CASPER COLLEGE COURSE SYLLABUS

COURSE NUMBER & TITLE: DESL 1650 Fuel Systems and Tuning I

SEMESTER/YEAR: Fall 2015

LECTURE HOURS: 6 LABORATORY HOURS: 15 CREDIT HOURS: 5

(6 hours of lecture and 15 hours of laboratory per week for 5 weeks for 5 credits)

CLASS TIMES: 8:00 a.m. to 9:50 a.m. LEC MTW ROOM: CS 152

10:00 a.m. – 11:50 a.m. LAB MTW ROOM: CS 153 1:00 p.m. – 3:50 p.m. LAB MTW ROOM: CS 153

INSTRUCTORS: Glen Roberts and Jeff Morris

INSTRUCTORS' OFFICE: CS 150 & 149

INSTRUCTORS' PHONE: 268-2709 & 268-2451

INSTRUCTORS' EMAIL: groberts@caspercollege.edu

jmorris@caspercollege.edu

OFFICE HOURS: As posted on office doors

COURSE DESCRIPTION: This course will cover the theory and operation of diesel engine fuel systems to include diesel fuel, common fuel system designs, governors, fuel system related components and subsystems. Students will use specialized tools and OEM service/repair information to safely perform entry-level technician tasks that include fuel system disassembly, inspection, reassembly and tuning adjustments. Fuel injection timing, injectors, combustion chambers, governors, failure analysis, and component nomenclature will be emphasized.

STATEMENT OF PREREQUISITES: Concurrent enrollment in DESL 1610

GOAL: To provide entry-level technical training that meets the needs of the diesel power industry

OUTCOMES:

- 1. Demonstrate effective oral and written communication
- 2. Solve problems using critical thinking and creativity
- 3. Use appropriate technology and information to conduct research
- 4. Use quantitative analytical skills to evaluate and process numerical data

COURSE OBJECTIVES:

- 1. Provide students with safe working habits so as to not injure themselves, others, or personal property
- 2. Instill a sense of punctuality, time management and work ethic
- 3. Communicate effectively both verbally and in writing
- 4. Apply appropriate Diesel workplace and critical thinking skills
- 5. Perform diagnostic and repair procedures on diesel engine fuel systems and related components

METHODOLOGY: A combination of lecture and laboratory classes

EVALUATION CRITERIA: Students are evaluated by the following methods: attendance, punctuality, classroom participation, written & practical tests, and daily lab performance. Late homework will receive a maximum of one-half credit depending on the reason and hand-in date. A makeup exam may be given at the instructors' discretion with a pre-excused absence. **Lab work and practical exams may NOT be made up!**

NOTE: Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

Grading Scale: 93%-100% A

83%-92% B 70%-82% C 60%-69% D 00%-59% F

REQUIRED TEXTS, READINGS, MATERIALS:

Medium/Heavy Duty Truck Engines, Fuel & Computerized Management Systems (4th Edition), Sean Bennett

(Must include CourseMate)

CLASS POLICIES:

- Last Date to Change to Audit Status: See current Casper College catalog.
- Last Date to Withdraw with a W grade: See current Casper College catalog.
- ➤ Refer to the Diesel Power Statement of Policy.

SAFETY: Personal and equipment safety standards will be strictly enforced. *It is the individual's responsibility to develop and use a safe work attitude.* Disregard for the safety of yourself and/or others will result in dismissal from the program. Students must provide their own safety-toed shoes and ANSI approved safety glasses.

STUDENT'S RIGHTS AND RESPONSIBILITIES: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

CHAIN OF COMMAND: If you have any problems with this class, you should first contact the instructor in order to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take your problem through the appropriate chain of command starting with the department head, then the division chair, and lastly the vice president for academic affairs.

ACADEMIC DISONESTY (CHEATING & PLAGERISM): Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion form school. See the Casper College Student Code of Conduct for more information on this topic.

OFFICIAL MEANS OF COMMUNICATION: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also where you will find course evaluation links during course evaluation periods.

ADA ACCOMMODATIONS POLICY: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.