

Career and Technical Education 2025-2026

FutureForward Career and Technical Education (CTE) programming gives all students a competitive advantage as they enter college, career or the military.

FutureForward Students:

- Explore opportunities that prepare them for high-demand careers and give them an edge entering college.
- Engage in authentic, hands-on learning.
- Equip themselves with relevant, rigorous, and practical skills.

LOCATIONS:

FutureForward at Bollman

9451 Washington St. Thornton, CO 80229 (720) 972-5820

https://futureforward.adams12.org/bollman

Principal: Janet Renden

FutureForward at Washington Square

12521 Washington St. Thornton, CO 80241 (720) 972-2900

https://futureforward.adams12.org/washingtonsquare

Principal: Marvin Lewis









FutureForward at Bollman FutureForward at Washington Square

Adams 12 Five Star Schools offers Career and Technical Education (CTE) courses at its Bollman and Washington Square campuses to all high school students enrolled in the district. The District is committed to non-discrimination in relation to race, color, sex (including pregnancy, childbirth, and related medical conditions), age, religion, creed, national origin (including ethnicity), ancestry, genetic information (including family medical history), marital status, sexual orientation, transgender identity, gender expression, or disability ("Protected Classes"), in its educational programs, activities, operations and employment decisions. Harassment is a form of discrimination. Anyone engaging in discrimination shall be subject to discipline in accordance with District policies. Any student or staff member who believes they have been discriminated against, or who witnesses discrimination (including bullying or harassment) will promptly make a report to an administrator or supervisor, or the Title IX/Non Discrimination Coordinator. The District's interim Title IX/Non-Discrimination Coordinator is:

Megan Brooks

Educational Support Center (ESC) 1500 E. 128th Avenue Thornton, CO 80241 720-972-4179 megan.brooks@adams12.org

FutureForward at Bollman is located at 9451 Washington Street and FutureForward at Washington Square is located at 12521 Washington Street. Bus transportation is provided for Horizon, Legacy, Mountain Range, Northglenn, Thornton, and Vantage Point students from their home high schools to each of these campuses. It will be necessary for students enrolled in programs at FutureForward campuses to have travel time built into their schedules to allow for transportation between schools.

CAREER AND TECHNICAL COURSE OFFERINGS BY CAREER PATHWAY

AGRICULTURE	Drone Flight Training & Analysis		
Veterinary Assistant	HEALTH SCIENCE		
ARTS & DESIGN / MEDIA ARTS	Introduction to Medical Careers		
Graphic Design	Medical Sciences		
Video Production	Advanced Medical Sciences - CNA		
BUSINESS AND ENTREPRENEURSHIP	Sports Medicine		
Real Estate	HOSPITALITY		
Small Business Operations	ProStart (Culinary Arts) - (Offered at ESC)		
CRIMINAL JUSTICE & PUBLIC SAFETY	Baking & Pastry Applications - (Offered at ESC)		
Crime Scene Investigation	HUMAN SERVICES & EDUCATION		
Emergency Medical Technician – EMT	Intro to Careers in Mental Health		
Firefighting	Behavioral/Mental Health		
Law Enforcement	P-TEACH		
ENGINEERING, COMPUTER & DIGITAL TECHNOLOGIES	SKILLED TRADES & TECHNICAL SCIENCES		
AP Computer Science A	Auto Body Collision Repair & Refinishing		
Cybersecurity	Automotive Technology		
Networking	Diesel Automotive Technology		
Sr Computer Science Projects	Construction, Mechanical, Electrical, and Plumbing		
Principles of Engineering	Welding Technology		
Aviation & Aeronautical Engineering			

All Career and Technical Education courses meet the Fine/Practical Arts graduation requirement. These courses are offered to all Five Star students; however, it may be necessary for students to purchase supplies that are beyond the basic program requirements, and all programs have a course fee. Safety is a priority at both campuses and special clothing may be required for some program areas.

NOTE TO PARENTS:

- Any alcohol, drug, or other substance use violation could be grounds for denial of admission to a program or removal from a program once admitted.
- Excellent attendance is important in all FutureForward at Bollman and Washington Square programs. Five or more unexcused absences may result in a student being placed on an attendance contract. Failure to comply with an attendance contract may result in disenrollment from a program.
- Students enrolled in the Advanced Medical Sciences/CNA programs will be required to have up-to-date immunizations, flu and COVID-19 Vaccinations, a TB test, and a current physical.
- Students enrolled in Advanced Medical Sciences/CNA or Education (P-TEACH) must provide their own transportation to off-site locations for projects, clinical rotations, observations, or teaching experiences.
- Transportation may not be provided for some programs. Please speak with a FutureForward at Bollman or Washington Square campus staff member for more details.
- It is required that all students who register for a FutureForward at Bollman or Washington Square program attend a pre-acceptance/orientation meeting in the spring.
- Juniors are given priority acceptance into most programs. Sophomores and seniors will be accepted on a "space available" basis.
- College credits are available in many FutureForward at Bollman and Washington Square programs. Contact the registrars or counselors for more information.

EXCEPTION TO THE THREE (3) CORE CLASS REQUIREMENT: According to Superintendent Policy 6340 Section 1.4.2, "Exceptions to the three (3) core class (1-1/2 credits) requirement may be made for students at FutureForward at Bollman and Washington Square providing such students can demonstrate competency in the core areas, and students with special circumstances as approved by the principal or designee."

WORK-BASED LEARNING

Potential Credit Earned: 0.5 - 2.0 credits per year, up to 4.0 credits total toward graduation Interested students enrolled in a pre-approved Career and Technical Education course (CTE) or who have successfully completed the pre-approved CTE pathway may choose to participate in Work-Based Learning. In Work-Based Learning, students will have the opportunity to apply their classroom knowledge to their job. Students will work with the Work-Based Learning Coordinator throughout the semester. Students should not enroll in Work-Based Learning as a separate class on the course registration selection form. The Work-Based Learning Coordinator will sign up students after courses have begun each semester (students must complete a Work-Based Learning agreement to enroll).

- The student must be currently enrolled or previously enrolled in at least one CTE course and earned credit in the course.
 - Summer semester exception explained below.
 - Alternative education campuses and Five Star Online Academy do not require enrollment in CTE courses.
- If a student is taking their first CTE course while simultaneously taking a work-based learning course, the student must pass the CTE course in order to earn credit for work experience.
- 0.5 Credit = 125 hours worked / 1.0 Credit = 250 hours worked

- Credit for work experience can be earned during three time periods:
 - Fall semester (August December)
 - Spring semester (January May)
 - Summer semester (June and July) completed through home high school, not Bollman or Washington Square
 - Summer credit for work experience documentation must be submitted to the work-based learning supervisor by September 1 in order to earn up to 1 credit.
 - For students to earn credit for work experience during the summer, they must have at least one CTE course on their transcript <u>prior to</u> the summer semester. (Alternative education campuses and Five Star Online Academy do not require enrollment in CTE courses.)
 - Maximum of 4.0 credits can be earned throughout a high school career.
 - Maximum of 2.0 credits can be earned in a given school year (August-May).
 - Maximum of 1.0 credit can be earned during the summer semester.
 - A student cannot earn more than 1 credit per semester.
 (Note: Alternative education and Five Star Online Academy students may earn more than 1 credit per semester but no more than 4 credits while in high school.)
 - Any exceptions must have Executive Director approval.
- The student must work the required number of hours in the semester in which they are awarded credit.

SERVICE LEARNING

Service Learning Credit can be awarded to students that complete 60 hours of unpaid approved volunteer experience within a semester. Students need to submit the Student Volunteer Time Sheet and Work Ethics Evaluation Form completed by a supervisor from the approved volunteer company and/or organization. Hours will be verified before credit is awarded. Students must be enrolled and in good standing in a FutureForward at Bollman or Washington Square program the semester the Service Learning hours are completed and credit is awarded. Students may earn a maximum of 0.5 Service Learning credits per semester. Students may not transcript more than 2.0 Service Learning credits total.

CAREERREADY COLORADO CERTIFICATE

Students enrolled in a FutureForward at Bollman or Washington Square program have the opportunity to train and test for the CareerReady Colorado Certificate developed by ACT WorkKeys. Students who complete the training and testing at the Silver Level or higher will receive 0.5 elective credits. This certificate verifies workplace competencies in three areas: Applied Math, Workplace Documents, and Graphic Literacy. The FutureForward Counseling Department facilitates training and testing. A test fee may apply.

CONCURRENT ENROLLMENT

Concurrent Enrollment is designed to improve coordination between secondary and post-secondary institutions to create a seamless pathway for students to transition from one level to the next. A student is simultaneously enrolled in FutureForward at Bollman or Washington Square and an institute of higher-level education. To receive credit in a Concurrent Enrollment (CE) course, students must be registered and earn a grade of "C" or higher in that course. CE courses will show on the high school transcript, but actual college credits will only show on the college transcript. Not all programs will be eligible for Concurrent Enrollment for the 2025-2026 school year. Please contact the registrars or counselors, or visit our website at futureforward.adams12.org for more information or program-specific questions about Concurrent Enrollment.

AGRICULTURE

VETERINARY ASSISTANT 1 & 2 - (Agriculture Pathway)

11, 12 Credits: 2

1 Science - Animal Science 1 1 Fine Practical Arts/Elective Location: Washington Square

Do you love working with animals? Have you considered a job in Veterinary Medicine? Explore the field of Veterinary Science and learn hands-on, real world skills. Topics in this course include Animal Behavior & Handling, Client Communication, Hospital Safety, Medical Records, Animal Care Careers, Anatomy & Physiology and Animal Breeds. Expand your knowledge of species and animal welfare through off site clinicals and field trips. Students will have the opportunity to experience authentic partnership with local shelters and veterinary clinics.

