

CAREER AND TECHNICAL EDUCATION

The Caribou Regional Applied Technology Center serves as a training center for students from Caribou, Fort Fairfield, Limestone, Presque Isle, Van Buren, Washburn, Easton and Ashland.

The Center provides high school students and post-graduates an opportunity to learn job skills in a variety of areas. A combination of classroom instruction, hands on learning experiences and on-the-job training enables every student to explore job options and develop life and work skills. Some students seek employment immediately after high school or join the military. Many students further their education at a university, college, or community college.

All students at the Technology Center are encouraged to participate in co-curricular organizations, which coincide with their chosen program. These student organizations have been highly successful in local, state and national competitions as evidenced by respective state and national awards.

1-YEAR PROGRAMS Offered to Grades 9, 10, 11, 12

Agriscience Technology	Home Design
Computer Applications	Presentation Graphics
Graphic Arts	Web Page Design
Graphic Communications	Wood Technology
	Introduction to PC Repair

1-YEAR PROGRAMS Offered to Junior & Senior Students

- Automated Manufacturing*
- Computer Information Processing
- Commercial Drivers License *
- Electronics/Computer Servicing
- Health & Medical Sciences
- Large Equipment Operations & Maintenance *
- Criminal Justice

2-YEAR PROGRAMS Offered to Junior & Senior Students

- Auto Body Repair *
- Automotive Technology *
- Food Service
- Marketing Education (1 period per day, open to Sophomores)
- Residential Construction *
- Video Productions
- Welding/Metal Fabrication*

* Two-year participation in these programs will meet the third year science requirement.

CAREER AND TECHNICAL EDUCATION ONE PERIOD CLASSES

AGRISCIENCE TECHNOLOGY

AG EXPERIENCE

1 Credit

This new course is for students who want to be actively involved in the FFA and the agricultural industry. Coursework will include soil science, Ag weather, force, acceleration, Pascal's Law, electrical basics, composites, specific gravity, density, Bernoulli's effect, scientific methods and research. A Supervised Ag Experience Project will be planned. An opportunity to earn money with an Agriscience project will be offered.

AG MECHANICS

1 Credit

This course will include basic tool identification and use, fasteners, composites, metal identification, basic fabrication skills, Maine Public Service electrical program, hydraulics, alternative energy, and small engines. Students may enter the electrification contest that offers \$1000 scholarship to the winner. Ag Mechanic students may work on third world collaborative projects.

HORTICULTURE

1 Credit

The class will include landscaping, sports fields' management, landscape design, and growing plants in the new greenhouse. Hands on projects, which utilize the school grounds and industry speakers, will be an integral part of this course. Sports fields and turf grass management national certification segments will be offered.

AGRICULTURE AND NATURAL RESOURCES

3 Credits

An intensive study of the agriculture, natural resources, and Agriscience industries in a three period block of time. Students will visit Ag businesses, Ag production, forestry, and Ag science facilities. These students will utilize the fields and forests at Caribou Technology Center to cultivate, plant, maintain, harvest and sell fresh commodities. State of Maine private pesticide applicator licensing may be earned. A Supervised Ag Experience Project must be planned or in place. Membership in the FFA is strongly encouraged.

All Ag education students will get their Environmental Protection Agency Worker Protective Standards (WPS) course certification.

Membership in the Caribou Chapter will open up a world of opportunity to students who take an active part in the student organization of agriculture education, the FFA.

Thomas Hale - thale@mail.caribouschools.org

COMPUTER APPLICATIONS I & II

1 Semester

1/2 Credit each

This course is a continuation of Computer Technology and will prepare the student for intermediate usage of Windows as a computer tool. Various generalized application areas covered include: computer theory, disk operating system, word processing, electronic spreadsheets, database management, presentation graphics and computer aided design. Stress will be placed on the use of the computer as a business tool. Students will continue to strive for proficiency and production.

Jane Umphrey – jumphrey@mail.caribouschools.org

GRAPHICS ARTS I

1 Credit

Computer Graphics is one of the fastest growing career fields. Create imaginative artwork that will inform and attract in an interesting and informative vocational program. You will use some of the tools of the printing industry and learn the history of the trade. The course is designed for both the artistic and the non-artistic alike to produce professional looking projects. This course meets the requirements of 1 Credit in fine arts.

