



## Introduction to the Birchwood High School Course Description Handbook

It is our hope that students and parents will use this booklet to choose courses that will help our students in their future endeavors. Research shows that today's young people will probably change their careers from five to seven times during their working lives. Young people who have a broad range of experiences will be better able to decide what areas they are interested in and would like to explore in greater detail. When thinking about next year's class schedule, please consider what the student's plans are for after graduation from high school. Careful planning includes reviewing career and interest inventories, entrance requirements of a college or technical college, and the essential skills needed that potential employers will be looking for in an employee. Future plans should be realistic and flexible to allow for changes in interest and job availability.

The school counselor will meet with each student to create a course schedule that reflects the student's future endeavors. As always parents/guardians are strongly encouraged to be part of the scheduling process. If at any time you have questions or would like to meet with Mrs. Howard, please feel free to contact her at 715-354-3471 or mhoward@birchwood.k12.wi.us.

### Graduation Requirements

#### *Class of 2019 and Beyond*

Beginning with the Class of 2019 the following Graduation requirements shall apply regarding specific Credit Requirements, replacing the previous Credit Requirements:

- 4 credits of English
- 3 credits of Social Studies
- 3 credits of Math
- 3 credits of Science
- 1.5 credits of Physical Education
- ½ credit of Health
- 1.0 credit for approved School to Work Portfolio - - ½ Personal Finance & ½ Career Readiness
- 1.0 credit of Industrial Technology and/or Business Education (not counting Yearbook)
- 1.0 Fine Arts (Music and/or Art)
- 1/2 Online/Virtual or MOODLE credits approved by the Counselor
- 9.5 elective credits
- Civics Test – Pass the State required Civics test. An IEP team will determine if the test is appropriate for each individual student.

Effective the Class of 2019 Core Subjects include:

- English
- Mathematics
- Science
- Social Studies
- World Languages

### *Honors Graduation Requirement*

Effective the Class of 2019, students wishing to be considered for Graduation with Honors up to and including Valedictorian/Salutatorian must complete 2 credits of World Languages (1.5 credits must be completed by end of first semester senior year, with enrollment in .5 during second semester senior year being allowed to reach 2.0).

## Why the Courses You Take in High School Matter

### ***College and Career Ready***

Whether your post-secondary goals include attending a competitive 4-year University, the local 2-year Community & Technical College, joining a branch of the military or applying to enter the workforce immediately upon graduation, your course of study and how you perform during high school directly impacts what options you will have.

We want to encourage students to **challenge themselves at the most rigorous level** possible but we also want to see students able to monitor and balance all activities when choosing high school courses. It is important to consider your involvement in leadership opportunities, athletics, music, community service, employment, and other extracurricular activities when choosing your course load.

Every college and university develops its own application requirements. It is important to do your research! If you're not sure what your future college or school expects of its prospective students, check with the admissions office. You can always schedule an appointment with Mrs. Howard if you want to ensure that your current academic planning puts you on track to reach your post-secondary goals.

When you begin to look at the scheduling process it is important to have multiple conversations and discussions as you plan your high school career and look to your post-secondary options.

Your **supporting team** may include: parents, teachers, school counselor, principal, recruiter, employer, mentor. Your **resources** include: reading and referencing the Course Description Guide, scheduling an individual meeting with your school counselor, making lists —pros and cons, setting goals for post-secondary plans, and referencing your transcript.

## College Admission Requirements

### Preparing to apply for college?

Every college and university maintains their own requirements and standards for admissions. It is best to check with a specific institution about their expectations and requirements. Many colleges and universities are looking for quality candidates. Quality candidates go above and beyond the minimum qualifications required for admissions. ***Many colleges base roughly 70% of an admissions decision on your primary factors.*** These are the following: Grade Point Average (GPA), Class Rank, and ACT.

### **Primary Factors for College Admission:**

1. Class Rank/GPA
2. ACT/SAT Test Scores
3. Rigor of academic coursework

## Rigor of Academic Courses

Applicants are recommended to select courses beyond the minimum requirements. Students completing academically rigorous courses throughout their high school career, including senior year, will be stronger candidates for admission.

## Academic Performance

Applicants are expected to achieve a high-level of performance in the course work they pursue. This includes: **Rigor of course work**. A minimum of the academic courses listed below. **Grade Trends**. An increasingly strong and consistent academic record improves the likelihood of admission; a downward trend diminishes it.

### ***College Preparatory Coursework***

**English -4**

**Social Studies/History- 3**

**Natural Science- 3**

**Mathematics-3**

***In addition to the "core college preparatory" credits identified, students need to complete a minimum of four elective credits as follows:***

**An additional 4 credits may be chosen from English, mathematics, natural science, social science/history, foreign language, fine arts, computer science, and other academic areas. (Two years of a single foreign language are required for admission to UW-Madison, and strongly recommended at other UW System campuses.) Some UW System campuses may also accept technical and career courses for a portion of these 4 elective credits.**

***All students are encouraged to exceed the minimum number of college preparatory credits required for admission. Students who choose a rigorous high school curriculum (including senior year coursework) are more successful in college. Strong academic preparation for college helps to ensure success.***

***\*see more@ <http://www.uwhelp.wisconsin.edu/admissions/freshman/collegeprep.aspx>***

## Class Rank/GPA

Universities will request class rank and GPA when considering an applicant for admission in addition to all other factors. Once a student has been admitted to a university, universities may also request a final transcript, including final GPA, and class rank following the student's high school graduation, to ensure academic performance was maintained throughout the student's entire senior year.

## Non-academic Qualifications

Numbers alone do not determine admissibility. Colleges and Universities are looking to build a diverse class—and diversity is considered and defined in a number of ways. Socio-economic status, racial identity, cultural/ethnic background, religious affiliation, (dis)ability, geographical origin, etc. can be factors that play a role in any individual student's application status. Universities look for students with special or unique talents, who give of themselves, and who learn outside the classroom as well as inside. Please remember, however, that while non-academic indicators will make a good applicant strong, they will never make an academically weak applicant admissible. Non-academic areas include: Leadership Experience, Personal Characteristics, Overcome Factors, Community Service, Special Talents/Abilities, & Extracurricular Activities.

## Vocational-Technical College Entrance Requirements

Some programs at vocational-technical colleges have specific entrance requirements. It is important to consult the vocational-technical college catalog to determine what admission requirements exist.

## **Scholarship Opportunities**

Visit the Birchwood Schools Scholarship Page at:  
<http://birchwood.k12.wi.us/staff/staffweb/mhoward/scholarships/>

For more detailed information on the **Academic Excellence Scholarship** (often referred to as the “Valedictorian Scholarship” visit: <http://www.heab.state.wi.us/>

For more information in the **Technical Excellence Scholarship** visit: <http://www.heab.state.wi.us/>  
The Birchwood School District utilizes the HEAB and state qualifications for the purpose of nominating students for this award.

***Please take note that Birchwood High School may fall under the 80 student enrollment window for both the Academic Excellence Scholarship and Technical Excellence Scholarship. When this happens students are nominated differently for both of these scholarships***

### **Schedule Change Policy**

A student may drop or enroll in another course in the time sequence established by the school at the beginning of each quarter.

Students will be provided with their upcoming schedules at least three weeks prior to the beginning of classes. Staff members of the school will make every attempt to accommodate the request for schedule change. Still, it is recognized that some requests will not be granted due to limitations on class size, limitations on class materials (i.e. textbooks, laboratory supplies, etc.), absence of pre-requisite courses, safety concerns. Final approval for all class schedule changes rest with the administration. Staff will need to acknowledge receipt of class list schedule changes via a signature on the Schedule Change Form.

Student generated schedule changes may occur under the following conditions:

1. Student must not jeopardize grade level promotion or graduation by making the schedule change.
2. Students must complete the request for schedule change in advance of the first day of a new quarter.
3. Student must cite an explanation for the change.
4. Any change will require the written approval of the student’s parents, and the guidance counselor.

### **Class Status Requirements**

Sophomore status – Have earned 6 3/4 credits or more.

Junior Status – Have earned 13 1/2 credits or more.

Senior Status – Have earned 20 credits or more.

