

BCN 3521 Electrical Systems
M.E. Rinker Sr. School of Building Construction
University of Florida

SYLLABUS

Professor: Mark Russell, PhD, PE
Office Hours: Posted on office door

Office: 311 Rinker Hall
email: russ1307@ufl.edu

CREDIT: 2 Credits

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

METHOD: Two lecture hours and one lab hour per week

REQUIRED MATERIALS: Mullin, R.C. and Simmons, P. (2012) Electrical Wiring Commercial 14th ed. Delmar, Clifton Park, NY (978-1-4354-9829-7)

PREREQUISITES: None

OBJECTIVES:

To teach the students the fundamentals of electrical systems, interpret electrical construction documents, apply electrical codes, and understand electrical estimates.

COURSE LEARNING OUTCOMES:

Upon completion of this course students will demonstrate their ability to:

1. Have a basic understanding of electrical fundamentals (ACCE SLO 10)
2. Be aware of safety issues in dealing with electrical systems (ACCE SLO 11)
3. Read and interpret electrical drawings, specifications, and codes (ACCE SLO 8)
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 6)

Assessment	CLO 1	CLO 2	CLO 3	CLO 4	Target
Lab			X		At least 80% receive C- or better
Final Exam	X	X		X	At least 80% receive C or better

PRESENTATIONS:

An integral part of this course are presentations of your work to your peers.

Notice: Failure to make a presentation on your scheduled day results in a -20 point grade.

CLASS ATTENDANCE:

Attendance is mandatory. School sponsored activities in which the appropriate faculty coach has provided a previous written notification of the activity will warrant an excused absence.

Attendance is taken using a sign-in sheet or through attendance quizzes. You are responsible for all material presented in class, lecture notes on Sakai, handouts, guest speakers, and anything said or written by the instructor.

Requirements for class attendance and make-up exams, assignments, and other work in the course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

GRADING:

The point value for each assignment will be clearly indicated when assigned.												
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Numeric Grade	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0-59
Quality Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

There is no rounding up of grades

DUE DATES / LATE WORK:

Allowing some persons extra time to complete assignments while others are on time is inherently unfair. Therefore: ALL LATE WORK IS PENALIZED, regardless of the reason. You should consider the due date in a similar fashion to submitting a bid.

- Each submittal is due at the start of class on the due date. NOT by the end of class, NOT by the end of the business day.
- Submissions turned in after the start of class receive an automatic 10 percent deduction for each class period late. For example, if an assignment is due on Tuesday, and you do not turn it in, you have until the beginning of the next class (Thursday) to turn it in for a -10% reduction. You'll receive a 20% reduction if you wait until the following Tuesday.
- Partial submissions are unacceptable. If your binder is missing an assignment, that assignment will get 0 points. Once you turn in your binder you cannot add missing

items. It may be better to wait until the entire package is finished than turn in incomplete work.

- Once an assignment has been graded and returned to the class, no more late assignments will be accepted.

HONOR CODE:

UF students are bound by The Honor Pledge which states: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “on my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-cde/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

The Rinker School prides itself in “Promoting professional and ethical behavior in education and practice.” As students continue their academic careers in the Rinker School, it is imperative that everyone maintains a high level of integrity. In the classroom setting, this translates into honest work being performed by all students.

PLAGIARISM:

This course has been taught for many years and as a result there may be a temptation to “rely on the work of others.” Should the instructor determine that a student’s work is substantially similar to that of another (either past or present) the student may be subject to a rejection of that assignment and will be cited with an honor court violation. Similarly, the use of materials, worksheets, or data from previous semesters is considered cheating. The student understands that their work is subject to electronic verification by Turnitin® or other technologies.

STUDENTS WITH DISABILITIES:

Students with disabilities requesting accommodations should first register with the Disability Resources Center (352-392-8565 or www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

COUNSELING:

Contact information for the Counseling and Wellness

Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

EVALUATIONS:

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <http://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

SOFTWARE:

Students MUST have a laptop computer available for use in class.

Students MUST have access to a printer other than the BCN labs. Lack of BCN facilities is no excuse for missed or late assignments.

Students SHOULD have access to a color printer since assignments are marked down 10% if presented in black & white.

SAKAI:

This course utilizes Sakai as a repository for all course material including lecture notes, quizzes, forms, tutorials, and grades. It is the student's responsibility to take advantage of the university resources to learn how to utilize Sakai.

Periodically the instructor will communicate with the class via e-mails from Sakai. Please note: Do not respond to these e-mails. If you need to communicate use the instructor's e-mail: russ1307@ufl.edu.

GRADING:

Homework	10%
Quizzes	15%
Exams (3 at 15% each)	45%
Lab assignments	10%
Final Exam	20%
Total	100%

SPECIAL NOTES:

1. All assignments must be turned in hard copy format. Having the assignment on your computer, memory stick, or e-mail IS NOT ACCEPTABLE and does not substitute for turning in the assignment. Printing your assignments is totally your responsibility. The BCN lab is there for your convenience, however you are not excused from turning in your assignments if there are problems in the labs.
2. MS Project assignments are to be in color. Black & white submittals will be marked down 10%.