

AREA CAREER CENTER

Program Coordinator: Mr. Dwayne Mentgen

The courses at the Area Career Center are career-oriented, student preparation is focused on career work in business and industry rather than for work in the home.

The demand for some ACC classes and one semester CTE classes is often higher than the number of work stations available for a given class (such as welding, drafting, etc.) If this situation exists, counselors will determine which students have preference for course enrollment according to the following criteria:

1. Attendance patterns.
2. Successful completion of Introduction to Technology or the one hour CTE class.
3. Teacher recommendation, if need exists.
4. Recommendation of ACC Director.

<u>Course Title</u>	<u>Credit</u>	<u>Years Offered</u>
Aviation	1	11, 12
Computer Repair & Maintenance	1	11, 12
Intro. to Programming – Database Management	1	11, 12
Auto Technology 1	2	11, 12
Auto Technology 2 **	2	12
Cosmetology	2	12
Building Trades 1+	2	11, 12
Building Trades 2+	2	12
Computer Aided Drafting 1	2	11, 12
Computer Aided Drafting 2 **	2	12
Residential Wiring 1	2	11, 12
Residential Wiring 2 **	2	12
Culinary Arts 1	2	11, 12
Culinary Arts 2	2	12
Health Occupations 1 **	2	11, 12
Health Occupations 2 **	2	12
Machine Technology 1	2	11, 12
Machine Technology 2 **	2	12
Welding 1	2	11, 12
Welding 2 **	2	12
Basic Fire Skills-Emer. Medical Responder 1	2	11, 12
Basic Fire Skills II	2	12
Child Care/Early Childhood Education 1 **	2	11, 12
Child Care/Early Childhood Education 2 **	2	12
Transitional Math	1	12

** Students can earn articulated credit through IVCC.

+ Students earn Dual Credit through South Suburban College



Aviation

(1 semester)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: Use of laptop or school provided device

Credits: 1

Weighted Grade: No

The ACC aviation curriculum is focused on taking the interested student through the various elements that would be included in the ground school portion of an aviation education program. As such, major topics included in the course are as follows (but not limited to): A fundamental study of the technical subject matter necessary to operate safely as a Private Pilot which includes, basic aerodynamics and aircraft performance, aviation regulations, cross-country flight planning, basic meteorology, aeromedical factors, and aeronautical decision-making. Additionally, the students will be exposed to other careers in the aviation industry such as: Aviation mechanics, navigation, air traffic controllers, accident investigation, etc.) Lastly, as a part of the curriculum the student will have the opportunity to be taken up in flight on at least two occasions.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Computer Repair and Maintenance

(1 semester)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: None

Credits: 1

Weighted Grade: No

Students taking this course will experience hands on and theory based instruction in repairing and maintaining computers and their peripheral attachments. Installation and updating of software, as well as removal and diagnosis of computer virus' and malware, will provide additional elements of instruction within the curriculum. Additionally, an understanding of network configurations and maintenance will be a part of classroom instruction. Students will have opportunity to earn A+ certification through CompTia, as well as certification via Test Out.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Intro. to Programming – Database Management

(1 semester)

Prerequisites: None

Open to: 11, 12

Fee: None

Necessary Materials: None

Credits: 1

Weighted Grade: No

This course introduces students to the fast growing and high paying fields of computer programming and database management. Students will have an opportunity to earn industry certifications in Database application (MOS Certification) and Database Fundamentals (MTA Certification). Using the languages of Visual Basic and SQL, students will learn programming fundamentals as they apply to creating, maintaining, and enhancing database structures. This course is being negotiated for dual credit with IVCC.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Auto Technology 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: None

Credits: 2

Weighted Grade: No

Students enrolled in this course will learn the skills necessary to become an automotive technician. Hands on activities and presented theories will allow students to enhance their acquired skills while servicing vehicles from the community and home. An emphasis on safety and operation of automotive diagnostic tools is a substantial part of this class. Students will be eligible for six hours of college credit from IVCC and to complete the requirements for NATEF General Automotive Service Technician Certification.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Auto Technology 2

