

Course Syllabus

Electrical Systems

BCN 3521C

2 Credit Hours

Instructor: Dr. Russ Walters, Ph.D., P.E.

- Physical: 328 Rinker Hall
- Email: [Canvas Mail Tool \(https://ufl.instructure.com/conversations#filter=type=inbox\)](https://ufl.instructure.com/conversations#filter=type=inbox)
- 352-354-2896
- Office Hours: Monday - Wednesday 4th period (10:40AM – 11:30AM)

Course Goals and/or Objectives

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

Student Learning Outcomes

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

- Have a basic understanding of electrical fundamentals (ACCE SLO 20)
- Be aware of safety issues in dealing with electrical systems (ACCE SLO 3)
- Read and interpret electrical drawings, specifications, and codes (ACCE SLO 7)
- 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)

Weekly Schedule

Posted on [course website \(https://ufl.instructure.com/courses/500435/pages/schedule\)](https://ufl.instructure.com/courses/500435/pages/schedule)

Course Grading

The table below shows the weighting of assignments and how your final grade will be determined. Please review the following link for UF grading policies for assigning grade points:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/> 
(<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>)

Type of Assignment

Percentage

In-class & take-home work	15%
Labs	15%
3 Exams	42% (14% each)
Final Exam	28%

Course Policies

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/> 
[\(https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/\)](https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/)

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 calendar 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 feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/> 
[\(https://gatorevals.aa.ufl.edu/students/\)](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/> 
[\(https://ufl.bluera.com/ufl/\)](https://ufl.bluera.com/ufl/). Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/> 
[\(https://gatorevals.aa.ufl.edu/public-results/\)](https://gatorevals.aa.ufl.edu/public-results/).


Course Website: <http://elearning.ufl.edu> 
[\(http://elearning.ufl.edu/\)](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](https://disability.ufl.edu/students/get-started/)  (<https://disability.ufl.edu/students/get-started/>). It is important for students 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 are in violation of this code and the possible sanctions. [Click here to read the Conduct Code.](https://sccr.dso.ufl.edu/process/student-conduct-code/)  (<https://sccr.dso.ufl.edu/process/student-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/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.


Use of AI Tools


The use of Artificial Intelligence (AI) tools has 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 any 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 during any assignments or activities without specific permission and instructions.
- 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.

Campus Resources


Health and Wellness


U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu (<mailto:umatter@ufl.edu>), 352-392-1575, or visit [U Matter, We Care website](https://umatter.ufl.edu/)  (<https://umatter.ufl.edu/>) 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](https://counseling.ufl.edu/)  (<https://counseling.ufl.edu/>) 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](https://shcc.ufl.edu/) .


University Police Department: [Visit UF Police Department website](https://police.ufl.edu/)  (<https://police.ufl.edu/>) 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](https://ufhealth.org/uf-health-shands-emergency-room-trauma-center) .


GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, [visit the GatorWell website](https://gatorwell.ufsa.ufl.edu/)  (<https://gatorwell.ufsa.ufl.edu/>) or call 352-273-4450.

Academic Resources


E-learning technical support: Contact the **[UF Computing Help Desk](http://helpdesk.ufl.edu/)**  (<http://helpdesk.ufl.edu/>) at 352-392-4357 or via e-mail at helpdesk@ufl.edu (<mailto:helpdesk@ufl.edu>).


[Career Connections Center](https://career.ufl.edu/)  (<https://career.ufl.edu/>): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

[Library Support](https://cms.uflib.ufl.edu/ask/)  (<https://cms.uflib.ufl.edu/ask/>): Various ways to receive assistance with respect to using the libraries or finding resources.

[Teaching Center](https://teachingcenter.ufl.edu/)  (<https://teachingcenter.ufl.edu/>): Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

[Writing Studio](https://writing.ufl.edu/writing-studio/):  (<https://writing.ufl.edu/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](https://sccr.dso.ufl.edu/policies/student-honor-%20code-student-conduct-code/)**  (<https://sccr.dso.ufl.edu/policies/student-honor-%20code-student-conduct-code/>).

On-Line Students Complaints: **[View the Distance Learning Student Complaint Process](https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint)**  (<https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint>)

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.

Schedule

9-Jan	Safety
11-Jan	Lamps and Luminaires / Lighting Drawings
16-Jan	The Lighting Plan
18-Jan	The Lighting Plan
23-Jan	Wiring Methods - Conduit
25-Jan	J2 Field Trip
30-Jan	Wiring Methods - Conductors
1-Feb	Branch Circuits
6-Feb	Exam 1
8-Feb	BIM (video)
13-Feb	One Line Drawings
15-Feb	Load Calculation
20-Feb	Career Fair
22-Feb	Energy Code
27-Feb	Site Work & High Voltage Distribution
29-Feb	Site Work & High Voltage Distribution
5-Mar	Photovoltaics
7-Mar	Exam 2
12-Mar	Spring Break
14-Mar	Spring Break
19-Mar	Telecom Requirements
21-Mar	Telecom Drawings
26-Mar	Fire Alarm
28-Mar	Fire Alarm
2-Apr	Security
4-Apr	Audio Visual
9-Apr	Audio Visual

11-Apr	Submittals
16-Apr	Scheduling
18-Apr	Exam 3
23-Apr	Final Exam Review
	Final Exam (From Department Exam calendar)