

determine necessary action.

Disassemble and clean caliper assembly; inspect parts for wear, rust, scoring, and damage; replace seal, boot, and damaged or worn parts.

Remove and install rotor

Refinish rotor on vehicle.

Refinish rotor off vehicle

Adjust calipers with integrated parking brake system.

Install wheel, torque lug nuts, and make final checks and adjustments.

Power Assist Units Diagnosis and Repair

Test pedal free travel with and without engine running; check power assist operation.

Check vacuum supply (manifold or auxiliary pump) to vacuum-type power booster.

Inspect the vacuum-type power booster unit for vacuum leaks; inspect the check valve for proper operation; determine necessary action.

Inspect and test hydraulically assisted power brake system for leaks and proper operation; determine necessary action.

Measure and adjust master cylinder pushrod length.

Miscellaneous (Wheel Bearings, Parking Brakes, Electrical, Etc.) Diagnosis and Repair

Diagnose wheel bearing noises, wheel shimmy, and vibration concerns; determine necessary action.

Remove, clean, inspect, repack, and install wheel bearings and replace seals; install hub and adjust wheel bearings.

Check operation of brake stop light system; adjust and service as needed.

Replace wheel bearing and race.

Major Course Projects:

Students will perform tasks relating to the Automotive Service Industry as per standards identified by the National Automotive Technicians Education Foundation (NATEF). Students will complete repair orders each day and will document completion of competencies on competency profiles tracking individual progress and accomplishment.

Project Outline:

Projects will include performing tasks on mock ups, shop vehicles, and live work as student skills progress. These projects will reinforce classroom theory instruction and will require the student to consult industry service information during the course of task performance.

Instructional Delivery Plan:

The instruction for this course will be comprised of multiple methods designed to promote and accommodate different learning styles including classroom lecture, classroom demonstrations, shop demonstrations, hands on learning activities, classroom discussion, interactive media, textbook, computer based learning activities, research projects, guest speakers, student presentations, and interactive learning with CPS (Classroom Performance System). Students will be required to practice the skills associated with the instructional content and will be required to work independently and also in teams. Assignments will require students to use academic skills in math, science, and language arts.

Assessment Plan:

Students will be assessed according to three basic kinds of learning. Knowledge: Does the student possess the required knowledge to perform a specific competency? Skills: Does the student possess the necessary coordination to perform the task/competency? Attitude: Will the student perform the task/competency on the job after learning to do

it? Students will also be assessed according to the basic work skills of attendance and promptness. Soft skills will be assessed in the Academic Career Center.

50%	Daily work- Performance of technical skills on job, work habits, safety, clean-up, participation
50%	Written assignment- Repair orders, textbook assignments, etc.

Grading Scale:

A	90-100	Exceeds expectations
B	80-89	Meets industry standards and expectations
C	70-79	Passing grade, but does not meet some standards
D	60-69	Passing, but only meets the minimum standards
F	Below 60	Failing, does not meet minimum standards

OSU Okmulgee

Alliance Credit Offered:

Industry Alignments: ASE Certification, ODCTE Certification,

End of Instruction Industry Assessment: ASE Certification, ODCTE Certification,

Resources: Automotive Excellence Vol. 1 and Vol. 2
Modern Automotive Technology
Introduction to Automotive Service: Fundamental Concepts
CDX Global Interactive Training
Snap On Shop Key
Alldata

Attachments: See Automotive Service Technology Task List Competency Handbook