



## Direct Current 1 IDFC 1011 HYBRID COURSE SYLLABUS Fall Semester 2016

**\*\*\*\*Instructor reserves the right to change the syllabus and/or lesson plan as necessary. \*\*\*\***

**Semester:** Fall 2016

**Course Title:** Direct Current 1

**Course Number:** IDFC 1011

**Credit Hours/ Minutes:** 3 / 3000

**Class Location:** Building 6 Lab 6102

**Class Meets:** Monday & Wednesday Term A  
9:20AM-11:45AM (60%F2F, 40% on-line)

**CRN:** 20366

**Instructor:** Tony Criswell

**Office Location:** Building 6 Lab 6102

**Office Hours** Monday- 8:15AM-9:15AM and 2PM-4PM; Tuesday 1PM-4PM; Wednesday 8:15AM-9:15AM and 1PM-2PM; Thursday 1PM-2PM

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

**Phone:** 478-289-2235

**Fax Number:** 478-289-2214

**This course is taught in a hybrid format. Hybrid classes require students to complete a portion of the required contact hours traditionally by attending classes on campus while completing the remaining portion online at the student's convenience with respect to the instructor's requirements.**

### **REQUIRED TEXT:**

- Safety, Basic Electricity,

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

**Note:** Although students can use their smart phones and tablets to access the online portion of their course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor GVTC provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to complete the online portion of the course.

**COURSE DESCRIPTION:** Introduces direct current (DC) concepts and applications

**MAJOR COURSE COMPETENCIES:** Electrical principles and laws; batteries; DC test equipment; series, parallel, and simple combination circuits; and laboratory procedures and safety practices.

**PREREQUISITE(S):** None

**COREQUISITE(S):** MATH 1012- Foundations of Mathematics

### **COURSE OUTLINE:**

1. Electrical Principles and Laws.
2. Batteries
3. DC Test Equipment
4. Series, Parallel, and Simple Combination Circuits
5. Laboratory Procedures and Safety Practices

**GENERAL EDUCATION CORE COMPETENCIES:** STC has identified the following general education core competencies that graduates will attain:

- 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..

**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 do 10 Work Ethics Scenarios on a discussion board on Angel. Each student must make a post and do 1 reply of another student on each discussion board Work Ethic Topic. Also the student will be graded on content. Each answer must contain 10 or more words. If not, 10 points will be deducted. A grade of 70 out of 100 is required to complete the work ethics requirements for this

**STUDENT REQUIREMENTS:** Class attendance is a very important aspect of a student's success in this course. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is expected. Students are expected to complete all work required by the instructor. Unannounced quizzes/assignments may be given. Students that miss an unannounced quiz or assignment will receive a grade of 0. Students are expected to complete all work shown on the attached assignment sheet. Students are also expected to complete all tests and comprehensive problems on the dates specified on the attached calendar. Students are responsible for policies and procedures included in the *STC Catalog*. **Electrical Construction Technology program students must earn a minimum grade of C in this course.**

**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 the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 -- Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

**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...):** Extenuating circumstances are determined at the instructor's discretion. Unless otherwise scheduled with the instructor, it is expected that the test will be taken the next day, scheduled outside of regular class time. Failure to follow this procedure will result in a grade of zero.

**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:

#### **--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" 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 second 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:** Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era 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).

**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 BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at [www.southeasterntech.edu](http://www.southeasterntech.edu).

### **GRADING POLICY**

Module Test	40%
Review Questions	10%
Performance Evaluations	45%
Work Ethics Discussion	5%
Total	100%