Counseling Notes:

1. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AGRICULTURE PATHWAY:

Veterinary Assistant Kennel Assistant Veterinary Technician Veterinarian Animal Nutritionist

Animal Control Officer Pet Groomer Veterinary Technician Specialist Biologist Wildlife Assistant

Zoo Keeper

VETERINARY ASSISTANT 3 & 4 - (Agriculture Pathway)

12

Credits: 2

1 Science - Animal Science 2 1 Fine Practical Arts/Elective

Location Washington Square

Veterinary Assistant 3 & 4 will build upon topics covered in Veterinary Assistant 1 & 2, providing students with advanced skills, knowledge, and techniques. Students will continue to expand their knowledge in the following areas:

- Epidemiology (disease surveillance, response, and prevention)
- Parasitology (the study of parasitic organisms)
- Veterinary medical terminology and abbreviations
- Anatomy and physiology within multiple animal species
- Disease processes within the body
- Diagnostics and lab work in a clinical setting
- Medications and their uses
- Medication dosing calculations
- Anesthesia and surgical procedures

Along with this class having a very hands-on, learn-by-doing process, we also collaborate with various veterinary facilities, schools, and farms throughout the Denver Metro area, as well as with local colleges. This allows students to network with other professionals in the field and obtain various perspectives on a variety of case studies and personal experiences from veterinary professionals. Through this program, students will have access to shadowing, volunteer, and internship opportunities through local agencies, allowing them to obtain knowledge, skills, and abilities that they can use moving forward in their career pathways.

Counseling Notes:

1. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AGRICULTURE PATHWAY:

Veterinary Assistant Kennel Assistant Veterinary Technician Veterinarian Animal Nutritionist

Animal Control Officer Pet Groomer Veterinary Technician Specialist Biologist Zoo Keeper

ARTS & DESIGN / MEDIA ARTS

GRAPHIC DESIGN I & 2 - (Arts & Design / Media Arts Pathway)

10, 11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman

FRONT RANGE
COMMUNITY COLLEGE
CONCURRENT ENROLLMENT

Graphic Design 1 & 2 students focus on the aesthetics, style, and form of their messages of visual communication, and how they can convey meaning, emotion, and identity through visual language.

Course work and projects are developed to give each student a well-rounded understanding and the skills needed to become a proficient and knowledgeable designer. Projects are designed to increase students' artistic abilities, give a variety of perspectives for visual problem solving, and expand critical and creative thinking skills through an understanding of the foundational psychology of visual communications. Using a variety of industry-standard practices, mediums, methods, and techniques students will become competent with the graphic design process. Medium includes television, magazines, books, street signs, movies, logos/branding, packaging, communication design, typography, digital illustration, photo manipulation, page layout, mobile devices, banners, and billboards. Students will work with Macintosh computers and Adobe Illustrator, Photoshop, and InDesign.

Notes:

Students will have the opportunity to earn college credits.

Counseling notes:

- 1. Supplies required:
 - a. Sketchbook or journal
 - b. 32 GB or larger flash drive
 - c. Portfolio
 - d. Refillable or disposable artist inking pen

2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE GRAPHIC DESIGN PATHWAY:

Creative Director Art Director Visual Designer Product Designer Digital Product Manager
UX / UI Designer Web Designer Web Developer Motion Designer Graphic Designer

Production Artist Production Designer & Manager Prepress Technician Illustrator Brand Designer

Communications Coordinator & Manager Communications Director Environmental Graphic Designer

GRAPHIC DESIGN 3 & 4 - (Arts & Design / Media Arts Pathway)

11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman



Graphic Design 3 & 4 students learn advanced skills and techniques in all areas of the creative process: communication arts; production; post-production; print, and web media development; visual problem solving; critical thinking; artistic fundamentals; team building, and "real world" employability skills. Students will further expand their knowledge of speaking a global, visual language and developing awareness of the power of symbols, meanings, images and words. Course work and projects are developed to give each student the necessary skills to become a competent, efficient designer who uses the technology as well as the psychology and marketing aspects of industry. Projects are designed to increase students' artistic abilities, give a variety of perspectives for visual problem solving, expand critical and creative thinking skills, and develop skills in working within a team in a studio setting. Graphic Design 3 & 4 students may also complete a job shadow with professional graphic designers.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Prerequisite: Successful completion of Graphic Design 1 & 2
- 2. Supplies required:
 - a. Sketchbook or journal
 - b. 32 GB or larger flash drive
 - c. Portfolio
 - d. Refillable or disposable artist inking pen
- 3. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE GRAPHIC DESIGN PATHWAY:

Creative Director Art Director Visual Designer Product Designer Digital Product Manager
UX / UI Designer Web Designer Web Developer Motion Designer Graphic Designer

Production Artist Production Designer & Manager Prepress Technician Illustrator Brand Designer

Communications Coordinator & Manager Communications Director Environmental Graphic Designer

GRAPHIC DESIGN INTERNSHIP - (Arts & Design / Media Arts Pathway)

12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman

This course is designed to prepare students to enter the workforce through on-the-job training in the form of an internship. Students will have the opportunity to apply advanced graphic design skills in supervised practical experience on the job to become effective graphic designers. The student will apply prior knowledge and skills developed in portfolio pieces that are self-directed. Emphasis is placed on developing the computer and creative skills necessary to design pieces that effectively communicate information and meaning.

Notes:

Subject to industry availability and teacher approval.

Counseling Notes:

1. Prerequisite: Photoshop, Graphic Design and Screen Printing each with a grade of "A" or better. This course is designed for the serious student pursuing a career in the graphics field.

VIDEO PRODUCTION 1 & 2 - (Media Arts Pathway)

10, 11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman



This course is an introduction to television, video, and film production. Students are actively involved in creating dynamic video projects using a variety of industry standard software and equipment. To be successful in the course, students are challenged to participate daily in both individual and group projects while maintaining a high level of professionalism. Students learn how to create video and films, and how to analyze and incorporate all types of techniques into a variety of projects. Students leave with an understanding of how and why media messages are constructed and for what purposes.

The following are the expected outcomes:

- Key concepts, principles, and techniques of audio, video, and film production
- Use of equipment, tools, and techniques associated with video production
- Demonstrate and apply the planning process effectively
- Project implementation for television, video, and film
- Investigate career opportunities
- Cultivate necessary workplace skills

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE VIDEO PRODUCTION PATHWAY:

Video Editor Scriptwriter Video Producer/Director Storyboard Creator/Artist

Television Production Manager Production Designer Videographer/Cinematographer/Photographer

VIDEO PRODUCTION 3 & 4 - (Media Arts Pathway)

11, 12

Credits 2 Fine Practical Arts/Elective

Location: Bollman



Video Production 3 & 4 provides students with real-world experience in the field. Each student will be expected to create productions with real clients and situations. This course will focus on advancing the students skills obtained in the Video Production 1 & 2 class. The experience gained in this course will match the format and experience of a college course. Advanced techniques will give the student the head start needed to be career-ready and employable.

Some of the following will be expected:

- Advanced techniques in videography and cinematography
- Video editing skills are expected to be near expert/career-ready level
- Projects assigned will be in line with industry expectations and topics
- Pursue industry internship and job opportunities
- Budget, write, produce, and edit complete projects in the commercial, film, corporate, and documentary genres

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Prerequisite: Successful completion of Video Production 1 & 2
- 2. In-depth knowledge of Adobe Premier Pro/Apple Final Cut Pro, DSLR camera functions and composition, knowledge of Microsoft Office products
- 3. Course Fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE VIDEO PRODUCTION PATHWAY:

Video Editor Scriptwriter Video Producer/Director Storyboard Creator/Artist

Television Production Manager Production Designer Videographer/Cinematographer/Photographer

VIDEO PRODUCTION INTERNSHIP - (Media Arts Pathway)

12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman

This course is designed to prepare students to enter the workforce through on-the-job training in the form of a job shadow/internship. The Focus of this program is to advance knowledge and hone skills needed to be "workforce ready." Besides working on weaknesses, students will be filming projects for the school/district, working alongside Level II students, networking with industry professionals training in the field, and creating short films beyond current capabilities.

Notes:

Subject to industry availability and teacher approval.

Counseling Notes:

1. Prerequisite: Successful completion of Video Production 3 & 4 and Instructor recommendation

BUSINESS AND ENTREPRENEURSHIP

REAL ESTATE 1 & 2 - (Business Pathway)

11, 12

Credits: 1 Fine Practical Arts/Elective

Location: Washington Square

This course provides a comprehensive introduction to the real estate industry, covering both residential and commercial sectors. Students will explore fundamental concepts, principles, and practices essential for understanding real estate transactions, property management, and investment strategies.

Students will also learn about the fundamentals of real estate to include: Market Analysis, Property Valuation, Financing and Investment, Leasing and Property Management, Legal Considerations, Development and Construction, Current Market Trends, and Technologies used in the industry.

Counseling Notes:

1. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE REAL ESTATE PATHWAY:

Leasing Agent Foreclosure Specialist Property Management

Title Examiner Mortgage Processor Appraiser

Home Inspector Property Developer Mortgage Broker

Real Estate Agent

SMALL BUSINESS OPERATIONS 1 & 2 - (Business Pathway)

11, 12

Credits: 1 Fine Practical Arts/Elective

Location: Washington Square

This year-long course is designed to provide students with a comprehensive understanding of small business operations. Students will learn about the basic fundamentals of starting, managing, and growing a small business, with practical applications specific to career programs.

Small business operations involve the day-to-day activities and processes that keep a business running efficiently. Key components include:

1. **Management**: Overseeing daily activities, setting goals, and making strategic decisions.

- 2. Finance: Managing budgets, expenses, and cash flow, as well as bookkeeping and financial reporting.
- 3. **Marketing**: Promoting products or services to attract customers through various channels, including social media, advertising, and networking.
- 4. **Sales**: Engaging with customers to drive sales and build relationships, often through direct selling or online platforms.
- 5. **Human Resources**: Hiring, training, and managing employees, as well as ensuring compliance with labor laws.
- 6. **Customer Service**: Providing support to customers before, during, and after their purchase to enhance satisfaction and loyalty.
- 7. **Supply Chain Management**: Coordinating the procurement, production, and distribution of goods or services.

