Time and Location: MW-F period 6, Little Hall, Room 235

Office Hours: MW-F period 7 and by appointment made 24 hours in advance.

Note on Email: I often check my email just in the early afternoons on weekdays. So if you need a reply by a certain time, plan ahead accordingly.

Text: Applied Fourier Analysis by Tim Olson. An electronic copy will be provided free to all enrolled students. You will find additional useful information at appliedfourier.com including a link to buy a hard copy book (also available on Amazon).

Course Description: This course will cover the basics of Fourier Series, the Discrete Fourier Transform and the Fourier Transform followed by applications including sampling and interpolation, signal and image processing, image and audio compression, and partial differential equations.

Prerequisites: Linear Algebra, Calculus 3 and Differential Equations. A main part of the course consists of student computational projects which require a programming language, preferably Matlab.

Projects and Exams: There will be 5 projects and one exam. Details will be forthcoming in class and the class project page as the semester progresses.

Grades: The projects and the exam are worth 20 points each for a total of 120 points. Letter grades are approximately 90%-100% A, 80%-90% B, etc with pluses and minuses at the two ends of each range.

Announcements: You are responsible for all announcements made in class.

Honor Code and Collaboration: In this course authorized aid on projects consists of talking to me, other students, and looking at the text for this course. This means that you are not allowed to look on-line, in other books for solutions to the projects, or at the written solutions of other students. You can collaborate with fellow students but must write up and code individually.

Class Attendance: Most students benefit a great deal from attending class regularly. Arriving late and/or leaving early, reading the newspaper, looking at your cell phone, etc. disrupts the class and is rude and unprofessional.

Excused Absences: In certain circumstances a student will be able to make up a missed exam or turn in a project late. These circumstances could include medical situations, family emergencies, travel for University activities (eg. band, debating club, etc), and religious observances. In these cases the student must inform me before or within one week after the missed work and provide written documentation.

Grades: Grading will be in accord with the UF policy stated at https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

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 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.”

Class Attendance: “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/ugrad/current/regulations/info/attendance.aspx.”

Accommodations for Students with Disabilities: “Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://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.”

Online Evaluations: “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/.”

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.