.P. European History 1 & 2 A.P Government & Politics 1 & 2 Economics Global Relations History of Western Civilization 1 & 2 Political Science U.S. History 1 & 2
11 th and 12 th Grade	A.P. European History 1 & 2 A.P. U.S. Government & Politics 1 & 2 A.P. Macroeconomics 1 & 2 A.P. Psychology 1 & 2 A.P. U.S. History 1 & 2 American Problems Domestic Affairs American Problems Foreign Policy Economics Global Relations History of Western Civilization 1 & 2 Political Science Psychology Sociology U.S. History 1 & 2

DESCRIPTION COURSE TITLE

Advanced Placement European History starts in the year 1450 and introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. The course has students investigate the content of European history for significant events, individuals, developments, and processes in four historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. Students will need to read and comprehend a college-level text and develop strong writing skills to be successful.

*ADVANCED PLACEMENT EUROPEAN HISTORY 1 & 2 (NC)

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year

Fee: \$12 and AP test fee

Advanced Placement Human Geography, according to the College Board, is a college-level course that is "designed to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences." Topics include: geography as a field of inquiry, population, cultural patterns and processes, organizational agriculture and land use, industrialization and economic development, cities and urban land use. Students may earn college credit by scoring well on the A.P. College Board exam for Human Geography. Students who enroll in A.P. Human Geography must still fulfill the government requirement for graduation and take either A.P. US Government and Politics or Political Science during high school. Political Science is also offered in Summer School.

*ADVANCED PLACEMENT HUMAN GEOGRAPHY 1 & 2

Credit: 2 Grade: 9

Prerequisite: ACT online test is required. A 22 in reading and/or a Lexile score of 1300 is

a strong predictor of success.

Duration: Year Fee: AP test fee

Advanced Placement Macroeconomics is designed to help students develop critical thinking skills through the understanding, application, and analysis of fundamental macroeconomic concepts. Students will be expected to apply economic logic to a wide variety of real-world and hypothetical situations. The goal is to understand the linkages describing the chain of events leading to economic conclusions. A.P. Macroeconomics may fulfill general education requirements in college. This course allows students to earn one semester of college credit if they pass the exam with a sufficiently high grade.

*ADVANCED PLACEMENT MACROECONOMICS 1 & 2

Credit: 2 Grade:11-12 Prerequisite: None Duration: Year Fee: \$12 AP test fee

Advanced Placement Psychology will introduce students to the systematic and scientific study of the behavior of humans and animals. Students will learn psychological facts, principles, and phenomena associated with each of the major subfields of psychology. This course is designed for college bound students. It will be taught using a lecture, discussion, and lab format. Much reading will be required as well as essay examinations and research papers. The A.P. Psychology course allows students to earn one semester of college credit while in high school if they pass the exam at the end of the course with a sufficiently high grade. The experience of taking this course in high school will better prepare them for college courses. Due to the scientific approach to behavior used in this course, a strong background in biology and math is recommended. Strong vocabulary skills will also help students to be successful in this course.

*ADVANCED PLACEMENT PSYCHOLOGY

1 & 2 Credit: 2 Grade: 11-12 Prerequisite: None Duration: Year Fee: \$12 AP test fee

DESCRIPTION COURSE TITLE

This course will provide students with the opportunity to study American politics and government within the rigorous demands of an A.P. environment. As a result, students will be required to do an extensive amount of reading and writing. The ability to write free response essays is an important skill necessary for success in the class. These skills will be taught in the context of the class, but previous knowledge of the components of essay writing is essential. The class will examine the following aspects of government and politics:

Constitutional underpinnings of United States government, political beliefs and behavior, political parties, interest groups and mass media, institutions of national government, public policy and civil rights and liberties. U.S. Government and Politics is equivalent to a one-semester college class.

*ADVANCED PLACEMENT U.S. GOVERNMENT & POLITICS 1 & 2

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year Fee: AP test fee

Advanced Placement U.S. History is a college-level class that involves an in-depth study of American History while requiring a great deal of reading, writing, and analysis. A.P. U.S. History fulfills the graduation requirement for U.S. History. The A.P. course allows students to earn college credit while in high school if they pass the exam with a sufficiently high score. The experience of taking this course in high school will better prepare students for their college course work. The Advanced Placement examination will be given at the end of the course

*ADVANCED PLACEMENT U.S. HISTORY 1 & 2

Credit: 2 Grade:11-12 Prerequisite: None Duration: Year Fee: \$12 AP test fee

American Problems Domestic Affairs deals with current contentious issues in American society, as well as the background of these issues. The American Dream, generations, the American political spectrum, freedom and censorship are the topics discussed. The course uses lecture, discussion, multimedia, and popular-culture activities.

*AMERICAN PROBLEMS DOMESTIC AFFAIRS

Credit: 1 Grade:11-12 Prerequisite: None Duration: Semester Fee: None

American Problems Foreign Policy deals with current contentious issues in American society, as well as the background of these issues. American foreign policy, immigration, war on drugs and international affairs are the topics discussed. The course uses lecture, discussion, multimedia, and popular-culture activities.

*AMERICAN PROBLEMS FOREIGN POLICY

Credit: 1 Grade:11-12 Prerequisite: None Duration: Semester Fee: None

Economics is the study of how individuals and societies use scarce resources. The basic principles of the market system will be discussed. Topics covered include supply and demand, market structure, government regulation, inflation recessions, and unemployment. Students will learn to recognize concepts in the world around them. Study will be centered on lecture and group discussion.

*ECONOMICS (NC)

Credit: 1 Grade:10-12 Prerequisite: None Duration: Semester Fee: None

DESCRIPTION COURSE TITLE

Global Relations focuses on issues pertaining to human rights, conflict and war, environmental stability, and politics in all regions of the world. Students are given the unique opportunity to choose their topics of study and the manner in which those topics will be explored. Students will research multiple themes throughout the semester and will have the opportunity to share their knowledge in several different ways including multimedia presentations, speeches, and classroom debates. This course also includes multiple guest speakers on topics of interest to that particular class.

*GLOBAL RELATIONS (NC)

Credit:1 Grade:10-12 Prerequisite: None Duration: Semester

Fee: None

History of Western Civilization covers the development of civilizations from ancient times toward the present such as Ancient Greece, Ancient Rome, the Middle Ages, the Renaissance, the Reformation, Age of Discovery, Imperialism, and Industrialization.