Counseling Notes:

1. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE SMALL BUSINESS OPERATIONS PATHWAY:

Small Business Owner Entrepreneurship Sales Manager Business Consultant
Operations Manager Non-Profit Manager e-commerce Manager Financial Analyst

CRIMINAL JUSTICE & PUBLIC SAFETY

CRIME SCENE INVESTIGATION 1 & 2 - (Criminal Justice & Public Safety Pathways)

11 & 12
Credits: 2
1 Science - Forensic Science 1

1 Fine Practical Arts/Elective Location: Washington Square



In this class, students will be provided hands-on experience on what real Crime Scene Investigators do. This course includes what a Crime Scene Investigator does working in the field and laboratory processing. Students will learn how the investigation team works and the Crime Scene Investigator's role. In this course, students will have the opportunity to use real crime lab equipment and study the following:

- Digital SLR photography
- Crime scene documentation
- Latent print processing techniques
- Trace evidence analysis
- Alternate Light Source (ALS) for evidence location, as well as chemical photography
- Impression evidence

Along with this class having a very hands-on, learn-by-doing process, we also collaborate with various law enforcement agencies and coroner offices throughout the Denver Metro area. This allows students to network with other professionals in this field and obtain various perspectives on a variety of case studies and personal experiences from forensic and law enforcement professionals. Through this program, students will have the potential of obtaining volunteer and shadowing opportunities through local agencies and obtain knowledge, skills and abilities that they can use moving forward in their career pathways.

Notes:

- Program will work in partnership with local area police departments.
- This course may contain sensitive material and graphic images.
- Students will have the opportunity to earn college credits.

Counseling Notes:

1. Course fee: \$40.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE CRIME SCENE INVESTIGATION PATHWAY:

Crime Scene Investigator Forensic Science Technician Forensic ID Technician/Criminalist

Latent Print Examiner Forensic Autopsy Technician Crime Laboratory Analyst

Crime Scene Reconstructionist Evidence Technician DNA Analyst

CRIME SCENE INVESTIGATION 3 & 4 - (Criminal Justice & Public Safety Pathways)

12

Credits: 2

1 Science - Forensic Science 2 1 Fine Practical Arts/Elective Location: Washington Square



In this class, students will further their knowledge of the investigative team and their roles/responsibilities. Students will further their expertise in crime scene investigation in the following areas:

- Timed/Aerial/Painting with light photography
- Chemical enhancements, to include BlueStar & Luminol
- Laser & shooting trajectory
- Latent print analysis & comparison
- Traffic accident documentation & reconstruction
- Bloodstain pattern analysis to include area of convergence & area of origin
- Faro 3D scanner
- Reflective Ultraviolet Imaging System (RUVIS)
- UV/IR forensic photography
- Gunshot residue recognition and documentation
- Clandestine graves
- Forensic entomology

Along with this class having a very hands-on, learn by doing process, we also collaborate with various law enforcement agencies and coroner offices throughout the Denver Metro area. This allows students to network with other professionals in this field and obtain various perspectives on a variety of case studies and personal experiences from forensic and law enforcement professionals. Through this program, students will have the potential of obtaining volunteer and shadowing opportunities through local agencies and obtain knowledge, skills and abilities that they can use moving forward in their career pathways.

Notes:

- Program will work in partnership with local area police departments.
- This course may contain sensitive material and graphic images.
- Students will have the opportunity to earn college credits.

Counseling Notes:

1. Prerequisite: Successful completion of CSI 1 & 2

2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE CRIME SCENE INVESTIGATION PATHWAY:

Crime Scene Investigator Forensic Science Technician Forensic ID Technician/Criminalist

Latent Print Examiner Forensic Autopsy Technician Crime Laboratory Analyst

Crime Scene Reconstructionist Evidence Technician DNA Analyst

Firearms Examiner Forensic Entomologist Forensic Pathologist

Bloodstain Pattern Analyst Forensic Toxicologist Coroner

Colorado Bureau of Investigation- Forensic Investigator FBI- Evidence Response Team

EMERGENCY MEDICAL TECHNICIAN - EMT 1 & 2 - (Criminal Justice, & Public Safety Pathways)

12

Credits: 2

1 Science - Pathophysiology 1 Fine Practical Arts/Elective Location: Washington Square



The EMT program is designed for the student wishing to investigate health-related and public safety careers. The areas of study include pathophysiology, safety practices, simulated clinical situations, medical emergencies, working in the pre-hospital setting, and providing patient transportation. Students may have the opportunity to have authentic experiences with local emergency medical service agencies.

All experiences are delivered through classroom, laboratory, and simulated clinical situations. The EMT program will provide the foundation for professional opportunities in the medical field, e.g. nursing, physician, dental, medical records, pharmacy, firefighter, paramedic, and other emergency medical services. EMT provides students with general workplace skills and specific health industry knowledge that can assist them in attaining employment in a variety of entry-level positions within the health care setting, or continue their education at the post-secondary level.

Note: This course may contain sensitive material and graphic images.

Counseling Notes:

1. Course fee: \$50.00

Students in this program will learn the following skills:

- Demonstrate an understanding of the roles and responsibilities of the EMT
- Demonstrate an understanding of the medical legal aspects
- Determine and record vital signs of a sick or injured person
- Use medical identification devices
- Identify the potential for a spinal injury
- Conduct a primary assessment of problems

- that are a threat to life if not corrected immediately
- Demonstrate Healthcare Professional BLS (Basic Life Support) procedures
- Recognize and control bleeding
- Recognize and control shock
- Identify and use mechanical aids to breathing
- Provide a secondary assessment of the patient

- Identify musculoskeletal injuries and treat them accordingly and effectively
- Provide emergency evacuation and transfer of a sick and/or injured patient
- Identify and care for patients who need specialized care
- Provide triage to victims of mass casualty incidents
- Recognize life-threatening situations

- Recognize entrapment situations
- Assist with emergency childbirth
- Identify critical incident stressors and techniques to effectively deal with them
- Communicate patient information to appropriate authorities
- Effectively communicate, both verbally and non-verbally, with patients of all ages

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN EMT PATHWAY:

ER Physician Paramedic **EMT** Firefighter **Psychologist** Registered Nurse

FIREFIGHTING 1 & 2 - (Criminal Justice & Public Safety Pathways)

10, 11, 12 Credits: 2

1.5 Fine Practical Arts/Elective

0.5 Physical Education Credit-Candidate Physical Aptitude Test (CPAT)

Location: Washington Square



A firefighter is an important figure within the public health and safety industry. Firefighters combat and extinguish fires, often working in high-pressure circumstances. Students will learn hands-on, practical skills in firefighter orientation, safety, fire behavior, building construction, firefighter personal protective equipment, fire streams, fire control, fire detection, alarm and suppression systems, loss control, and communications.

Notes:

- Program will work in partnership with local area fire departments.
- This course may contain sensitive material and graphic images.
- Students will have the opportunity to earn college credits.

Counseling Notes:

1. Course fee: \$40.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE FIREFIGHTING PATHWAY:

Paramedic Hazmat Technician **EMT** Wildland Firefighter Firefighter

FIREFIGHTING 3 & 4 - (Criminal Justice, & Public Safety Pathways)

11, 12

Credits: 2 Fine Practical Arts/Elective Location: Washington Square



This program is designed to provide advanced training in firefighting skills such as extinguishing liquid and gas/vapor fueled fires, auto extrication, hazardous materials response awareness, advanced search and rescue skills and team leadership skills. Students will have the opportunity to complete clinical related experiences with live fire scenarios. Students will also have the opportunity to test for the CPAT (Candidate Physical Aptitude Test).



Notes:

- Program will work in partnership with local area fire departments.
- This course may contain sensitive material and graphic images.
- Students will have the opportunity to earn college credits.

Counseling Notes:

1. Prerequisite - Successful completion of Firefighting 1 & 2

2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE FIREFIGHTING PATHWAY:

Firefighter Paramedic Hazmat Technician EMT Wildland Firefighter

LAW ENFORCEMENT 1 & 2 - (Criminal Justice & Public Safety Pathways)

10, 11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Washington Square



Do you dream of working as a police officer, investigator, prosecutor, defense attorney, or a corrections officer? A career in law enforcement can be exciting and rewarding. Students will learn about law-enforcement-related professions through practical, industry-related experiences—providing students exposure to police procedures, defensive tactics, criminal statutes, arrest control, courtroom procedures, and verbal de-escalation so they can graduate with a competitive advantage in their chosen field. This course has a heavy emphasis on communication training including making contacts in scenarios, taking reports, creating and presenting presentations, and practicing oral boards to prepare for actual hiring events. The curriculum will provide the most authentic, industry standard experience that is hands on, including the use of an interactive training simulator. Students will review traffic laws, including driving under the influence of alcohol and drugs. This course reviews principles of federal, state, criminal and civil laws and court

cases as they apply to and affect law enforcement. Standard law enforcement techniques and practices will be taught by both CTE educators and professionals in their respective fields.

Since the Law Enforcement program prepares students for positions in fields related to law enforcement and public safety, developing and maintaining professional skills is paramount and is a significant element throughout the program.

Notes:

- Program will work in partnership with Broomfield Police, Thornton Police, Westminster Police, and The Adams County Sheriff's Office.
- This course may contain sensitive material and graphic images.
- Students will have the opportunity to earn college credits.

Counseling Notes:

1. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE LAW ENFORCEMENT PATHWAY:

Police Officer Security Screener Records Specialist Detective

Background Investigator Dispatcher Animal Control

LAW ENFORCEMENT 3 & 4 - (Criminal Justice & Public Safety Pathways)

11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Washington Square



Law Enforcement 3 & 4 students will learn advanced skills, knowledge, and techniques that were learned in the Law Enforcement 1 & 2 course. In this course, students will learn more in-depth knowledge of traffic investigation, including traffic accident reconstruction. Students will undergo advanced Investigation training and Interrogation training, which will also include Crisis Intervention Training (CIT). Students will also have the opportunity to participate in courtroom testimony, in the classroom and in an actual courtroom. Students will also learn more in depth about being a 911 Dispatcher and a Correctional Officer. Students will obtain more de-escalation skills, specifically when dealing with people in a crisis state and situations involving mental health. If you were enrolled in the Law Enforcement 1 & 2 course, and want to become experts on your skills, techniques, and knowledge, then this course is for you. Law Enforcement experts will teach and train students within this course.

