**Career Center Course Guide 23/24 School Year**

### Key
- **F**=Fall Semester
- **S**=Spring Semester
- **FY**=Full Year Course
- **(9/10/11/12)**=Grade
- course is available
- * =Dual Credit Course

### Academic classes

**Math**
- Algebra 1 FY
- Geometry FY
- Technical Geometry/Geo. in Construction-2Hr Block FY
- Honors Geometry FY
- Algebra 2 FY
- Pre-Calculus FY

*College Technical Math **F/S** (M111)-Geared towards an associates degree or certification, not bachelor's degrees

*College Extended Technical Math **F/S** (M114)-Geared towards an associates degree or certification, not bachelor's degrees

*College Algebra **F/S** (M121)-Geared towards bachelor's degrees

*College Introduction to Statistics **F/S** (M216)-Geared towards bachelor's degrees

**English**
- English 1 FY
- Honors English 1 FY
- English 2 FY
- Honors English 2 FY
- English 3 FY
- AP English Language FY
- English 4 FY

*English 4/Tech Writing **FY** (W121-College Technical Writing)-Geared towards an associates degree or certification, not bachelor's degrees

*College Writing/English 4 **FY** (W101)-Geared towards bachelor's degrees

*College Intro to Public Speaking **F/S** (COMX 111)-Geared towards all college degrees-Elective

**High School credit-does not count towards High School English requirements**

**Social Studies**
- World History FY
- U.S. History FY
- Psychology **F/S**
- U.S. Government **F/S**

*College American Government **F/S** (PSCI 210)-Geared towards all college degrees

*College American History 1 **F** (HSTA 101)-Geared towards all college degrees

*College American History 2 **S** (HSTA 102)-Geared towards all college degrees
Science
Biology FY
Honors Biology FY
Physics 1 FY

CTE Courses

Agriculture
Introduction to Agriculture, Food, and Natural Resources FY (9/10/11/12)
Principles of Plant Science FY (11/12)-Sophomores permitted with Intro to Ag prerequisite
Principles of Animal Science FY (11/12)-Sophomores permitted with Intro to Ag prerequisite
Urban Agriculture F/S or FY (11/12)-2Hr Block Schedule

Automotive
Automotive Fundamentals F/S (10/11/12)
Automotive Engines 1 F/S (10/11/12)
Automotive Powertrain F/S (11/12)
Automotive Electrical F/S (11/12)
Automotive Chassis F/S (11/12)-2Hr Block Schedule (Successful completion of Automotive Engines 1 or Automotive Fundamentals is required for enrollment)
Automotive Engines 2 F/S (12) - 2Hr Block Schedule (Successful completion of Automotive Engines 1 is required for enrollment)

*College Automotive Brakes with Lab (AST 114/115) F/S (11/12)-Dual credit available through Automotive Chassis Geared towards all students pursuing a college degree in the field.
*College Automotive Electrical Lecture only (TRID 181) F/S (11/12)-Dual credit for Automotive Electrical. Geared towards all students pursuing a college degree in the field.

Coding/Web Design (CTE)
Web Page 1 F/S (11/12)-Sophomores permitted with Visual Media Prerequisite
Web Page 2 F/S (11/12)
*College Introduction to Web Design and Programming (CSCI 181) F/S (10/11/12)-Dual Credit option for Web Page 1. Geared towards all students pursuing a college degree in the field.

Culinary
*Cafe Protege-2 Hr Block Schedule FY (11/12)
Early Childhood Education
First Year F/S or FY

Fall
Early Childhood Physical Development (11/12) F-2Hr Block Schedule
Early Childhood Intellectual Development (11/12) F-2Hr Block Schedule
Early Childhood Fundamentals (11/12) F-Additional course for 3 hour block

Spring
Early Childhood Social Development (11/12) S-2Hr Block Schedule
Early Childhood Emotional Development (11/12) S-2Hr Block Schedule
Child and Careers (11/12) S-Additional course for 3 hour block

*College EDU Human Growth and Development (EDU 220/220L) FY-Dual Credit course for Early Childhood Physical Development and Social Development-Must be enrolled in both semesters consecutively. Geared towards all students pursuing a college degree in the field.

Engineering- Project Lead the Way

PLTW Three-Year plan
Introduction to Engineering Design FY (9/10/11/12)* Geometry is a require pre/corequisite
Principles of Engineering FY (10/11/12)
Engineering Capstone FY (12)

Additional Engineering classes
Digital Electronics Engineering FY (10/11/12)
Aerospace Design FY (10/11/12)

Home Build Courses

Construction (3 hour blocks-am or pm)
First Year F/S or FY (11/12)

Fall
Construction Fundamentals 1
Carpentry 1
Construction Technique 1

Spring
Construction Fundamentals 2
Carpentry 2
Construction Technique 2

Second Year F/S or FY (12)

Fall
Building Trades 1
House Building 1
Construction Technique 3

Spring
Building Trades 2
House Building 2
Construction Technique 4
**Electrical/Electronics**

**First Year FY**
Electronics 1/Electric 1 F (11/12)-2Hr Block Schedule  
Electronics 2/Electric 2 S (11/12)-2Hr Block Schedule

**Second Year FY**
Electrical Technician 1/Electronic Communication 1 F (12)-2Hr Block Schedule  
Electrical Technician 2/Electronic Communication 2 S (12)-2Hr Block Schedule

**Home Improvement**

F/S or FY
Home Design/Interior Design F (11/12)-2Hr Block Schedule  
Home Improvement/Design Improvement S (11/12)-2Hr Block Schedule  
*College Introduction to Interior Design FY (11/12) -Full year dual credit for Interior Design courses. Must enroll in both semesters consecutively. Geared towards all students pursuing a college degree in the field.