*HISTORY OF WESTERN CIVILIZATION 1 & 2

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year Fee: None

Political Science teaches the American political system and focuses on the structure and function of the government and the political factors which determine decision making. In this regard, modern day policy issues will be studied. Subject areas covered in the class will include: the foundations of American government, political ideologies, political parties, interest groups, elections, civil rights, civil liberties, Congress, the Presidency, and the Supreme Court, as well as current events. Students should expect to participate in frequent discussions on American political issues, read about and reflect on current events, complete a variety of writing assignments, and produce both group and individual projects.

*POLITICAL SCIENCE (NC)

Credit: 1 Grade: 10-12 Prerequisite: None Duration: Semester

Fee: None

Psychology involves the study of behavior and can help students learn to work together and to understand themselves. Students are introduced to basic principles and terminology to help them learn more about why people behave the way they do. Students are encouraged to examine their own behavior in an effort to learn more about themselves and the reasons for their behavior. Major units include: experimentation in psychology, biological factors in behavior, learning patterns, personality development, personality theory, mental health, and mental disorders.

*PSYCHOLOGY

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: None

Social Studies 9 is a year-long freshman course that focuses on civics, government and politics in semester one and geography in semester two. Semester one explores the ideas of democracy, separation of powers, federalism and political ideals while asking students to critically evaluate and connect political, economic and social themes to current events at the state and national levels of government. In the geography focus of second semester, students will be expected to learn about America's role in the world as well as some major global concerns. Students will do this through the exploration of geographic concepts, specifically:

- physical geography,
- population geography,
- political geography,
- economic geography
- cultural geography.

*SOCIAL STUDIES 9 1 & 2

Credit: 2 Grade: 9

Prerequisite: None Duration: Year Fee: None

DESCRIPTION COURSE TITLE

Sociology is designed to help students understand the social consequences of people in groups. Sociology involves the scientific study of these groups with the goal of helping students understand society. Understanding social problems in America and their effect on our society requires students to be willing to do considerable reading and partake in class discussions. Note-taking and research projects are required. Units covered include: personality development, the family, social institutions, social class, race relations, crime, and the problems of the cities. Within each unit, at least one social problem is isolated and studied in detail. These include topics such as: the changing role of women, the media industry, science and sports, divorce, religious cults, death and dying, problems of the elderly, and others. Guest speakers are invited to help students understand the reality of these topics.

*SOCIOLOGY

Credit: 1 Grade: 11-12 Prerequisite: None Duration: Semester

Fee: None

U. S. History is a survey course investigating the political, economic, and cultural development of the United States beginning with the Civil War Era. U.S. History is required for graduation from Arrowhead. Students will engage in research, writing, document analysis and in-class activities.

***U.S. HISTORY 1 & 2**

Credit: 2 Grade: 10-12 Prerequisite: None Duration: Year Fee: None

Visual Arts

The Art Department aims to provide a balanced education for all students with an emphasis on:

- student engagement
- creative expression
- innovative thinking
- design problem-solving
- personal development
- increased visual literacy
- digital communication

3 main areas of growth include:

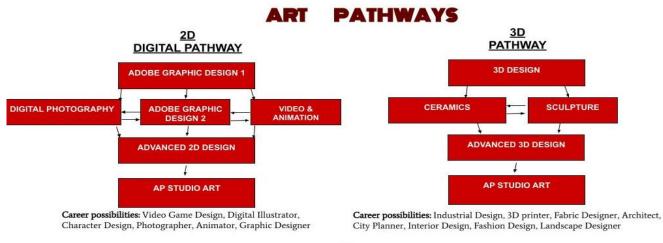
Design Thinking - The foundations for organization of visual images.

Creative Process - This process teaches students how to develop new, original ideas, apply them, and reflect on the outcome. This process is an effective tool in all types of problem-solving. Through this process of creating, revising, displaying and publishing their work, students experience the process used to be creative and innovative.

Visual Literacy -Students learn to communicate through the use of images and are able to analyze, evaluate, interpret, critique and make informed judgments about their own work and the work of others.

Two credits of fine arts are required for graduation. This requirement may be met in art, music, or theater courses.

Sherry Moseler, Program Leader, 369-3612, Ext. 2154





Career possibilities: Storyboard designer, Art Therapist, Multimedia Specialist, Communications media, Producer & Director, Systems Designer, Art Teacher

GRADE	2D FINE ART COURSES	DIGITAL DESIGN COURSES	3D ART COURSES
9TH GRADE 1ST SEMESTER	2D DESIGN OR PEER MENTOR 2D (PREREQUISITE for all other 2D & 3D courses)	ADOBE GRAPHIC DESIGN 1 (PREREQUISITE for ALL digital classes)	3D DESIGNOR PEER MENTOR 3D (PREREQUISITE for all other 2D & 3D courses)
9TH GRADE 2ND SEMESTER	DRAWING (2ND SEMESTER ONLY)	PHOTOGRAPHY (2ND SEMESTER ONLY)	CERAMICS (2ND SEMESTER ONLY)
10ТН	2D DESIGN (PREREQUISITE for all other 2D & 3D courses) DRAWING PAINTING (held @ NORTH campus) ADVANCED 2D(held @ NORTH campus)	ADOBE GRAPHIC DESIGN 1 (PREREQUISITE for ALL digital classes) PHOTOGRAPHY ADOBE GRAPHIC DESIGN 2 (held @ NORTH campus) VIDEO @ ANIMATION (held @ NORTH campus)	3D DESIGN (PREREQUISITE for all other 2D & 3D courses) CERAMICS SCULPTURE (held @ NORTH campus) ADVANCED 3D (held @ NORTH campus)
11ТН	ART SEMINAR (PREREQUISITE for all other 2D & 3D classes ONLY IF NO PRIOR ART) DRAWING PAINTING ADVANCED 2D AP STUDIO ART	ADOBE GRAPHIC DESIGN 1 (PREREQUISITE for ALL digital classes) PHOTOGRAPHY ADOBE GRAPHIC DESIGN 2 ADVANCED 2D DESIGN VIDEO @ ANIMATION AP STUDIO ART	ART SEMINAR (PREREQUISITE for all other 2D & 3D classes ONLY IF NO PRIOR ART) 3D DESIGN CERAMICS SCULPTURE ADVANCED 3D AP STUDIO ART
12TH	ART SEMINAR (PREREQUISITE for all other 2D & 3D classes ONLY IF NO PRIOR ART) DRAWING PAINTING ADVANCED 2D AP STUDIO ART	ADOBE GRAPHIC DESIGN 1 (PREREQUISITE for ALL digital classes) PHOTOGRAPHY ADOBE GRAPHIC DESIGN 2 ADVANCED 2D DESIGN VIDEO @ ANIMATION Pr	ART SEMINAR (PREREQUISITE for all other 2D & 3D classes ONLY IF NO PRIOR ART) CERAMICS SCULPTURE ADVANCED 3D AP STUDIO ART