(2 semesters)

Prerequisites: Auto Mechanics 1

Open to: 12

Fees: None

Necessary Materials: None

Credits: 2

Weighted Grade: No



The second year course in the automotive program is a continuation of learning and an understanding of what is required of today's automotive repair technician. The class and shop work will stress the diagnostic and repair skills needed to work on computerized engine controls, electronic fuel injection, air conditioning, ABS braking systems, front suspension, and digital imaging four-wheel alignment. Second year students will act as group leaders for the first year students and will develop good communication and public relation skills when dealing with the auto repair customer. Second year students will have the opportunity to take the IVCC Automotive Technology proficiency exam in the spring. With a 75% or above they will receive six free credit hours in IVCC's auto mechanics program once they have graduated from high school, and enrolled and successfully completed six hours in the IVCC auto mechanics program. Students will also have the opportunity to receive NATEF certification in "Maintenance & Light Repair".

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Cosmetology

(2 semesters)

Prerequisites: None

Open to: 12

Fees: \$195 (Beautician Supply Kit and Smock)

Necessary Materials: None

Credits: 2

Weighted Grade: No

This course is open to seniors only. The class is offered at Educators of Beauty which is a Pivot Point School. The class will engage students in both practice and theory of introductory concepts such as facials, shampooing, permanent waves, makeup application, manicures, pedicures, hair removal/scalp massage, chemical hair relaxing, and retail. Upon completion students will have been eligible to have earned up to 250 hours towards a licensure in cosmetology. More information can be found at www.educatorsofbeauty.com

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Building Trades 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: Students buy tools for construction (belt, hammer, tape, utility knife) and safety glasses (required equipment).

Credits: 2

Weighted Grade: No



Students enrolled in Building Trades will learn the skills necessary to pursue a career in the Carpentry Profession. In addition to learning how to properly use hand and power tools students will learn how to design and construct stair risers, raise general framing, install roofing, and perform interior and exterior finish work. Whenever possible students will put their skills to work in off-site construction projects. Students will be eligible to earn an OSHA 10-hour safety credential, as well as earn certification in construction and safety through the NCCER curriculum. This class offers four hours of dual credit from South Suburban Community College. The credit is transferrable to any Illinois state school, or community college.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Building Trades 2

(2 semesters)

Prerequisites: Building Trades 1

Open to: 12

Fees: None

Necessary Materials: Students buy tools for construction (belt, hammer, tape, square, etc.) and safety glasses (required equipment).

Credits: 2

Weighted Grade: No

Advanced students in the construction trades are introduced to the qualifications that are required for the broad range of job opportunities in the construction field. Emphasis is placed on craftsmanship, tool techniques, remodeling, maintenance, and repair. Planning, estimating and quality craftsmanship are stressed. Students will experience increased responsibility and progressively more difficult building techniques. A major emphasis stressed throughout the class will be the development of a positive work ethic. Second year students will act as group leaders. Students will work on NCCER core curriculum.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Computer Aided Drafting 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: None

Credits: 2

Weighted Grade: No



This course is designed to give students training in using software and design tools for applications in various industries. Through the use of state of the art software, and 3-d printing equipment, students will be able to experience the design process from inception to creation of a printed prototype. This course allows a student to earn up to nine credit hours from IVCC. Three of those hours are directly applicable through dual credit agreements. This course is a must for any student who wishes to pursue a career or degree in engineering.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Computer Aided Drafting 2

(2 semesters)

Prerequisites: Computer Aided Drafting 1

Open to: 12

Fees: None

Necessary Materials: None

Credits: 2

Weighted Grade: No



This course will expand on skills learned in Engineering Design/Drafting 1. Considerable time will be spent on real world projects, working with area industry and businesses. Through the use of computer-aided drafting and design programs, advanced techniques will be applied to machine design projects, structural projects, civil design projects and architectural projects. Models will be constructed through the use of a 3D printer (Rapid Prototyping Machine) and tested and analyzed for strength and durability. This course will expand on the principles learned in the engineering design/drafting 1st year course. College credit can be earned from IVCC through various articulation tests (up to 9 credit hours).