GRAPHIC ARTS II

1 Credit

Continuing the development of the graphic arts skills, this course will provide self-paced instruction and practice in the field of graphic arts. Students practice these skills on school projects including business cards, brochures, flyers, invitations, and office printing. Students gain professional training in the following software: Microsoft Publisher, Paint Shop Pro X, and Microsoft Office components. This course meets the requirements of 1 Credit in fine arts. Prerequisites: Graphic Arts I

GRAPHIC COMMUNICATIONS

1 Credit

This is a fast paced development class using previously developed graphic arts skills to produce documents and designs for local businesses, private individuals, and the school district. We will actively explore local Graphic Art employment options and best practices.

Prerequisites: Graphic Arts II

HOME DESIGN

1 Credit

This course will provide students with a simulated process of designing and constructing a model of their dream home. Students will draw a scaled blue print of their home, and select doors, windows, cabinets and interior fixtures. Learning the building process and how to estimate cost of materials will be included. The course will conclude with students constructing a scaled model of their future home. This class meets the requirements for 1 fine arts Credit.

Spencer Bragan – sbragan@mail.caribouschools.org

PRESENTATION GRAPHICS

1 Semester

1/2 Credit

This course provides the student the ability for developing visually oriented presentations containing both text and graphics placed in an attractive layout on the computer screen and then printed ready to be reproduced. The student will create multicolumn page layouts; mix different type styles and place photos and drawings in the document. Documents created would include newsletters, brochures, tickets, sales flyers, directories, price lists, forms training manuals, business cards, letterheads, transparencies, resumes, note pads, slides, bar-graphs, pie charts and other professional typeset quality documents.

Jane Umphrey – jumphrey@mail.caribouschools.org

WEB PAGE DESIGN

1 Semester

1/2 Credit

Learn to create and edit Web pages using HTML and Microsoft FrontPage. HTML (hypertext markup language) is a formatting language for web pages that will display text, images, set up lists boxes, hyperlinks, graphics, sound and video. Microsoft FrontPage allows you to create and edit Web pages without the use of programming languages. They are designed for both the experienced and beginning Web site developers with a simple yet powerful tool for designing and building great looking, easy to navigate Web sites.

Jane Umphrey – jumphrey@mail.caribouschools.org

WOOD TECHNOLOGY I & II

1/2 Credit each

This program will cover types of wood and usage. There will be instruction on the safe use of hand and power woodworking tools. Small woodworking projects will be completed to demonstrate skilled usage of tools and woodworking techniques. Wood finishing with paint and stains will also be covered. Student projects are an expectation in the program. Costs incurred must be paid prior to the end of add/drop period. Wood Technology I is a prerequisite to Wood Technology II. Advanced tool skills will be taught to accomplish larger and more complex projects.

Spencer Bragan – sbragan@mail.caribouschools.org

INTRODUCTION TO PC REPAIR

1/2 Credit

This one-period, one-semester course is designed to provide students with a basic understanding of how personal computers work. Topics include computer hardware, how hardware and software work together, installing and supporting hardware, troubleshooting basics, installing and supporting Windows XP, and connecting PCs to networks and the Internet.

Lisa Anderson – lisa_anderson@mail.caribouschools.org

CAREER AND TECHNICAL EDUCATION ONE-YEAR PROGRAMS

AUTOMATED MANUFACTURING

3 Credits

This new course will introduce students to the exciting world of computer-aided manufacturing. Students will experience the processes required in manufacturing metal and non-metal parts through computer assisted precision machining. Topics include CAD (Computer Aided Drafting and Design), CAM (Computer Aided Manufacturing), and CNC (Computer Numerically Controlled) machines. Students will work on state of the art equipment while working closely with industry and the Welding/Metal Fabrication program. This is an excellent program for people planning a career in engineering.

Kevin Quist – kquist@mail.caribouschools.org

COMPUTER INFORMATION PROCESSING

3 Credits (Dual Credit option*)

This one-year course in computer applications covers areas that can lead to an exciting career involving computers. The primary emphasis is on Microsoft Office covering Word, Access, Excel, PowerPoint and integration of these applications. Other topics in the course are desktop publishing using Microsoft Publisher, Internet study and web page creation. *Students have the option of enrolling in the Dual Credit component of the course and earning college Credit in addition to high school Credit.