Adobe Illustration Certification



Adobe Premier Pro Certification

VISUAL ARTS			
DESCRIPTION	COURSE TITLE		
Students explore 2D Design through drawing and painting, and other 2D art forms. Students will use artwork to express ideas, improve visual literacy, and critique visual images. This class meets the prerequisite for Drawing and Illustration.	2D DESIGN (SC) Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester Fee: \$15		
Students explore 3D Design by building sculptures in clay, metal and glass and other 3D art forms. Students will use artwork to express ideas, improve visual literacy, and critique visual images. This course meets the prerequisite for Ceramics and Sculpture.	3D DESIGN (SC) Credit: 1 Grade: 9-10 Prerequisite: None Duration: Semester Fee: \$20		
Advanced 2D Design combines the technical skills with the creative process learned in previous art classes to provide students' choice in mediums, subject matter, and style of art. In this class, there is critical thinking, visual research, design, and critique as a means of evaluating and creating works of art. Students will be given themes in art to investigate composition, style, and the artist's view of the world. Emphasis is placed on contemplation of ideas, ethics, content, and self-awareness as an artist. Students are expected to think critically about what artwork is worth creating and use the creative process to produce artwork.	ADVANCED 2D (NC) Credit: 1 Grade: 10-12 Prerequisite: Successful completion of Art Seminar and 1 of Drawing, Painting, or Digital classes Duration: Semester Fee: \$20		
Students will become experts in Adobe Photoshop, demonstrating their skills to create digitally by taking the Visual Communication Exam in Photoshop. Passing the exam results in internationally recognized certification in Visual Design with Photoshop.	NEW: ADOBE GRAPHIC DESIGN I (Formerly CGI) Credit: 1 Grade: 9-12 Prerequisite: None Duration: Semester Fee: \$15		
Students will become experts in Adobe Illustrator and validate their knowledge using the world's leading vector graphics software. Passing the Illustrator exam results in internationally recognized certification in Graphic Design & Illustration with AI. Pr. Level Up: Two Certifications will earn <i>another</i> certification: combine your Photoshop and Illustrator certification to receive an additional Specialty Credential and gain recognition as an Adobe Certified Professional in Visual Design with Adobe Illustrator.	NEW: ADOBE GRAPHIC DESIGN II Credit: 1 Grade: 10-12 Prerequisite: Adobe Graphic Design I or the 2023-24 Computer Graphic Imaging) Duration: Semester Fee: \$15		
Students create a personalized body of artwork that communicates their investigation into 3D design solutions. Students are empowered to have a more personal voice and style of work in this advanced course. Students use critical thinking, research, design, and critique work of art in order to grow as a 3-dimensional artist. This course meets the prerequisite for AP Studio Art.	ADVANCED 3D DESIGN (NC) Credit: 1 Grade: 10-12 Prerequisite: Successful completion of either Ceramics or Sculpture and 3D Design Duration: Semester Fee: \$30		

VISUAL ARTS

DESCRIPTION COURSE TITLE

Advanced Placement Studio Art students pursue and have potential receive credit for college-level course work. A.P. Studio Art is based on a digital portfolio; the compilation of students' work centered on a theme. Students are given considerable freedom to explore their own artistic interests and strengths; they research ideas, techniques, methods so that finish works reflect the technique and mastery of a first year college student. The course requires a student to be self-motivated and requires work time outside of the class period to complete the portfolio.

AP STUDIO ART

Credit: 2 Grade: 11-12

Prerequisite: Advanced level art courses

highly recommended. Duration: Year

Fee: AP test fee /materials fee \$20

This class is designed for juniors and seniors who <u>have not taken art at Arrowhead</u>. The goal of this introductory course is to expose students to 2-dimensional and 3-dimensional art forms. Students will learn about the creative process using many different art materials. Visual literacy and critique are used as a means to help students learn to communicate through visual images.

ART SEMINAR

Credit: 1 Grade: 11-12

Prerequisite: None (should not have a

prior art course)

Duration: Semester

Fee: \$15

Students will continue to explore 3D art through clay. Students develop their technical skills with hand-building and wheel-thrown projects. This class meets the prerequisite for Advanced 3D.

CERAMICS

Credit: 1 Grade: 9-12

Prerequisite: 3D Design or Art Seminar

Duration: Semester

Fee: \$20

Students enrolled in Digital Photography will learn how to compose digital photographs in manual mode. Students should have an interest in taking photos beyond point and shoot. Students will explore Adobe Photoshop to edit and manipulate photographs. Students will have a greater understanding of how images communicate with the viewer. Field trips are an expectation and used to take memorable photos. Students need access to a DSL camera. This course meets the prerequisite for Advanced 2D Design.

DIGITAL PHOTOGRAPHY

Credit: 1 Grade: 9-12

Prerequisite: Adobe Graphic Design I

Duration: Semester

Fee: \$15

Drawing and Illustration is designed to continue to enhance the skills and knowledge gained in 2D Design with an emphasis on digital images. Students will create their own digital work and visions after understanding where the techniques and design elements have originated. There is an emphasis on experimentation with media, critical thinking, research, design and critiques as a means of evaluating and looking at works of art.

DRAWING & ILLUSTRATION

Credit: 1 Grade: 9-12

Prerequisite: Successful completion of

Art Seminar or 2D Design Duration: Semester

Fee: \$15

Painting Studio is designed to continue and enhance the skills and knowledge gained through 2D Design. Students will investigate techniques for painting to further their skill and creativity in using a variety of painting mediums. There is an emphasis on experimentation with media, critical thinking, research, design and critiques as a means of evaluating and looking at works of art. This class meets the prerequisite for Advanced 2D Design.