**Alternative Shed Construction** (3 hour blocks-am or pm, IEP required)

**First Year F/S or FY (11/12)**
- **Fall**  
  +Construction Fundamentals 1  
  +Carpentry 1  
  +Construction Techniques 1  
- **Spring**  
  +Construction Fundamentals 2  
  +Carpentry 2  
  +Construction Techniques 2

**Second Year F/S or FY (12)**
- **Fall**  
  +Building Trades 1  
  +House Building 1  
  +Construction Techniques 3  
- **Spring**  
  +Building Trades 2  
  +House Building 2  
  +Construction Techniques 4

**JMG**
Jobs for Montana Graduates F/S or FY (11/12)-Meets new personal finance graduation requirement

**Medical Courses-Project Lead the Way**

**PLTW First Year**
Principles of Biomedical Sciences FY (9/10/11/12)

**PLTW Second Year**
Human Body Systems FY (10/11/12)

**PLTW Third Year**
Medical Interventions FY (11/12)

**Additional Medical Courses**
Introduction to the Operating Room F/S (11/12)
Certified Nurse Assistant  F/S (11/12)
Anatomy and Physiology/Applied Medicine  F/S (12)-(AKA Med Careers)-2Hr Block-Suggested prerequisites/corequisites include PBS, HBS, MI, and/or College Medical Terminology
*College Medical Terminology (AHMS 144)  F/S (11/12)-Geared towards all students pursuing a college degree in the field.
*College Basic Human Biology with Lab (BI0H 104/105)  FY (11/12)-Geared towards all students pursuing a college degree in the field.
*College Emergency Medical Technician (EPC 291)  FY (12)-Medical prerequisites/corequisites suggested include PBS, HBS, Medical Interventions, and Anatomy and Physiology/ Applied Medicine-Geared towards students pursuing a college degree in the field.

**Visual Media/Graphics (visual/performing art or CTE credit)**
Exploring Visual Media  F/S (10/11/12)
Animation Lab 1  F/S (11/12)-Sophomores permitted with Visual Media Prerequisite
Animation Lab 2  F/S (11/12)
Graphics/Print Photo  F/S (11/12)-2Hr Block Schedule
AP 2D Art and Design-Photography  F/S (11/12)-2Hr Block Schedule- Advanced placement course
Digital Photo  F/S (11/12)-Prerequisite-no longer required
Design Advertising/Design Layout  F/S (11/12)-2Hr Block Schedule
Digital Illustration  F/S (11/12)-Prerequisite- Design Advertising/Design Layout

**Welding**  All welding course must be taken in order
**Semester 1**
Manufacturing Process 1/Manufacturing Design 1  F/S (11/12)-2Hr Block Schedule

**Semester 2**
Manufacturing Process 2/Manufacturing Design 2  F/S (11/12)-2Hr Block Schedule

**Semester 3**
Manufacturing Technology 1/Manufacturing System 1  F/S (12)-2Hr Block Schedule

**Semester 4**
Manufacturing Technology 2/Manufacturing System 2  F/S (12)-2Hr Block Schedule
*College Welding 125 (Cut/Shielded Metal Arc Welding Lab WLDG 125)  F/S (12) 2Hr Block Schedule-Geared towards all students pursuing a college degree in the field.
*College Welding 157 (Semi-automatic & SMAW Lab WLDG 157)  F/S (12)-2Hr Block Schedule-Geared towards all students pursuing a college degree in the field.

**Metal Machining**
Machinist Technology-Manual  F/S (11/12)
CNC Machining Technology  F/S (10/11/12)-Recommended Prerequisite Machinist Technology-Manual
CNC Machining Technology and Design  F/S (10/11/12)-Prerequisite CNC Machining Technology
--CNC courses only available to sophomores who have completed and earned credit in Intro to Engineering Design

**Additional Course offerings**
Independent Study **F/S or FY** (11/12)-Coordinated through specific instructors for pathway students who have exhausted curriculum; additional applications or permissions apply
Transitions **F/S or FY** (9,10,11,12)-Referral Process and special requirements apply
Options **F/S or FY** (12)-Referral Process and special requirements apply
Workplace Experience **F/S or FY** (12)-Organized through Career coaches
Study Hall **F/S or FY** (9,10,11,12)-No credit available

+This guide is for reference only and is subject to change at any time.