# SOUTHEAST COMMUNITY COLLEGE
# TRANSPORTATION OCCUPATIONS
# AUTOMOTIVE TECHNOLOGY
# COURSE SYLLABUS
July 1, 2019

Syllabus Statements

## I. CATALOG DESCRIPTION

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|---|---|
| Course Number: | AUTT1212 |
| Course Title: | STEERING AND SUSPENSION LAB |
| Prerequisite(s): | See Course Information Document for specific prerequisite(s) |
| Catalog Description: | Diagnosis and practical experience of automotive steering and suspension applications. This class includes the replacement of suspension components and 4-wheel alignment. |
| Credit Hour: | 1.5 |
| Classroom Hours: | 0 |
| Lab Hours: | 75 |
| Total Contact Hours: | 75 |

## II. COURSE OBJECTIVES: *Course will:*

**A.** Cover diagnosis and repair of steering gears.
**B.** Cover diagnosis and repair of wheels and tires.
**C.** Cover diagnosis and repair of steering components.
**D.** Cover diagnosis and hands on use of 2 and 4 wheel alignment equipment.
**E.** Cover diagnosis and repair of tire pressure monitoring components.

## III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNINGOUTCOMES:

### A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

1. Inspect, diagnose, service and repair wheels, tires and bearings.
2. Diagnose, service, repair and identify front and rear suspension systems.
3. Diagnose, service, repair and identify various steering systems and their individual components.
4. Perform complete alignment and service on front and rear wheel drive vehicles using industry standard equipment.
5. Diagnosis, service and repair of tire pressure monitoring components.

### B. GENERAL EDUCATION LEARNING OUTCOMES

1. GELO 4: Problem Solving The student will demonstrate the ability to define a problem, develop a plan to solve the problem, collect and analyze information, solve the problem, evaluate results, and define any need for furtherwork.

## III. INSTRUCTIONAL MATERIALS

**A.** The Course Information Document lists the current text(s) required for this class. The list is also available in the campus bookstore. The Course Information Document also lists the tools/equipment or other supplies required for this class.

## IV. COURSE CONTENT/UNIT OF INSTRUCTION

- **A.** Conventional Steering
- **B.** Power Steering
- **C.** Wheels
- **D.** Tires
- **E.** Balancing
- **F.** Steering Components
- **G.** Two Wheel Alignment
- **H.** Four Wheel Alignment
- **I.** Front/Rear Suspensions
- **J.** Tire Pressure Monitors
- **K.** Service Procedures
- **L.** Lab Exercises

## V. METHODS OF PRESENTATION / INSTRUCTION

- **A.** Presentation methods may include, but are not limited to, lecture, small and large group discussion, video presentation, transparencies, demonstrations, project boards, flip charts, handouts, observations, assigned lab projects, and field trips.

## VI. METHODS OF EVALUATION

The following may be utilized in evaluation of the student by the instructor:

- **A.** Notebook (if required)
- **B.** Quizzes
- **C.** Tests
- **D.** Lab grades
- **E.** Class/lab conduct and participation

Letter grades will be based on the SCC Standard Grade Scale Policy. **Note:** See Course Information Document for specific details on how the course grades will be calculated.

## VII. SPECIFIC COURSE REQUIREMENTS

- **A.** Completion of all tests, projects, assignments, and notebook (if required).
- **B.** Must earn a final grade of 70% (2.0) or higher.
- **C.** Attendance as stated in the college student handbook, automotive lab and classroom policies handbook or Course Information Document.
- **D.** Shop safety rules will be followed.
- **E.** Additional Course Requirements.