Notes:

- Program will work in partnership with Westminster Police, Dispatch, and Records; Broomfield Police, Dispatch and Sheriff's Office; Adams County Sheriff's Office.
- Mental Health First Aid Certification possible
- This course may contain sensitive material and graphic images.
- Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Prerequisite Successful completion of Law Enforcement 1 & 2
- 2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE LAW ENFORCEMENT PATHWAY:

Detective Court Reporter District Attorney Investigator

Bailiff Paralegal

ENGINEERING, COMPUTER & DIGITAL TECHNOLOGIES

AP COMPUTER SCIENCE A - (Computer & Digital Technologies Pathways)

10, 11, 12

Credit: 1 Fine Practical Arts/Elective

Location: Bollman

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. The course emphasizes object-oriented programming and design using the Java programming language.

Counseling Notes:

- 1. Prerequisites: Coding I and Coding II; or AP Computer Science Principles; or Instructor approval. Students must also be enrolled in, or have completed, Integrated Math II.
- 2. Course fee: \$99 for AP Examination (subject to annual increase)
- 3. All students taking AP Computer Science A will be required to attempt the Advanced Placement Examination in order to receive the weighted credit for this course. A score of two or better demonstrates Math competency for new graduation guidelines.
- 4. There will also be a mandatory guardian/student meeting in April that will cover class expectations. At that time, the guardian and student will sign an AP contract.
- 5. This course may be taken online through Bollman (Contact Bollman counselors for details).

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE COMPUTER SCIENCE PATHWAY:

Computer Programmer Computer Engineer Web Designer IT Specialist

Network Technician Video Game Designer

CYBERSECURITY - (Computer & Digital Technologies Pathways)

10, 11, 12

Credit: 1 Fine Practical Arts/Elective

Location: Bollman

In this one-year course students will explore the current cyber threat landscape to understand the types of adversaries organizations face and the techniques adversaries use to compromise systems and data. Students will learn how vulnerabilities create risks and how organizations implement security controls to manage that risk. Topics in this course include law, ethics, physical, operational, application and network security, security controls, cryptography, access control, attacks and detection, and response and recovery. Students will research emerging trends in cybersecurity and gain hands-on experience implementing security protocols.

Counseling Notes:

1. Prerequisite: Coding I or AP Computer Science Principles

2. This course may be taken online through Bollman (Contact Bollman counselors for details)

3. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE CYBERSECURITY PATHWAY:

Cyber Crime Investigator Cybersecurity Consultant IT Auditor

Software Development Cybersecurity Engineer

NETWORKING A & B - (Computer & Digital Technologies Pathways)

10, 11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman

Networking A & B is an advanced course designed to emphasize the conceptual and practical skills necessary to design, manage, and diagnose network hardware and software. Upon completion of this course, proficient students will identify types of networks, understand the layers of the open systems interconnection (OSI) model, prevent security risks, and

apply troubleshooting theory to the successful execution of networking tasks. Course content covers transmission control protocol, internet protocol, wired and wireless topologies, switching and routing, network hardware, wireless networking, and network operating systems (NOS). Upon completion of this course, proficient students will be prepared to sit for the CompTIA Network+ exam. Students will also be halfway through the curriculum necessary to take the Cisco CCNA certification exam.

Counseling Notes:

1. Prerequisite: Coding I or AP Computer Science Principles

2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE NETWORKING PATHWAY:

Networking Administrator Network Engineer Network Technician

Cybersecurity Specialist / Technician Incident Analyst/Responder

NETWORKING C & D - (Computer & Digital Technologies Pathways)

11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman

In this course, students develop and build a foundation for success in networking-related careers and degree programs. With the support of video and rich interactive media, participants learn, apply, and practice CCNA knowledge and skills through a series of in-depth hands-on experiences and simulated activities that reinforce their learning. Upon completion of this course students will be prepared to take the Cisco CCNA certification exam.

Counseling Notes:

1. Prerequisite: Networking A & B

2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE NETWORKING PATHWAY:

Networking Administrator Network Engineer Network Technician

Cybersecurity Specialist / Technician Incident Analyst/Responder

SR COMPUTER SCIENCE PROJECTS - (Computer & Digital Technologies Pathways)

11, 12

Credit: 1 Fine Practical Arts/Elective

Location: Bollman

In this one-year course, students learn Agile Scrum (a framework for managing knowledge while working, with an emphasis on software development) while designing a Computer Science Project. By the end of the course, students can take the Professional Scrum Master I (PSMI) Certification exam. Project areas could include Advanced Cyber Security Skills, real-world authentic problems from industry partners, or authentic problems from school district staff.

Counseling Notes:

1. Prerequisite: AP Computer Science A or Cybersecurity or Networking or instructor approval

2. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE COMPUTER SCIENCE PATHWAY:

Information Technology Project Manager Software Engineer Video Game Designer Cybersecurity Consultant Computer Programmer Web Designer

PRINCIPLES OF ENGINEERING – (Engineering Technology Pathway)

10, 11, 12

Credit: 1 Fine Practical Arts/Elective

Location: Bollman

This survey course exposes students to major concepts they will encounter in a post-secondary engineering course of study. Topics include mechanisms, hydraulics, pneumatics, computer, interfacing, robotics, computer-aided design, electronics, energy, statics, materials, and kinematics. Students learn to use engineering mathematics and develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work, and communicate solutions.

Counseling Notes:

- Students that complete this course may be eligible to test for Solidworks certification. This certification may be used to demonstrate competency for new graduation guidelines.
- 2. Students should have a good understanding of basic algebraic mathematics
- 3. This course is recommended for students interested in design and engineering
- 4. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE ENGINEERING PATHWAY:

Mechanical Engineer Electrical Engineer Structural Engineer Alternative/Renewable Energy Technician

AVIATION & AERONAUTICAL ENGINEERING 1 & 2 - (Engineering Technology Pathway)

10, 11, 12 Credit: 1

0.5 Science - Aeronautics0.5 Fine Practical Arts/Elective

Location: Bollman



Introduction to Aviation & Aeronautical Engineering explores the evolution of flight, navigation, and control, flight fundamentals, aeronautical materials, propulsion, weather dynamics and flight planning. In addition, this course provides students with the opportunity to engage in activities that support their skills development in the area of Unmanned Aircraft Systems (UAS). This includes small, medium, and large aviation vehicles (AV), flight and ground control processes, FAA regulations, UAS applications, mission operations, ethical and human factors concerns, and future considerations.

Counseling Notes:

- 1. Students that complete this course may have the opportunity to earn FAA Part 107 certification. **This certification** may be used to demonstrate competency for new graduation guidelines.
- 2. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AVIATION AND AERONAUTICS ENGINEERING PATHWAYS:

Commercial Pilot Drone Pilot Air Traffic Controller
Aerospace Systems Analyst Aerospace Engineer Mechanical Engineer

DRONE FLIGHT TRAINING & ANALYSIS 1 & 2 - (Engineering Technology Pathway)

11. 12

Credit: 1 Fine Practical Arts/Elective

Location: Bollman



Students will be introduced to the principles of flight and control as applied to unmanned aeronautical vehicles (UAV's). Topics include principles of flight, mission planning, systems control, and safety of personnel, safety in the operational environment, compliance with regulations and procedures. Students will learn how to acquire, process, and analyze data from photographic, multispectral, infrared, and LiDAR sensors. Human factors analysis with focus on crew resource management is introduced. Opportunities for field experience will be explored as part of the course.

Counseling Notes:

1. Prerequisite: Aviation & Aeronautical Engineering 1 & 2 or instructor approval

2. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AVIATION AND AERONAUTICS ENGINEERING PATHWAYS:

Commercial Pilot Drone Pilot Air Traffic Controller
Aerospace Systems Analyst Aerospace Engineer Mechanical Engineer

HEALTH SCIENCE

INTRODUCTION TO MEDICAL CAREERS 1 & 2 - (Health Science Pathway)

10, 11, 12

Credit: 1 Fine Practical Arts/Elective

Location: Bollman

Are you considering a career in the medical field? How will you choose from the numerous specialties available in this field? This engaging introductory course will provide students with the opportunity to interact with medical professionals and explore the many opportunities available. In addition to this fun exploration, students will be introduced to basic medical terminology, gain an introduction to body systems, and practice leadership and teamwork through participation in HOSA (Future Health Professionals).

Counseling Notes:

1. Course fee: \$20.00

POSSIBLE FUTURE CAREER OPPORTUNITIES FOR STUDENTS IN MEDICAL CAREERS PATHWAY:

Nurse Athletic Trainer CNA EMR/EMT/Paramedic

Doctor Dental Hygienist Vet Tech Massage Therapist
Physical Therapist Dentist Veterinarian Psychiatrist

MEDICAL SCIENCES I & 2 - (Health Science Pathway)

11, 12 Credits: 2

1 Science - CP Anatomy and Physiology

1 Fine Practical Arts/Elective

Location: Bollman

The Medical Sciences 1 & 2 program is designed for students who are interested in pursuing careers in the healthcare field. This course is also recommended for students who plan to apply for Advanced Medical Sciences/CNA or Emergency Medical Technician/EMT in their senior year. The core curriculum is based on National Health Science Standards and is focused on the following:

- CP Anatomy & Physiology
- Healthcare career exploration
- Medical terminology
- Workplace skills, including problem-solving and teamwork
- Law and Ethics in Health Care
- Introduction to clinical skills
- Anatomage Table for virtual cadaver experiences

Counseling Notes:

- 1. Students that complete this course are eligible to test for National Health Science Certification. This certification may be used to demonstrate competency for the new graduation guidelines.
- 2. Course fee: \$40.00

POSSIBLE FUTURE CAREER OPPORTUNITIES FOR STUDENTS IN MEDICAL SCIENCES PATHWAY:

NurseAthletic TrainerCNAEMR/EMT/ParamedicDoctorDental HygienistVet TechMassage TherapistPhysical TherapistDentistVeterinarianPsychiatrist

ADVANCED MEDICAL SCIENCES - CNA 1 & 2 - (Health Science Pathway)

12

Credits: 2.5

1 Science – Pathophysiology 1.5 Fine Practical Arts/Elective

Location: Bollman

The Advanced Medical Sciences/CNA program is designed for the mature, responsible student wishing to investigate careers in the medical field. Students interested in registering for this program should have a serious interest and long-term goal of employment in the medical field. A strong commitment to the program is necessary to be successful in this class. This program emphasizes character building, honesty, integrity, and professionalism. The core of the curriculum is focused on the following: medical terminology, pathophysiology, basic nursing skills, career exploration, safety practices, ethics, and human relations. All are delivered through classroom, laboratory, and clinical situations. **Students**

successfully completing this course will receive their CPR/First Aid Certification. They will also be eligible to take the Nurse Aide exam with the Board of Nursing to become certified nursing assistants, if all portions of the course, including clinicals, are successfully completed.