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Residential Wiring 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: Safety glasses

Credits: 2

Weighted Grade: No



Students taking this course will be taught a curriculum that is designed to instill in them the basic knowledge necessary to become a residential electrician. Students will learn how to read, create, layout, and diagnose electrical blueprints. Additionally, as part of a hands on experience students will learn how to hang light fixtures, install smoke detectors, as well as build and install a main service panel with electrical breakers. Enrolled students will be eligible for five college credit hours from IVCC.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Residential Wiring 2

(2 semesters)

Prerequisites: Residential Wiring 1

Open to: 12

Fees: None

Necessary Materials: Safety glasses

Credits: 2

Weighted Grade: No



This second year of the Career and Technical Education series in Residential Wiring is a continuation and expansion of the first course. Students will install NMB cable, EMT conduit and ENT conduit, all within the context of executing real connections found in any common residence. Upon completion of this second year of Residential Wiring, students will have virtually wired a typical house according to the requirements of the NEC.

Students will be given the opportunity to take a proficiency exam from IVCC. With an 80% or better score, graduation from high school, and upon enrollment at IVCC in the Electronics Technology program, 3 credit hours for IVCC's ELE 1206 course will be placed on the student's official transcript.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Culinary Arts 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: \$15.00

Necessary Materials: None

Credits: 2

Weighted Grade: No

Students taking this class will be trained for career opportunities in the Food Service Industry. In preparation for these careers students will be given opportunity to earn certifications such as "Illinois Food Handlers Certification", and Serv-Safe sanitation certification (for food manager). Students will learn skills that allow them to function in both the front and back of the house. Training for this class will be performed as the students operate a functioning restaurant known as "The Corner Café". The Café is located at the corner of 9th and Chicago in Peru, Illinois. (This is on the campus of the ACC). Students will be expected to earn their Food Handlers Certification, as well as be encouraged to earn the Food Managers Certification.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Culinary Arts 2

(2 semesters)

Prerequisites: Culinary Arts 1

Open to: 12

Fees: \$15.00

Necessary Materials: None

Credits: 2

Weighted Grade: No

This course is a continuation of Culinary Arts 1, where basic food preparation skills and concepts are expanded upon in much greater detail. Throughout the year new topics will be introduced to these student: food purchasing, portion, quality and cost control, management techniques and skills, advanced garnishing, and food production techniques. Students will be expected to take on a more responsible and supervisory role in the practical restaurant labs as they practice managerial skills such as: daily record keeping, cash register and cash handling, inventory, time card calculations, employee motivation, communication and handling skills. Students will be expected to earn their Food Handlers Certification, as well as be encouraged to earn the Food Managers Certification.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Health Occupations 1

(2 semesters)

Prerequisites: Should have at least a “C” in Biology, good attendance, and achieve at least a “C” in Health Occupations 1 class first semester, to be accepted into the second semester when clinical experience begins.

Open to: 11, 12

Fees: Approximately \$95 (Fee covers a mandatory background check and the textbook, which is optional)

Necessary Materials: scrubs and pay for the TB skin test

Credits: 2

Weighted Grade: No



Students enrolled in this course will learn basic anatomy and physiology terminology as well as patient care skills (such as taking vital signs). In the second semester students will get the hands on clinical experience required by the Illinois State Department of Public Health to become a certified Nursing Assistant(CNA). Second year students will earn credit for IVCC’s Medical Terminology (3 credit hours). If students complete both years they will be eligible for 13 dual credit hours through IVCC.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Health Occupations 2

(2 semesters)

Prerequisites: Successful completion of Health Occupations 1 or strong academic student.

