ECE210 Electrical Circuit Analysis
(De partment of Electrical and Computer Engineering; Spring, 2019)

Course Information

CRN 42016 by Zheng Yang

Course Schedule: 8:00am-8:50am Monday and Wednesday (CRN: 42016)
Classroom: Science & Engineering South 130 (SES 130)
Lab Schedules: 2:00pm-4:50pm Tuesday (CRN: 27394) (with Anuj Singhal)
11:00am-1:50pm Thursday (CRN: 33775) (with Baker Al-Bahri)
11:00am-1:50pm Friday (CRN: 38200) (with Baker Al-Bahri)
Lab Location: Science & Engineering Laboratory East 4255 (SEL 4255)
Course website: https://www.ece.uic.edu/~zyang/Teaching/20182019SpringECE210/index.html
Instructor: Zheng Yang (yangzhen@uic.edu)
Office Hours: 9-10am and 6-7pm on Monday and Wednesday at ERF 3017
Teaching Assistants: Anuj Singhal (asing48@uic.edu)
Baker Al-Bahri (balbah2@uic.edu)
TA Office Hours: 2:30-4:30pm on Wednesday at SELW4210 (Anuj Singhal)
9:30-10:30am on Thursday and Friday at SEO1234 (Baker Al-Bahri)

CRN 18100 by Kimberly Fitzgerald

Course Schedule: 11:00am-11:50am Monday and Wednesday (CRN: 18100)
Classroom: Lecture Center Building D 001 (LCD 001)
Lab Schedules: 8:00am-10:50am Tuesday (CRN: 18099)
2:00pm-4:50pm Thursday (CRN: 18098)
8:00am-10:50am Friday (CRN: 36502)
Lab Location: Science & Engineering Laboratory East 4255 (SEL 4255)
Course website: Blackboard
Instructor: Kimberly Fitzgerald (kimfitz@uic.edu)

Credit Hours: 3

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), input impedance, voltage and current division rules, superposition principle; Thévenin and Norton equivalent circuits and source transformations; power and maximum power transfer; transient and steady-state analysis of RC and RL circuits; Operational amplifiers; Sinusoidal steady-state analysis, frequency response and filters; and laboratory.

Prerequisites MATH 220 (credit or concurrently enrolled) and PHYS 142.
Homework  Homework are given but not collected. Homework solutions are posted later.

Laboratory  Lab section is led by teaching assistants. **Totally eleven labs will be given. The lowest score of the eleven labs is dropped. The remaining ten lab scores are counted.** Lab manual will be posted on course website.
- All required components for lab section can be found in SEL 4255. (No additional lab kits is required.)
- **You 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 one, 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.
  - In order to pass this course, one must receive a grade of 65% or higher for the lab part.

Exams  THREE exams (50 minutes) are given on class and ONE comprehensive Final is given during the final exam week. Exam contents are based on materials covered in lectures, homework and quizzes. **The lowest score of the FOUR exams is dropped.** NO MAKEUP EXAMS are given!

Missed Exams  No make-up exams will be given since the lowest exam score will be dropped (essentially, one of the four exams is optional).

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

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>25%</th>
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<tbody>
<tr>
<td>Highest Exam of the Four Exams</td>
<td>25%</td>
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<tr>
<td>Second Highest Exam of the Four Exams</td>
<td>25%</td>
</tr>
<tr>
<td>Third Highest Exam of the Four Exams</td>
<td>25%</td>
</tr>
<tr>
<td>Lowest Exam of the Four Exams (dropped)</td>
<td>0%</td>
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</tbody>
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*An straight scale is used to determine the grades with A = 90–100%, B = 80–89%, C = 70–79%, D = 60–69%, F = 0–59%.*

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 an 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.