



## **TENTATIVE—SUBJECT TO CHANGE**

### **DIET 2011 Off Road Drivelines COURSE SYLLABUS Spring Semester 2022 (202214)**

#### **COURSE INFORMATION**

Credit Hours/Minutes: 6 / 8170

Campus/Class Location: Swainsboro Campus / Room 2138

Class Meets: M,T,W,R 12:30 – 3:00 p.m.

Course Reference Number (CRN): 40061

#### **INSTRUCTOR CONTACT INFORMATION**

Office Hours: Monday-Thursday (MTWR) 7:30-8:15 AM, 3:30-5:00 PM

Office Location: Building 2 Room 2139

Email Address: Jeffrey Wyatt ([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/college-catalog/downloads/current.pdf) (<https://catalog.southeasterntech.edu/college-catalog/downloads/current.pdf>).

#### **REQUIRED TEXT**

Electude Heavy Vehicles Systems, 12 Month voucher, ISBN 97894-93163-75-1

Fundamentals of Medium/Heavy Commercial Vehicle Systems, Second Edition Two year voucher, ISBN 9781284196429

CDX Mobile Heavy Equipment 12 Month voucher, ISBN 9781284178470

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

Three ring binder notebook, computer access, loose-leaf paper, pencils, and highlighter. Daily, MTWR, access to a reliable internet connection for use with Blackboard, Fundamentals of Diesel (CDX), Electude, mySTC, and college email.

**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: power train theory and principles, clutches, manual transmissions, drive shafts, differentials, final drives, special drives, final drive failure analysis, torque converters, hydraulically shifted transmissions, electronic transmissions, hydrostatic transmissions, and transmission failure analysis.

### **MAJOR COURSE COMPETENCIES / OUTLINE**

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

### **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**

Students are expected to complete all work required by the instructor. Students will have at least one week to complete tests and assignments. All tests and assignments are due at midnight on Wednesday of each week. Assignments must be keyed in Microsoft Word, saved, uploaded, and attached for grading in Blackboard.

Students are expected to prove weekly academic engagement by meeting assignment deadlines each week and spending a minimum of 66.25 hours during the semester doing the required homework, quizzes, and tests. Students are expected to communicate frequently through college email and discussion boards. College email and other STC resources can be accessed from the [mySTC](#) tab on STC's Website. Email can also be accessed in the menu of your Blackboard course.

### **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)
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
<b>In the past 14 days, if you:</b>
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, 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](#), 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: [Daphne Scott \(dscott@southeasterntech.edu\)](mailto:dscott@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: [Daphne Scott \(dscott@southeasterntech.edu\)](mailto:dscott@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 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.

## **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.

## **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**

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:

<b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b>	<b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b>
Helen Thomas, Special Needs Specialist	Lanie Jonas, Director of Human Resources

<b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b>	<b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b>
Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 165 Phone: 912-538-3126 Email: <a href="mailto:hthomas@southeasterntech.edu">Helen Thomas</a> <a href="mailto:hthomas@southeasterntech.edu">hthomas@southeasterntech.edu</a>	Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 138B Phone: 912-538-3230 Email: <a href="mailto:ljonas@southeasterntech.edu">Lanie Jonas</a> <a href="mailto:ljonas@southeasterntech.edu">ljonas@southeasterntech.edu</a>

### 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
C	70-79
D	60-69
F	0-59

## DIET 2011 – Off Road Drivelines 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
Week One 01/10/2022	Blackboard no show requirements.  CDX Ch. 1 Intro and Ch. 2 Identification	Log in to Blackboard and do the four no show requirements listed in the announcements to secure your seat in the course.  Log in to CDX in Blackboard on left side of screen with the instant access code purchased from the library.  CDX Ch. 1 Intro and Ch. 2 Identification	Due on 01/13/2022  By Midnight – Day 3. No show students will be turned in to the registrar by early Monday morning.  Start Week two as soon as you are ready.	1  a,b,c,
Week Two 01/17/2022  No Class on 01/17/2022	CDX Ch. 4 Bearings, Seals, Lubricants, Gaskets, and Sealants	Do all lessons and Test:  CDX Ch. 4 Bearings, Seals, Lubricants, Gaskets, and Sealants	Due on 01/19/2022  By Midnight	1,6,8,13  a,b,c
Week Three 01/24/2021	CDX Ch. 5 Tools and Fasteners	Do all lessons and Test:  CDX Ch. 5 Tools and Fasteners	Due on <b>MONDAY</b> , 01/31/2022, by Midnight	1  a,b,c

