

**SOUTHEAST COMMUNITY COLLEGE
TRANSPORTATION OCCUPATIONS
DIESEL –AG EQUIPMENT SERVICE TECH
COURSE SYLLABUS
January 25, 2023**

I. COURSE DESCRIPTION

Course Number: AGST1901
Course Title: Cooperative Experience
Prerequisite(s): AGST1111, AGST1116

Catalog Description: On-the-job experience with the student's sponsoring Cooperative Experience employer. Application of skills and concepts learned in previous semesters. Safety is emphasized throughout the work experience. Supervised by Southeast Community College-Milford Campus AG Equipment Service Tech Instructors.

Credit Hour: 5
Class Hours: 0
Lab Hours: 300
Total Contact Hours: 300

II. COURSE OBJECTIVES: *Course will:*

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. STUDENT LEARNING OUTCOMES: *The student will be able to:*

1. Develop and present a professional resume, demonstrate acceptable interview skills, and maintain employment throughout the cooperative experience term.
2. Present original, organized written ideas/information in diverse genres to varied audiences; use language effectively, including the use of standard grammar; and gather and analyze information from a variety of sources. Develop marketable skills as a high quality entry level Ag equipment technician through on-the-job training and experience.
3. Begin the transition from the student level to the level of a career Ag equipment service technician in an Ag equipment service facility.
4. Apply safety procedures related to the Hazard Communication and Globally Harmonized Systems as well as specific program and employer policies and procedures for tool and equipment use.
5. Maintain a professional appearance appropriate for the job.
6. Complete assigned jobs at a performance level that is acceptable to the job site service manager and the SCC cooperative experience coordinator.
7. Display initiative and accuracy in the interpretation and implementation of job site supervisor instructions and customer requests.
8. Demonstrate the ability to learn new knowledge and skills from co-workers, supervisors and industry training classes.
9. Demonstrate effective interpersonal relationships with the employer, other employees, and the clientele of the business.

10. The student will demonstrate the ability to present original, organized written ideas/information in their resume, customer reports and daily job reports using correct technical language, spelling, grammar, and punctuation.
11. Certify for heavy duty diesel equipment safety and pollution prevention by completing each module test and by passing the on-line SP/2 Final Exams.
12. Perform diagnostic, service and repair procedures with electrical systems.
13. Perform diagnostic, service and repair procedures with electronic / CAN Bus Systems.
14. Perform diagnostic, service and repair procedures with engine mechanical systems.
15. Perform diagnostic, service and repair procedures with diesel fuel injection systems.
16. Perform diagnostic, service and repair procedures with power train systems.
17. Perform diagnostic, service and repair procedures with hydraulic systems.
18. Perform diagnostic, service and repair procedures with HVAC systems.
19. Perform diagnostic, service and repair procedures with harvesting equipment systems.
20. Perform diagnostic, service and repair procedures with planting / seeding systems.
21. Perform diagnostic, service and repair procedures with application equipment systems.
22. Perform diagnostic, service and repair procedures with precision farming systems.

B. GENERAL EDUCATION LEARNING OUTCOMES:

GELO #1: Oral Communication

Outcomes:

GELO #2: Written Communication

Outcomes:

IV. CONTENT/TOPICAL OUTLINE

- A. Obtain a suitable Cooperative Experience Training Site Agreement with an SCC approved employer.
- B. Complete preparatory documentation no later than 1 week prior to the beginning of the Cooperative Experience.
- C. Maintain employment in an approved Cooperative Experience employment station through the term.
- D. Complete and submit daily work hours / job descriptions in a timely manner.
- E. Gain additional knowledge and experience with Ag equipment service diagnosis and repair of: engine and fuel systems, electrical and electronic systems, heating ventilation and air conditioning systems, power trains, hydraulic systems, machinery inspection set-up and adjustment and customer service.
- F. Participate in weekly Zoom meetings with classmates and the SCC coordinator by PDA or telephone.
- G. Safety quizzes and on-line training completion prior to the end of the term.
- H. Student will coordinate at least 2 conference calls (Video or audio) with SCC faculty and job site supervisor.

