

BCN 3521C Electrical Systems

I. General Information

Fall 2024

Meeting Day/Time: Tuesday & Thursday 5th period

Location: Rinker 238

Instructor

Russell Walters

Office location: 328

Office hours: Tuesday & Wednesday 6th period

Phone: (352) 354-2896

Course Description

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

Required & Recommended Course Materials

All assigned material will be available through Canvas.

II. Graded Work

Description of Graded Work

Attendance

Although not built into the course requirements, regular attendance is strongly recommended and the best guarantee of class success. Regular attendance will better ensure that you engage in and properly absorb readings and lecture material. Much of the test material will come from lectures and discussions that are not fully represented by posted lecture slides. If you attend a class meeting, you will be assumed to be prepared to participate. If you miss a class meeting, you will still be responsible for all course content and logistical information covered during the class. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

In-class and Take-Home Assignments (15%)

These assignments will assess your mastery of the course content.

Laboratory Work (15%)

The course content will be reinforced through weekly laboratory work.

Tests 1, 2 & 3 (14% + 14% + 14%)

Three 50-minute in-class tests will measure mastery of the material covered, including in-class work, course readings, assignments, and laboratory work.

Final Exam (28%)

A 2-hour final exam will assess your mastery of the student learning outcomes (Section IV).

Grading Scale

For information on how UF assigns grade points, visit

<https://catalog.ufl.edu/UGRD/academicregulations/grades-grading-policies/>

A	94 – 100%		C	74 – 76%
A-	90 – 93%		C-	70 – 73%
B+	87 – 89%		D+	67 – 69%
B	84 – 86%		D	64 – 66%
B-	80 – 83%		D-	60 – 63%
C+	77 – 79%		E	<60

III. Weekly Schedule

Week/Date	Topic/Assignment
Week 1	Electrical Safety
Week 2	Lamps and Luminaires
Week 3	Wiring Methods - Branch Circuits and Submittals
Week 4	Wiring Methods - Feeders
Week 5	Energy Code
Week 6	Exam 1
	One Line Drawings
Week 7	Load Calculations and Site Work
Week 8	Site Work and Photovoltaics
Week 9	Commissioning and Telecom Requirements
Week 10	Exam 2
	Telecom Drawings
Week 11	Fire Alarm and Security
Week 12	BIM
Week 13	Audio Visual
Week 14	Scheduling
Week 15	Exam 3
Week 16	Final Exam

IV. Student Learning Outcomes (SLOs)

At the end of the course, students will be able to...

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. 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)
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V. Required Policies [OBJ]

Attendance Policy

Attendance of class is required. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/Links to an external site.>

Quiz/Exam Dates/Policies

Exam dates are posted in the course schedule, and makeup exams are only available with prior approval.

Make-up Policy

Students are responsible for all material presented in class, including in-class assignments. For absences consistent with the course attendance policy, make-up work must be completed within two scholastic days of the absence.

Assignment Policy

Assignment due dates will be listed in Canvas. Late work is not accepted without prior approval.

Online course evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give input professionally and respectfully is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Course Website

<http://elearning.ufl.edu>

Course Communications

For questions outside of class time, please use the Canvas mail tool. For urgent matters, please call me.

Required or Recommended Textbooks

All course material is provided through Canvas.

Materials and Supplies Fees

\$10

University Policy on Accommodating Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. [Click here to get started with the Disability Resource Center](#). Students need to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

University Policy on Academic Conduct

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 Conduct Code specifies a number of behaviors that violate this code and the possible sanctions. Click [here](#) to read the Conduct Code. If you have any questions or concerns, please consult with the instructor or TAs in this class.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation and delivered by any instructor hired or appointed by the University or by a guest instructor as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Use of AI Tools

Artificial intelligence (AI) tools have the potential for beneficial use. The course policy on AI tools will be to embrace and integrate them into certain course activities, like interactive projects, with full transparency about their use. However, using AI tools during an exam or quiz is never permitted.

- Do not use any AI tools during any exams or quizzes.
 - Do not use AI tools without specific permission and instructions during assignments or activities.
- Credit and cite any time you use AI.
- Except during exams and quizzes, you may use writing assistants to check your written work for grammar and punctuation.
- Writing assistants and other AI should not be used to write, paraphrase, or change the style and composition of your writing.

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please get in touch with umatter@ufl.edu, 352-392-1575, or visit the [U Matter, We Care website](#) to refer or report a concern, and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#). Or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: [Visit the UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care, call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608. [Visit the UF Health Emergency Room and Trauma Center website](#).

GatorWell Health Promotion Services: For prevention services focused on optimal well-being, including Wellness Coaching for Academic Success, [visit the GatorWell website](#) or call 352-273-4450.

Academic Resources

E-learning technical support: Contact them at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance concerning using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010, or to make an appointment, 352-392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Student Complaints: [View the Distance Learning Student Complaint Process](#).

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.