Students will be assigned a grade level based on the number of credits they have achieved, not according to years attended. This will allow only students who have achieved the correct number of credits to participate in events designated Sophomore, Junior, or Senior activities.

Students may change class status at semester. Check with the high school counselor regarding semester class status changes. Students will be allowed to change class status at semester providing they have achieved the appropriate number of credits. For movement at semester:

Sophomore – 10 1/2 credits or more.

Junior – 17 1/4 credits or more.

Senior – 24 1/2 credits or more.

## High School Courses

### **Math Foundations\*** (200-MF)

(Every Year)

**Credits:** ¼ credit for each quarter

Remedial Math class that will be counted as an elective. This class is required for students who don't meet math benchmarks.

**ALEKS** (Assessment and Learning in Knowledge Spaces) is a Research-Based Online Math Program:

- Artificial Intelligence Targets Gaps in Individual Student Knowledge
- Assessment and Learning with Standards-Based Content

## Art Education

### **Beginning Art and Design** (600-BAD)

(Every Year)

This course is an overview of the various art mediums that are used in different art production methods. Students will gain strong knowledge in the Elements of Art and Principles of Design which are known as “the building blocks of all art”. Art media such as drawing, painting, printmaking, collage, ceramic, etc. will be used to successfully understand each element and principle. Block course: ½ credit

### **Ceramics I** (600-CI) & **Ceramics II\*** (600-CII)

(Every Year)

**\*Pre-requisite for Ceramics II is Ceramics I**

The Ceramics I course will introduce the clay hand-building techniques of pinch, coil, and slab. This course will also focus on basic clay skills that include the joining method along with the additive and subtractive processes.

Ceramics II\* will be all about experimentation on the potter's wheel in order to create ceramic vessels. Wheel throwing skills learned will consist of centering, opening and pulling clay. Block course: ½ credit

### **Sculpture & Metals I** (600-SM) & **Sculpture & Metals II\*** (600-SMII)

(Every Year)

**\*Pre-requisite for Sculpture & Metals II is Sculpture & Metals I**

The Sculpture portion of this course will focus on 3-Dimensional forms of artwork. Students will have the opportunity to apply their knowledge of the elements and principles through the use of incorporating mixed media into their works. A variety of media will be used including paper mache, wire, paint, cardboard, found materials, etc. The metals portion of this course will concentrate on flat metal and cold joining techniques such as riveting in order to create unique metal art like key chains and pendants. Metals II\* students will have the opportunity to design and create their own ring through the process of “lost wax casting”. Block course: ½ credit

### **Drawing and Painting** (600-DP) & **Drawing & Painting II\*** (600-DPII)

(Every Year)

**\*Pre-requisite for Drawing and Painting II is Drawing and Painting**

Drawing and Painting will focus on line, value and color theory through the use of mark making. Drawing will create works of art using the following mediums: graphite, charcoal, chalk and oil pastels. Painting will create works of art using watercolor and acrylic paints. Drawing II will investigate the observational drawing technique through figure-life drawing. Painting II will offer students the opportunity to research and experiment with different brush stroke patterns found in different works of art. Block course: ½ credit

### **Independent Study Art \*** (600-IA)

(Every Year)

**Pre-requisite - Student must have the permission of the instructor.** This course gives students the opportunity to

explore advanced techniques in their chosen media or research a form of art not offered in the general course listings. Block course: ½ credit

## **Business Education**

### **Advanced Computers(700-AC)**

*(Even Year)*

This project based learning style class puts you in the driver's seat of your learning. Have you ever wanted to learn how to make a webpage or wanted to try your hand at the layout of the school newspaper? You can explore IT and taking a computer apart, programming, video game design, make a movie, and more. . Block course: ½ credit

### **Business Communications/Information Processing (700-BCIP)**

*(Even Years)*

Students will learn basic communication skills (reading, writing, listening and speaking) as well as skills in word processing, outlining, graphic design, spreadsheet computation and charting, database management, and multimedia authoring and presentation related to everyday living and workplace situations. Students will select materials to achieve the course competencies based on their chosen career field. Local employers will provide input and spend time working with the class on workplace communication skills. \*\*Industry certifications in Microsoft Office products may be available. Block course: ½ credit

### **Career Readiness - Portfolio (700-CR) *Required to graduate***

*(Every Year)*

**Pre-requisite: Open to students in grades 10 – 12. It is strongly recommended that students take this class in the classroom. Online option is only open to Seniors and must be taken in the first semester as either a block or 2 quarter 45-minute class.**

In this class students will learn many of the skills necessary to be successful citizens in today's society. Students will take a look at a variety of careers, learn about resumes, job applications, college applications, grants and more pertaining to the college or schooling they might be interested in. Students will also learn how to get a job, as well as many other valuable "life" resources. Students will choose two careers to research, learn about job outlooks, salaries, the ins and outs of the job as well as which schools offer the specific programs. This class will be very hands on as students will meet with various professionals as they come to the classroom to discuss their jobs. Opportunities to job shadow particular professions will be required for this class. Students will complete their student portfolio during this course. Block Class: ½ credit

\*\*This course meets the graduation requirement for Portfolio, however it does not meet the required ½ credit for health.

### **Desktop Publishing (700-DNP)**

*(Odd Year)*

Develop your skills in the electronic procedures of producing/editing publications. Through the use of desktop publishing software (mainly the Adobe Suite), students will design, edit/revise, format, create, illustrate and print various publications and graphics. Students will demonstrate improved productivity of electronically produced projects including, posters, flyers, brochures, reports, advertising materials, and other publications are emphasized. Block course: ½ credit

### **Introduction to Business (700-IB)**

*(Even Years)*

Interested in learning more about the business world today? This course will introduce students to the role of business in society and the factors that impact it locally and globally, as well as an overview of functional areas of business and the basic concepts of the business world. Topic include: the stock market, how business is owned and structured, entrepreneurship, marketing, business ethics, workplace diversity issues, how to write a business plan, what it takes to start a business, and the roles of employees and employers. Block course: ½ credit

**Introduction to Computer Science (700-CS)** (Odd Years)

This course is a rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. Students will use code.org as a learning tool for this course. Block course: ½ credit

**Personal and Financial Matters - Portfolio 11 (700-PFM) *Required for all Juniors*** (Every Year)

In this class, Students learn many personal life skills including how to manage their finances and invest in their future. They will have the opportunity to learn how to balance their checkbooks, what investments they could be making, how to make a personal budget plan and more. Students will also learn about technology, complete a community service project, and begin adding work to their student portfolio. Block Course – ½ credit or can be complete by Moodle. – 45 minute class for two quarters. – 1/4 credit each. \*The Moodle option must be taken 3rd/4th Quarter

**Travel and Tourism (700-TV)** (Odd Years)

Students will have an opportunity to learn about travel and tourism and how it applies in our local community through a variety of projects and activities. In the class, students will look at the nature of the travel and tourism industry, travel and tourism careers and employment opportunities, examine the diverse elements of the industry, as well as the business aspects of the industry. Students will also have the opportunity to put together campaigns for businesses in the area. Block course: ½ credit

**Independent Business Education Courses (700-IBEC)** (Every Year)

Desktop Publishing 2 and Advanced Computers 2 can be taken with instructor approval, these will be an extension of what is learned in the first classes. Each class: ½ credit

## **English**

### **GENERAL**

**English Studies (100-ES)** (Every Year)

The basics of all aspects of English Language Arts will be the basis for these classes. This course will incorporate concepts from all the major categories under the Common Core State Standards in an effort to give freshman a basic understanding of all areas. Categories include reading/literature, writing, oral language, language, media and technology, research and inquiry. Required Texts: *Romeo & Juliet, To Kill a Mockingbird, The Hot Zone*. Students receive ½ credit of reading and ½ credit writing for this course.

**Sophomore English: (Semester) (100-SE)** (Every Year)

This course will pick up where English Studies left off, focusing more deeply into the areas of study in the English Language. The primary focus for student learning will be to read and analyze classic American Literature and develop the art of essay writing for a variety of purposes and audiences. Required Texts: *The Adventures of Huckleberry Finn, The Great Gatsby, The Wave*. Students receive ½ credit of reading and ½ credit writing for this course.