IMMUNIZATIONS NEEDED:

- MMR (Measles, mumps, rubella)
- Tdap (tetanus, diphtheria, pertussis)
- Hepatitis B (Hep B Can take up to six months to complete)
- Polio
- Varicella (chicken pox)
- Influenza
- COVID-19

All immunizations must be completed by November 1st.

SCREENINGS:

- TB (Tuberculosis)
- Criminal Background Check Due November 1st

Go to <u>cccs.castlebranch.com</u>, Click on the "Place Order" button then follow prompts for Bollman. Clinical facilities require a criminal background check on each student prior to allowing them to participate in clinical experiences at their facilities.

Counseling Notes:

- Prerequisite: Successful completion of Medical Sciences 1 & 2, CP/AP Anatomy & Physiology, or other CP or AP science course in the 11th grade year is recommended.
- 2. Excellent attendance
- 3. Course fee: \$50.00

Class Format:

Semester 1:

This course is offered in a two-hour block that includes classroom work, labs, field trips, and quest speakers.

Semester 2:

This course is offered in a three-hour block to include clinical experiences working with patients in a hospital, nursing home, and/or internship site settings. **Students must provide their own transportation for these clinical experiences.** Students enrolled in the 6/7/8 block must provide their own transportation after 8th hour, second semester.

Student Requirements:

- 1. Students must have 75% or higher in the course curriculum standards and teacher recommendation to continue in this class second semester.
- 2. Uniforms are required for both the class and clinicals.
- 3. Students are required to have the following items for clinical and internship experiences:
 - a. Watch with second hand (analog)
 - b. Black scrub pants (no sweats, leggings, or jeans) and turquoise scrub top (may be checked out from Bollman)
 - c. Closed toe shoes (tennis shoes or nursing, etc.)
 - d. Tattoos must not be visible during clinicals.
 - e. No facial piercings, only a single post in each ear during clinicals.
 - f. Nails must be kept clean and short. No artificial nails during clinicals.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN MEDICAL SCIENCES-CNA PATHWAY:

Pediatrician Physician/Surgeon Psychologist Oncologist or other Specialist Psychiatrist Physical Therapist Respiratory Therapist Registered Nurse

Veterinarian Nurse Practitioner Physicians Assistant

SPORTS MEDICINE 1 & 2 - (Health Science Pathway)

11, 12 Credits: 2

1 Fine Practical Arts/Elective 1 Science - Kinesiology 1 Location: Washington Square



The Sports Medicine Class is designed for students to learn about medical issues associated with sports from joint pain to osteoarthritis to nutrition. Topics covered in this class include: athletic training, physical therapy, medicine, fitness, exercise physiology, kinesiology, nutrition, injury risk reduction, treatment, rehabilitation, emergency injury management and administrative functions. This class will have a hands-on application in order to provide students with an avenue to explore these fields. Through these connections, students will understand the importance of exercise, nutrition and treatment modalities and the role they play in the physically active community.

Notes:

Students will have the opportunity to earn college credits

Counseling Notes:

1. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE SPORTS MEDICINE PATHWAY:

Exercise Physiologist Sports Psychologist Chiropractor

Athletic Trainer Sports Medicine Nurse Massage Therapist
Orthopedic Nurse Orthopedic Surgeon Physician Assistant

Occupational Therapist Sports Medicine Physician Physical Therapist Assistant

Physical Therapist Physiatrist
Dietician Personal Trainer

SPORTS MEDICINE 3 & 4 - (Health Science Pathway)

12

Credits: 2

1 Fine Practical Arts/Elective 1 Science - Kinesiology 2 Location: Washington Square



Sports Medicine 3 & 4 will offer students the opportunity to become *Certified Personal Trainers*. In this class, the study material for personal training, the practice tests, and the in-person examination will be included in the course fee. The certification is offered through an organization called the National Academy of Sports Medicine or NASM. Once certified, students will be able to work for companies like health clubs, gyms or even start their own business.In addition to frequent hands-on opportunities, we will also collaborate with healthcare professionals outside of athletic training to allow students to network, learn about job opportunities, attain shadowing experiences, and develop professional relationships for future reference opportunities.

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

1. Prerequisite: Successful completion of Sports Medicine 1 & 2

2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE SPORTS MEDICINE PATHWAY:

Exercise PhysiologistSports PsychologistChiropractorAthletic TrainerSports Medicine NurseMassage TherapistOrthopedic NurseOrthopedic SurgeonPhysician Assistant

Occupational Therapist Sports Medicine Physician Physical Therapist Assistant

Physical Therapist Physiatrist Personal Trainer

Dietician

<u>HOSPITALITY</u>

PROSTART 1 & 2 - (Hospitality & Food Production and Business Management & Administration Pathways)

10, 11, 12

Credits: 2 Fine Practical Arts/Elective

Location: ESC



Interested in a fast-paced, hands-on, creative career? Do you have a passion for food or travel? ProStart may be the class for you. The ProStart program is designed to expose students to the culinary, tourism, and hospitality fields including food preparation, management, and customer service. Through the curriculum, students are able to blend food science, technical skills, and industry knowledge with each student's creativity and passion.

ProStart is a nationally certified program focusing on the hospitality industry. The ProStart curriculum is built around providing students the necessary industry skills and knowledge to succeed within the hospitality and tourism industry as well as a post-secondary hospitality or culinary program.

Content covered in this program:

- Food Safety and Sanitation
- Stocks, Soups, and Sauces
- Cooking Methods and Techniques
- Food Costing and Menu Control
- Salads, Dressings, and Dips
- Breakfast Foods and Sandwiches
- Management Strategies
- Garnishing and Plating Techniques

- Kitchen Hierarchy and Brigade
- Nutrition
- Global Cuisine
- Meat, Poultry, and Seafood
- Kitchen Equipment
- Knife Skills
- Customer Service and Serving Techniques

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Students that complete this course may be eligible to test for ProStart certification.
- 2. ProStart is a culinary arts and restaurant management program, taught by a professional Chef, and designed to prepare students for culinary school, apprenticeships, and/or careers in the industry.
- 3. ProStart is a FutureForward program taught at the Educational Support Center (Admin Building) 128th & Claude

- Ct. Transportation is provided.
- 4. Course fee \$85.00
 - a. Personalized chef coat and chef hat included in course fee.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE PROSTART/CULINARY PATHWAY:

Caterer Chef/Pastry Chef Hotel General Manager Food Photographer
Event Planner Restaurant Entrepreneur Food/Beverage Director Food Scientist/R & D Chef

BAKING & PASTRY APPLICATIONS 1 & 2 - (Hospitality & Food Production and Business-Management & Administration Pathways)

11, 12

Credits: 2 Fine Practical Arts/Elective

Location: ESC

Baking & Pastry Applications is designed to expose students to advanced techniques of baking and pastry, combining creativity with food science to produce ornate and delicious pastries and baked goods. For students who know they are pursuing a career in culinary arts, this class will enable them to dive deeper into advanced food production techniques, develop technical skills, and learn vital aspects of foodservice management.

Content covered in the program:

- Advanced Breads and Cakes
- Advanced and Classic Plated Desserts
- Functions of Ingredients in Baking
- Safety and Sanitation

- Food Artistry and Chocolate Work
- Cold Desserts
- Pies, Soufflés, and Custards
- Employability Skills
- Foodservice Management

Counseling Notes:

- 1. Prerequisite: Successful completion of ProStart 1 & 2
- 2. Course fee \$40.00
 - a. Personalized chef coat \$15.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE BAKING APPLICATIONS PATHWAY:

Baker Line Chef Food Scientist/R&D Chef
Pastry Chef Food Artist Food/Beverage Manager

HUMAN SERVICES

INTRO TO CAREERS IN MENTAL HEALTH 1 & 2 - (Human Services Pathway)

10, 11, 12

Credit: 1 Fine Practical Arts/Elective

Location: Bollman



This program is designed for students who are interested in pursuing careers in the behavioral/mental health fields.