PAINTING STUDIO (NC)

Credit: 1 Grade: 10-12

Prerequisite: Successful completion of

2D Design or Art Seminar Duration: Semester

Fee: \$20

VISUAL ARTS DESCRIPTION COURSE TITLE PEER MENTOR ART (2D) This class is for students interested in learning the skills and concepts related to two-Credit: 1 dimensional art while supporting other students as a peer mentor. Students enrolled will Grade: 9-12 be learning while supporting other students who need adaptive art education in an Prerequisite: none inclusive environment. The environment with peer mentors is evidence-based and has Duration: Semester a great overall positive impact on student growth and achievement in this area. Fee: \$15 PEER MENTOR ART (3D) This class is for students interested in learning the skills and concepts related to three-Credit: 1 dimensional art while supporting other students as a peer mentor. Students enrolled will Grade: 9-12 be learning while supporting other students who need adaptive art education in an Prerequisite: none inclusive environment. The environment with peer mentors is evidence-based and has **Duration: Semester** a great overall positive impact on student growth and achievement in this area. Fee: \$15 Students will further develop their artistic voice in the construction of 3D sculpture. **SCULPTURE** Students investigate figurative, kinetic/movement -based, electrical lighting, model-Credit: 1 making and concept vehicle design. Students use mixed media to create unique Grade: 9-12 solutions to design problems. This class provides tactile experiences found in the Prerequisite: 3D Design or Art Seminar professional design world. This class meets the prerequisite for Advanced 3D Design. Duration: Semester Fee: \$30 Students will become experts in Adobe Premiere Pro and validate their knowledge and VIDEO & ANIMATION (NC) skills through digital video editing film, television and the web. Passing the exam Credit: 1 results in internationally recognized certification in Adobe Premier Pro. Grade: 11-12 Prerequisite: Adobe Graphic Design 1 or 2023-24 Computer Graphic Imaging. **Duration: Semester** Fee: \$10

World Languages

The study of a world language is both fundamental and practical in a high school education. It helps to communicate with people here in the United States and abroad, affording a better understanding of today's complex, internationally interdependent world, as well as to reinforce the development of skills in English. Each level of world language will be taught at both campuses, if enrollment permits. Otherwise, students may be required to attend the course at the opposite campus.

Jeanne Psket, Program Leader, 369-3612, Ext. 3137

Level One	Chinese I, French I, German I, Spanish I
	A placement test is available for students who believe they are able to begin level two, as freshmen
Level Two	Chinese II, French II, German II, Spanish II
Level Three	Chinese III, French III, German III, Spanish III
Level Four	Chinese IV, French IV, German IV, Spanish IV,
Level Five	Advanced Placement Spanish Language and Culture

^{*}All World Language classes are year-long.

Which language? Chinese, French, German, or Spanish?

- a. If a student is interested in taking one particular language, for whatever reason, this choice is probably the best one to pursue. Students who are made to take a language other than their preferred language tends to be less motivated in the language chosen for them.
- b. All languages are good for the global economy in which we live.
- c. Some students choose a world language based on their ethnic background.
- d. Travel is greatly facilitated by knowing the respective languages of each country.
- e. Ideally, the prospective language student should make this choice using a reasoned approach, considering personal interests, ambitions, and future career plans.

WORLD LANGUAGES

DESCRIPTION COURSE TITLE

The Advanced Placement Spanish Language & Culture course provides students with opportunities to develop language proficiency across the three modes of communication: interpretive, interpersonal, and presentational. Students learn about culture through the use of authentic materials that are representative of the Spanish-speaking world. This is a language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where Spanish is spoken exclusively.

*ADVANCED PLACEMENT SPANISH LANGUAGE & CULTURE

1 & 2 Credit: 2 Grade: 11-12

Prerequisite: Spanish Language IV or

consent of instructor Duration: Year Fee: AP Test fee

Chinese I is designed to develop Chinese language skills and prepare students for living in a global society. Classroom instruction is focused on developing the ability to communicate in the Chinese language by involving the students in communicative tasks. Students will learn the target language in a contemporary cultural context.

*CHINESE I 1 & 2

Credit: 2 Grade: 9-12 Prerequisite: None Duration: Year Fee: None

Chinese II is designed to further enhance Chinese language skills and prepare students for living in a global society. We will continue to develop vocabulary, deepen the understanding of word formation and structures of the Chinese language, and further develop listening, speaking, reading and writing skills. Cultural topics will also be presented.

*CHINESE II 1 & 2

Credit: 2 Grade: 10-12

Prerequisite: Chinese I, 75% or better in the

second semester Duration: Year Fee: None

Chinese III places a greater emphasis on advanced communication skills. Students continue to expand their vocabulary and study essential language structures in depth. Listening and speaking skills are emphasized while reading and writing skills are further developed. Students also continue the exploration of the cultures and history of Chinese-speaking countries through a variety of literature and media.

*CHINESE III 1 & 2

Credit: 2 Grade: 11-12

Prerequisite: Chinese II, 75% or better in the

second semester Duration: Year Fee: None

Chinese IV brings the students an opportunity to further develop their language proficiency by immersing them fully in the Chinese language and varied aspects of both contemporary and historical Chinese culture. The course is conducted in Mandarin Chinese and the students are required to speak in Chinese as much as possible.

*CHINESE IV 1 & 2

Credit: 2 Grade:11-12

Prerequisite: Chinese III, 75% or better in

the second semester Duration: Year Fee: None

First year French introduces students to the basic concepts of French grammar and gives students a general understanding of the cultures of French-speaking areas. Students will learn basic vocabulary and expressions to talk about their daily lives and communicate with others. Students will build on their novice proficiency through the interpretive, presentational and interpersonal modes of communication.