**Oral Communication (100-OC) *Open to grades 10, 11, 12*** (Every Year)

Public speaking is a primary fear for most people. In this course, students will be immersed in the experience of speaking in front of groups. Through that practice, students will better develop writing, speaking, and listening skills. The course will include several formal speeches as well as informal speaking exercises. Students will practice using visual aids, including software, such as PowerPoint, appropriately in a speech.. Block course: ½ credit

## READING

**British Literature\*** (Semester) (100-BL) **Enrollment Limit: 20**

*(Odd Years)*

**Pre-requisite: Junior and Senior Students Only.**

This is a survey course that examines British, Irish, Scottish, and Welsh authors and their works from the Anglo-Saxon (Old English) period through the 20<sup>th</sup> Century. We will examine epic tales, hero's journeys, Shakespeare, satire, and modern texts. Block course: ½ credit

**Contemporary Literature** (100-CL)

*(Odd Years)*

- May include mature topics.

Students will read literature published recently. Analysis will be devoted to the writer's craft in the context of the author's biography. Books that have made it on the bestseller list or are currently on the list will be the texts studied. Students may need to purchase their own book or check out copies from the public library in some cases. Block course: ½ credit

**World Literature** (Semester) (100-WDL) **Enrollment Limit: 20**

*(Even Years)*

**Pre-requisite: Junior and Senior Students Only**

Students will explore texts written by authors from a myriad of countries outside of Britain and the United States. A primary focus will be on analysis of culture within the context of the writing and will include study of Russian, Japanese, South American, and African literature to name a few. Genre is not a limiter in the course; students will read short stories, speeches, autobiographies, novels, and more. Block course: ½ credit

**Mythology, Science Fiction & Fantasy** (100-MSF) **Open to grades 10, 11, 12**

*(Even Years)*

—Some authors deal with mature subjects.

Students will study the gods/goddesses and stories of Greek, Roman, Egyptian, Norse, and Native American mythology. The course will then move to the science fiction genre where we'll examine a variety of novels, short stories, and films. This course will end with a focus on elements of the fantasy genre. Texts will range from classic authors such as HG Wells, Ray Bradbury, and J.R.R. Tolkien, to modern dystopian fiction novels. Block course: ½ credit

## WRITING

**Advanced Composition\*** (100-AC) **Strongly recommended before English 101**

*(Every Year)*

**Pre-requisite – Sophomore English with at least a grade of B or Instructor's consent.**

Advanced composition is meant for students interested in taking English 101 through ITV as well as those students who intend on going to college after high school. This course will focus research writing in a variety of formats, such as informative, compare and contrast, persuasive, cause and effect, and literary analysis. This will be a writing intensive class with numerous shorter research papers and one longer research paper during the quarter. Emphasis will be placed on avoiding plagiarism and use of both MLA and APA citation methods. Block course: 1/2 credit

**Creative Writing\*** (100-CW)

*(Every Year)*

**Pre-requisite: Junior and Senior Students Only**

The exciting art of expressive composition will be the focus for this course. Forms of writing will include poetry, satire, and will emphasize the short story format. Students in this class will experience the joy of creativity within writing and will produce a short story with lively characters, a descriptive setting, and an engaging and clear plot. Block course: ½ credit

**Journalism and Technical Writing for Publication** (100-JTW)

(Every Year)



Students will explore the world of writing for technical publications, focusing on journalism and publishing as a type of storytelling. The class will begin with studying the history, laws and ethics of journalism and move into types of writing for publication (features, editorials, press releases, reviews, interviews etc.). We will focus on the structure of text, analyzing ideas, and writing development. Students will learn to how to communicate effectively with the community by creating advertisements and community spotlights. Class will be responsible for creating content for the Birchwood News, the school yearbook, social media, and other ways Birchwood is present in our community. There will also be required, subject-related readings and a heavy writing workload. Course runs 45 minutes for two quarters: ½ credit

## Family & Consumer Education

### Parenting (700-P)

(Odd Years)

This course offers students the opportunity to explore the prenatal development of a child from conception through birth. Topics include parenting skills and readiness, qualities of effective parents, and approaches to parenting. Family planning, decision-making, and contraception are all part of a unit on parenthood as a choice. Pregnancy and prenatal development, labor and delivery, and birth defects are also studied. Students will care for infant simulators to get firsthand experience at parenting an infant. Students develop skills and knowledge that will be valuable to them as future parents as well as future workers in the areas of Early Childhood Education and Child Care. Course runs 45 minutes for two quarters: ½ credit

### Early Childhood Development (700-ECD)

(Even Years)

This course offers students the opportunity to explore the various stages of development from birth to adolescence, taking a careful look at how parents and caregivers of children can nurture, encourage and stimulate growth. Topics include the physical, emotional, social and cognitive development of children. Students will also explore the value of play and reading, TV pros and cons, safety, nutrition, brain development and child guidance. Infant simulators are also used as part of this class. Students develop knowledge and skills that will be valuable to them both as future parents and future workers in the areas of childcare and Early Childhood Education. Course runs 45 minutes for two quarters: ½ credit

### Apparel, Textile, and Design (700-ATD)

(Even

Years)

Apparel, Textile, and Design covers the following units: The elements and principles of design, fashion terms, cycles and trends in fashion, the history of textiles and apparel, consumer rights and responsibilities, clothing care, and basic sewing and needlecraft skills. Students will have opportunities to design and complete individual sewing/clothing and handcraft projects. ***Fees-Students will be responsible for purchasing materials for individual projects. Fees may be waived due to financial hardship.*** Course runs 45 minutes for two quarters: ½ credit

### Food Nutrition and Preparation (700-FN) *Formerly Foods A*

(Odd Years)

This introductory course covers information on basic nutritional needs, my plate, safety and sanitation guidelines, plus cooking terminology and food principles. Students will have the opportunity to apply food preparation skills and knowledge of nutrition and safety to more complex experiences. Units include the principals of poultry, meat and seafood preparation, the use of herbs and spices, and the preparation of soup and soup stock. Students will also learn about careers in the food service industry. Course runs 45 minutes for two quarters: ½ credit

## Guidance Department

**Aide/Tutor\* Pre-requisite - Must be a Junior/Senior in good standing.**

(Contract required – Lab aide 50300/Library aide 50400/Tutor 50600/Office aide 50200/Elem tutor 50000)

The student has five (5) options to choose from when working as an Aide/Tutor. These options are: Tutor (working one to one with student); Tutor/Teacher Aide (working with students as well as doing clerical activities); Teacher/Librarian assistant (Helping with clerical duties only); Office assistant (Doing such things as typing, filing, copy work, answering phone, etc.); and Janitorial assistant (Variety of janitorial (duties). A learning contract is to be written between student and person student is assigned. This contract is to be turned into the guidance counselor the first week of the quarter. **Teacher aides will receive no credit and can enroll as a teacher aide for a maximum of one semester throughout their high school career.**

## Health

### Healthy Living (900-HL)

*(Every Year)*

This course is designed for sophomores and juniors to teach the beneficial knowledge and skills that encourage students to think critically about how the decisions they make will affect their lives today and in the future. Topics included are: Nutrition, wellness, stress management, anatomy and physiology, diseases and disorders, conflict resolution and healthy relationships. Block course ½ credit

### Safety Education & Prevention (900-SE)

*(Every Year)*

Have you ever had someone you care about get severely hurt or choke to the point of passing out? This course will not only teach students about First Aid and CPR but will also allow them to become personally certified in both areas as well. There will also be a segment on athletic training and sports medicine where students will have the opportunity to learn about different injuries and care for the injuries appropriately. This class is open to freshman through seniors. Block course ½ total credit.

## Independent Project Based-Learning- Through BBHCS

### Independent PBL (800-IPBL)

*(Every Year)*

If you've ever wanted to delve deeper into a topic, fix a problem in the real world, improve something in the community or school, or create a system or product to effect real change, it may be time for you to explore the wonderful world of project based learning (PBL) at the Blue Hills Charter School! With guidance from an advisor, you will customize this course according to the subject(s) that you would like to earn credit in - then plan, research, and create something amazing (a product) to show your learning. This process will help you to develop skills in research, time management, accountability, creating a quality product, communication, and critical thinking. Block course: ½ credit.

