



**DIET 1030
Diesel Engines
COURSE SYLLABUS
Spring Semester 2021**

COURSE INFORMATION

Credit Hours/Minutes: 3 / 4705
Campus/Class Location: Swainsboro Campus / Room 2139
Class Meets: Monday, Tuesday, Wednesday, Thursday 1:00-4:00
Course Reference Number (CRN): 40084

INSTRUCTOR CONTACT INFORMATION

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 (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/college-catalog/downloads/current.pdf) (<https://catalog.southeasterntech.edu/college-catalog/downloads/current.pdf>).

REQUIRED TEXT

Modern Diesel Technology, Electricity and Electronics 2nd edition. ISBN-13: 978-1133949800
ISBN-10: 1133949800
Modern Diesel Technology, Electrical/Electronic systems and heating, ventilation and air conditioning job sheet. ISBN-13: 978-1418063382 ISBN-10: 141806338X
Electude Heavy Vehicles Systems, 12 Month voucher, ISBN 97894-93163-75-1

REQUIRED SUPPLIES & SOFTWARE

Software Electude is the software required for the course. The **Electude Access Codes** may be purchased from the bookstore. See our Blackboard course and/or the instructor for more details.

Notebook for notes, pens, pencils, cloth mask, and safety glasses. Other recommended, but not required: work gloves, nitrile gloves, safety toe boots

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

COURSE DESCRIPTION

This course introduces students to diesel electrical and electronic systems used on medium/heavy duty trucks and heavy equipment, topics include: general electrical systems diagnosis: battery diagnosis and repair; starting system diagnosis and repair; and basic lighting diagnosis and repair.

MAJOR COURSE COMPETENCIES / OUTLINE

1. General Electrical Systems Diagnosis Text
2. Battery Diagnosis and Repair
3. Starting System Diagnosis and Repair
4. Charging System Diagnosis and Repair

PREREQUISITE(S)

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 heel 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

Masks or face coverings must be worn at all times while on the campus of Southeastern Technical College. 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). A student's refusal to wear a mask or face covering will be considered a classroom disruption and the student may be asked to leave campus and/or receive further discipline.

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

COVID-19 Key Symptoms
Cough: new or worsening, not attributed to another health condition
Shortness of breath, not attributed to another health condition
New loss of taste or smell
Chills; Repeated shaking with chills
Sore throat, not attributed to another health condition
Muscle pain, not attributed to another health condition or exercise
Headache, not attributed to another health condition
Diarrhea (unless due to known cause)
In the past 14 days, if you:
Have had close contact with or are caring for an individual diagnosed with COVID-19 at home (not in healthcare setting), please do not come on campus and contact your instructor (s).

COVID-19 SELF-REPORTING REQUIREMENT

Students, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using the [COVID 19 Health Reporting Form](#). Report all positive cases of COVID-19 to your instructor and [Stephannie Waters](#), Exposure Control Coordinator, 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: Macy Gay mgay@southeasterntech.edu, 478-289-2274, Building 1, Room 1210

Vidalia Campus: [Helen Thomas 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: Macy Gay mgay@southeasterntech.edu, 478-289-2274, Building 1, Room 1210

Vidalia Campus: [Helen Thomas 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 assessed 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.

2. 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.

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 (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 1 st Street, Vidalia Office 165 Phone: 912-538-3126 Email: Helen Thomas hthomas@southeasterntech.edu	Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Lanie Jonas 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 \(www.southeasterntech.edu\)](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

Letter Grade	Range
C	70-79
D	60-69
F	0-59

DIET 1012 – Diesel Electrical and Electronic Systems

Spring Semester 2021 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
01/11	Chapter 2 Modern Diesel Technology Diesel Engines	Hand and Shop Tools, Precision Tools and Units of Measure	01/19	1,2 a,b,c
	Get Ahead Program	Complete the following by end of semester, DD EPA 07, DD EPA 10, MBE4000, MBE900, Natural Gas, Series 60		
	Get Ahead Program	Complete the following by end of semester, DD EPA 07, DD EPA 10, MBE4000, MBE900, Natural Gas, Series 60		
01/18	Job Sheet 2 Workbook to Accompany Diesel Engines	Hand and Shop Tools, Precision Tools and Units of Measure	01/19	1,2 a,b,c
01/18	Test Chapter 2	Review Chapters 2 Test Chapters 2	01/19	1,2 a,b,c
01/18	Chapter 3 Modern Diesel Technology Diesel Engines	Engine Basics	01/26	2-3 a,b
01/18	Job Sheet 3 Workbook to Accompany Diesel Engines	Engine Basics	01/26	2-3 a,b
01/25	Test Chapter 3	Review Chapters 3 Test Chapters 3	01/26	2-3 a,b
01/25	Chapter 4,5 Modern Diesel Technology Diesel Engines	Pistons, Camshafts, Valves	02/02	4 a,b,c
01/25	Job Sheet 4,5 Workbook to Accompany Diesel Engines	Pistons, Camshafts, Valves	02/02	4 a,b,c