*FRENCH I 1 & 2

Credit: 2 Grade: 9-12 Prerequisite: None Duration: Year Fee: None

WORLD LANGUAGES			
DESCRIPTION	COURSE TITLE		
Students will learn to express themselves in the present and past tenses while increasing their French proficiency. Vocabulary acquisition, and oral/ written work are especially emphasized through study of thematic units, music and readings.	*FRENCH II 1 & 2 Credit: 2 Grade: 9-12 Prerequisite: French I, 75% or better in the second semester Duration: Year Fee: None		
Students will improve their ability to express themselves through oral discussion and written composition. New grammatical concepts include future, conditional, and the imperative. Students will dive deeper into the French -speaking world as their thematic units prepare them for global travel and communication.	*FRENCH III 1 & 2 Credit: 2 Grade: 10-12 Prerequisite: French II, 75% or better in the second semester Duration: Year Fee: None		
An emphasis will be placed on oral and written proficiency. Topics covered will pertain to French culture and history. Advanced grammar will be built into thematic units that utilize a variety of authentic resources.	*FRENCH IV 1 & 2 Credit: 2 Grade: 11-12 Prerequisite: French III, 75% or better in the second semester Duration: Year Fee: None		
German I provides students with grammar study and reading and writing practice in German. Students are encouraged to express themselves orally in German from the beginning through classroom experiences, dialogues, skits, and games. The German sound system is presented, and listening comprehension is aided by the use of songs and media. All materials give broad and interesting insights into the culture and geography of Germany, Switzerland and Austria.	*GERMAN I 1 & 2 Credit: 2 Grade: 9-12 Prerequisite: None Duration: Year Fee: \$47 for 2 workbooks		
German II will continue the study of the basic German grammar to include the past tense and complex sentences. Continuous detail on vocabulary, grammar concepts, and sentence structure is stressed. Reading selections and dialogues will be used as a basis for conversation and writing. All materials and media will add to students' cultural understanding and appreciation of German-speaking countries.	*GERMAN II 1 & 2 Credit: 2 Grade: 9-12 Prerequisite: German I, 75% or better in the second semester Duration: Year Fee: \$49 for 2 workbooks		
In German III, students gain fluency through vocabulary acquisition in a wide range of topics. Grammar review is included along with acquisition of higher-level grammar. Students will produce German in writing and speaking with more detail and increased accuracy. All materials aid in student understanding of culture in German-speaking countries.	*GERMAN III 1 & 2 Credit: 2 Grade: 10-12 Prerequisite: German II, 75% or better in the second semester Duration: Year Fee: \$53 for 2 workbooks that will be used in level IV as well.		

WORLD LANGUAGES

DESCRIPTION COURSE TITLE

In German IV, students will further develop conversation and composition skills. Students will gain an overview of history, geography, society, politics and culture. Students will present oral and written reports of their studies in German. All reading and audio-visual materials expand student understanding of German-speaking countries.

*GERMAN IV 1 & 2

Credit: 2 Grade: 11-12

Prerequisite: German III, 75% or better in

the second semester Duration: Year Fee: None

Spanish I is an introductory course that starts at the novice level and provides students with grammar study, reading, and writing practice in Spanish. Students are encouraged to express themselves orally in Spanish in the present tense from the beginning through classroom experiences, dialogues, skits, presentations, and games. Spanish pronunciation is presented, and listening comprehension is aided by various audio activities and videos. All materials give broad and interesting insights into the culture and geography of the Spanish-speaking world.

*SPANISH I 1 & 2

Credit: 2 Grade: 9-12 Prerequisite: None Duration: Year Fee: \$20 Workbook

Spanish II will continue the practice of the present tense learned in Spanish I and will expand to include the past tense. Continuous detail on vocabulary, grammar concepts, and sentence structure is stressed. Reading selections, audio and video activities, and interpersonal and presentational communication will support language acquisition and cultural competences.

*SPANISH II 1 & 2

Credit: 2 Grade: 9 -12

Prerequisite: Spanish I, 75% or better in the second semester, or placement exam results

Duration: Year Fee: \$35 Workbook

In Spanish III students will study thematic units while working to improve speaking, listening, reading and writing skills. Special emphasis will be placed on further developing communication skills and expanding cultural competencies.

*SPANISH III 1 & 2

Credit: 2 Grade: 10-12

Prerequisite: Spanish II, 75% or better in the

second semester Duration: Year Fee: \$35 Workbook

Spanish IV further develops conversation and composition skills with an emphasis on Spanish/Hispanic culture. A comprehensive grammar review is presented, along with new grammar topics, studied contextually and thematically throughout the year.

***SPANISH IV 1 & 2**

Credit: 2 Grade: 11-12

Prerequisite: Spanish III, 75% or better in

the second semester Duration: Year Fee: \$35 Workbook

THIS PAGE LEFT INTENTIONALLY BLANK



2024 Summer School Course Guide

Summer School

Dates and Procedures

Arrowhead Summer School will be from **June 10 – July 18, 2024**, Monday through Thursday. Classes meet for $2\frac{1}{2}$ hours per class for 6 weeks. In the description, the grade level listed is the grade level students enter 2024-2025.

STUDENTS WILL BE REGISTERING FOR SUMMER SCHOOL COURSES AT THE SAME TIME THEY ARE SELECTING COURSES FOR THE NEXT SCHOOL YEAR. This is important for overall planning, including those who may be interested in improving their grades for courses already taken. Online requests are in priority of grade level in school (Example: seniors first, then juniors, etc.) and the date of registration.

Online registration for summer school courses begins in February. If there are sufficient students enrolled to offer the course, students may continue to add, if space is available until June 7, 2024. We do not maintain a waiting list for classes that fill up quickly. Families are encouraged to continue to check Skyward for open seats in the class, as students drop.

Grading

- > Students will receive the grade they earn during summer school.
- > If students are repeating a course and they earn a higher grade, the transcript will be updated to reflect the change. Students can only earn credit once for repeated classes. If a class is repeated for an improved grade, the students would not receive additional course credit. Effective for Class of 2018, the transcript will reflect the higher of the two grades and an "R" replaces the lower grade to identify the course that was repeated.
- > Courses are the same curriculum that is offered during the school year.
- > Final exams are required for all summer school courses.
- > For year-long courses, summer school classes may only be taken once to repeat a grade.