Jane Umphrey – jumphrey@mail.caribouschools.org

COMMERCIAL DRIVERS LICENSE

3 Credits

This course will provide an opportunity for students to gain the knowledge that is needed for today's trucking industry. If you would like to drive a truck and feel the freedom of being on the open road, then this course will cover the rules and regulations for Commercial Drivers and the basic preventative maintenance of trucks. This includes changing engine oil, greasing, tightening belts and basic wiring. This program will help students meet test requirements of the State of Maine Motor Vehicle Class B Commercial Vehicle Road Test. A valid Maine driver's license is **required** to take this vocational program. A drug test may be required.

Tom Huston – thuston@mail.caribouschools.org

ELECTRONICS/COMPUTER SERVICING

3 Credits

This course is designed to prepare students for a career in a computer occupation such as a computer service technician or network support specialist. Topics include safety, computer configuration, installing hardware and software, operating systems, networking fundamentals, upgrading, diagnosis, repair, customer interaction and preventive maintenance. This course will help prepare students who wish to obtain A+ Certification in Computer Servicing. **Two period options are available.**

Lisa Anderson – lisa_anderson@mail.caribouschools.org

HEALTH & MEDICAL SCIENCES

3 Credits

Health & Medical Sciences is a one-year program designed to give students a general overview of medical career opportunities. It emphasizes hands-on training in entry-level skills needed to be successful in the work force. First and Second Quarter focuses on class/lab to obtain the knowledge needed for the clinical setting. Those students who do not wish to become certified nursing assistants can exit out after completing second quarter or possibly do training in another medical setting. Those who complete the clinical hours needed and are 16 years of age by May 1st, may take the state exam to become certified in May. Any student who is considering going to college to be a nurse or who wants a career in the medical field is highly encouraged to take this course. Health & Medical Sciences offers a great foundation to build upon. All students participating in clinical need to have a physical examination by a licensed professional within the past year. All necessary forms may be obtained through your guidance counselor.

Carol Buzzell – cbuzzell@mail.caribouschools.org

LARGE EQUIPMENT OPERATIONS & MAINTENANCE

3 Credits

This course provides a basic knowledge of heavy equipment and the fundamentals of mechanical maintenance on large industrial equipment. Students will use equipment to plow snow, load gravel, dig trenches, plow parking lots and haul materials. Preventative maintenance, including changing oil, greasing, tightening belts, and basic wiring will be taught. A valid Maine driver's license is **required** to take this vocational program.

Tom Huston – thuston@mail.caribouschools.org

CRIMINAL JUSTICE

3 Credits

The Criminal Justice program is designed to provide an overview of the total criminal justice system. Students will have the opportunity to explore law enforcement issues at the local, state, and federal levels. They will also look at the United States and worldwide court systems, juvenile law, corrections, private security and other related fields.

This three-period program will provide juniors and seniors with a background in a variety of criminal justice topics through academic study and hands on training. The course instructor will work closely with the University and Community College systems along with the Maine Criminal Justice Academy to better prepare students for the next level of training/education.

Melinda Howe – mhowe@mail.caribouschools.org

CAREER AND TECHNICAL EDUCATIONAL TWO-YEAR PROGRAMS

AUTO BODY REPAIR I & II

3 Credits each

This program is designed to provide students with the fundamental skills needed to enter the auto body trade. Students will have the opportunity to perform panel replacement, sheet metal repair, frame construction repairs, and plastic shaping and sanding. Students will also learn to use the MIG welder, uni-spotter, and power and hand tools that are used in the auto body industry. Safety procedures will be included throughout the program.

The second year will cover more advanced skills in the areas of major collision repair, BC/CC painting single stage paints, airbrushing, glass installation, estimating repair and frame and body alignments.

One period, two period, and off lab day options are available.