### Introduction to Solar Photovoltaic Systems

Learn the fundamentals of solar photovoltaic (PV) systems and how to assess the solar energy potential of a site. The first part of this two part course covers the basics of how solar PV systems work, different types of PV systems, the solar window, and basics of site assessments. The second portion of the course goes in-depth on how to conduct a site assessment including load analysis, energy efficiency recommendations, shade analysis, array placement options, basic system sizing, and financial estimates.

Students may choose to conduct and submit two site assessments for grading and sit for the MREA Solar PV Site Assessment Professional Certificate exam. Courses are self paced on-line courses with some hands-on "lab" experiences. Block Course during Project Based Learning: ½ Credit.

## Mathematics

### Pre-Calculus\* (200-PC) – Open to 10, 11, and 12 grades

*(Every Years)*

**Pre-requisite – Algebra II with at least a grade of B or instructor's consent –**

A study of Pre-Calculus Mathematics, with emphasis on functions and their graphs, such as Trigonometric

Functions and Inverses, Limits and basic derivatives of polynomial functions. Block class – ½ credit per quarter – Total one credit.

**Algebra I (200-AI) – Open to 9 – 12 grades** (Every Year)

A study of our number system and its underlying properties, simplification and manipulation of variable expressions and mathematical sentences containing variable expressions. Mini-course – 1/4 credit per quarter. Total one credit.

**Algebra II\* (200-AII) – Open to 9, 10, 11, and 12 grades.** (Every Year)

**Pre-requisite is Geometry or Instructor’s Consent**

A continuation and expansion of topics from Algebra I, with greater emphasis on functions and graphs. Block course – 1/2 credit per quarter. Total one credit.

**Algebra IA (200-AIA)** (Every Year)

These courses (Algebra 1A and 1B) are taught at a slower pace with more review of basic pre-algebra topics than the regular Algebra I class. When the students complete both parts of this class, they have the equivalent of the regular Algebra I class. This year is a study of the number system, mathematical properties, solving linear equations and systems of linear equations, graphing linear functions and inequalities. Total 1 credit - mini course (45 minutes for 4 quarters).

**Algebra IB\* (200-AIB)** (Every Year)

**Pre-requisite for Algebra IB is Algebra IA**

This is the second part of Algebra 1A, focusing on simplifying polynomial expressions, graphing more complex functions such as parabolas, factoring and solving quadratic functions. Upon completion, they will be ready for Geometry or Algebra II. Total 1 credit - mini course (45 minutes for 4 quarters).

**Math Applications (200-MA)** (Every Year)

This is a course in which students will explore through projects, group work and research the following applications of mathematics: Mathematics in Nature, Balancing the National Budget, Designing a Home, The History of Mathematics, Math in Music, and Sports Applications. These topics will use a variety of skills from Statistics, Geometry and Algebra II, but don’t require any prerequisite knowledge beyond Algebra I. Mini course – 1/4 credit per quarter – Total ½ credit

**Geometry\* (200-GEO) – Open to 9, 10, 11, and 12 grades** (Every Year)

**Pre-requisite - Algebra I**

Study of plane and solid figures and their properties through the development of a mathematical system of postulates, definitions, and theorems. Block course – ½ per quarter - Total one credit.

**Geometry, Introduction To\* (200-IG)** (Every Year)

**Pre-requisite – Algebra I or Algebra IB**

This course is for those students wanting an introduction to Geometry but are not planning to take this course for the preparation for college. This course may not be taken for credit when the student also has taken Geometry 30130. Mini course – 1/4 credit per quarter – Total ½ credit

**AP Statistics\* (200-APS)** (Every Year)

**Pre-requisite – Algebra II with at least a grade of B or Instructors consent**

This course is an introduction to collecting, analyzing, and drawing conclusions from certain data sets. Students will explore patterns within data, using statistical inference to test various hypotheses. Block course – ½ per

quarter - Total one credit.

**Calculus (200-CAITV) Math (ITV Class)**

(Every Year)

**Prerequisite: B- or better, Trig/Pre-Calc (Graphing Calculator required-TI-83+ Recommended)**

A course designed for students interested in pursuing a career in science, computer programming, engineering, etc. Provides a thoroughly sound introduction into calculus and prepares for more formal study in calculus. The course covers materials in plane and solid analytic geometry, the differential and integral calculus and work with differential equations. The technology of computer and/or graphic calculators will be utilized. NCAA approved at origination site.

## **Music**

**Concert Band (600-HSCB)**

(Every Year)

Concert Band is made up of students in grades 8 through 12 who can read music and have experience playing wind or percussion instruments. The band plays a variety of different musical styles including classical, marches, rock & roll, and contemporary. Literatures of various difficulty levels are worked on, giving all students a feeling of accomplishment and challenge. The band performs one concert per quarter and individual band members are given the opportunity to perform at Solo & Ensemble Festival and the yearly Dinner Concert fundraiser. Attendance at several marching events and at 8-10 Pep Band performances will also be required. Mini course – 1/4 credit per quarter – Total 1 credit per year.

**Concert Choir (600-HSC)**

(Every Year)

The Concert Choir welcomes all students that enjoy music and have a desire to make music. This class builds teamwork and cooperation and is made up of students in grades 8 – 12. Students will learn the basics skills of singing, reading music, developing song repertoire, broadening listening skills and experiencing the interrelated nature of music with other cultures and content areas. The topics in this class will provide a strong basis for the continuation of their music skills as the high school age student continues on their path to becoming a life-long participant of music. Additional drumming, guitar and ukulele instruction will be given throughout the year. Four voice lessons a quarter are required per quarter. Three concerts, "Small Town, BIG TALENT", and ClinicFest are performed each year. Optional performances include All-Conference Honors Choir, Solo and Ensemble Festival. Mini-course – 1/4 credit per quarter – Total 1 credit per year.

**Jazz Band (600-JB)**

(Every Year)

Jazz has been said to be one of the only truly "American" styles of music. This class will focus on the performance of 'Jazz' styles, including swing, bebop, cool, Latin and fusion. The class is open to all band students in grades 8 – 12, other students admitted by audition only. Monday, Wednesday, Friday during 0 hour. 1 semester – 1/4 credit.

## **Online Learning Options**

Beginning with the class of 2019, .5 credits of online coursework will be required to graduate. Listed below are options for earning .5 credits through online learning.

### **Birchwood Online Learning Center**

High School classes provided by the Birchwood Online Learning Center are similar to high school classroom-based classes. There are lectures, required reading, assignments, quizzes, tests, and everything else you would associate with an educational course. Like classroom-based classes, online classes are led by a teacher and contain a maximum of 15 students who share a common goal. In many cases, the only difference between an online class and a classroom-based class is the way the curriculum is presented and delivered.

Courses through the Birchwood Online Learning Center are taught on a Moodle platform. Moodle is an Open Source Course Management System or a Virtual Learning Environment. It has become very popular among educators around the world as a tool for creating dynamic online websites for their students.

**Although there are many advantages to studying online, online classes can be more challenging for some students. Online learners have to control their own educational experience so therefore must be self-disciplined and self-motivated to do course work without the physical presence of a teacher. Students will be required to do work in a timely manner and actively participate in their own educational experience.**

**Pre-requisite: Student must present a letter of reference from a high school teacher to the online teacher before student will be permitted to register for the course. Internet and Technology Acceptable Use Policy does apply to this course. In the event that a student is on an inappropriate website during the scheduled course time, guidelines under the Internet and Technology Acceptable Use Policy will be enforced. Second offense is removal from the course with a failing grade.**

### **Online Course Options Through The Birchwood Online Learning Center**

#### **Music Theory\* (600-MT)**

(Every Year)

This class is designed for students who are able to read music and who have had experience in a high school music class. Students will first learn the basics of music theory: scales, scale degrees, intervals, time signatures, and chords. We will then move into: principles of voice leading, harmonic progressions, triadic inversions, cadences, and non-chord tones. Students will learn how to use the music software program Finale and will compose some of their own music to show what they have learned in class. Moodle Course - ½ credit.

