

# DIET 1030

# Diesel Engines

# COURSE SYLLABUS

**Summer Semester 2022 (202214)**

## Course information

Credit Hours/Minutes: 6 / 9700

Campus/Class Location: Swainsboro Campus / Room 2139

Class Meets: Monday, Tuesday, Wednesday, Thursday 8:00 AM—11:00 AM

Course Reference Number (CRN): 40214

## INSTRUCTOR CONTACT INFORMATION

Full Time Instructor: Jeffrey Wyatt

Office Hours: Monday-Thursday (MTWR) 7:00-8:15 AM, 4:00-5:15 PM

Office Location: Building 2 Room 2139

Email Address: [Jeffrey Wyatt](mailto:jwyatt@southeasterntech.edu) ([jwyatt@southeasterntech.edu](mailto:jwyatt@southeasterntech.edu))

Phone: 478-289-2218

## Southeastern technical college’s (STC) Catalog and Handbook

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College’s [Catalog and Handbook](https://catalog.southeasterntech.edu/) (<https://catalog.southeasterntech.edu/>).

## REQUIRED TEXT

Electude Heavy Vehicles Systems, 24 Month voucher, ISBN 97894-93163-68

Fundamentals of Medium/Heavy Commercial Vehicle Systems, Second Edition Two year voucher, ISBN 9781284196429 Vouchers purchased from the Book Store.

**REQUIRED SUPPLIES & SOFTWARE**

Notebook for notes, pens, pencils, cloth mask, safety glasses, safety toe boots

One STC Diesel Shirt purchased from the STC book store

**Students should not share login credentials with others and should change passwords periodically to maintain security.**

## 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.

## PREREQUISITE(S)/Corequisite

DIET 1000 – introduction to Diesel Technology, Tools, and Safety

## GENERAL EDUCATION CORE COMPETENCIES

Southeastern Technical College 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

Safety Glasses required any time students are in the shop.

Long Pants, ***(No Shorts are allowed)***

Safety Toe Boots strongly recommended. ***(No open toe or open heal shoes are allowed)***

Tee Shirts or Button up shirts are allowed, ***(No tank tops, or cut off shirts allowed)***

*STC Diesel Tee shirts are available at the book store 1 required.*

## COVID-19 MASK REQUIREMENT

Regardless of vaccination status, students are highly encouraged to wear masks or face coverings while in a classroom or lab at Southeastern Technical College.  Masking may be implemented in some program areas (i.e. Health Sciences and Cosmetology) where students, faculty, and clients are in close proximity and social distancing cannot be maintained.  This measure is being implemented to reduce COVID-19 related health risks for everyone engaged in the educational process.  Masks or face coverings must be worn over the nose and mouth, in accordance with the Centers for Disease Control and Prevention (CDC).

## COVID-19 Signs and symptoms

We encourage individuals to monitor for the signs and symptoms of COVID-19 prior to coming on campus.

If you have experienced the symptoms listed below or have a body temperature 100.4°F or higher, we encourage you to self-quarantine at home and contact a primary care physician’s office, local urgent care facility, or health department for further direction. Please notify your instructor(s) by email and do not come on campus for any reason.

|  |
| --- |
| **COVID-19 Key Symptoms** |
| Fever or felt feverish |
| Chills |
| Shortness of breath or difficulty breathing (not attributed to any other health condition) |
| Cough: new or worsening, not attributed to another health condition |
| Fatigue |
| Muscle or body aches |
| Headache |
| New loss of taste or smell |
| Sore throat (not attributed to any other health condition) |
| Congestion or runny nose (not attributed to any other health condition) |
| Nausea or vomiting |
| Diarrhea |
|  |
| **In the past 14 days, if you:** |
| Have had close contact with or are caring for an individual diagnosed with COVD-19 at home (not in healthcare setting), please do not come on campus and contact your instructor(s). |

## Covid-19 Self-Reporting Requirement

Students, regardless of vaccination status, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using <https://www.southeasterntech.edu/covid-19/>. Report all positive cases of COVID-19 to your instructor and [Stephannie Waters](mailto:Stephannie%20Waters), Exposure Control Coordinator, [swaters@southeasterntech.edu](mailto:swaters@southeasterntech.edu), 912-538-3195.