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
02/01	Test Chapter 4,5	Review Chapters 4,5 Test Chapters 4,5	02/02	4 a,b,c
02/01	Chapter6 Modern Diesel Technology Diesel Engines	Cylinder Blocks, Liners, Heads	02/09	2,3 A,b,c
02/02	Job Sheet 6 Workbook to Accompany Diesel Engines	Cylinder Blocks, Liners, Heads	02/09	2,3 A,b,c
02/08	Test Chapter 6	Review Chapters 6 Test Chapters 6	02/09	2,3 A,b,c
02/08	Chapter7,8 Modern Diesel Technology Diesel Engines	Engine Cooling and Lube Systems	02/16	4,6 A,b,c
02/08	Job Sheet 7,8 Workbook to Accompany Diesel Engines	Engine Cooling and Lube Systems	02/16	4,6 A,b,c
02/08	Test Chapter 7,8	Review Chapters 7,8 Test Chapters 7,8	02/16	4,6 A,b,c
02/15	Chapter 9 Modern Diesel Technology Diesel Engines	Engine Breathing	02,23	7 A,b,c
0215	Job Sheet 9 Workbook to Accompany Diesel Engines	Engine Breathing	02,23	7 A,b,c
02,22	Test Chapter 9	Review Chapters 9 Test Chapters 9	02,23	7 A,b,c
02,22	Chapter10,11 Modern Diesel Technology Diesel Engines	Engine Brakes, Service and Maintenance	03,02	2 A,b,c
02,22	Job Sheet 10,11 Workbook to Accompany Diesel Engines	Engine Brakes, Service and Maintenance	03,02	2 A,b,c
03.01	Test Chapter 10,11	Review Chapters 10,11 Test Chapters 10,11	03,02	2 A,b,c

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
03,01	Chapter12 Modern Diesel Technology Diesel Engines	Engine Removal, Disassembly, Cleaning, Inspection and Reassembly.	02,23	1,2,3,7,8 A,b,c
03,01	Job Sheet 12 Workbook to Accompany Diesel Engines	Engine Removal, Disassembly, Cleaning, Inspection and Reassembly.	03,23	1,2,3,7,8 A,b,c
03,22	Test Chapter 12	Review Chapters 12 Test Chapters 12	03,23	1,2,3,7,8 A,b,c
03,22	Chapter13,14 Modern Diesel Technology Diesel Engines	Fuel Subsystems	03,30	7,8,9 A,b,c
03,22	Job Sheet 13,14 Workbook to Accompany Diesel Engines	Fuel Subsystems	03,30	7,8,9 A,b,c
03,29	Test Chapter 13,14	Review Chapters 13,14 Test Chapters 13,14	03,30	7,8,9 A,b,c
03,29	Chapter15,16 Modern Diesel Technology Diesel Engines	Engine Management, Fuel Injection	04,13	2,7 A,b,c
03,29	Job Sheet 15,16 Workbook to Accompany Diesel Engines	Engine Management, Fuel Injection	04,13	2,7 A,b,c
04,12	Test Chapter 15,16	Review Chapters 15,16 Test Chapters 15,16	04,13	2,7 A,b,c
04,12	Chapter17 Modern Diesel Technology Diesel Engines	Emissions	04,20	
04,12	Job Sheet 17 Workbook to Accompany Diesel Engines	Emissions	04,20	
04,19	Test Chapter 17	Review for Chapters 17	04,20	
04,19	Review	Review for Chapters 2-17	05,03	1,2,3,4 a,b,c,d
05,03	Finals	Finals Chapter 2-17	05,03	1,2,3,4 a,b,c

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
05,03	Mandatory	Shop Clean Up. Will count as lab.	02,03	1,2,3,4,5,6,7 ,8,9,10 A,b,c

COMPETENCY AREAS:

1. General Engine Diagnosis
2. Cylinder Head and Valve Train
3. Engine Block
4. Engine Lubrication System
5. Hydraulic Pumps
6. Engine coolant System
7. Air Induction and Exhaust System
8. Fuel Supply System
9. Electronic Fuel Management Systems
10. Engine Brakes

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