Students will:

- Explore educational and professional behavioral health career pathways
- Study common behavioral and mental health disorders and recognize signs of mental health distress
- Apply legal, professional, and ethical considerations important to the delivery of safe and effective behavioral health care
- Identify various communication techniques, including therapeutic communication and motivational interviewing, to assist in developing the skills needed to build therapeutic relationships with clients and improve patient outcomes in behavioral health settings
- Create a resource notebook, life skills class, and multiple project based learning assignments to take with them into the field

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE BEHAVIORAL/MENTAL HEALTH PATHWAYS:

Behavioral Health Technician Social Worker Psychologist Psychiatrist Medical
Psychiatric Nurse School Counselor Therapist Law Enforcement Education

BEHAVIORAL/MENTAL HEALTH 3 & 4 - (Human Services Pathway)

11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman

Students will:

- Continue with all concepts introduced in Level 1 & 2 in a more advanced capacity
- Identify the steps of case management, from intake to follow-up
- Apply the strengths-based clinical case management model
- Practice crisis interventions and clinical documentation
- Demonstrate active listening skills, including paraphrasing, summarizing, and clarifying, to enhance client engagement and understanding
- Develop empathetic responses to client emotions and experiences, fostering a supportive and non-judgmental therapeutic environment. Develop empathetic responses to client emotions and experiences, fostering a supportive and non-judgmental therapeutic environment
- Create open-ended questions and reflective statements to facilitate exploration of client thoughts, feelings and Behaviors

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Prerequisite: Successful completion of Introduction to Behavior/Mental Health 1 & 2
- Concurrent enrollment course
- 3. Course fee: \$40.00



POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE BEHAVIORAL/MENTAL HEALTH PATHWAYS:

Behavioral Health Technician Social Worker Psychologist Psychiatrist Medical Psychiatric Nurse School Counselor Therapist Law Enforcement Education

BEHAVIORAL/MENTAL HEALTH 5 & 6 - (Human Services Pathway)

12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman



In this advanced course, students will continue to expand their knowledge in all concepts introduced in level 3 & 4 courses. Students will study personality theory and abnormal psychology with opportunities for additional college credit. In addition, there will be differentiated in-the-field placements providing hands-on learning opportunities. They will also work to solidify their Motivational Interviewing Skills as well as develop clarity in using the DSM-5 and DSM-5TR in various fields in relation to mental health diagnosis.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Prerequisite: Successful completion of Advanced Behavioral/Mental Health 3 & 4

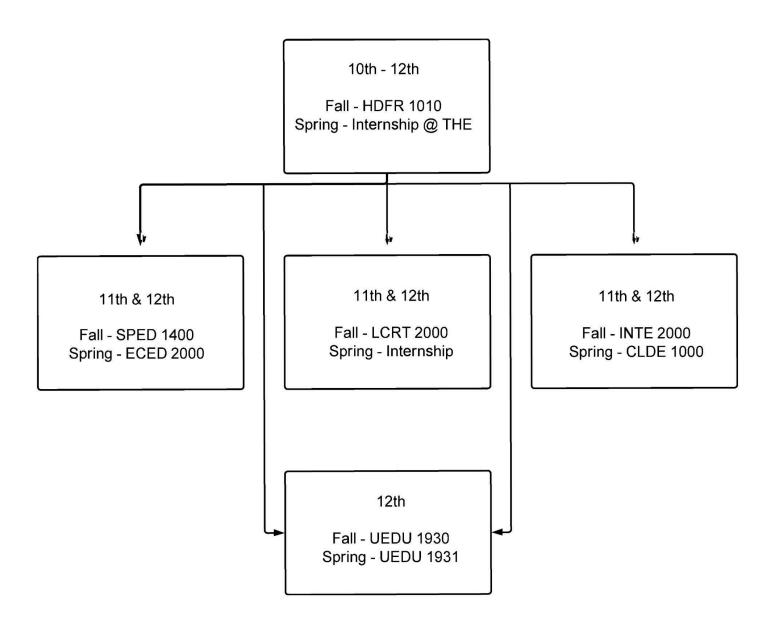
2. Concurrent enrollment course

3. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE BEHAVIORAL/MENTAL HEALTH PATHWAYS:

Behavioral Health Technician	Social Worker	Psychologist	Psychiatrist	Medical
Psvchiatric Nurse	School Counselor	Therapist	Law Enforcement	Education

EDUCATION



P-TEACH INTERNSHIP - (Education Pathway)

10, 11, 12

Credits: 0.5 Fine Practical Arts/Elective

Location: Bollman

Want to explore what the profession of teaching looks and feels like? Work in a classroom, support a teacher in our system, and gain invaluable experiences with students. Students are eligible to participate in an education specific internship in the P-TEACH pathway of their choice. Internship opportunities may be individualized to match the interests of students. Internships may range from PreK, Elementary, Secondary, Music, ART and SPED. *This semester-long course is offered during the fall and spring semesters and can be repeated for credit.*

Counseling Notes:

1. Prerequisite: Student must have previously completed or be concurrently enrolled in any other P-TEACH course to register for Internship.

2. Course fee: \$10.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator
Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

<u>UEDU 1930 & 1931 INTRO TO SOCIALLY JUST TEACHING 1 & 2 - (Education Pathway)</u>

12

Credit: 1 English 12 Location: Bollman



Dive into the heart of education with this transformative course that empowers you to tackle the pressing issues affecting our schools and communities! Through a critical examination of educational inequalities, you'll explore how factors like gender, race, ethnicity, and language proficiency shape students' experiences and achievements. Engage in dynamic discussions, analyze real achievement data, and collaborate with your peers to envision solutions that promote educational justice.

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. This course does not replace English 11
- 2. Concurrent enrollment course
- 3. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

LCRT 2000 REBELS, VILLAINS, AND SUPERHEROES - (Education Pathway)

11, 12

Credits: 0.5 Fine Practical Arts/Elective

Location: Bollman



This Core Humanities Course explores both class and contemporary children's and adolescent literature and media. This course focuses on exploring perspectives and personal responses to literature, developing literary understanding among children and teens, and exploring how literature impacts identity development. Course readings include children's books, young adult literature, apps, graphic novels and multimodal texts. Students will read and respond to literature from the dual perspective of a literary genre and representation of the pivotal issues of child and adolescent identity development.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Concurrent enrollment course

2. This is a semester-long course

3. Course fee: \$10.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

<u>HDFR 1010 LIFESPAN DEVELOPMENT IN ECOLOGICAL SETTINGS - (Education Pathway)</u>

11, 12

Credits: 0.5 Fine Practical Arts/Elective

Location: Bollman



This course is designed to introduce students to human development in ecological settings in particular family, school and community contexts as it occurs across the lifespan, including emotional, physical and cognitive development, and emphasizes personal adjustment and achievement.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Concurrent enrollment course

2. This is a semester-long course

3. Course fee: \$10.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

SPED 1400 UNIVERSAL DESIGN FOR LEARNING - (Education Pathway)

11. 12

Credits: 0.5 Fine Practical Arts/Elective

Location: Bollman



Unlock the power of inclusive education with this exciting course on Universal Design for Learning. You will discover innovative strategies to create vibrant and accessible classroom environments where every student - whether a visual, auditory, or kinesthetic learner - can thrive. Learn how to tailor your teaching to meet the needs of diverse learners and foster a sense of belonging for all.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Concurrent enrollment course

2. This is a semester-long course

3. Course fee: \$10.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

INTE 2000 DIGITAL TEACHING AND LEARNING - (Education Pathway)

11. 12

Credits: 0.5 Fine Practical Arts/Elective

Location: Bollman



Unlock the power of technology in education. This course invites students to dive into the world of digital tools and media, exploring how they can enhance personal learning, lesson design, and content sharing. Students will learn to critically evaluate media trustworthiness, create impactful digital content, and leverage technology to champion equity and access in the classroom.

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Concurrent enrollment course
- 2. This is a semester-long course
- 3. Course fee: \$10.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

CLDE 1000 LANGUAGE, POWER, AND IDENTITY - (Education Pathway)

11, 12

Credits: 0.5 Fine Practical Arts/Elective

Location: Bollman



Dive into the dynamic world of language, power, and identity! This course invites students to explore how these critical elements shape educational experiences in diverse contexts - empowering students to create inclusive and engaging classrooms. Students will tackle pressing issues related to race, ethnicity, gender, and media - uncovering how societal attitudes toward language reveal deeper inequalities.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Concurrent enrollment course

2. This is a semester-long course

3. Course fee: \$10.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

ECED 2000 EARLY CHILDHOOD EDUCATION AS A PROFESSION - (Education Pathway)

11, 12

Credits: 0.5 Fine Practical Arts/Elective

Location: Bollman



Embark on an inspiring journey into the world of early childhood education! This course will immerse students in the profession's rich philosophical and historical foundations, while equipping them with the latest developmental practices and curriculum models. Students will learn effective strategies for promoting diversity and inclusion, creating vibrant learning environments for all children.

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

1. Concurrent enrollment course

2. This is a semester-long course

3. Course fee: \$10.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE EDUCATION PATHWAY:

Coach Counselor Elementary/Secondary Teacher School Administrator Social Worker Psychologist Special Education Teacher Child Advocate

Speech/Language Pathologist Private Industry Trainer

SKILLED TRADES & TECHNICAL SCIENCES

AUTO BODY COLLISION REPAIR & REFINISHING 1 & 2 - (Transportation, Distribution & Logistics Pathways)

10. 11. 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman

MAIMS COMMUNITY COLLEGE

Auto Body Collision Repair Technicians find their skills increasingly valued as more vehicles fill the roads and a greater number of traffic accidents damage these vehicles. As OEM vehicles continue to incorporate sophisticated new materials and increasingly complex design technologies in their vehicles, the collision repair industry will face an ongoing need for

repair technicians. Students in FutureForward's Auto Body Collision Repair program will learn to assess the damage, remove and install parts, remove dents, replace sections, and paint the car body. In addition, students learn how to estimate a repair job and obtain the entrepreneurial skills to operate their own business. Collision repair and refinishing is a challenging, lucrative, and rewarding career, especially as vehicles become more diverse and high-tech in their construction. All students will have the opportunity to obtain an industry-relevant I-CAR certification. I-CAR, the Inter-Industry Conference on Auto Body Collision Repair, plays a major role in supplying the industry with well-trained, knowledgeable, and highly employable collision repair professionals.

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

- Students who complete this course may be eligible to test for I-CAR, the Inter-Industry Conference on Auto Body Collision Repair. This certification may be used to demonstrate competency for new graduation guidelines.
- 2. Safety glasses, shop shirt, and appropriate shoes are required.

3. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AUTO COLLISION REPAIR AND REFINISHING PATHWAY:

Auto Body Shop Owner/Manager Collision Estimator Automobile Customization

Repair Technician Master Painter Prep Technician

Aviation Paint Technician Auto Detailing Technician Auto Restoration Technician

AUTO BODY COLLISION REPAIR & REFINISHING 3 & 4 - (Transportation, Distribution & Logistics Pathways)

11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman



Auto Body Collision Repair Technicians find their skills increasingly valued as more vehicles fill the roads and a greater number of traffic accidents damage these vehicles. As OEM vehicles continue to incorporate sophisticated new materials and increasingly complex design technologies in their vehicles, the collision repair industry will face ongoing need for repair technicians.

Level 3 & 4 students in FutureForward's Auto Body Collision Repair program will learn auto estimating, color matching and theory, plastic repair, applying adhesives, custom painting techniques, and applying decals and pinstripes.

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Prerequisite: Completion of Auto Body Collision Repair and Refinishing 1 & 2
- 2. Students that complete this course may be eligible to test for I-CAR, the Inter-Industry Conference on Auto Body Collision Repair. **This certification may be used to demonstrate competency for new graduation guidelines**.
- 3. Safety glasses, shop shirt, and appropriate shoes are required.
- 4. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AUTO COLLISION REPAIR AND REFINISHING PATHWAY:

Auto Body Shop Owner/Manager Collision Estimator Automobile Customization

Repair Technician Master Painter Prep Technician

Aviation Paint Technician Auto Detailing Technician Auto Restoration Technician

AUTO BODY COLLISION REPAIR & REFINISHING INTERNSHIP - (Transportation, Distribution & Logistics Pathways)

12

Credits: 3 Fine Practical Arts/Elective

Location: Bollman

This course is designed to prepare students to enter the workforce through on-the-job training in the form of an internship. Students will have the opportunity to apply advanced automotive collision repair and refinishing skills in supervised practical experience on the job to become effective automotive technicians.

Notes:

Subject to industry availability and teacher approval.

Counseling Notes:

- 1. Prerequisite: Completion of Auto Body Collision Repair and Refinishing 3 & 4 and Instructor recommendation
- 2. Safety glasses, shop shirt, and appropriate shoes are required.
- 3. Students are required to provide transportation to the job site.
- 4. Students will have to complete an individual company's pre-hiring approval process.

<u>AUTOMOTIVE TECHNOLOGY 1 & 2 - (Transportation, Distribution & Logistics Pathways)</u>

10, 11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman



The Auto Technology program is National Automotive Technical Education Foundation (NATEF) certified in all eight areas. Instructors are Master ASE Certified.

Auto Technology 1 & 2 program provides great opportunities for students interested in careers related to the automotive industry. Students will gain a thorough knowledge of engine performance, electronic diagnostics, light maintenance, brakes, tires, cooling systems, chassis, drivetrains, fuel systems, steering, suspension, and electrical systems. Students will have the opportunity to obtain student ASE certifications in the automotive field.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Students that complete this course are eligible to test for Automotive Service Excellence (ASE) certification.

This certification may be used to demonstrate competency for new graduation guidelines.

2. Safety glasses, shop shirt, and appropriate shoes are required.

3. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AUTO TECHNOLOGY PATHWAY:

Auto Shop Owner/Manager Repair Service Estimator Diesel Mechanic Small Engine Repair Master Auto Technician

Automotive Service Writer

Automotive Parts Professional

AUTOMOTIVE TECHNOLOGY 3 & 4 - (Transportation, Distribution & Logistics Pathways)

11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Bollman



The Auto Technology program is National Automotive Technical Education Foundation (NATEF) certified in all eight areas. Instructors are Master ASE Certified. Auto Technology 3 & 4 students demonstrate a strong interest in the auto technology industry. This program is designed to provide a thorough knowledge of engine performance, advanced charging systems, advanced brakes, alignments, suspension, electrical system diagnostics, engine rebuilding, and emission testing. Students will have the opportunity to obtain student ASE certifications. It is expected that students will enroll in the AYES program.

Notes:

• Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Prerequisite: Completion of Automotive Technology 1 & 2
- 2. Students that complete this course are eligible to test for Automotive Service Excellence (ASE) certification. This certification may be used to demonstrate competency for new graduation guidelines.
- 3. Safety glasses, shop shirt, and appropriate shoes are required.

4. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE AUTO TECHNOLOGY PATHWAY:

Auto Shop Owner/Manager Diesel Mechanic Master Auto Technician

Dealer Service Technician Repair Service Estimator Small Engine Repair

Automotive Parts Professional Automotive Service Writer

<u>AUTOMOTIVE TECHNOLOGY INTERNSHIP - (Transportation, Distribution & Logistics Pathways)</u>

12

Credits: 3 Fine Practical Arts/Elective

Location: Bollman

This course is designed to prepare students to enter the workforce through on-the-job training in the form of an internship. Students will have the opportunity to apply advanced automotive skills in supervised practical experience on the job to become effective automotive technicians.

Notes:

Subject to industry availability and teacher approval.

Counseling Notes:

- 1. Prerequisite: Successful completion of Automotive Technology 3 & 4 and Instructor recommendation
- 2. Safety glasses, shop shirt or coveralls, and steel-toe shoes are required.
- 3. Students are required to provide transportation to the job site.
- 4. Students will have to complete an individual company's pre-hiring approval process.

DIESEL AUTOMOTIVE TECHNOLOGY 1 & 2 - (Transportation, Distribution & Logistics Pathways)

10, 11, 12

Credits: 2 Fine Practical Arts/Elective

Location: Washington Square





This AED certified program is designed to train entry-level diesel technicians. Students are trained in shop safety, preventive maintenance, braking systems, suspension systems, engine theory, electrical and electronic theory, hydraulic theory, design and troubleshooting, powertrain theory, performance, operation and component rebuild. All courses will follow ASE/AED standards. Students will be working on live units with real world problems to diagnose and repair to gain the hands-on experience they need to become successful Diesel technicians. Students will have the opportunity to obtain ASE, AED, Snap-on, and EPA certifications in the automotive field.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Safety glasses, shop shirt, and steel-toed boots are required.
- 2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE DIESEL TECHNOLOGY PATHWAY:

Auto Shop Owner/Manager Diesel Technician Master Auto Technician Repair Service Estimator

DIESEL AUTOMOTIVE TECHNOLOGY 3 & 4 - (Transportation, Distribution & Logistics Pathways)

11, 12 Credits: 2

1 Math - Math in Diesel

1 Fine Practical Arts/Elective Location: Washington Square





The Diesel Automotive Technology 3 & 4 course is designed to train diesel mechanics to enter the workforce at the apprentice level. Students will have the opportunity to obtain student ASE, Snap-on, and EPA certifications. **These certifications may be used to demonstrate competency for new graduation guidelines**. All courses will follow ASE standards. Students will be working on live units with real-world problems to diagnose/repair and to gain the hands-on experience they need to become successful technicians.

Students are trained in:

Advanced Manual/Automatic Transmission

Engine Repair and Rebuild

- Advanced Computer Diagnostic & Engine Performance – Gas and Diesel Engines
- Advanced Braking Systems
- Advanced Driveline Repair
 - DOT Inspection Procedures

- HVAC
- Advanced Electrical Diagnostic & Repair
- Hydraulics
- Advanced Suspension & Repair

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

1. Prerequisite: Successful completion of Diesel 1 & 2

2. Safety glasses, shop shirt, and steel-toe shoes are required.

3. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE DIESEL TECHNOLOGY PATHWAY:

Auto Shop Owner/Manager Diesel Technician Master Auto Technician Repair Service Estimator

<u>DIESEL AUTOMOTIVE TECHNOLOGY INTERNSHIP - (Transportation, Distribution & Logistics Pathways)</u>

12

Credits: 3 Fine Practical Arts/Elective

Location: Washington Square

This course is designed to prepare students to enter the workforce through on-the-job training in the form of an internship. Students will have the opportunity to learn advanced diesel skills in supervised practical experience on the job to become effective diesel technicians.

Notes:

• Subject to industry availability and instructor approval.

Counseling Notes:

- 1. Prerequisite: Successful completion of Diesel 3 & 4 and Instructor recommendation
- 2. Safety glasses, shop shirt, and steel-toe shoes are required.
- 3. Students are required to have transportation to the job site.
- 4. Students will have to complete an individual company's pre-hiring approval process.
- 5. Course fee: \$40.00

PRINCIPLES OF CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING 1 & 2 - (Architecture & Construction Pathways)

10. 11. 12

Credit: 1 Fine Practical Arts/Elective Location: Washington Square



Principles of Construction, Mechanical, Electrical, and Plumbing prepares students for electrical, plumbing, and HVAC careers by introducing students to the physical principles of these systems and the fundamental skills needed to work with them. Upon completion of this course, proficient students will be able to follow safety procedures and use tools to perform basic operations with electrical circuits, as well as demonstrate understanding in fundamental concepts of

electricity theory (i.e. Ohm's Law). Students will be able to apply proper tools and procedures to perform basic operations with plastic piping, including measuring, cutting, and joining. Furthermore, students will be able to apply mathematical concepts to solve HVAC, electrical, and plumbing problems.

Counseling notes:

- 1. Students that complete this course are eligible to test for OSHA 10 and PACT HBI core certification. **These** certifications may be used to demonstrate competency for new graduation guidelines.
- 2. Course fee: \$20.00
- 3. Supplies include:
 - a. Safety-toed shoes/boots
 - b. Safety glasses
 - c. Basic hard hat for field trip and on-the-job exercises

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE CARPENTRY PATHWAYS:

Construction Management Carpenter Architect Surveyor
Home Maintenance and Repair Interior Designer Building Inspector Engineering
Electrician Plumber HVAC

ADVANCED PRINCIPLES OF CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING 3 & 4 - (Architecture & Construction Pathways)

11, 12 Credits: 2

1 Math - Math in Construction 1 Fine Practical Arts/Elective Location: Washington Square



Throughout the course, students will interpret construction drawings to complete projects and implement material estimating procedures and safe working practices. Standards in this course also expand on principles of the construction industry and project management strategies. Students will continue to learn practical applications of electrical theory and techniques used by licensed electricians, including exploration of OSHA's electrical safety-related work practices. Students will learn approaches to commercial building wiring in compliance with current National Electrical Code and local codes. Math concepts related to construction will be integrated throughout the course.

