



## **DIET 1030 Diesel Engines**

### **COURSE SYLLABUS**

### **Fall Semester 2017**

#### **COURSE INFORMATION**

Credit Hours/Minutes: 6/9750

Class Location: Building 2 Room 2139

Class Meets: 9:01am to 12:00pm Monday, Tuesday, Wednesday, Thursday

CRN: 20092

#### **INSTRUCTOR CONTACT INFORMATION**

Instructor Name: Jon Walraven

Office Location: Building 2 Room 2138

Office Hours: Monday and Tuesday 5:00pm to 6:30pm

Email Address: [jwalraven@southeasterntech.edu](mailto:jwalraven@southeasterntech.edu)

Phone: 478 289 2218

Fax Number:

Tutoring Hours (if applicable):

#### **REQUIRED TEXT**

MDT Diesel Engines 2<sup>nd</sup> edition

#### **REQUIRED SUPPLIES & SOFTWARE**

Each student must have a black pen, pencil, highlighter, paper and a notebook. Student must have MDT Diesel Engines Textbook.

#### **COURSE DESCRIPTION**

This course introduces diesel engines used in medium/heavy duty trucks and heavy equipment. Topics include: general engine diagnosis, cylinder head and valve train, engine block, engine lubrication system, engine cooling, air induction, exhaust, fuel supply systems, electronic fuel management, and engine brakes. Using and interpreting test and measuring equipment is highly emphasized.

#### **MAJOR COURSE COMPETENCIES**

- 1 General Engine Diagnosis
- 2 Cylinder Head and Valve Train
- 3 Engine Block
- 4 Engine Lubrication System
- 5 Engine Cooling System
- 6 Air Induction and Exhaust System
- 7 Fuel Supply System
- 8 Electronic Fuel Management System
- 9 Engine Brakes

## **PREREQUISITE(S)**

Program Admission

## **COURSE OUTLINE**

- 1 General Engine Diagnosis
- 2 Cylinder Head and Valve Train
- 3 Engine Block
- 4 Engine Lubrication System
- 5 Engine Cooling System
- 6 Air Induction and Exhaust System
- 7 Fuel Supply System
- 8 Electronic Fuel Management System
- 9 Engine Brakes

## **GENERAL EDUCATION CORE COMPETENCIES**

STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

## **STUDENT REQUIREMENTS**

### **STUDENT OPERATING TRUCKS AND FORKLIFTS MUST HAVE APPROPRIATE LICENSES.**

Students that operate trucks/equipment that require a commercial driver's license (CDL) must have a valid CDL learners permit or CDL license on file before they can operate any equipment. Students that do not have a CDL permit will be required to attend CDL permit training classes and pass all required DDS test. DDS testing fees are the responsibility of the student.

Students are required to have a powered lift truck certification on file before they are allowed to operate forklifts or any other power equipment. STC offers forklift training; students are responsible for all fees related to training.

Instructors and STC staff have the discretion to deny vehicle operation to students

## **ATTENDANCE GUIDELINES**

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of

graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an F in a course.

### **SPECIAL NEEDS**

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Helen Thomas, 912-538-3126, [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), to coordinate reasonable accommodations.

### **SPECIFIC ABSENCES**

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

### **PREGNANCY**

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make appropriate arrangements with Helen Thomas, 912-538-3126, [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu).

### **WITHDRAWAL PROCEDURE**

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

**Remember** - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

### **MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC...)**

Statement will vary per program, course, or instructor. Information should be included pertaining to such items as tests, quizzes, homework, etc.

### **ACADEMIC DISHONESTY POLICY**

The STC Academic Dishonesty Policy states All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the STC Catalog and Student Handbook.

## PROCEDURE FOR ACADEMIC MISCONDUCT

The procedure for dealing with academic misconduct and dishonesty is as follows:

### 1. First Offense

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

### 2. Second Offense

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

### 3. Third Offense

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of third offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

## STATEMENT OF NON-DISCRIMINATION

The Technical College System of Georgia and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member or citizenship status (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

<b>ADA/Section 504 - Equity- Title IX (Students) - OCR Compliance Officer</b>	<b>Title VI - Title IX (Employees) - EEOC Officer</b>
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 108 Phone: 912-538-3126 <a href="mailto:hthomas@southeasterntech.edu">hthomas@southeasterntech.edu</a>	Blythe Wilcox, Director of Human Resources Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 138B Phone: 912-538-3147 <a href="mailto:bwilcox@southeasterntech.edu">bwilcox@southeasterntech.edu</a>

## GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on STC's website.

## ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and Banner Web via the my STC portal or by clicking the Current Students link on the [STC website](#).

## TCSG GUARANTEE/WARRANTY STATEMENT

*The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

## GRADING POLICY

Assessment/Assignment	Percentage
Test	30%
Shop lab grade	50%
Final Exam	20%
0	0
0	0

## GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

# DIET 1030 Diesel Engines

## Fall Semester 2017 lesson plan

Instructor may amend lesson plan as needed  
Instructor will assign students DTNA training and job sheets

Assignments	Chapter/Lesson	Content	Assignments & Tests	Competency Area
1	Chapter 3	Engine Basics	Complete Chapter 3 Test in Black Board (BB) Complete DTNA Get Ahead Training as assigned Complete Job Sheets as assigned	1
2	Chapter 4	Pistons, Crankshafts Flywheels	Complete Chapter 4 Test in BB Complete DTNA Get Ahead Training as assigned Complete Job Sheets as assigned	3
3	Chapter 5	Timing Gears, Camshafts	Complete Chapter 5 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	2,3
4	Chapter 6	Cylinder Blocks ,Liners, Cylinder Heads	Complete Chapter 6 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	3,2
5	Chapter 7	Engine Lubrication System	Complete Chapter 7 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	4
6	Chapter 8	Engine Cooling Systems	Complete Chapter 8 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	5

Assignments	Chapter/Lesson	Content	Assignments & Tests	Competency Area
7	Chapter 9	Engine Breathing	Complete Chapter 9 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	6
8	Chapter 10,11,12	Engine Brakes Engine Servicing and removal	Complete Chapter 10,11,12 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	9
9	Chapter 13	Fuel systems	Complete Chapter 13 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	7
10	Chapter 15,16	Diesel Engine Electronics, Electronic Fuel Injection	Complete Chapter 15,17 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	8
11	Chapter 17	Emissions	Complete Chapter 17 Test in BB Complete DTNA Training as assigned Complete Job Sheets as assigned	8
12	Final Exam	Final Exam	Complete Final Exam Located in BB	

**Competency Areas: (will vary for each course/taken from state standards)**

- 1 General Engine Diagnosis
- 2 Cylinder Head and Valve Train
- 3 Engine Block
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**General Core Educational Competencies**

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.

c) The ability to read, analyze, and interpret information.