#### **Economic Geography\* (400-EG)**

(Even Year)

Study of how economic activities affect such issues as economic growth, employment, investment patterns, mobility, and the prices paid for goods. Industrial economic activities are examined as students address issues such as why some areas are more suitable than others for economic activities, and how markets function in the real world. Transportation networks that connect areas and issues of global interdependence will be central to this study. Class runs 45 minutes each day for two quarters – ½ credit.

#### **Cultural Geography\* (400-CG)**

(Even Year)

Explores the influence of culture on perceptions, decisions, and interpersonal relations on both planetary and local scales of life. A broad range of cultural topics are considered, including the origins of culture, human development, political and social organization, religions and languages, and evolving human landscapes. Class runs 45 minutes each day for two quarters – ½ credit.

#### **Native American History\* (400-NAH)**

(Odd Year)

Students will study the different tribal regions of North America and how the environment of each shaped the life of each tribe. Students will also examine the history and culture of the Native American people from their origin to present. Class runs 45 minutes each day for two quarters – ½ credit.

#### **Wisconsin Geography\* (400-WG)**

(Odd Year)

An examination of the state of Wisconsin utilizing both physical and human considerations. A look at 20th and 21st century environmental issues that are related to physical characteristics such as geologic history, hydrologic, and climatic forces as well as how these physical factors have impacted the human development of the state will be analyzed. Examples of human issues include indigenous and immigrant settlement, economic, and political

patterns will be examined. Class runs 45 minutes each day for two quarters – ½ credit.

**Career Readiness - Portfolio 12 (700-CR) *Required to graduate*** *(Every Year)*

**Pre-requisite: Open to students in grades 10 – 12, Online option but must be taken in the first semester as either a block or 2 quarter 45-minute class.**

In this class students will learn many of the skills necessary to be successful citizens in today's society. Students will take a look at a variety of careers, learn about resumes, job applications, college applications, grants and more pertaining to the college or schooling they might be interested in. Students will also learn how to get a job, as well as many other valuable "life" resources. Students will choose two careers to research, learn about job outlooks, salaries, the ins and outs of the job as well as which schools offer the specific programs. This class will be very hands on as students will meet with various professionals as they come to the classroom to discuss their jobs. Opportunities to job shadow particular professions will be required for this class. Students will complete their student portfolio during this course. Block Class: ½ credit

\*\*This course meets the graduation requirement for Portfolio, however it does not meet the required ½ credit or health.

**Personal and Financial Matters - Portfolio 11 (700-PF) *Required for all Juniors*** *(Every Year)*

In this class, Students learn many personal life skills including how to manage their finances and invest in their future. They will have the opportunity to learn how to balance their checkbooks, what investments they could be making, how to make a personal budget plan and more. Students will also learn about technology, complete a community service project, and begin adding work to their student portfolio. This course will be offered in a unique format utilizing the Flipped Classroom format or it can also be taken online. Block Course – ½ credit or can be complete by Moodle. – 45 minute class for two quarters. – 1/4 credit each. \*The Online Moodle option must be taken 3rd/4th Quarter

### **Additional Online Learning Options**

FuelEd Option: Courses offered through K12 FuelEd Curriculum. All instruction will be delivered online from a Wisconsin licensed teacher outside of the Birchwood School District. **Please note:**

- **Students can take up to two FuelEd courses per school year.**
- **Students can only take FuelEd courses that are not the same or similar to courses offered at the Birchwood High School or Birchwood Online Learning Center. (Example: Birchwood offers PE, resulting in a FuelEd PE course cannot be taken.)**
- **Students will be required to complete a Virtual Education Contract that states students shall be responsible for all costs related to the course if the student receives a failing grade.**

For more information about the FuelEd Options see Mrs. Howard.

College Courses: 9th-12th grade students may sign up for ITV, campus-based, or online college courses through the Early College Credit Program, with UW System colleges. 11<sup>th</sup>-12<sup>th</sup> grade students may sign up for ITV, campus-based, or online college courses through the Start College Now program, with WITC. Students will need to meet the Early College Credit Program and Start College Now program requirements, as well as college entrance requirements to enroll. **Please note:**

- **Students will required to complete a Virtual Education Contract and/or Youth Options/Course Options Contract that states students shall be responsible for all costs related to the course if the student receives a failing grade.**

For more information about the Early College Credit Program or the Start College Now program, see Mrs. Howard.

## Physical Education

### **Dual and Individual Sports (900-DIS) Maximum of 12 students in class. (Every Year)**

This class includes selections from lifetime sports; such as fitness activities/weight lifting, bicycling, basketball, table tennis, archery, horseshoes, golf, bowling, bean bag toss, frisbee golf and racquet sports (badminton, pickleball, tennis, eclipseball). We also have a unit on the basics of gymnastics. Gymnastics includes: basic floor exercise plus selected training on, vault and balance beam. Written work is part of this class which includes creating gymnastics routines, using score sheets, taking written tests, and writing a research paper on a dual / individual sport. Block course – 1/2 credit.

### **Fit for Life (900-FFL) (Every Year)**

Join the Fit for Life Class to learn about fun and trendy ways to get healthy! This is an **EXTREMELY** active class; students need to be prepared to sweat daily!!! This class has advanced activities that include but are not limited to Biking, Insanity Workout Program, Training for a 5K, Pilates, Cardio/Strength Training, Kettlebell Workout, Zumba, Jump Program/Plyometric Training and much more. Students will create fitness related goals to obtain throughout the semester, while tracking progress daily through a fitness journal. Mini-course – ¼ credit per quarter

### **General Physical Education I (GPEI) (Every Year)**

These courses include a wide variety of both individual and team activities. General physical education units may include flag football, kickball, floor hockey, softball, basketball, volleyball, soccer, team handball, archery, table tennis, racquet games (badminton, pickleball, tennis, eclipseball), matball, nitroball, fitness and exercise. Time will be spent on learning the basic fundamentals of a variety of activities. Written work is part of this class. Mini-course – 1/4 credit per quarter.

### **Team Sports (900-TS) (Every Year)**

This class includes, team handball, flag football, basketball, volleyball, softball, kickball, soccer, ultimate football/frisbee, tennis, matball, and racquet sports (badminton, pickleball, tennis, eclipseball). Emphasis is placed on both individual skill and the player's concept of team play. Written work is part of this class which includes written tests and writing a research paper on a team sport. Block course – 1/2 credit.

### **Track & Field (900-TF) (Every Year)**

Form running for sprints, distance road runs, PACER tests, and relays will be practiced. The field events of shot put, discus, and long jump will also be worked on. Students will implement pace work, monitor target heart rates, use pedometers, participate in fitness circuits, etc. to better understand their strengths and weaknesses. Cross training will take place in regards to conditioning; these activities may include biking (road and trail riding), cardiovascular work in the weight room (treadmill, elliptical, bike, etc.) as well as speed and agility work (ladders, dot drill, bosu balls, steppers, etc.). Archery techniques will be included with this class also. Written work is part of this class which will include establishing and monitoring fitness goals, determining individual target heart rate, taking written exams, using score sheets, and writing a research paper on a track or field event. Block course – 1/2 credit.

### **Weight Training (900-WT) (Every Year)**

**- Consent of instructor regarding safety concerns. Maximum of 18 students in class.**

Weight training is built around the core lifts of bench press, squats, power clean, and dead lift. This course also includes additional auxiliary work such as curls, military press, leg press, rowing machine, treadmill, stationary bike, dips, etc. One day per week is spent in cardiovascular activities and circuit training. Circuits include shuttle run, 20 yd dash, vertical jump, pegboard/pull-ups, dot drill, jump rope, sit and reach, and push-ups. Individual bfs (bigger/stronger/faster) schedules are set up for each student with weekly challenges as well. Written work is part

of this class which includes establishing quarterly goals, maintaining individual lifting programs, and weekly reflections. Mini-course – 1/4 credit per quarter.