## 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.

## STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

**Swainsboro Campus**: [Emily Jarrell](mailto:ejarrell@southeasterntech.edu) [(ejarrell@southeasterntech.edu)](mailto:ejarrell@southeasterntech.edu), 478-289-2259 Building 1, Room 1210

**Vidalia Campus**: [Helen Thomas](mailto:hthomas@southeasterntech.edu) [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

## **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 make arrangements with the appropriate campus coordinator.

**Swainsboro Campus**: [Emily Jarrell](mailto:ejarrell@southeasterntech.edu) [(ejarrell@southeasterntech.edu)](mailto:ejarrell@southeasterntech.edu), 478-289-2259, Building 1, Room 1210

**Vidalia Campus**: [Helen Thomas](mailto:hthomas@southeasterntech.edu) [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **may not** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

## Withdrawal Procedure

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (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” (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which the student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of “F” (Failing 0-59) being assigned.

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

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 accessed due to the withdrawal. A grade of “W” will count in attempted hour calculations for the purpose of Financial Aid.

## **MAKEUP GUIDELINES** (Tests, quizzes, homework, projects, etc.)

Any assignment can be made up with acceptable excuse approved by the instructor; any assignment not made up will result in the student receiving a zero.

## ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that 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 Southeastern Technical College Catalog and 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.

1. **Second Offense**

Student is given a grade of "WF" (Withdrawn Failing) 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.

1. **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 (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, 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 nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

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

| **American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer** | **Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer** |
| --- | --- |
| Helen Thomas, Special Needs Specialist  Vidalia Campus  3001 East 1st Street, Vidalia  Office 165 Phone: 912-538-3126  Email: [Helen Thomas](mailto:hthomas@southeasterntech.edu)  [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu) | Lanie Jonas, Director of Human Resources  Vidalia Campus  3001 East 1st Street, Vidalia  Office 138B Phone: 912-538-3230  Email: [Lanie Jonas](mailto:ljonas@southeasterntech.edu)  [ljonas@southeasterntech.edu](mailto:ljonas@southeasterntech.edu) |

## accessibility Statement

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

## GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College’s website.

## **ACCESS TO TECHNOLOGY**

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College (STC) Website](http://www.southeasterntech.edu/) ([www.southeasterntech.edu](http://www.southeasterntech.edu/)).

## Technical college system of georgia (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** |
| --- | --- |
| Chapter Test | 30% |
| Final Exam | 20% |
| Shop Lab | 50% |