Open to: 12

Fees: Approximately \$60 (“Medical Terminology” textbook)

Necessary Materials: None

Credits: 2

Weighted Grade: No



This class is offered to anyone interested in pursuing a career in the medical field. It is especially helpful to students that want to pursue a nursing degree. Body systems are reviewed along with medical terminology for body systems and disease processes. Three hours of dual credit will be awarded through IVCC and this will be completed during the 1st semester.

For the 2nd semester students will join the Basic Fire Skills class and complete the EMR Emergency Medical Response course. Students will study and learn basic emergency medical techniques and practices, scene safety, patient assessment, airway management, CPR, trauma assessment, bandaging, splinting and transport. Students will visit local fire and EMS agencies to gain an understanding of the variety of employment and volunteer opportunities in their communities. Students will also be introduced to a variety of other public safety careers. Up to 5 Dual Credit hours will be offered through IVCC.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Machine Technology 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: Safety glasses

Credits: 2

Weighted Grade: No



Students enrolled in this class will learn to operate lathes, mills, grinders, presses, band saws, and state of the art CNC equipment to manufacture projects of their own design. Students will be eligible for four college credit hours from IVCC. In addition, students enrolled for a second year will have opportunity to earn Manufacturing Production Technician Certification through the use of the Manufacturing Skills Standards Council curriculum.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Machine Technology 2

(2 semesters)

Prerequisites: Machine Technology 1

Open to: 12

Fees: None

Necessary Materials: Safety glasses

Credits: 2

Weighted Grade: No



Students enrolled in this class will learn to operate lathes, mills, grinders, presses, band saws, and state of the art CNC equipment to manufacture projects of their own design. Students will be eligible for four college credit hours from IVCC. In addition, students enrolled for a second year will have opportunity to earn Manufacturing Production Technician Certification through the use of the Manufacturing Skills Standards Council curriculum.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Welding 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: Safety glasses

Credits: 2

Weighted Grade: No

Students enrolled in this course will learn proper welding techniques and procedures. The first year introduces students to basic techniques, tool use, and safety. Second year students will continue to learn more advanced methods, and will build upon skills learned in the first year. Students who successfully complete the course will be eligible for four proficiency hours and six hours of college credit from IVCC. Additionally, students will be exposed to, and taught use of plasma cutters with CNC controllers.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Welding 2

(2 semesters)

Prerequisites: Welding 1

Open to: 12

Fees: None

Necessary Materials: Safety glasses

Credits: 2

Weighted Grade: No

Students enrolled in this course will continue to learn proper welding techniques and incorporate those techniques at an advanced level. A primary focus will be for students to be able to achieve certification via AWS standards (in a variety of welding techniques and styles) as well as obtain the requisite skills to afford them entry into a union apprenticeship program. As in Welding I, students will be eligible to earn up to four hours of proficiency credit, and six hours of classroom credit via IVCC.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Basic Fire Skills/Emergency Medical Responder 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: Safety Glasses

Credits: 2

Weighted Grade: No

The course is designed to provide a basic understanding of the fire service career field and to prepare the fire service student for entry into the Fire Service II program. This course provides students with awareness level skills to function safely and effectively in a supportive role in both non-emergency and emergency settings. The program is a blended program of classroom instruction, internet based online self-study curriculum, online assessment, hands on skill instruction, and hands on evaluations and scenarios. Students will study and learn about how the fire and emergency services have evolved and their importance within their communities. The curriculum is based on the standards established by the Illinois State Fire Marshal's office, the National Fire Protection Association, the National Fire Academy, the Department of Transportation, the Department of Public Health, and the Fire and Emergency Services National Professional Development Model. Students may visit local Fire and EMS agencies to gain an understanding of the variety of employment and volunteer opportunities in their communities.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Basic Fire Skills 2

(2 semesters)

Prerequisites: Earned a C or better in Basic Fire Skills/Emergency Medical Responder 1

