

EEL4924C Electrical and Computer Engineering Design II

1. **Catalog Description** (3 credit hours) – Selected design projects involving engineering applications in the various areas of electrical engineering. Senior standing is the prerequisite and it must be taken prior to the semester of graduation.
2. **Pre-requisites** – EEL3923C, EEL3135.
3. **Course Objectives** - To provide the framework for specification of a design problem in a written design proposal, communication and discussion of design progress at oral project briefing meetings at weekly intervals, documentation of technical approaches in a patent style notebook checked and signed at weekly intervals with demonstration, presentation and written documentation of the completed design project.
4. **Contribution of course to meeting the professional component** 3 hours of engineering science.
5. **Relationship of course to program outcomes:** EE2, a, b, c, d, e, f, g, h , i, j, k
6. **Instructors**

	Drs. Karl Gugel, Mike Stapleton and Eric Liebner
a. Office location	265, 239, 236 NEB
b. Telephone	692-0800
c. E-mail address	gugel@ufl.edu
d. Web site	www.add.ece.ufl.edu/4924
e. Office hours	KG: 09:00 – 09:30, 10:30 – 11:30 am and 02:50 - 03:30 pm MWF, MS: daily, EL: daily
7. **Teaching Assistant and hours** TBD
8. **Meeting Times** - MWF 3rd & 7th periods (9:35 - 10:25 am, 1:55 – 2:45 pm)
9. **Class/laboratory schedule**, three 50-minute periods each week.
10. **Meeting Locations** – LAR239/CHE0239 (class) & NEB 202 (lab)
11. **Material and Supply Fees** - \$81.31
12. **Textbooks and Software Required** - None
13. **Recommended Reading** - None
14. **Course Outline** – Dates to be determined.
Group and Project Selection – 2 members per group only
Project Abstract due
Preliminary Design Report due
Preliminary Design Presentations held during class
Guest Lectures – Attendance is Mandatory
Intermediate Design Reviews in Lab
Final Design Report due along with Final Project Presentation/Demo
Poster Session
15. **Attendance and Expectations**
 - **ATTENDANCE** at your weekly meeting is **MANDATORY**.
 - You will be allowed one absence, excused or otherwise, without any impact on your grade.
 - The second absence will drop your grade by one letter.
 - After **TWO ABSENCES** you automatically **FAIL** the course
 - There are six class times a week when meetings occur. If you cannot make it to your assigned meeting time, **YOU must reschedule** to avoid an absence.

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx> (Links to an external site.)Links to an external site.

16. **Grading** – Project Abstract, Preliminary Design Report, Preliminary Design Presentation, Intermediate Design Review, **Patent Style Notebook**, Final Design Report and Final Design Presentation & Demo

Abstract 2.5%
Presentation 2.5%
Preliminary Design Report 10%
Design Project 75%:
- A working project that meets the design spec 50%
- Project Complexity 25%
Final report 10%

Note1: All of the above must be completed to receive a passing grade!

Note2: Please see our website for examples of the items above. In order to pass the class, students must finish their design projects and show a working demo.

17. **Grading Scale** (e.g., 90-100 A, 85-89 B+, 80-84 B, etc.) “A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

18. **Make-up Exam Policy** – N/A

19. **Honesty Policy** – All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.

20. **Accommodation for Students with Disabilities** – Students Requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

21. **UF Counseling Services** –Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
- Career Resource Center, Reitz Union, 392-1601, career and job search services.

22. **Software Use** – All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

23. **Lab Notes**

1. Students will receive the access code for the door and have 24 hour access to the lab. There should be no eating & drinking in the lab. Students are responsible for cleaning up their stations before leaving the lab.
2. Students must wear eye protection while soldering. Safe practices must also be used when handling high or dangerous voltages. Fire may be a risk so think before flipping the switch. Make sure you know where the nearest fire extinguisher is located.
3. Any personal equipment or items left in the lab are done so at the student's own risk. If a student does decide to leave anything in the lab, it should be clearly labeled with their student name and group name.
4. Equipment like O-scopes and LSAs will need to be checked out (and back in) from the locked cabinet in the lab by a TA or other faculty. This equipment may only be used while a TA or other faculty are present in the lab.
5. When finished, students should return all borrowed equipment back to the original location on a particular shelf. Soldering irons should never be disassembled or have their tips removed. This is the general rule for all equipment in the lab; don't disassemble our equipment without our consent first! Note: If a soldering iron appears to not be working, then use another one and notify a TA or Eric Liebner to obtain a new tip.
6. At some point during the semester, students will need to have PCB boards milled. Please sign up on the class website to have you boards milled. You will also need to upload your files to the mill server, a link can be found on the desktop of the lab computers. Please note that if the folder name submitted to the server does not match the name submitted to the website your board will not be milled. This will be covered further in class.