<b>Date/Week</b>	<b>Chapter/Lesson</b>	<b>Content</b>	<b>Assignments &amp; Tests Due Dates</b>	<b>Competency Area</b>
Week Four 01/31/2022	CDX Ch. 8 Principles of Hoisting, Rigging and Slings	Do all lessons and Test:  CDX Ch. 8 Principles of Hoisting, Rigging and Slings	Due on 02/02/2022  By Midnight	1  a,b,c
Week Five 02/07/2022	CDX Ch. 41Track Drive Undercarriage Systems	Do all lessons and Test:  CDX Ch. 41Track Drive Undercarriage Systems	Due on 02/09/2020  By Midnight	1,3,5,6,7  a,b,c
Week Six 02/14/2020	CDX Ch. 42 Undercarriage Inspection and Maintenance	Do all lessons and Test:  CDX Ch. 42 Undercarriage Inspection and Maintenance	Due on 20/16/2022  By Midnight	1,3,5,6,7  a,b,c
Week Seven 02/21/2022	CDX Ch. 43 Friction Clutches	Do all lessons and Test:  CDX Ch. 43 Friction Clutches	Due on 02/23/2020  By Midnight	2  a,b,c
Week Eight 02/28/2022  No Class 03/03/2022	CDX Ch. 44 Gearing Basics	Do all lessons and Test:  CDX Ch. 44 Gearing Basics	Due on 03/02/2022  By Midnight	6,7  b,c
Week Nine 03/07/2022	CDX Ch. 45 Manual Transmission	Do all lessons and Test:  CDX Ch. 45 Manual Transmission	Due on 03/09/2022  By Midnight	9,10,11,12,13  a,b,c
Week Ten 03/14/2022	CDX Ch. 46 Automated Transmissions and Ch. 47 Torque Converters	Do all lessons and Test:  CDX Ch. 46 Automated Transmissions and Ch. 47 Torque Converters	Due on 03/16/2022  By Midnight	9,10,11,12,13  a,b,c
Week Eleven 03/21/2022	CDX Ch. 48 Power shift Transmissions	Do all lessons and Test:  CDX Ch. 48 Power shift Transmissions	Due on 03/16/2022  By Midnight	9,10,11,12,13  a,c
Week Twelve 03/28/2022	CDX Ch. 49 Drivelines, Ch.50 Drive Axles	Do all lessons and Test:  CDX Ch. 49 Drivelines, Ch.50 Drive Axles	Due on 03/30/2022  By Midnight	4,5,6,7,8  a,b,c



Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
Week Thirteen 04/04/2022		Spring Break		
Week Fourteen 04/11/2022	CDX Ch. 51 Track – Type Machine Steering Systems	Do all lessons and Test:  CDX Ch. 51 Track – Type Machine Steering Systems	Due on 04/13/2022  By Midnight	6  a,b,c
Week Fifteen 04/18/2022	CDX Ch. 52 Final Drives	Do all lessons and Test:  CDX Ch. 52 Final Drives	Due on 04/20/2022  By Midnight	6,7,8,9,10,11,12,13  a,b,c
Week Sixteen 04/25/2022	CDX Ch. 53 Electric Drives	Do all lessons and Test:  CDX Ch. 53 Electric Drives	Due on 04/27/2022  By Midnight	7  a,b,c
Week Seventeen 05/02/2022	Final Exam	Final Exam	Due on <b>MONDAY,</b> 05/03/2022  By 12:00 p.m., <b>NOON</b>	1,2,3,4,5,6,7,8,9,10,11,12,13  a,b,c

#### 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

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.