

ELECTRICAL SYSTEMS

BCN 3521C

3 CREDITS

FALL 2018

TUESDAY & THURSDAY 4TH PERIOD – ROOM 238 RINKER HALL

INSTRUCTOR: *Dr. Walters*

329 Rinker Hall

rwalters@ufl.edu

352-354-2896

OFFICE HOURS: Monday & Wednesday 4th period for walk in, other times by appointment

COURSE WEBSITE: <http://elearning.ufl.edu>

COURSE COMMUNICATIONS: Please use Canvas email.

COURSE DESCRIPTION: Principles and practices of electrical systems, including code provisions and cost estimations.

COURSE GOALS AND/OR OBJECTIVES: *By the end of this course, students will:*

1. Have a basic understanding of electrical fundamentals (ACCE SLO 20)
2. Be aware of safety issues in dealing with electrical systems (ACCE SLO 3)
3. Read and interpret electrical drawings, specifications, and codes (ACCE SLO 7)
4. Possess knowledge of boxes and conduit, service and distribution, transformers, grounding, branch circuits and feeders, motors and motor controls, lighting, fire alarm systems, and low voltage systems. (ACCE SLO 8)
5. Create a Building Information Model (BIM) of an electrical building system (ACCE SLO 10)

TEACHING PHILOSOPHY: I designed the course material and delivery to help you meet the goals and objectives of the course. The lecture materials includes example solutions to prepare you to complete the homework and in-class assignments. The homework and in-class problems will prepare you for the quizzes. The quizzes will prepare you for the exams. The lectures are also reinforced through laboratory exercises. Be engaged in class, ask questions, and come to office hours. If you do not understand the class presentations, you should expect to do poorly on the homework assignments, quizzes, and exams. Please remember that I am here to help.

COURSE POLICIES:

ATTENDANCE POLICY: This course contains both a classroom presentation/discussion portion and a lab portion. During the classroom portion, the material listed in the Course Objectives will be discussed. During the lab portion, students will apply the knowledge learned in the classroom setting to reinforce their knowledge of the Course Objectives.

Students are expected to attend every class session and make up all work missed because of legitimate absences. Unexcused or unexplained absences will automatically lower a student's grade if they exceed the equivalent of one week's worth of class time.

An assignment missed when there was prior notification about the absence can be made up if this assignment is taken within the next two University class days. That is, if an assignment is missed on a Friday, it must be made up on the following Monday or Tuesday. For the first assignment made up in this way, full credit can be earned on the assignment. If a second assignment is made up in this way, only 80% of the grade on that assignment will be possible. For the third assignment, the percentage drops again to 60%, and so on.

COURSE MATERIAL: The course schedule and material are posted on the course website (elearning.ufl.edu). I do update the website as needed with schedule changes and postings of solutions to the course assignments.

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior

to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

NETIQUETTE: COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. [Describe what is expected and what will occur as a result of improper behavior]
<http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

GETTING HELP:

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

GRADING POLICIES:

Assignment	Points or percentage
Homework	10%
Quizzes	10%
Labs	10%
Exams	42%
Final Exam	28%

GRADING SCALE:

Grade Values for Conversion May 11, 2009 and After												
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E, I, NG, S-U, WF
Grade Points	4.0	3.67	3.33	3.00	2.67	2.33	2.00	1.67	1.33	1.00	.67	0.00

COURSE SCHEDULE:

FINAL EXAM: *Dec. 10, 3 – 5 PM, RNK 140*

<i>Date</i>		<i>Topic</i>
23-Aug	Th	Calculating the Electrical Load
28-Aug	Tu	Commercial Building Plans and Specifications
30-Aug	Th	Reading Electrical Working Drawings - Entry Level
4-Sep	Tu	Reading Electrical Working Drawings - Entry Level
6-Sep	Th	Safety
11-Sep	Tu	Switches and Receptacles
13-Sep	Th	Wiring Methods
18-Sep	Tu	Calculating the Load
20-Sep	Th	Switches & Receptacles
25-Sep	Tu	Exam 1
27-Sep	Th	Working Drawings - Upper Level
2-Oct	Tu	Panelboard Selection and Installation
4-Oct	Th	Working Drawings Quiz
9-Oct	Tu	Electric Service Lecture/Temporary Electric Lab
11-Oct	Th	The Electric Service
16-Oct	Tu	Panelboard Lab
18-Oct	Th	Luminaires
23-Oct	Tu	Exam 2
25-Oct	Th	Lamps and Ballasts for Lighting
30-Oct	Tu	More Lighting
1-Nov	Th	Site Work
6-Nov	Tu	Submittals
8-Nov	Th	Quiz - Luminaires
13-Nov	Tu	Electrical Room Layout - Revit
15-Nov	Th	Scheduling
20-Nov	Tu	Photovoltaic Circuits
22-Nov	Th	Thanksgiving (Holiday)
27-Nov	Tu	Exam 3 Review
29-Nov	Th	Exam 3
4-Dec	Tu	Final Exam Review

Please check with the course website for schedule changes.

Disclaimer: This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.