## grading scale

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

# DIET 1030 – Diesel Engines

# Spring Semester 2023 Lesson Plan

Subject to Changes per Discretion of the Instructor

Instructor will assign DTNA Training and Meritor Training as needed

Instructor will assign shop task to students as necessary

Shop task will count towards student shop/lab grade

| **Date/Week** | **Chapter/Lesson** | **Content** | **Assignments & Tests Due Dates** | **Competency Area** |
| --- | --- | --- | --- | --- |
| Week 1  01-09-2023 | CDX  JCB  Getahead | Login to CDX and fill in class code for 1E-02,1E-03, and 1E-05  Complete 1E-02 Ch 6 quizzes, chapter test, and end of chapter questions  Login to JCB and complete JCB Basic Engines DL 110  Login to Freightliner Getahead  **THIS IS THE WEEK TO LET US KNOW ABOUT ANY LOGIN ISSUES.** | Assignments are due on  01-11-2023  by midnight | 1,2,3,4  A,B,C |
| Week 2  01-16-2023  **No class Monday**  **01-16-2023** | CDX  Getahead | Login to CDX and complete 1E-02 Ch 7 quizzes, chapter test, and end of chapter questions  Login to Getahead and complete Detroit Heavy Duty Certification | Assignments are due on  01-18-2023  by midnight | 1,2,3,4  A,B,C |
| Week 3  01-23-2023 | CDX  JCB | Login to CDX and complete 1E-02 CH 8 quizzes, chapter test, and end of chapter questions  Login to JCB and complete Engines Basic Training (UAS) DLM | Assignments are due on  01-25-2023  by midnight | 1,2,3,4,5  A,B,C |
| Week 4  01-30-2023 | CDX  Getahead | Login to CDX and complete 1E-03 Ch 9 quizzes, chapter test, and end of chapter questions  Login to Getahead and complete Detroit Heavy Duty Certification | Assignments are due on  02-01-2023  by midnight | 1,2,3,5,6  A,B,C |
| Week 5  02-06-2023 | CDX  JCB | Login to CDX and complete 1E-03 Ch 10 quizzes, chapter test, and end of chapter questions  Login to JCB and complete Kohler KDI engine Introduction | Assignments are due on  02-08-2023  by midnight | 1,2,3,5,6,7  A,B,C |
| Week 6  02-13-2023 | CDX  Getahead | Login to CDX and complete 1E-03 Ch 11 quizzes, chapter test, and end of chapter questions  Login to Getahead and complete Detroit Heavy Duty Certification | Assignments are due on  02-15-2023  by midnight | 1,3,5,6,8,9  A,B,C |
| Week 7  02-20-2023 | CDX | Login to CDX and complete 1E-03 Ch 12 quizzes, chapter test, and end of chapter questions | Assignments are due on  02-22-2023  by midnight | 2,3,5,6,8  A,B,C |
| Week 8  02-27-2023  **Student Study Day on**  **03-02-2023** | CDX  JCB | Login to CDX and complete 1E-03 Ch 13 quizzes, chapter test, and end of chapter question | Assignments are due on  03-01-2023  by midnight | 1,2,3,5,6  A,B,C |
| Week 9  03-06-2023 | CDX  Getahead | Login to CDX and complete 1E-05 Ch 28 quizzes, chapter test, and end of chapter questions  Login to Getahead and complete Electric Vehicles (BEV) Certification | Assignments are due on  03-08-2023  by midnight | 1,2,3,5,6  A,B,C |
| Week 10  03-13-2023 | CDX  Getahead | Login to CDX and complete 1E-05 Ch 29 quizzes, chapter test, and end of chapter questions  Login to Getahead and complete Electric Vehicles (BEV) Certification | Assignments are due on  03-15-2023  by midnight | 1,2,5,8,9  A,B,C |
| Week 11  03-20-2023 | CDX | Login to CDX and complete 1E-05 Ch 30 quizzes, chapter test, and end of chapter questions | Assignments are due on  03-22-2023  by midnight | 1,2,3,4,5  A,B,C |
| Week 12  03-27-2023 | CDX | Login to CDX and complete 1E-05 Ch 31 quizzes, chapter test, and end of chapter questions | Assignments are due on  03-29-2023  by midnight | 1,2,5,6,8  A,B,C |
| Week 13  04-03-2023 | **Spring Break**  **No Class** | **Spring Break**  **No Class** | **Spring Break**  **No Class** |  |
| Week 14  04-10-2023 | CDX | Login to CDX and complete 1E-05 Ch 32 quizzes, chapter test, and end of chapter questions | Assignments are due on  04-12-2023  by midnight | 1,2,3,4,5  A,B,C |
| Week 15  04-17-2023 | CDX | Login to CDX and complete 1E-05 Ch 33 quizzes, chapter test, and end of chapter questions | Assignments are due on  04-19-2023  by midnight | 1,2,3,4,5  A,B,C |
| Week 16  04-24-2023  **Finals week** | CDX  **Finals Week** | Login to CDX and complete 1E-05 Ch 34 quizzes, chapter test, and end of chapter questions  **Finals will be taken this week**. | Assignments are due on  04-26-2023  by midnight | 1,2,3,4,5  A,B,C |
| Week 17  05-01-2023  **Last day**  **05-04-2023** | Make up work  Shop Clean up | Any work incomplete will be filled in the gradebook and we will be cleaning the shop and shelter area | **Assignments are due on**  **05-08-2023**  **by 12:00PM** |  |

## Competency Areas:

1. General Engine Diagnosis

2. Cylinder Head and Valve Train

3. Engine Block

4. Engine Lubrication System

5. Engine coolant System

6. Air Induction and Exhaust System

7. Fuel Supply System

8. Electronic Fuel Management Systems

9. Engine Brakes

## General Core Educational Competencies:

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