Policies and Procedures

- ➤ An enrollment of 10 students is necessary for the course to be offered.
- > No student absence is excused from summer school for any reason other than an unforeseen emergency. Summer school students are expected to attend for the full-specified term of the course. "Every day and on time" applies to summer school, whether the class is held virtually or in person. Some classes or parts of classes will be synchronous to the times listed in the summer school guide. Teachers will explain when students will be expected to be online.
- > Students absent for more than "two sessions" will be dropped and an "F" placed on the transcript. PE Adventure Education students are allowed NO absences.
- > Four "tardies" are equal to one absence. If a student is tardy for more than 20 minutes, the student is considered absent and expected to stay for the rest of class.
- > Students who drop a full credit course <u>after the first week</u> will receive an "F". If a student requests a drop within the first week, no penalty will be issued.
- Arrowhead school year expectations concerning conduct and behavior apply in the summer session, this includes virtual learning expectations and etiquette.
- ➤ Courses identified with an (*) are generally recognized as academic units for college admission.
- The program is available to all residents of the Arrowhead School District. Non-residents may attend summer school. Non –residents (who are not open enrolled during the school year) should contact the North Campus Associate Principal or the Director of Learning about enrollment information.
- > Children in the school district on a vacation basis will be considered as resident students providing they and their parents or legal guardians reside within the school district for the full duration of the course selected.
- > Students and parents/legal guardians should contact their counselor prior to the end of the regular school year if they have questions or concerns. This is particularly important for students who are credit deficient.

Summer School courses are listed alphabetically within the department. Note that there are times offered for each course to aid in planning, however those times can change – and families will be notified. Not all courses will run at both times; sections are based on enrollment size. Please note that a course a student registers for may be canceled due to low enrollment (less than 10). In this event you will be notified via email.

ONLINE COURSES AT ARROWHEAD HIGH SCHOOL

Please read the descriptions carefully so that expectations are clear for online classes. These students need to be self-directed, motivated, meet deadlines, participate weekly in forums, chats, and collaborative work.

Students who are interested in the online classes should consider the following:

- 1. Students should expect to be online daily throughout the week.
- Students should attend at a healthy pace for the class. Students should be realistic with their summer plans when they take an online class (must have internet access).
- 3. Students must log in to the course management system sometime in the first three days of summer school.
- 4. Students should attend office hours with instructors as needed (if earning a C- or below this is a must). Office hours will be shared by individual teachers.
- 5. Students are required to participate in weekly online discussions.
- 6. Students must communicate with their teacher (s) on a regular basis.
- 7. Students cannot take more than two online classes at one time (can take ONE additional summer school course).

ENGLISH

DESCRIPTION COURSE TITLE

Composition is an online course and it will focus on the writing process. This will include the concepts of writing well: brevity, clarity, word choice, mechanics, voice, style, organization, audience, and paragraph development. Students will also study vocabulary with application to ACT-timed writing. A portfolio of work, including narrative, informative, explanatory, and impromptu and opinion, will be compiled. Students are expected to meet with the online teacher in a face -to- face setting before the course begins.

*COMPOSITION

Credit: 1 Grade: 11 -12 Prerequisite: None

Duration: 6-week Summer School

Class Period: Online

Creative Writing is an online course. Using Canvas, students will: write for a purpose, submit and publish pieces, work independently on pieces for a variety of writer's markets and work on individual interests. Students are expected to meet with the online teacher at least once in a face-to-face setting before the course begins.

*CREATIVE WRITING

Credit: 1 Grade: 11-12 Prerequisite: None

Duration: 6-week Summer School

Class Period: Online

Students enrolled in English 9 focus on learning literature, grammar skills, writing and mechanics, and speech. English 9 is a required course for graduation. This Summer School course is for students who have already taken English 9.

*ENGLISH 9

Credit: 1 Grade: 10-12

Prerequisite: English 9 1&2 Duration: 6-week Summer School Class Period: 7:30 – 9:55 a.m.

English 10 a required course for graduation consisting of three main components: literature, writing and grammar, and communications. Literature will be specifically selected for Summer School. The writing component focuses on grammar review of key skills and solid paragraph and essay structure primarily for literature analysis. Students will deliver several oral presentations. They will learn strategies for preparing, organizing and delivering a speech. This Summer School course is for those students who have already taken English 10.

*ENGLISH 10

Credit: 1 Grade: 11-12

Prerequisite: English 10 1&2 Duration: 6-week Summer School Class Period: 10 a.m.-12:25 p.m.

HEALTH

DESCRIPTION COURSE TITLE

Health class emphasizes how individuals protect, maintain, and improve their health by developing, establishing and achieving positive lifestyle goals. This course is **fast-paced and requires nightly outside reading.** Students are to electronically submit assignments on a weekly basis. Topics: Wellness and Consumerism, Nutrition/Physical Activity, Alcohol/Tobacco/Medicines, Disease Prevention, First Aid/CPR/Safety, Mental Health, and *Human Growth & Development. Some weekly assignments require internet access outside of school. Meets graduation requirements for Health.

*If a parent wishes to have their child exempted from any or all areas of this section, independent study materials will be provided for that student during the exemption. Requests for exemption of all or part of Human Growth and Development must be submitted on the first day of health class. See the full Arrowhead High School Curriculum Guide for more details.

HEALTH

Credit: 1 Grade: 9 - 12 Prerequisite: None

Duration: 6-week Summer School Class Period: 7:30 a.m. – 9:55 a.m.

or

10:00 a.m. – 12:25 p.m.

MATHEMATICS		
DESCRIPTION	COURSE TITLE	
Advanced Algebra follows the course description from the regular Arrowhead High School Curriculum Guide. The Summer School course covers the 2 nd semester of the Advanced Algebra curriculum.	*ADVANCED ALGEBRA Credit: 1 Grade: 10 - 12 Prerequisite: Geometry 1&2 and Advanced Algebra 1&2 Duration: 6-week Summer School Class Period: 10:00 a.m.–12:25 p.m.	
Algebra follows the course description from the regular Arrowhead High School Curriculum Guide. The Summer School course covers the 2 nd semester of Algebra curriculum. Students who completed Algebra or Algebra B during the school year are eligible to take this Summer School course. For Algebra B students, The Algebra B course grade on the transcript will be replaced with the Summer School grade and the title of Algebra B remains on the transcript.	*ALGEBRA Credit:1 Grade: 10 - 12 Prerequisite: Algebra 1&2 or Algebra B 1&2 Duration: 6-week Summer School Class Period: 7:30 – 9:55 am	
Geometry follows the course description from the regular Arrowhead High School Curriculum Guide. The Summer School course covers the $2^{\rm nd}$ semester of the Geometry curriculum.	*GEOMETRY Credit: 1 Grade: 10 - 12 Prerequisite: Algebra 1 & 2 and Geometry 1 & 2 Duration: 6-week Summer School Class Period: 7:30-9:55 am Fee: None	