V. INSTRUCTIONAL MATERIALS

Tasks and assignments provided by the employer as necessary for the completion of the work assignment.

PDA (Personal Digital Assistant) or phone access.

SP/2 Online Safety Training: MOODLE Access.

Students must have all Diesel–AGST Program required tools available at the employers facility for all work done during the students assigned work hours.

Students must use approved safety eyewear (Z-87.2) at all times during the students' assigned work hours.

Students must properly use all other necessary PPE required by SCC and / or the employer during the students assigned work hours.

VI. METHODS OF PRESENTATION / INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. Pre-Class preparation to obtain and document: Training site approval, Cooperative Experience Training Agreement, Training Plan and Employer Data Sheet.
2. On-the-job work experience in an approved cooperative education work station.
3. Submit daily Job Descriptions / Work Hours via Google Doc's form.
4. Complete SP-2 On-Line Safety Training: Heavy Equipment Diesel Technology Safety & Pollution Prevention and any other Safety Quizzes.
6. Periodic visits / contacts from SCC Cooperative Experience Coordinator.
7. Zoom Meetings – weekly as scheduled by the instructor.

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. Resume, employer data sheet and pre-class preparation materials
2. Daily job descriptions / work sheets
3. Safety quizzes and on-site observations for safety compliance
4. SP-2 safety training
5. Weekly Zoom meetings
6. Student midterm and end of term appraisals by supervisor (performance rubric)
7. Letter grades will be based on the SCC Standard Grade Scale Policy.
8. Gradebook setup:
 - a. Pre-class preparation – 5%
 - b. Safety – 10%
 - c. Daily job descriptions / work hours and Zoom meetings – 35%
 - d. Mid-term appraisal by job site supervisor – 25%
 - e. End-of-term appraisal by job site supervisor – 25%
 - f. Total work hours submitted by student by the end of the term – 300 hours

VIII. SPECIFIC COURSE REQUIREMENTS

A. Student must:

1. Complete all tests, quizzes, projects, assignments.
2. Earn a final grade of 70% (2.0) or higher.

B. Program shop safety rules will be followed. Please see the course information document for any additional safety rules established by the instructor.

C. Attendance:

1. Attendance is required for successful completion of this course.

2. This is an Engaged Learning course and students are expected to complete pre-class preparation assignments / homework and attend employer assigned cooperative experience work hours.
3. Each instructor will inform students by means of a syllabus and Course Information Document of attendance requirements at the first class meeting.
4. Students are expected to complete any and all assignments / homework by the assigned due date/time, and attend all sessions for class and lab.
5. It is expected that students will be on time and present for all scheduled Cooperative Experience work times unless PRIOR arrangements have been made with the instructor and the job site supervisor.
6. Missed work time, regardless of cause, reduces the opportunity for learning and may affect student learning outcomes and the student's grades.
7. Students are responsible for all content missed, regardless of the reason for the absence.
8. Students must, whenever possible, notify the instructor and their job site supervisor if unable to attend any scheduled work times.
9. Emergency absences will be considered on an individual basis to determine if learning activities / work time can reasonably be rescheduled during the current session.

D. Participation:

1. Students are expected to be responsible for meeting scheduled training and homework due dates unless prior arrangements have been made with the instructor and the job site supervisor 24 hours before the due date.
2. Students are expected to complete all exams, quizzes, work site activities and assignments / homework at the scheduled times unless PRIOR arrangements have been made with the instructor before the due date and time.
3. When reasonably possible, and only when prior arrangements have been made, students may ask the instructor to have a test or exam rescheduled prior to 24 hours before the activities scheduled date and time.
4. Unscheduled Quizzes may be given at any time and may not be repeated or taken at a later time, unless approved by the instructor.
5. Exceptions due to emergency absences will be considered on an individual basis.