**COLLIN COLLEGE**

**COURSE SYLLABUS**

Course Information

**Course Number**: CETT 1303

**Course Title:** DC Circuits

**Course Description:** A study of the fundamentals of direct current including Ohm's law, Kirchhoff's law, and circuit analysis techniques.

**Course Credit Hours:** 3

 Lecture Hours: 2

 Lab Hours: 3

**Student Learning Outcomes**

* **State-mandated Outcomes:** Upon successful completion of this course, students will:
1. Apply safety techniques while working on and troubleshooting various circuits and components. (SCANS: F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16), (SCANS: C1, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20)
2. Interpret color codes and other descriptors used in electronics. (SCANS: F1, F2, F3, F4, F5, F7, F8, F9, F10, F11, F12, F15, F16), (SCANS: C1, C2, C3, C5, C6, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20)
3. Identify various sources of electricity in DC circuits. (SCANS: F1, F2, F3, F4, F5, F7, F8, F9, F10, F11, F12, F15, F16), (SCANS: C3, C5, C6, C7, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20)
4. Interpret characteristics of voltage, current, resistance, and power in DC circuits. (SCANS: F1, F2, F3, F4, F5, F6, F7, F8, F9, F11, F12, F13, F15, F16), (SCANS: C1, C3, C5, C6, C7, C8 , C11, C12, C13, C14, C15, C16, C17, C18, C19)
5. Measure voltage, current, and resistance in DC circuits using measuring devices. (SCANS: F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F15, F16), (SCANS: C1, C2, C3, C4, C5, C6, C7, C8, C9, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20)

**Secretary’s Commission on the Acquisition of Necessary Skills (SCANS) -** SCANS skills are a group of foundational skills and workplace competencies that the Secretary’s Commission on the Acquisition of Necessary Skills established as vitally important for workplace success in the 21st century. In Collin’s workforce programs, the SCANS skills are developed and reinforced throughout the curriculum to provide students with an opportunity to hone these skills/competencies in the context of their education. Over the course of an entire degree program, the successful student is expected to demonstrate all of the SCANS skills and competencies as part of their education. The SCANS Foundation Skills and Workplace Competencies are described at: <http://www.collin.edu/academics/programs/Workforce_SCANS_Skills_Syllabi_Code_Key.pdf>

**Withdrawal Policy:** See the current *Collin Registration Guide* for last day to withdraw

**Collin College Academic Policies:** See the current *Collin Student Handbook.*

**Americans with Disabilities Act Statement:** Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student’s responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.

*Fall 2014*