MUSIC/THEATER			
DESCRIPTION	COURSE TITLE		
Broadway Company is required for all troupe members. Students work with a professional choreographer, preparing for the fall music theater performance. Also included are vocal sessions, student leadership opportunities, and team building activities. Included in this 9-day study will be intensive work with character development, vocal part work and memorization, and intense dancing. If Broadway Company dates and times conflict with other summer school courses, students will need to plan accordingly. They will not be excused from regularly scheduled summer school during the week of Broadway Co.	BROADWAY COMPANY Credit: 1 Grade: 10-12 Prerequisite: Audition Duration: Summer School Dates TBD		
Marching Band camp is required for all members. Students work to prepare for the fall marching band season. Included in this course are instrument sectionals, student leadership opportunities, team building exercises, intensive music rehearsal, memorization, marching drill rehearsal, and marching activities.	MARCHING BAND Credit: 1/2 Grade: 9 – 12 Prerequisite: None Duration: Dates TBD (Please note that registration for Marching Band does take place in Skyward AND on Band Website.)		

PHYSICAL EDUCATION

DESCRIPTION COURSE TITLE

Adventure Physical Education offers students outdoor experiences and recreational activities designed for lifetime fitness. **Students** <u>must</u> <u>attend all of the classes to receive credit.</u> There is an enrollment cap for this course.

Students will be expected to be able to climb at height, swim, fish and ride a horse among other outdoor physical challenges. These classes run for full days.

Session 1: June 10,11,13,17,19,24,26 Session 2: June 10,12,17,18,20,25,27

Rain Dates: July 1,2

Performance Training is offered as a component of a schoolwide fitness and conditioning program. Students engage in movement through all planes of motion by establishing high levels of functional strength and neuromuscular efficiency. Classes will integrate flexibility, core, balance, plyometric, speed/agility/quickness, resistance, and cardiorespiratory training. Due to its flexibility, this course is an excellent choice for the beginner to the highly skilled and will focus on improvement at all skill levels.

Traditional Physical Education is similar to the curriculum offered during the school year in the individual and team courses. Attendance and participation are mandatory. Each student must dress with appropriate attire for each unit. The class will use facilities at South and North Campuses. The class will meet on poor weather days without exception.

ADVENTURE PHYSICAL EDUCATION

Credit: 1 Grade: 12

Prerequisite: none

Duration: Summer School Class Period: (See session dates)

PERFORMANCE TRAINING

Credit: 1 Grade: 10 - 12 Prerequisite: None

Duration: 6-week Summer School Class Period 10:00 a.m. – 12:25 p.m.

or 12:30p.m. -2:55 p.m.

TRADITIONAL PHY ED

Credit: 1 Grade: 9 - 12 Prerequisite: None:

Duration: 6-week Summer School Class Period: 7:30 a.m. – 9:55 a.m. or 10:00 a.m. – 12:25 p.m. or 12:30

p.m. - 2:55 p.m.

All classes will all meet at South Campus.

SCIENCE DESCRIPTION **COURSE TITLE** The topics, expectations, and rigor of this course are similar to the full-year Biology course. *BIOLOGY Topics will be drawn from the major units in that course; characteristics and classification Credit: 1 of living things, ecology, biochemistry, cellular structure and function, genetics, and Grade: 11 - 12 evolution. The course includes a significant laboratory component that will require the Prerequisite: Biology 1 or 2 completion of written lab reports. Students will demonstrate an understanding of key Duration: 6-week Summer School Class Period: 7:30 a.m. - 9:55 a.m. concepts on frequent assessments. This course is open to those students who took Biology and want to repeat it. The topics, expectations, and rigor of this course are similar to the full-year Science 9 *SCIENCE 9 course. Topics will be drawn from the major units in that course: science foundations, Credit: 1 motion, forces and energy, atomic theory, chemical reactions, and earth and space science. Grade: 10 -12 The course includes a significant laboratory component that will require the completion of Prerequisite: Science written lab reports. Students will also be expected to demonstrate understanding of key Duration: 6-week Summer School concepts on frequent tests or quizzes, and homework may be assigned. This course is open Class Period: 10:00 a.m. – 12:25 p.m. to those students who took Science 9 and want to repeat it.

SOCIAL STUDIES DESCRIPTION **COURSE TITLE** American Problems is an online course. The students will explore current events in society, *AMERICAN PROBLEMS as well as the background of these issues. Units include: economics, government, civil **CURRENT TOPICS** rights, urban problems, and foreign affairs. The class will consist of some predetermined Credit: 1 issues, but will primarily be events and issues that arise during the summer. Students are Grade: 11 - 12 expected to meet with the online teacher at least once in a face-to-face setting before the Prerequisite: None first day of class to discuss course expectations Duration: 6-Week Summer School Class Period: Online Political Science is an online course that teaches the American political system and deals *POLITICAL SCIENCE with both the structure and function of the government and the political factors which Credit: 1 determine decision making. In this regard, current political events/issues will be studied. Grade: 10 -12 These issues will vary according to the policies and events the government is dealing with Prerequisite: None at the time of the class. Subject areas covered in the class will include the Constitution, Duration: 6-WeekSummer School ideology, political parties, interest groups, elections, Congress, the Presidency, and the Class Period: Online Supreme Court, as well as current policy studies. Students should expect to read a great deal and complete a variety of writing assignments and projects. Students are expected to meet with the online teacher at least once in a face-to-face setting before the start of summer school. *SOCIAL STUDIES 9 The Summer School curriculum will select themes taught during the school year. This Credit: 1 Summer School class is for students who have already taken Social Studies 9. Grade: 10-12 Prerequisite: Social Studies 9 (1 & 2) **Duration: 6-Week Summer School** Class Period: 7:30 a.m.-9:55 a.m.

GENERAL ELECTIVES

DESCRIPTION COURSE TITLE

Students looking to practice and improve their ACT scores can sign up for the 9 sessions. These sessions will be rich academic coaching in subject categories of the ACT: English Reading and Science. Session sizes will be small/limited and are intended for Juniors. For registration, questions, and details, please contact Lauren Bartel

at the ACT advantage @gmail.com

See flyer for more details.

Please note, this is not a credit bearing/transcipted summer school class.

There is a fee for the sessions.