Open to: 12

Fees: None

Necessary Materials: Safety Glasses

Credits: 2

Weighted Grade: No

This course is open to seniors who have successfully passed the Basic Fire Skills/Emergency Medical Responder 1 course with a C or higher grade. The Fire Service II course is designed to provide a deeper understanding of the fire service career field and the topics covered in first course. It is, further, intended to prepare the student for entry into a State approved firefighter certification program and/or a college or university Fire Technology degree program. The program is a blended program of classroom instruction, internet based online self-study curriculum, online assessment, hands on skill instruction, and hands on evaluations and scenarios. Students will study and learn about how the fire and emergency services have evolved and their importance within their communities. In order to further the development of leadership and mentoring skills, student led classroom environment is utilized. Student will function in the capacity of a fire service line officer and have responsibilities with prepping skill drills, assisting students in skill development and problem solving. Student will reinforce and maintain Basic Fire Skills, while assisting other students. Student must have the ability to work independently under the guidance and direction of the Instructor. Students may visit local fire and EMS agencies to gain an understanding of the variety of employment and volunteer opportunities in their communities. Students may participate with local fire service and EMS agencies to job shadow shift duty activities.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Child Care – Early Childhood Education 1

(2 semesters)

Prerequisites: None

Open to: 11, 12

Fees: None

Necessary Materials: None

Credits: 2

Weighted Grade: No



This course is designed to prepare students interested in a career in child and day care operations and early childhood education with information and practical experiences needed for the development of job-related competencies. Students are provided laboratory experiences within a school-based or extended campus facility. Students are expected to develop appropriate skills in program development and in assisting with children's activities. Classroom study is concerned with the philosophy and management of care centers and the state and local regulations governing care-giving operations. Students will learn appropriate methods of developing and writing program curriculum. The main learning experiences involve actual work with children in situations that simulate those found in a child day care and educational settings. Students will be able to earn 3 hours of credit in IVCC's Child Care program as well as meeting the observation requirement for IVCC's "Creative Activities" course. In addition, there will be awarded the Level One Credential. This Credential is available to those who complete the Manual during this course through Gateways to Opportunities of INCCRRA. (Illinois Network of Child Care Resource and Referral Agencies funded by the Illinois Department of Human Services.

MEETS GRADUATION REQUIREMENT **ELECTIVE**



Child Care – Early Childhood Education 2

(2 semesters)

Prerequisites: Child Care – Early Childhood Education 1

Open to: 12

Fees: None

Necessary Materials: None

Credits: 2

Weighted Grade: No



This course continues the learning begun in Child Care/Early Childhood Education 1. The emphasis will be on learning the skills associated with the administration of the day care facility and preparation for post-secondary education in an Early Childhood Education program. Emphasis is placed on career opportunities, communication skills, and human relations. Students will learn about the responsibilities and characteristics of teachers. They will also learn about the physical, cognitive, social and emotional development of children and further develop their teaching and observation skills. Students will continue to be provided with laboratory experiences within the school-based or extended campus facility. Articulation into IVCC's Child Care/Early Childhood Education program will be developed this year and graduating seniors will have credit granted for this course.

MEETS GRADUATION REQUIREMENT **ELECTIVE**

Transitional Math

(1 semester)

Prerequisites: Completed or concurrently enrolled in Algebra II

Open to: 12

Fees: None

Necessary Materials: None

Credits: 1

Weighted Grade: No



Transitional math is designed for the student who has completed or is currently enrolled in Algebra II or higher at his or her home school. The course is a combination of essential Algebra II topics (quadratic equations, radical expressions, linear functions, graphing, polynomial expressions, and others) as well as infused applications of the mathematical concepts. Students will explore the use of mathematics in a variety of workplace settings (from business to the trades), as well as improve their knowledge and understanding of both soft and work place skills. Students successfully completing this course are eligible to start in a credit bearing math course at IVCC (without having to take the Accuplacer test).

MEETS GRADUATION REQUIREMENT **ELECTIVE**