**Winter Sports (900-WS) Maximum of 14 students in class. (Every Year)**

The units for winter sports may include broomball, boot hockey, ice skating, frisbee golf, football, soccer, and softball played in the snow. We also include instruction in cross-country skiing and snowshoeing. Students are also offered the opportunity to go ice fishing if the weather allows. Games such as capture the flag, ultimate football and ultimate frisbee will also be played. Indoor winter sports such as floor hockey, scooter hockey, gymnastics, basketball, archery, and bowling are a part of this course as well. Proper winter clothing is essential for this class. This includes boots, gloves or mittens and hats as well as indoor clothing as well. Written work is part of this class which includes written tests and writing a research paper on a winter sport. Block course – 1/2 credit.

**Physical education is a required component of graduation for all high school students. Students may choose from a wide variety of classes to acquire the minimum 1.5 credits in physical education to meet graduation requirements. Additional credits up to 2 credits may be earned as elective credits throughout a student's high school career. The emphasis of the curriculum is fitness based through a diverse offering of activities.**

**All 90 minute Phy. Ed classes may be taken only once for credit toward graduation as part of the Phy Ed requirement. Weights, General PE and Fitness for Life classes may be taken twice toward the Phy Ed requirement. Any additional classes will be credited as an elective.**

**The goal is to have students engaged in physical education classes throughout their high school careers. Hopefully this will produce healthy lifestyles which will promote physical activity in our students' lives both now and into the future.**

## Science

### Biological Sciences

**Anatomy and Physiology\* (300-AP) - Pre-requisite: Biology I (Even Years)**

This course takes a look at the structure and function of the human body. Each body system will be studied in detail. It is an excellent course to take if you are pursuing a career in the health field. Students will earn 3 Technical College Credits in Medical Terminology from Wisconsin Indianhead Technical College through transcribed credit. Block class – 1/2 credit per quarter – Total 1 credit

**Biology I (300-BI) (Every Year)**

Biology I will be an introduction to the basic concepts of living things. We will also cover the basics of ecology, cell biology, and genetics. This course is a prerequisite for Biology II and Anatomy and Physiology. Block course – 1/2 credit per quarter – Total 1 credit. Maximum number of students is 20. This course is recommended for sophomore who are college bound.

**Biology II\* (300-BII) - Pre-requisite: Biology I (Every Year)**

Biology II continues the study of life with emphasis on the plant and animal kingdoms. Block class – 1/2 credit per quarter – Total 1 credit. Maximum number of students is 20. This course is recommended for sophomores and juniors who are college bound.

### Physical Sciences



**Physical Science (300-PS) Required for all Freshmen** *(Every Year)*

A very general introduction to Physics and Chemistry. Physical Science is a pre-requisite for Chemistry and Physics. 45 minute class for the full year. – 1/4 credit each.

**Earth Science (300-ES)** *(Odd Years)*

This class will deal with the study of the Earth, its history, its changes, and its place in the universe. Concepts to be covered will address issues in geology, meteorology, oceanography, and astronomy. Block class – 1/2 credit per quarter – Total 1/2 credit. Maximum number of students is 20. This course is recommended for sophomores and juniors who need to fulfill science requirements.

**Chemistry I\* (300-C) – Prerequisite is Physical Science** *(Every Year)*

Find out why things blow-up, turn colors, or do nothing at all. Chemistry will study matter; in its entirety, and the changes that it undergoes. This course is heavily lab and math oriented. Two consecutive Block classes 1/2 credit each – Total 1 credit. Maximum number of students is 20. This is a junior/senior level course for students who are college bound.

**Advanced Chemistry\* (300-ADC) - Prerequisite- Chemistry 1** *(Odd Years)*

This course will continue to master your skill in Chemistry. We will study the advance topics of Reaction Rates, Chemical Equilibrium, Redox Reactions, Electrochemistry, Nuclear Chemistry, and Organic Chemistry. Block class – 1/2 credit per quarter – Total 1/2 credit. Maximum number of students is 20. This is a senior level course for the college bound student.

**Physics I\* (300-PHY) - Prerequisite - Physical Science & Algebra I** *(Odd Years)*

This course will introduce you to the basic concepts in Physics. The main focus will be the field of mechanics. There is a heavy math emphasis in this class. Course runs 45 minutes a day for all four quarters. You must enroll in all four quarters. – Total 1 credit. Maximum number of students is 20. This is a junior/senior level course for the college bound student.

**Forensic Science\* (300-FS) - Prerequisite Junior or Senior Status** *(Even Years)*

Students will learn numerous scientific strategies and skills as they step into the role of a crime scene investigator. Emphasis is placed on the techniques and processes carried out by a forensic scientist. Course runs 45 minutes a day for all four quarters. Must be enrolled in all four quarters – Total 1 credit Maximum number of students is 20. This is a junior/senior level course for those students looking to fulfill science requirements.

## Social Studies

**Freshman Social Studies (400-FS)** *(Every Year)*

Within this curriculum, we will study the information, skills, and concepts from the disciplines of history, geography, political science, economics, anthropology, psychology, law, archaeology, and sociology with attention also given to connections among the peoples and nations of the world, the effect of science and technology on society (and vice versa), and the ways to practice good citizenship. Social studies helps young people develop the knowledge and skills necessary to make informed and reasoned decisions as citizens of a culturally diverse, democratic society in an interdependent world. 45 minute class for a full year – 1 credit.

**Early American History (400-EAH) Limited to 22 students** *(Every Year)*

In this class students will look at the Industrial Revolution in England, the Religious persecution and how it affected life in England leading to the colonization of the Americas leading up to the war of Independence. This course is a pre-requisite for Civics. Block Class – 1/2 credit.

**Post Revolution to Western Frontier (400-PRWF) Limited to 22 students** (Every Year)

This class will follow the course of events dating from the War of Independence in 1776 through the Civil War and reconstruction up to the great cattle drives. Block course – 1/2 credit.

**Industrial Age to the Great Depression (400-IAGD) Limited to 22 students** (Every Year)

This class will follow the course of events from the rise of industry after the Civil War, railroads, WWI, the 20's and end up with the Great Depression. Block course – 1/2 credit.

**WWII to Present (400-WWII) Limited to 22 students** (Every Year)

This class will follow the course of events leading up to WWII, World War II itself, the Cold War, Korean conflict, Vietnam, and events of today. Block course – 1/2 credit.

**Civics (400-C) Pre-requisite: Early American History Limited to 22 students** (Every Year)

In this class we dig into the different types of governments, constitutions, and how people are affected by the type of government they live under. Much attention will be paid to the Bill of Rights, how it came to be and how the interpretation of it has changed over the years. Block class – 1/2 credit. Not recommended for Freshman and Sophomores.

**Holocaust (400-H) Limited to 22 students** (Every Year)

This class will help students grasp the historical contexts, chronological events, and chilling facts surrounding: the origins of anti-Semitism, the development of Hitler's philosophy, the rise of the Nazi party and the atrocities against Jews and other groups. We will be watching the movie *Schindler's List* (R) and *Defiance* (R) along with several survivor accounts and required reading will include *Night* by Elie Wiesel. This class is taught much like a college class with a rigorous workload and high expectations. Block course – 1/2 credit.

**Environmental Education (400-EE) Limited to 14 students** (Every Year)

Hopefully this course will increase the student's awareness of the environment and what he/she does can affect it. We will also be using the School Forest as a part of the classroom. Limited to first 14 students. Block course – 1/2 credit.

**Ancient World History (400-AWH) Limited to 22 students** (Odd Years)

The class covers the earliest civilizations such as Ancient Egyptians, Romans and Greeks. Limited to first 22 students. Mini course – ¼ credit per semester – Total ½ credit

**Modern World History (400-MWH) Limited to 22 students** (Even Years)

In this course we will study world history primarily from the 18<sup>th</sup> century to the present. We will look at important people, events, and institutions in different parts of the world, and study how they are related to each other. We will also look at the philosophy of these cultures in order to understand them better. Another important goal of this course is to understand how history relates to our lives today, and how our present is shaped by our past.

Mini course – ¼ credit per semester – Total ½ credit

**Roots (400-R) Limited to 22 students** (Summer)

This class deals solely with the institutions of slavery, beginning in Africa and carrying through the Civil War. We will follow the ancestors of Alex Haley in this class and also look at slave uprisings and Black actions immediately following the Civil War in the American West. Summer School – 1/4 credit.