### **GRADING SCALE**

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

**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.*

**IDFC 1011 DIRECT CURRENT 1  
FALL SEMESTER 2016 LESSON PLAN**

**ITEMS THAT ARE COLORED RED ARE ON-LINE  
ITEMS THAT ARE COLORED BLUE ARE DONE ON CAMPUS**

DATES	MODULE	OBJECTIVES	ASSIGNMENTS			Comp Area Gen. Ed Comp
<b>August 15</b>	<b>Fall Semester Begins</b>		<b>Classroom</b>	<b>On-Line</b>	<b>Work Ethics</b>	
<b>Begin August 15</b>  <b>End August 29</b>	Electrical Safety-Module 26102-14	<ul style="list-style-type: none"> <li>Recognize safe working practices in the construction environment.</li> <li>Explain the purpose of OSHA and how it promotes safety on the job.</li> <li>Identify electrical hazards and how to avoid or minimize them in the workplace.</li> <li>Explain electrical safety issues concerning lockout/tagout procedures, confined space entry, respiratory protection, and fall protection systems.</li> </ul>	<ul style="list-style-type: none"> <li>Lecture on Electrical Safety</li> <li>Complete Module 26102-14 Performance Profile Sheet with instructor</li> <li>Take the Module 26102-14 Exam</li> </ul>	<ul style="list-style-type: none"> <li>Read Module 26102-14 of the Trainee Guide</li> <li>PowerPoint on Electrical Safety</li> <li>Watch Video on Electrical Safety</li> <li>Watch Video on Lockout/Tagout</li> <li>Answer the module review questions</li> </ul>	<ul style="list-style-type: none"> <li>Do the Communication discussion board by August 22</li> <li>Do the Cooperation Discussion Board by 24</li> <li>Do Productivity Discussion Board by August 29</li> <li>Do Character Discussion Board by August 31</li> </ul>	<b>5</b> <b>A,B,C</b>
<b>Begin August 31</b>  <b>End September 19</b>	Introduction to Electrical Circuits-Module 26103-14	<ul style="list-style-type: none"> <li>Define voltage and identify the ways in which it can be produced.</li> <li>Explain the difference between conductors and insulators.</li> <li>Define the units of measurement that are used to measure the properties of electricity.</li> <li>Identify the meters used to measure voltage, current, and resistance</li> </ul>	<ul style="list-style-type: none"> <li>Lecture on Introduction to Electrical Circuits</li> <li>Do Module 3-1 Practice Sheet</li> <li>Do Module 3-2 Practice Sheet</li> <li>Do Module 3-3 Practice Sheet</li> <li>Take the Module 26103-14 Exam</li> </ul>	<ul style="list-style-type: none"> <li>Read Module 26103-14 of the Trainee Guide</li> <li>Look at PowerPoint- Introduction to Electrical Circuits</li> <li>Watch the Video-What is AC\DC</li> <li>Watch the video- Ohms Law, The Basics</li> <li>Watch the video- What is Volts, Ohms, and Amps</li> <li>Answer the module review questions</li> </ul>	<ul style="list-style-type: none"> <li>Do the Appearance Discussion Board by September 7</li> <li>Do Organization Discussion Board by September 12</li> <li>Do Respect Discussion Board by September 14</li> </ul>	<b>1,2,3</b> <b>A,B,C</b>
<b>Begin September 21</b>  <b>End October 5</b>	Electrical Theory-Module 26104-14	<ul style="list-style-type: none"> <li>Explain the basic characteristics of combination circuits.</li> <li>Using Ohm's law, find the unknown parameters in series, parallel, and series-parallel circuits</li> </ul>	<ul style="list-style-type: none"> <li>Lecture on Electrical Theory</li> <li>Do Module 4-1 Practice Sheet</li> <li>Do Module 4-2 Practice Sheet</li> <li>Do Module 4-3 Practice Sheet</li> <li>Take the Module 26104-14 Exam</li> </ul>	<ul style="list-style-type: none"> <li>Read Module 26103-14 of the Trainee Guide</li> <li>Look at PowerPoint- Electrical Theory</li> <li>Watch the Video-Batteries</li> <li>Watch the video- Series Circuits</li> <li>Watch the video- Parallel Circuits</li> <li>Answer the module review questions</li> </ul>	<ul style="list-style-type: none"> <li>Do the Attendance Discussion Board by September 19</li> <li>Do Attitude Discussion Board by September 21</li> <li>Do Teamwork Discussion Board by September 26</li> </ul>	<b>4</b> <b>A,B,C</b>

**COURSE COMPETENCIES:**

- Electrical Principles and Laws.
- Batteries
- DC Test Equipment
- Series, Parallel, and Simple Combination Circuits
- Laboratory Procedures and Safety Practices

**GENERAL EDUCATION CORE COMPETENCIES:**

- The ability to utilize standard written English.
- The ability to solve practical mathematical problems.
- The ability to read, analyze, and interpret information.
- The ability to utilize basic computer skills.