ACT PREP SESSIONS

Credit: None Grade: 11

Duration: June 15-August 15

Mondays or Tuesdays at 1:00 p.m. or

2:15 p.m.

LOCATED AT SOUTH CAMPUS

The College Essay Workshop will help students understand what college admissions officers desire in a college essay. The workshop will focus on the principles of good writing, including the components of a compelling narrative. Students will plan, draft, write, share and receive feedback from multiple teachers and students. They will learn about creating an application with purpose and consistency through example essays and readings. This workshop is for seniors only and will happen via Zoom. Although students need to sign up for one session, they can flip between the two without penalty. Students will receive a quarter credit if they attend four sessions. The course is pass/fail. Students sign up for the College Essay Workshop on Skyward; students will then be added to the

COLLEGE ESSAY WORKSHOP

Credit: 1/4 credit (pass/fail)

Grade:12

Prerequisite: None Duration: August 5-8 Sessions are held virtually.

Flight is designed as a focused opportunity for seniors to "plan ahead to get ahead" on preparing for life after Arrowhead. This workshop format will focus on such topics as the college application, transcripts, choosing the right college, exploring majors and careers, obtaining letters of recommendation, scholarship opportunities, financial aid and senioritis. Using a variety of methods, including guest speakers, computer searches, projects and lectures students who successfully complete Flight will help students acquire skills to make college transition positive. Flight is highly encouraged for all college-bound seniors.

FLIGHT-SENIOR EXPERIENCE

Credit: None Grade: 12

Prerequisite: None

Duration: 12:30 p.m. -2:30 p.m. Date: Tuesday, August 7

All students should bring a device to participate on this day.

Canvas course where students can view the hour-by-hour schedule.

Jump Start focuses on preparing incoming freshmen to be successful in their transition to Arrowhead High School. Students will focus on improving reading through the completion of a novel and utilizing the Achieve 3000 reading program. They will improve writing skills through daily journal writing. Students will also learn strategies to tackle many common challenges for Arrowhead students such as stress management, goal setting, and peer pressure. Students will become familiar with computer logins, Google documents, Gmail accounts, and the Arrowhead Way philosophy.

JUMP START

Credit: 1 (pass/fail)

Grade: 9

Prerequisite: None

Duration: 6-week Summer School Class Period: 7:30 a.m. – 9:55 or

10:00 am- 12:25

Mindfulness Workshop sessions will have the following components: Wellness/Health, History, Literature, Writing, and Analysis

- Introduction of Mindfulness Techniques
- History/Philosophy background and guided readings
- Guided Practice
- Mindfulness through Movement
- Self-Reflection Writing

MINDFULNESS WORKSHOP

Credit: 1/4 (pass/fail)

Grade: 9-12 Prerequisite: None

Duration: 6 online sessions and self -

paced lessons Times: ONLINE

GENERAL ELECTIVES

DESCRIPTION COURSE TITLE

Wings introduces freshmen to the high school experience to pave the way for a smooth transition to Arrowhead. The course consists of 3-half day sessions using team building, small groups, and other activities to help students get an introduction to the environment, meet new friends and become a part of the Arrowhead community.

Please note- when signing up for WINGS the schedule will show the summer school dates from beginning to end.

WINGS – FRESHMEN EXPERIENCE

Credit: 1/4 (pass/fail)

Grade: 9

Prerequisite: None

Duration: 7:30 a.m. – 12:00 p.m.

Dates: August 21-23

Arrowhead Devices

Beginning with the class of 2027, in order to ensure consistent teaching and learning experiences, provide effective technology support, and create coherent technology solutions, students are now issued a Chromebook device through the Cooperative Technology Program (policy 649). For more information about the Cooperative Technology Program, contact Donna Smith.

Device Guidelines for Classes of '25 and '26 ONLY

Arrowhead students (class of 2025 and 2026) may choose to bring in a Macintosh laptop, a Windows laptop, or a Chromebook. *If* your student needs to install software, a laptop is recommended. However, if your student is just going to be using Internet-based programs, such as Google Docs, then a Chromebook will be sufficient. Please note that Chromebooks don't allow program installations and they require a constant Internet connection.

programs, such as Google Docs, then a Chromebook will be sufficient. Please note that Chromebooks don't allow program installations and they require a constant Internet connection.				
Wireless Connectivity Wireless connectivity is key to devices in schools! Devices must support 5Ghz dual band wireless or 802.11 a/g/n (preferably your device supports both a, n, and/or ac).		Operating System To ensure the latest programs and software are compatible, we recommend the current or previous version of any operating system other than Linux.		
Your devices need to last the school day, we recommend a minimum of 8 hours of battery life, but longer battery life is preferred. CAMPUS LIBRARIES HAVE CHARGING LOCKERS FOR STUDENT USE.	Chromebooks and Laptops We recommend Chromebooks and laptops, rather than tablet devices. If your student needs to install software for classes, laptops are recommended over Chromebooks.	Memory or RAM 4GB minimum 8GB or higher recommended To be able to process data effectively, these minimum specifications are recommended.		
Hard Drive Storage Laptops: 250GB or more hard drive space. Chromebooks: 16GB or more hard drive space. Recommended: Solid State Drives are preferred for fast performance	Processor or CPU Laptops: 2.2GHz or faster Chromebooks: 1.5GHz or faster The processor is the "brains" of the device and it handles all the data processing of the device.	AMDE (INTEL)		
Secretary of the control of the cont	Hardware Features Camera, earbuds, & microphone. These are necessary to ensure students can participate in 21st century learning activities.	Screen Size Minimum: 11 inches or greater at a resolution of 1280x1024 or greater. Ensure the screen is a reasonable size to enable ease of use throughout the		

Other Essential Considerations:

- Tech and Engineering require a PC at this time. Please refer to the <u>Technology and Engineering</u> <u>Department section</u> before purchasing your device.
- Science has free software that will not currently work with a Chromebook.

Casing: Should be tough and sturdy

Weight: Is the laptop light enough to carry all day?

Durability: Consider overall durability of the device. Are the keys and inputs sturdy?

Carry Case: A carry case or skin is essential in protecting your device and can provide ergonomic advantages.

Insurance: Devices can become lost or be broken. Make sure your policy

school day.

covers these issues.

Warranty: Make sure you consider purchasing extra warranty to cover repairs.

Antivirus: Protect your device from viruses and malware!