**World Events (20800)**(Every Year)

Through the use of the internet, students will study major current issues happening throughout the world. Study will focus on how those events affect them and where in the world they are happening. Block course ½ credit.

**Economic Geography\* (400-EG) (Online)**(Even Year)

Study of how economic activities affect such issues as economic growth, employment, investment patterns, mobility, and the prices paid for goods. Industrial economic activities are examined as students address issues such as why some areas are more suitable than others for economic activities, and how markets function in the real world. Transportation networks that connect areas and issues of global interdependence will be central to this study. Class runs 45 minutes each day for two quarters – ½ credit.

**Cultural Geography\* (400-CG) (Online)**(Even Year)

Explores the influence of culture on perceptions, decisions, and interpersonal relations on both planetary and local scales of life. A broad range of cultural topics are considered, including the origins of culture, human development, political and social organization, religions and languages, and evolving human landscapes. Class runs 45 minutes each day for two quarters – ½ credit.

**Native American History\* (400-NAH) (Online)**(Odd Year)

Students will study the different tribal regions of North America and how the environment of each shaped the life of each tribe. Students will also examine the history and culture of the Native American people from their origin to present. Class runs 45 minutes each day for two quarters – ½ credit.

**Wisconsin Geography\* (400-WG) (Online)**(Odd Year)

An examination of the state of Wisconsin utilizing both physical and human considerations. A look at 20th and 21st century environmental issues that are related to physical characteristics such as geologic history, hydrologic, and climatic forces as well as how these physical factors have impacted the human development of the state will be analyzed. Examples of human issues include indigenous and immigrant settlement, economic, and political patterns will be examined. Class runs 45 minutes each day for two quarters – ½ credit.

**Spanish****Spanish I (600-SI)**(Every Year)

In Spanish I, students begin to develop speaking, listening, reading, and writing skills in Spanish. Students learn Spanish grammar and build a vocabulary base surrounding familiar topics such as basic greetings, clothing, likes & dislikes, physical descriptions, families, sports, clothing, food. Geographical and cultural aspects of the Spanish-speaking world are emphasized. Block course – 1/2 credit per quarter. One semester, total 1 credit. / Mini-course - 1/4 credit per quarter. Meets all year, total 1 credit.

**Spanish II\* (600-SII)**(Every Year)**Pre-requisite Spanish I or equivalent**

In Spanish II, students continue to develop speaking, listening, reading, and writing skills in Spanish. Students expand their grammar and vocabulary around topics such as shopping & bargaining, restaurant dining, cooking, daily routine, professions, art, entertainment, and transportation. Instruction is given almost exclusively in Spanish. Students are expected to communicate primarily in Spanish. Geographical and cultural traditions of the Spanish-speaking world continue to be a focus of study. Block course – 1/2 credit per quarter. One semester, total 1 credit. / Mini-course - 1/4 credit per quarter. Meets all year, total 1 credit.

**\* Students who are currently taking Spanish I are encouraged to take Spanish II the next year, as opposed to skipping a year or two. Continuity is extremely important when learning a foreign language. Students must be ready to begin Spanish II with the level I vocabulary and grammar in recent memory.**

**Spanish III\* (600-SIII)***(Every Year)***Pre-requisite Spanish II or equivalent**

In Spanish III, students continue to develop speaking, reading, listening, and writing skills in Spanish. Topics of study include history, art, literature, politics, demographics, and employment. Students will focus on higher levels of grammar and vocabulary. Instruction is exclusively in Spanish and students are expected to communicate entirely in Spanish. Geographical and cultural traditions of the Spanish-speaking world continue to be a focus of study. Block course – 1/2 credit per quarter. One semester, total 1 credit.

**Spanish IV\* (600-SIV)***(Every Year)***Pre-requisite Spanish III**

In Spanish IV students will review and reinforce all previously learned grammar topics and cover remaining verb tenses and conjugations. Students will focus on the finer points of grammar and vocabulary as they expand their reading and writing skills in Spanish. Topics of study include the environment, fashion, and media. Students will enjoy reading and discussing excerpts from Don Quixote, as well as short readings by Mario Benedetti, Isabel Allende and Octavio Paz.

**Technology Education****3D Printing Design and Modeling (800-3DP)***(Every Year)*

The 3D Printing Revolution is about to transform our lives. While traditional laser and inkjet printers only make marks on paper, 3D printers build up solid objects in a great many of thin layers. Already pioneers are 3D printing production tools, prototypes, jewelry, sunglasses, works of art, toys and vehicle parts. This is just the beginning as digital manufacturing destined to change how we create, transport and store a great many things. Within a decade, some products may be downloaded from the internet for printout in store or even at home. Already DIY enthusiasts are building their own 3D printers, while consumer models for the rest of us are just starting to arrive. Meanwhile doctors are learning how to 3D print kidneys and other replacement human organs. Students will learn to fabricate parts using 3D printing technology. This will be a useful skill in the immediate future. Mini course – ¼ credit per semester – Total ½ credit

**STEM-Guitar Build (800-GB)***(Every Year)*

Students, do you like electric guitars? Do you love to build things and learn how things work? In this course students will construct a fully functional electric guitar from start to finish. We will spend time learning about the science and math behind the electric guitar. Students will customize the body and headstock. We will learn about fretting, electronic soldering and installation, neck design, and intonation. Each student will have a nice guitar to practice and play on. 2<sup>nd</sup> year students taking the guitar class will be completing an electric guitar for sale. You do not need to know how to play a guitar to take this class. Block course- ½ Credit (2 Terms Total)

**Traditional Shop (800-TS)***(Even Year)*

This is a course designed to provide student a hand on experience in the area of construction, woodworking, plumbing and residential wiring. We will spend two weeks in each area. Student s will get the opportunity to learn and apply skills in these important areas. In the near future, people with these skills will be able to earn a good living as more people move away from learning these skills. Block course – 1/2 credit.

**Introduction to Electricity and Electronics (800-IE)***(Every Year)*

This course is a one- quarter introduction to electricity and electronics. The theories of voltage, current and resistance are explored through learning by discovery. Several student projects will be explored using breadboarding for prototyping circuits. Students will also learn the basics of soldering for permanent circuit

designs—Students will learn about and use components ranging from basic resistors to complex integrated circuits. Proper safety practices and precautions will be followed.  
Block Credit – ½ credit.

**How to Make (almost) Anything (800-HMA)**

(Every Year)

This course is an introduction to “personal digital fabrication” using the Birchwood School Fab Lab. It is designed for innovators, inventors, entrepreneurs, artists, and individuals allowing people to move from ideas to fabrication using modern digital equipment. Students will use laser cutters, 3-D printers, vinyl cutters, CNC routers, desktop milling machines and other digital and analog tools in order to fabricate and test their designs projects. This course is designed to allow students to explore their interests in a variety of fields including graphic design, art, business, computer assisted design (CAD), physical and natural science, mathematics, engineering and others. Mini course – ¼ credit per semester – Total ½ credit.

**Introduction to Robotics (800-IR)**

(Odd Year)

This is a beginning course in robotics. We will be utilizing Lego Mindstorm Kids, Robolab Software and various Lego Robotics materials. The objective of this course is to introduce students to basic programming as well as problem solving strategies. This course will involve students in the development building and programming of LEGO Mindstrom Robot. Students will work hands-on in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, timing, program loops, logic gates, decision-making, timing sequences, propulsion systems and binary number systems. Student designed robots will be programmed to compete in various course as developed by First Lego League.

**Manufacturing Processes (800-M)**

(Every Year)

Several manufacturing techniques and processes will be studied and performed during the first half of the quarter with students using this information in developing a small production line of a product. Students have the potential of selling the product and dividing the profits among themselves. Block course – ½ credit.

**Fundamentals of Engineering (800-FOE)**

(Every Year)

Students will study engineering concepts and utilize various 3-dimensional solid modeling software to communicate design ideas. The first quarter of the class will be devoted to learning 3-dimensional design. Reverse engineering techniques will fill the mid portion of the quarter with new design development finishing the quarter. Some fabricating may be necessary to prove design ideas. Block class – ½ credits.