Ken Westin – kwestin@mail.caribouschools.org

AUTOMOTIVE TECHNOLOGY I & II

3 Credits each

This program combines classroom instruction, a practical shop environment, and a variety of hands on learning experiences to provide students with a thorough understanding of basic automotive maintenance and repair. Maintaining, troubleshooting, and repairing of brake systems, electrical systems, ignition systems, drive trains, engines, and more will be taught. Students will also be instructed on the use of a wide variety of standard shop equipment as well as state of the art equipment including scope/analyzer, an automotive computer code scanner, 5-gas analyzer and 4-wheel alignment machine. Individual and team shop projects will provide students with practical “live-work” experiences. **Less than a 3-Credit class may be offered on an individual basis.**

Kevin Keaton – kkeaton@mail.caribouschools.org

FOOD SERVICE

3 Credits

This program covers entry-level skills of the food service industry. Training includes safety, sanitation, customer relations, customer service, cashier, cook, waiter/waitress, job attitudes and operations of related tools and equipment. Working in the lunch counter that operates on a daily basis provides live work experience. Students will rotate through the different jobs of the lunch counter to gain experience in each area of the kitchen.

Juanita Campbell – jcampbell@mail.caribouschools.org

MARKETING EDUCATION I & II

1 Credit each

Marketing Education provides students with key skills needed to seek employment or further their education in the business field. Skills in academic and technical areas are combined to provide students the foundation our business and industrial leaders demand. Some of the areas covered are E-Commerce, Entrepreneurship, Financial Services, Hospitality Services, Travel & Tourism and Sports & Entertainment Marketing. Guest speakers, on-line computer activities and the development of student career portfolios are also included in the curriculum.

DECA Club

Participation in DECA (An Association of Marketing Students) provides students with the opportunity to become involved in many exciting activities relating to their Marketing curriculum. Involvement in DECA offers students leadership training, and a chance to compete in State and National events in career areas designed to stimulate and motivate classroom interest and vocational competence. Students winning First Place trophies at the State Conference are eligible to attend the National Conference, which is held in cities such as Anaheim, Nashville, Salt Lake City and Louisville.

Jane Umphrey – jumphrey@mail.caribouschools.org

RESIDENTIAL CONSTRUCTION I & II

3 Credits each

This course is designed to provide students with skills and hands on experiences in construction. Students will learn the uses and safety of power and hand tools, and how to layout, fabricate, install, and repair wooden structures. Siding, roofing, estimating, and blueprint reading will also be introduced.

A 6 to 9 week masonry course is included, covering the art of laying brick and block. Different brick and block projects will be built.

A variety of projects are constructed in response to local demands and needs. Community service projects may be included to provide on the job training.

Spencer Bragan – sbragan@mail.caribouschools.org

VIDEO PRODUCTIONS I & II

3 Credits each

Video Productions gives students the real life experience of making web casts for the class's own website vikingvideoprogram.com. Students shoot and edit a variety of fun and exciting mini-video productions from music videos to news flashes and from competition pieces to field trips. Students learn production planning, scripting, shooting, and editing. Many out of class filming experiences reinforce theory and technical skill development in class. State of the art digital equipment is used and this along with the skill of students has resulted in many awards for this class.

Brenda Jepson – bjepson@mail.caribouschools.org

WELDING / METAL FABRICATION I & ii

3 Credits each

This course provides an opportunity to learn skills needed for an exciting career in welding and metal fabrication. Upon successful completion, students may receive up to eight college Credits from Eastern Maine Community College and become certified through the American Welding Society. Topics covered in this high demand job field include oxy-fuel processes, as well as modern arc welding processes such as stick, TIG, MIG, flux-cored and pulse-arc welding. Related topics such as blueprint reading, computer-aided drafting and metallurgy prepare students for success in a wide range of occupations. Students will practice these skills and techniques through classroom and "live work" projects. Emphasis is placed on subject matter, work attitude and employability skills. Entrepreneurial skills are incorporated in a school-based business. "CTC Enterprises" manufactures equipment that is marketed through local businesses. Involvement in SkillsUSA is highly encouraged for development of leadership skills and demonstration of skills at local, state, and national competitions. **1 & 2 period classes may also be available.**

Kevin Quist – kquist@mail.caribouschools.org

SkillsUSA Club

SkillsUSA is a national organization specifically for vocational students and is designed to be an integral part of the student's education. In addition to leadership training, involvement in SkillsUSA offers students a chance to compete in local, state and national events in more than 60 skills and leadership areas.

