COP 2271L Computer Programming For Engineers Laboratory - MATLAB

- 1. Optional laboratory for CGS 2421. Required for ISE majors. (M) Credits: 1 can be repeated with change in content up to 3 credits.
- 2. Prereq: MAC 2312; Coreq: COP 2271.
- 3. The laboratory course provides additional practice for those students also enrolled in COP2271 lecture. Students will work on a variety of problems not seen in lecture to reinforce MATLAB programming topics. Students will also be introduced to more advanced topics not covered in lecture.
- 4. N/A
- 5. N/A
- 6. Dr. Ira Hill
 - a. NSC 204B
 - b. (352) 392-4523
 - c. ijh3@ufl.edu
 - d. http://elearning.ufl.edu
 - e. No dedicated office hours
- 7. David Dawson
 - a. NEB 101 during lab
 - b. Telephone N/A
 - c. Canvas class email
 - d. No dedicated office hours
- 8. Wednesday 2-3rd period
- 9. 1 laboratory per week for 100 minutes
- 10 NEB 101
- 11. N/A
- 12. A textbook is not required, and notes are provided through Canvas. Students will need access to MATLAB either freely through UF Apps

(https://apps.ufl.edu/vpn/index.html) or for purchase at the following:

https://www.mathworks.com/store/link/products/student

- 13. Recommended Reading:
 - a. MATLAB: A Practical Introduction to Programming and Problem Solving
 - b. Stormy Attaway
 - c. July 1, 2013 3rd edition
 - d. ISB-10: 0124058760
- 14. Course Outline:
 - Introduction
 - Fibonacci Sequence
 - Game of Pig
 - Interview questions from industry
 - Sorting algorithms
 - GUI programming
 - Image decoding
 - Advanced interview questions
 - Embedded systems programming
 - Robotics introduction with Roombas

- 15. Lab attendance is required each week and you are allowed 1 dropped lab grade.
- 16. Grading distribution:
 - Lab Assignments 100%
- 17. The final grade demarcations will not be higher than table shown below (i.e. an A will always be 90-100 despite the curve). Individual assignments or exam will be curved but instead the entire course at the end.

A: 90-100%
B+: 87-89.99%
B: 80-86.99%

• C+: 77-79.99%

C: 70-76.99%D+: 67-69.99%

• D: 60-66.99%

• E: 0-59.99%

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. Makeups for labs are not allowed; attendance is required each week.

Please read the university policies for further details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

19. Honesty Policy – 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-code/) 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.

Note that failure to comply with this commitment will result in disciplinary action compliant with the UF Student Honor Code Procedures.

See http://www.dso.ufl.edu/sccr/procedures/honorcode.php

- 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, http://www.counseling.ufl.edu/cwc/Default.aspx, counseling services and mental health services.
- · Career Resource Center, Reitz Union, 392-1601, career and job search services.
 - University Police Department 392-1111
- 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. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.
- 23. Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.