Textbook *(Required for class)*  

Course Topics  Basic electric circuit variables and elements; Ohm’s Law; Kirchhoff’s Laws and circuit topology (nodes, loops); Analysis methods (mesh and nodal); Equivalent transformations of circuits (series, parallel), voltage and current division rules, superposition principle; Thévenin equivalent circuit; Norton equivalent circuit; Source transformations; Maximum power transfer; Operational amplifiers; Capacitors and Inductors; steady-state analysis of RC and RL circuits; and laboratory.

Prerequisites  MATH 220 (credit or concurrently enrolled) and PHYS 142.

Homework  Homework problems of each chapter are posted on the course website. Homework are not collected but just for students’ practice purpose. Homework solutions are posted on the course website too.

Laboratory  Lab sections are led by teaching assistants. ** Totally ten labs will be given. The lowest score of the ten labs is dropped. The remaining nine lab scores are counted.** Lab manual is posted on course website.

- All required components for lab section can be found in SEL 4255. (No additional lab kits are required.)
- **Student must attend the lab section for which you registered.** NO EXCEPTIONS! Only 28 students are allowed in the lab room at a time. (You cannot go to another lab section, simply because it is full.)
- Attendance of lab section is mandatory and is monitored by the teaching assistant.
- The experiment procedures of each lab can be found at the course website.
- Lab reports are collected at the end of each lab section. NO LATE LAB REPORTS are accepted!
- Circuit analysis preparation is required to be done before coming to lab.
- One lab report is required **per group.**
- Lab reports submitted without attending lab are NOT ACCEPTED.

Exams  THREE take-home Exams are given. ONE comprehensive and **close-book** Final Exam is given during the Final week. Exam contents are based on materials covered by course lectures and homework. **The lowest score of the three take-home exams is dropped.** The Final Exam is mandatory. NO MAKEUP EXAMS are given!

Grading  The overall grade of the course is determined based on laboratory and exams as below.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory</td>
<td>30%</td>
</tr>
<tr>
<td>Highest take-home Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Second-highest take-home Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Lowest take-home Exam (dropped)</td>
<td>0%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
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</tbody>
</table>
A straight scale is used to determine the grades with $A = 90-100\%$, $B = 80-89\%$, $C = 70-79\%$, $D = 60-69\%$, $F = 0-59\%$ unless otherwise announced later.

**Attendance**
Lecture attendance is not monitored but is critical to your success of the course. Should you miss a lecture, please study the slides and lecture notes of the lecture. Slides and lecture notes can be downloaded from the course website or requested from the lecturer via email.

**Classroom Policy**
Any action that distracts or disrupts other students in the classroom is not permitted during lecture, including but not limited to eating food, talking on a cell phone, wearing inappropriate dress etc. Please remember to put cell phone on vibration or silence mode. Please respect your classmates (who have paid tuition to take the course and rightfully expect a quality learning environment) at all times.

**Regulations for Religious Holidays**
Students who wish to observe their religious holidays shall notify the instructor by the tenth day of the semester of the date(s) when they will be absent unless the religious holiday is observed on or before the tenth day of the semester. In such cases, the students shall notify the instructor at least five days in advance of the date when he/she will be absent.

**Policy on Incomplete (IN) Grades**
The UIC policy is that Incomplete (IN) grades should be given ONLY when the student is making satisfactory progress. Please see the current Undergraduate Catalog for a precise statement. In this course, any student looking for an IN grade needs to have a C average at the time he/she requests for an IN. If the student is earning a D or below, then and IN grade will not be given, regardless of other circumstances. Note that satisfactory progress is a necessary but not sufficient condition for an IN. There must also be an extraordinary reason why instructor should consider giving an IN.

**Professional and Ethical Responsibility**
- Attend all lectures. Take exams on scheduled dates. No make-up exams or alternate arrangements will be allowed unless for reasons beyond a student’s control (supporting documents required).
- Read announcements on course website or emails from the instructor and TAs regularly.
- Review lecture slides and notes posted and complete reading assignments in a timely manner.
- Policy on cheating and plagiarism: Dishonest actions by students will result in appropriate disciplinary action. Intentional use or attempt to use unauthorized assistance, materials, or information, in any quiz, examination, or assignment and plagiarism in literature review report may lead to penalties such as a failing grade. College of Engineering and University guidelines will be followed. Generally, the minimum penalty for cheating is an F in the course; the maximum penalty is expulsion from the university. Giving aid on exams to others is also considered as a form of cheating.