Students will acquire knowledge and skills in use of tools, codes, installation of commercial HVAC equipment, heat pumps, troubleshooting techniques, various duct systems, and maintenance practices. Students will acquire knowledge and skills in plumbing codes, advanced plumbing mathematics, commercial drawings, basic electricity, hanger installation, supports and structural penetrations, roof drains, fixture installation, valves and faucets, and oxy-fuel safety. Students will also learn about setup, cutting, brazing, and welding water system sizing; gas, drain, waste and vent installation and testing; and water heater installation.

Counseling notes:

- 1. Prerequisite: Successful completion of Principles of Construction, Mechanical, Electrical, and Plumbing course
- 2. No math prerequisite for this course.
- 3. Students that complete this course are eligible to test for OSHA 10 and HBI certification. **These certifications** may be used to demonstrate competency for new graduation guidelines.
- 4. Course fee: \$40.00
- 5. Supplies include:
 - a. Safety toed shoes/boots

- b. Safety glasses
- c. Basic hard hat for field trip and on-the-job exercises

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE ADVANCED PRINCIPLES OF CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING PATHWAYS:

Construction Management Carpenter Architect Surveyor
Home Maintenance and Repair Interior Designer Building Inspector Engineering

Electrician Plumber HVAC Refrigeration Technician

Building Maintenance Technician Building Maintenance Supervisor

<u>CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING INTERNSHIP -</u> (<u>Architecture & Construction Pathways</u>)

12

Credits: 3 Fine Practical Arts/Elective

Location: Washington Square



This course is designed to prepare students to enter the workforce through work-based learning in the form of an internship. Through supervised practical experiences, students will job shadow and work as an apprentice in industry trades including: carpentry, electrical, HVAC, and plumbing.

Notes:

Subject to industry availability and instructor approval.

Counseling notes:

- 1. Prerequisite: Successful completion of Advanced Construction 3 & 4 and Instructor recommendation
- 2. Safety glasses, shop shirt, and steel-toe shoes are required.
- 3. Students are required to have transportation to the job site.
- 4. Students will have to complete an individual company's pre-hiring approval process.

WELDING TECHNOLOGY 1 & 2 - (Manufacturing Pathway)

10*, 11, 12 Credits: 2

Location: Washington Square



This course will provide students with entry-level welding skills. The Welding Technology program provides training in welding safety, oxyacetylene welding and cutting, plasma arc cutting, brazing, soldering, stick welding (SMAW), TIG Welding, MIG welding (GMAW) and Flux-cored Arc Welding (FCAW). Students learn to read and make weld prints and sketches. Basic fabrication skills, including the safe use of shop tools, will be learned in conjunction with class projects and personal projects.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. *10th grade accepted if space is available.
- 2. Students that successfully complete this course may be eligible to receive American Welding Society certification. This certification may be used to demonstrate competency for new graduation guidelines.

- 3. Course fee: \$80.004. Supplies include:
 - a. Welding helmet
 - b. Safety glasses
 - c. Welding gloves
 - d. Welding jacket
 - e. Steel-toed boots

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE WELDING PATHWAY:

Architect Auto-Body Specialist Engineer Ironworker Sheet-Metal Worker Sculptor Pipefitter Machinist

WELDING TECHNOLOGY 3 & 4 - (Manufacturing Pathway)

11, 12 Credits: 2

1 Math - Math in Welding 1 Fine Practical Arts/Elective Location: Washington Square



This course is for students who have demonstrated an interest in pursuing a career as a welder. This class will provide students with advanced instruction in Welding Technology including welding safety, oxyacetylene welding/cutting, plasma arc cutting, carbon arc cutting, exothermic cutting, stick welding (SMAW), flux-cored arc welding (FCAW), MIG welding (GMAW), and TIG welding (GTAW), and pipe welding. Students will continue to master skills in print reading and other technical information. Students successfully completing Welding Technology 3 & 4 may acquire an Entry-Level Welder's Certification from the American Welding Society.

Notes:

Students will have the opportunity to earn college credits.

Counseling Notes:

- 1. Prerequisite: Successful completion of Welding 1 & 2
- 2. Students that complete this course may be eligible to receive American Welding Society certification. **This** certification may be used to demonstrate competency for new graduation guidelines.
- 3. Course fee: \$80.00
- 4. Supplies include:
 - a. Welding helmet
 - b. Safety glasses
 - c. Welding gloves
 - d. Welding jacket
 - e. Steel-toed boots

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS IN THE WELDING PATHWAY:

Architect Auto-Body Specialist Engineer Ironworker Sheet-Metal Worker Sculptor Pipefitter Machinist

WELDING TECHNOLOGY INTERNSHIP - (Manufacturing Pathway)

12

Credits: 3 Fine Practical Arts/Elective

Location: Washington Square

This course is designed to prepare students to enter the workforce through work-based learning in the form of an internship. Through supervised practical experiences, students will job shadow and work as a welding apprentice.

Notes:

Subject to industry availability and instructor approval.

Counseling Notes:

- 1. Prerequisite: Successful completion of Welding 3 & 4 and Instructor recommendation
- 2. Safety glasses, shop shirt, and steel-toe shoes are required.
- 3. Students may be required to provide transportation to the job site.
- 4. Students will have to complete an individual company's pre-hiring approval process.
- 5. Course fee: \$40.00

AFROTC

9, 10, 11, 12

Credit: 1 Fine Practical Arts/Elective Location: Westminster High School

Air Force Junior ROTC is available through a cooperative agreement with Westminster Public School. Classes are held at Westminster High School. Students are responsible for their own transportation to and from class. There is a \$35 course fee. Interested students should contact the BOLLMAN registrar at 720-972-5827 for more information, the ASI - Senior Master Sergeant Daniel Fleig at dfleig@wps.org, or Samuel Spiwak at sspiwak@wps.org.

This course teaches both aerospace studies and leadership/life skills education. Air Force topics include the heritage and development of the Air Force, including its structure, operations, customs, intercommunication skills, drill, and military ceremonies and courtesies. Aerospace topics include the development, history, and impact of flight; aircraft and spacecraft; the environment in which these crafts operate; science of flight, space technology and exploration; national defense systems; and knowledge of aviation, propulsion, and navigation. Global Studies curriculum is also included once every fourth year. This course may be repeated for credit.

Transportation for ROTC is NOT provided by Adams 12

ACADEMIC COURSE OFFERINGS

Students *must* be enrolled in a FutureForward career and technical program to be eligible for enrollment in FutureForward academic courses.

English 11 – American Lit/Comp	
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English 12 - Lit/Comp	Technical Writing - ENG 1031
- (must also register for Introduction to Technical	- (must complete/pass English 12)
Writing - ENG 1031)	*FRCC Guaranteed Transfer Course)
College English 1021 – English Composition I	College English 1022 – English Composition II
- (must also register for English 1022)	- (must complete/pass English 1021)
*FRCC Guaranteed Transfer Course	*FRCC Guaranteed Transfer Course

FutureForward English courses meet district graduation requirements.

Please consult with your counselor to verify which courses meet the NCAA Clearinghouse requirements before making final course selections.

ENGLISH COURSES

ENGLISH 11 (American Lit/Comp)

11

Credit: 1 English

Students will understand the thematic progression of literature from the United States by studying literary texts across the 18th, 19th, and 20th centuries. They will analyze and explain authors' use of literary and figurative language techniques through argumentative writing, higher-level discussions, and oral presentations. Students will flexibly use technology for both research and the presentation of information, including that required for a long-term, in-depth project. They will assess the credibility and validity of sources to answer research questions and complete long-term works, as well as write narrative, problem-solution, comparative analysis, informative, and argumentative pieces.

Major units of study include:

- Argument and Inquiry
- Thematic Development and Authorial Choices
- Rhetorical Analysis and Crafting Arguments
- Interpretation of Drama: Genre Study
- Informed Public Advocacy

Counseling Notes:

1. This course meets the district English graduation requirement

ENGLISH 12 (Lit/Comp) - (includes semester-long Technical Writing course - ENG 1031)

12

Credit: 1 English



Students will engage in the study of literary movements to determine how various views affect the interpretation and understanding of literature and poetry. Students will participate in a large-scale independent inquiry project where they

will research, develop, and refine a multi-faceted argumentative piece and presentation. In the Technical Writing course, students will develop rhetorical knowledge and focus on building their use of tone, format, and structure in a given writing situation, such as those that apply in the postsecondary world. Students in the course will develop their experiences as writers in at least one genre, and learn recursive strategies for generating ideas, revising, and editing, while using appropriate, credible sources and evidence in their discourse. Students will apply mechanics, syntax, style, vocabulary, and grammar appropriate to the writing task.

Major units of study include:

- Self-Directed Inquiry Project
- Narrative Thematic Development
- Initiating Inquiry
- Analysis and Argument
- Application and Presentation of Research

Counseling Notes:

- 1. Registration in English 1031 is also required.
- 2. This course meets the district English graduation requirements.

COLLEGE ENGLISH 1021: Freshman Composition I

12

Credit: 1 English



Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a wide variety of compositions that stress analytical, evaluative, and persuasive/argumentative writing. This is a statewide Guaranteed Transfer course in the GT-CO1 category.

Counseling Notes:

- 2. Registration in English 1022 is also required.
- 2. This course meets the district English graduation requirements.

COLLEGE ENGLISH 1022: Freshman Composition II

12

Credit: 1 English



Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and/or argumentative compositions. This is a statewide Guaranteed Transfer course in the GT-CO2 category.

Counseling Notes:

- 1. Prerequisite: Successful completion of ENG 1021
- 2. This course meets the district English graduation requirements.

Classes will only be offered if there is sufficient enrollment.