**Small Engines (800-SER)**

(Every Year)

In this course, students will disassemble a 5 1/2 horsepower Briggs & Stratton engine. We will discuss the theory of 2 and 4 cycle engines, carburetors, ignition, electrical systems, and reassemble the 5 1/2 horsepower Briggs engine. With any remaining time in the quarter students may work on personal small engines with instructor approval. Block class – 1/2 credit.

**Welding and Metals Fabrication (800-WM)**

(Every Year)

Students will learn the basics of welding ferrous and non-ferrous metals through the use of MIG (Metal Inert Gas), ARC, TIG (Tungston Inert Gas) and oxy-acetylene welding equipment. First year students will go through a series of labs and test welds. Second year students will go into metal fabricating where welding skills will be used in developing a project. Second year students need to provide an approved project and materials for that project. Block class – 1/2 credit.

**ITV Classes**

**Calculus (200-CAITV) Math**

**Prerequisite: B- or better, Trig/Pre-Calc (Graphing Calculator required-TI-83+ Recommended)**

A course designed for students interested in pursuing a career in science, computer programming, engineering, etc. Provides a thoroughly sound introduction into calculus and prepares for more formal study in calculus. The course covers materials in plane and solid analytic geometry, the differential and integral calculus and work with differential equations. The technology of computer and/or graphic calculators will be utilized. NCAA approved at origination site.

*1 HS Instructor: Matt Humpal*

*Sponsor: Unity High School*

*Time: 9:55-10:45*

**English 101 (100-UWBC) English**

**Prerequisite: A sufficiently high placement test score, completion of Advanced Composition**

A composition course focusing on academic writing, the writing process, and critical reading. Emphasis will be on essays that incorporate readings. Students will need access to internet, email and the University's course management system, D2L.

*3 UN Sem 1*

*Instructor*

*Sponsor: UW Barron County*

*Time: T,TH 7:45 – 9:00 AM (THIS IS PRIOR TO THE START OF OUR SCHOOL DAY)*

**English 102 (100-UWBC2) English**

**Prerequisite: A grade of C or better in English 101 or exemption through sufficiently high placement test score.**

A composition course focusing on researched academic writing that presents information, ideas, and arguments. Emphasis will be on writing process, critical thinking, and critical reading. Students will need access to internet, email and the University's course management system, D2L.

*3 UN Sem 2*

*Instructor*

*Sponsor: UW Barron County*

*Time: T,TH 7:45-9:00 AM (THIS IS PRIOR TO THE START OF OUR SCHOOL DAY)*

**Holocaust II (400-HII) Social Studies**

This class will help students grasp the historical contexts, chronological events, and chilling facts surrounding: the origins of anti-Semitism, the development of Hitler's philosophy, the rise of the Nazi party and the atrocities against Jews and other groups. We will be watching the movie Schindler's List (R) and Defiance (R) along with several survivor accounts and required reading will include Night by Elie Wiesel. This class is taught much like a college course with a rigorous workload and high expectations. NCAA approved at origination site. Not recommended for Freshman or Sophomores.

*.5 HS – Instructor: Eric Rademaker*

*Sponsor: Birchwood High School*

*Time: 2:40 - 3:18PM*

**Psychology 101 (400-IPSY) Social Studies**

**Prerequisite: College Admissions and 3.0 GPA**

Introduction to the scientific study of psychology covering major areas of study within the discipline, including biological bases of behavior, learning and conditioning, memory and cognition, motivation and emotion, social and cultural influences on behavior and attitudes, personality, health psychology, and mental illness.

3 UN Sem1

Sponsor: UW Superior

Time: M,W,F 8:00-8:53 **(THIS IS PRIOR TO THE START OF OUR SCHOOL DAY)**

### **Criminal Justice Introduction**

Students will explore the evolution of criminal justice systems, including courts, corrections, and law enforcement. Understand career pathways within the criminal justice system, including roles, functions, and professionalism.

3 UN Sem. 1

Sponsor: WITC

Time: T, W, Th 9:05-9:55

### **Marketing Principles**

MARKETING PRINCIPLES ...marketing management, market segmentation, market research, consumer behavior, product decisions and management of distribution, pricing, promotional decisions for strategy planning.

3 UN Sem. 1

Sponsor: NWTC

Time: W, Th, F 12:50-1:35

### **Sign Language I**

Participants will learn the manual alphabet, signed numbers, sign vocabulary, and develop receptive and expressive skills in American Sign Language (ASL). History and issues pertinent to the Deaf culture will be researched and discussed. Upon completion of this course, students will be able to communicate effectively in basic signed conversations and be familiar with the values of the Deaf Community. Student materials, resources and homework will require access to the CESA Moodle server and will also require each student to have an email account that can be accessed at school. NCAA approved at origination site. \*\*One Field trip each year.

HS-1 credit, Full year

Sponsor: Barron High School

Time: 1:45-2:35

### **Advanced Composition\* (100-AC) Strongly recommended before English 101**

**Pre-requisite – Sophomore English with at least a grade of B or Instructor's consent.**

Advanced composition is meant for students interested in taking English 101 through ITV as well as those students who intend on going to college after high school. This course will focus research writing in a variety of formats, such as informative, compare and contrast, persuasive, cause and effect, and literary analysis on crafting an extensive research paper, emphasizing the research process. This will be a writing intensive class with numerous shorter research papers and one longer research paper during the quarter. Emphasis will be placed on avoiding plagiarism and use of both MLA and APA citation methods. Students must obtain a B in this course and achieve satisfactory test scores to be eligible for English 101.

1st Sem-Block course: 1/2 credit

Instructor: Pam Buth

Sponsor: Birchwood High School

Time: 8:15-9:46

### **Creative Writing\* (100-CW)**

**Pre-requisite: Junior and Senior Students Only**

The exciting art of expressive composition will be the focus for this course. Forms of writing will include poetry, satire, and will emphasize the short story format. Students in this class will experience the joy of creativity within

writing and will produce a short story with lively characters, a descriptive setting, and an engaging and clear plot.

*1st Sem-Block course: ½ credit*

*Instructor: Pam Buth*

*Sponsor: Birchwood High School*

*Time: 8:15-9:46*

### **Student Success**

This course is designed to facilitate greater learner success affecting the academic, professional, and personal lives of students

*1 UN J-Term*

*Sponsor: WITC*

*Time: M-Th, 8:30-9:20*

### **Introduction to Environmental Studies**

**Prerequisite: Must be a junior or senior, 3.0 GPA, and in the top 40% of class.**

This course presents an overview of the interrelationships between humans and the environment. The material presented in the first one-third of the course focuses on important ecological concepts. The remainder of the course deals with human influence on the environment. The ecological concepts are used throughout to identify, understand, and provide a basis for proposing possible solutions to contemporary environmental problems. Overall, this course will provide the student with a better understanding of how humans can more positively affect the environment in which they live.

*Spring Semester, 3 Units*

*Sponsor: UW-River Falls*

*Time: M,W,F 8:00-8:50 **(THIS IS PRIOR TO THE START OF OUR SCHOOL DAY)***

### **Astronomy**

**Prerequisite: Must be a junior or senior, 3.0 GPA, and in the top 40% of class.**

Designed to apply toward the general education science requirement, this course examines the fundamental ideas from the dawn of time to the space age about the Earth, Moon, planets and constellations. The origin and evolution of the solar system, stars, black holes, quasars, galaxies and the universe are covered. The possibility of space travel and extraterrestrial life is explored. Students will need access to internet, email and the University's course management system D2L.

*Spring Semester, 3 Units*

*Sponsor: UW-River Falls*

*Time: M,W,F 9:00-9:50*

### **Intro to Sociology**

**Prerequisite: Cumulative GPA of 2.6 or greater OR satisfactory reading and writing assessment scores OR 10-831-107, College Reading and Writing 1 with "B" or better OR Corequisite: 10-831-102, English Comp Prep**

The nature and variety of groups; inequality, race and ethnicity; family, population, social integration, and change; collective behavior; politics, economics, religion, education, and the effects of technology.

*3 UN Spring Semester*

*Sponsor: NWTC*

*Time: M,W,F 12:50-1:35*