

**DIET 2011Off Road Drivelines**

**COURSE SYLLABUS**

**Summer Semester 2023 (202316)**

# COURSE INFORMATION

Credit Hours/Minutes: 6hrs/8170

Campus/Class Location: Swainsboro Campus / Room 2139

Class Meets: MTWR 11:30 am – 3:30 pm Course Reference Number (CRN): 60111

# 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 (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 power trains used on heavy equipment such as bulldozers, excavators, wheel loaders, back-hoe, loaders and skidders. Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: powertrain theory and principles. Clutches, manual transmissions, drive shafts, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

# MAJOR COURSE COMPETENCIES

1. Powertrain Theory and Principles
2. Clutches
3. Manual Transmissions
4. Drive Shafts
5. Differentials
6. Final Drives
7. Special Drives
8. Final Drive Failure Analysis
9. Torque Converters
10. Hydraulically Shifted Transmissions
11. Electronic Transmissions
12. Hydrostatic Transmissions
13. Transmission Failure Analysis

**PREREQUISITE(S)**

DIET 1000

# COURSE OUTLINE

Classroom and lab instruction on components and systems with use and interpreting testing and diagnosing equipment are highly emphasized. Topics include: powertrain theory and principles. Clutches, manual transmissions, drive shafts, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

# 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 Required.

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.*

# 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 (ejarrell@southeasterntech.edu), 478-289-2259, Building 1, Room 1210. Vidalia Campus: Helen Thomas (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 (ejarrell@southeasterntech.edu), 478-289-2259, Building 1, Room 1210. Vidalia Campus: Helen Thomas (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.

**EXIT EXAM**

None Required

# WORK ETHICS

The Technical College System of Georgia instructs and evaluates students on work ethics in all programs of study. Ten work ethics traits have been identified and defined as essential for student success: appearance, attendance, attitude, character, communication, cooperation, organizational skills, productivity, respect, and teamwork. Students will be required to take a work ethics exam as marked in the lesson plan. A grade of 70 or better is required to complete the work ethics requirements for this class.

# 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.

***Any work turned in late will receive 10 point per day deduction, up to three days. Any assignment over three days late will not be accepted and a grade of 0 will be given.***

# 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:

# 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.

# 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.

# 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

As set forth in the student catalog, Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, veteran status, or citizenship status (except in those special circumstances permitted or mandated by law).

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 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 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 |

**TENTATIVE—SUBJECT TO CHANGE**

**DIET 2011 Off Road Drivetrains**

**Summer Semester 2023 Lesson Plan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date/Week** | | | | | | | |  | **Chapter/Lesson** | **Content** | | | | | | |  | | **Assignments &** **Tests Due Dates** | **Competency Area** |
| Week 1 03-15-2023 | | | | | | | |  | CDX JCB | Login into CDX and go t  Mobile Heavy Equipme   |  | | --- | | BE2737 | | 47425C |   1E-04 Class ID - 1E-05 Class ID-  Login into JCB    **All work is due on the date listed. Each day th work is late, it will be 1 points off per day.** | | | | | | | o  nt      **e**  **0** | |  | 1,2,4,6,7,9    A,B,C |
|  | ***THIS IS THE WEEK TO LE*** | | | | | | ***T*** |  |
|  | ***US KNOW ABOUT ANY*** | | | | |  |
|  | ***LOGIN ISSUES OR IF*** | | |  |
| ***YOU’RE CAN NOT FIND*** | | | | |
|  | | ***THE WORK.*** |  | |
| Week 2 05-22-2023 | | | | | | | |  | CDX | CDX Chapter 36 Quizze and Chapter Test | | | | | | | s | | Assignments are due on  05-24-2023 | 1,2,4,5,10      A,B,C |
| Week 3 05-29-2023 | | | | | | | |  | CDX | CDX Chapter 37 Quizze and Chapter Test | | | | | | | s | | Assignments are due on  05-31-2023 | 1,2,5,12,13      A,B,C |
|  | | | **Holiday** | | |  | |
|  | **05-20-2023** | | | | | | |
| Week 4 06-05-2023 | | | | | | | |  | CDX | CDX Chapter 38 Quizze and Chapter Test | | | | | | | s | | Assignments are due on  06-07-2023 | 1,2,5,11,12      A,B,C |
| Week 5 06-12-2023 | | | | | | | |  | CDX | CDX Chapter 39 Quizze and Chapter Test | | | | | | | s | | Assignments are due on  06-14-2023 | 1,2,3,4,12    A,B,C |
| Week 6  06-19-2023 **Holiday**  **06-19-2023** | | | | | | | |  | CDX | CDX Chapter 40 Quizze and Chapter Test | | | | | | | s | | Assignments are due on  06-21-2023 | 1,2,5,9,8      A,B,C |
| **Date/We** | | | | | | | **ek** | | **Chapter/Lesson** | **Content** | | | | | | | | | **Assignments & Tests Due Dates** | **Competency Area** |
| Week7 06-26-20 | | | | | | | 23 | | CDX | CDX 1E-04 Final Exam | | | | | | | | | Assignments are due on  06-28-2023 | 1,2,4,5,7,8      A,B,C |
| Week 8 07-03-20 | | | | | | | 23 | | SUMMER BREAK | SUMMER BREAK | | | | | | | | | SUMMER BREAK |  |
|  | | **Summer** | | | | |
|  | | **Break** |  | |
| Week 9 07-10-20 | | | | | | | 23 | | CDX | CDX Chapter 41 Quizzes and Chapter Test | | | | | | | | | Assignments are due on  07-12-2023 | 1,2,4,6,8,11      A,B,C |
| Week 10 07-17-20 | | | | | | | 23 | | CDX | CDX Chapter 42 Quizzes and Chapter Test | | | | | | | | | Assignments are due on  07-19-2023 | 1,2,5,9,12      A,B,C |
| Week 11  07-24-20  Finals We | | | | | | | 23 ek | | **Finals Week** | CDX 1E-05 Final Exam  **Finals Week and Shop Clean Up** | | | | | | | | | All Assignments are due on  07-26-2023 |  |

**COMPETENCY AREAS:**

1. Powertrain Theory and Principles
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7. Special Drives
8. Final Drive Failure Analysis
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**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 information.