COURSE DESCRIPTION

The course focuses on direct current (DC) circuits to introduce the fundamentals of electrical theory. Topics include: Ohm's law; series, parallel, and series-parallel circuits; effects of circuit loading; circuit analysis using superposition, Thevenin’s theorem, and Norton’s theorem; and magnetism. Experience in circuit simulation is introduced through the software *Multisim*.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Prerequisite or Corequisite:</td>
<td>MAT 135 or equivalent</td>
</tr>
<tr>
<td>Credits:</td>
<td>4</td>
</tr>
<tr>
<td>Lecture Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Studio/Lab Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Coordinator:</td>
<td>Dominick T. DeFino, P.E.</td>
</tr>
<tr>
<td>Latest Review:</td>
<td>Fall 2015</td>
</tr>
</tbody>
</table>

**Instructor:** Harry Bittner  
**Office:** EET319  
**Phone:** 609-570-3751  
**Email:** bittnerh@mccc.edu

**General Education Knowledge Goals [GEKG]**

- **Goal 1. Communication.** Students will communicate effectively in both speech and writing.
- **Goal 2. Mathematics.** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
- **Goal 3. Science.** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.
- **Goal 4. Technology.** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

**MCCC Core Skills [CS ]**

- **Goal A. Written and Oral Communication in English.** Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.
- **Goal B. Critical Thinking and Problem-solving.** Students will use critical thinking and problem solving skills in analyzing information.
- **Goal D. Information Literacy.** Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.
- **Goal E. Computer Literacy.** Students will use computers to access, analyze or present information, solve problems, and communicate with others.
- **Goal F. Collaboration and Cooperation.** Students will develop the interpersonal skills required for effective performance in group situations.

**ATTENDANCE POLICY:**

Mercer County Community College does not have a “cut system.” Students are expected to attend all classes of every course on their schedules. Only illness or serious personal matters may be considered adequate reasons for absence and should be properly documented to be accepted as such.

The instructor has the privilege to excuse absences for valid reasons with clear understanding that the absentee(s) is solely responsible to personally study material covered, and will be held accountable for all missing assignments as all of those constitute provision of successful fulfillment of the course requirements.

Student performance in classes is formally verified at the middle of each full semester. If a student’s attendance has been infrequent or performance unsatisfactory, or any concerns that are foreseen to affect the performance of the student; he or she may receive notification from the college in the mail.

**At any time, the instructor may withdraw the student from class for insufficient attendance**

**ACADEMIC INTEGRITY:**

Students are required to perform all the work within the specified regulations established by the college and Professor-Class consensus. Students are to provide work (which include but not limited to: papers, reports, and examinations) resulting from personal or group effort (when authorized) as clearly stated in Mercer County Community College (MCCC), which full content can be found at: [http://www.mccc.edu/admissions_policies.shtml#1](http://www.mccc.edu/admissions_policies.shtml#1)

As a result of the content of the academic integrity of MCCC, a student will be found guilty of violation of the Rule of Academic Integrity if he or she –among other things:

- Knowingly represents the work of others as his or her own; or
- Uses or obtains unauthorized assistance in any academic work; or
- Gives fraudulent assistance to another student; or
- Intentionally damages any contents of the lab or classroom (books, reference manuals or other tools or equipments); or
- Is found to have stolen anything from the lab or classroom, etc.

**PENALTY:**

In accordance with MCCC rules and regulations with regards to academic violation, penalties are predetermined and go by types and frequency of violations. For example:

**Violation:**  **STEALING** or **INTENTIONAL VENDALISM**
- First violation is failure for the course student registered for.

**Violation:**  **CHEATING** while being evaluated
- First violation will result in an F for the test or project involved
- Second violation will be an F in the course etc.
TEMPORARY GRADE POLICY:

If a student does not complete the course requirements by the end of the semester, and has a prior agreement with the instructor, he or she may be given an “I” (incomplete) grade. “I” indicates that the instructor is affording extra time to earn a grade in the course. The amount of extra time is determined by the instructor, up to a maximum of 16 calendar weeks after grades are submitted. A “I” grade which has not been resolved within 16 calendar weeks is automatically changed to an F or NC (no credit) grade, as appropriate to the course.

LETTER GRADES:

<table>
<thead>
<tr>
<th>Letter Grade Earned</th>
<th>If Nominal average grade is between:</th>
<th>Definition of Scores/Letter Grades</th>
<th>Quality Point Average (QPA)</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>93 – 100</td>
<td>Superior achievement</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>90 – 92</td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>87 – 89</td>
<td></td>
<td>3.4</td>
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<tr>
<td>B</td>
<td>83 – 86</td>
<td>Above average achievement</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>80 – 82</td>
<td></td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>77 – 79</td>
<td></td>
<td>2.4</td>
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<tr>
<td>C</td>
<td>70 – 76</td>
<td>Average achievement</td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>60 – 69</td>
<td>Minimally passing</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0 – 59</td>
<td>Academic failure</td>
<td>0.0</td>
</tr>
</tbody>
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EXAMINATION & EVALUATION:

All Examinations and Evaluations will be administered in the Testing Center located on the second floor library building. The hours of operation of the Testing Center can be found at the Testing Center webpage: http://www.mccc.edu/student_services_testing.shtml.

The overall grade for EET138 students will be bases on the following variables:

- Periodic Evaluation Tests (Three Tests for 50%)
- Laboratory Experiments (Eight to Ten Laboratory Experiments 40%)
- Participation in Class and Attendance (10%)

Any student in this class who has special needs because of a disability is entitled to receive accommodations. Eligible students at Mercer County Community College are assured services under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973.

If you believe you are eligible for services, please contact Arlene Stinson, the Director of Academic Support Services at her office in LB221 or at office number which is: (609) 570-3525.