STUDENT SERVICES

The Technology Center has a Student Services Coordinator (Guidance Counselor) to assist all students in getting the most from their Technology training. Students and parents are encouraged to contact the Technology Center at any time to discuss following services:

Academic Counseling - Assisting students with course selection and scheduling, evaluating academic achievement and finalizing post-secondary plans.

Personal Counseling - Short term counseling regarding personal problems or concerns available to students individually or in small groups.

Career Counseling - Helping students explore career options based on their interests, aptitudes and abilities. Job seeking skills such as locating job openings, resume writing, completing job applications and interviewing skills are also included.

Judy Bougie – jbougie@mail.caribouschools.org

PRESQUE ISLE CAREER & TECHNICAL CENTER

Juniors and seniors may also elect these courses available at the Presque Isle Regional Career & Technical Center.

CTE DRAFTING I

3 Credits – Grades 11 and 12

CTE Drafting I introduces students to aspects of sketching, lettering, multi-view drawing, dimensioning, pictorial view drawing and cut sectioning. Residential house design, including floor plans, sections, elevation details, and structural components are also presented through the use of CADD. Student performance is assessed through authentic class assignments and projects.

CTE DRAFTING II

3 Credits – Grade 12

CTE Drafting II expands the skills learned in CTE Drafting I and includes a stronger focus on the AutoCAD program. Emphasis is placed on designing residential and commercial building plans. Many students' plans are actually utilized in real construction projects. Students will demonstrate their competency by plotting completed projects and by maintaining an up-to-date career portfolio.

EARLY CHILDHOOD EDUCATION I

3 Credits – Grades 11 and 12

Early Childhood Education I (ECE I) is designed to begin the process of teaching grades 11 and 12 students the skills required to work with young children. Students study the growth and development of children ages two to five and have the opportunity to assist in the organization and operation of our Childcare Education Center. This is a clinical-based program, which includes a period of lab for applying guidelines for observing, assessing, and interacting with children. Students work directly with young children in designated lab areas and assist with arts and crafts, science, motor skills, dramatic play, block building, housekeeping, reading and math readiness, story time, music and movement activities and snack preparation. Students also assist with the daily clean-up duties for the center. Additionally, students have daily classroom instruction to learn how to enhance a child's social, emotional and intellectual growth and development. The daily instruction presents students knowledge in order to provide children with positive guidance, to observe and assess each child's development, and to plan and implement a variety of learning activities.

EARLY CHILDHOOD EDUCATION II

3 Credits – Grade 11

Early Childhood Education II is a continuation of ECE I with a heightened emphasis on planning and implementation of lessons and activities. Students who return to ECE II are those who are genuinely interested in the field and who wish to prepare for an entry-level childcare worker position or other childhood career opportunities. Students will work to develop portfolios, applications, resumes and will hone their job interviewing skills. Students who enroll in ECE II will be better prepared for occupations in childcare and guidance, foster care/family daycare, and as a teacher assistant. Other related occupations include those in the field of education, health care, and social services.

INDUSTRIAL & FARM MECHANICS I

3 Credits - Grade 11

Industrial and Farm Mechanics I teaches skills to maintain, repair, and overhaul farm machinery, equipment, and vehicles, such as tractors, harvesters, pumps, tilling equipment, trucks, and other mechanized, electrically powered, or motor-driven equipment. Students will examine and listen to machines, motors, gasoline and diesel engines, and equipment for operational defects and dismantle defective units using hand tools. In addition to repairing and/or replacing defective parts, using hand tools and machine tools, welding equipment, grinders, and saws, they will reassemble, adjust, and lubricate machines and equipment to insure efficient operation.

INDUSTRIAL & FARM MECHANICS II

3 Credits – Grade 12

Industrial and Farm Mechanics II reinforces the fundamental skills learned in Farm Mechanics I and includes the installation and/or repair of wiring systems and other electronic systems found on large farm equipment. An OJT (On-the-Job Training) program in April and May gives seniors an opportunity to work with a variety of farm machinery businesses in the area.

Other Presque Isle Vocational Programs Include:**AGRISCIENCE PROGRAM****AUTOMOTIVE TECHNOLOGY****BUILDING TRADES****BUSINESS TECHNOLOGY**

See a guidance counselor for course descriptions.