## **EE3417:** Continuous Signals and Systems Laboratory Fall 2016

Instructors: Dr. Don Butler and Dr. Jon Bredow

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**Faculty Profile:** Dr. Butler (<a href="https://www.uta.edu/profiles/donald-butler">https://www.uta.edu/profiles/jonathan-bredow</a>), Dr. Bredow (<a href="https://www.uta.edu/profiles/jonathan-bredow">https://www.uta.edu/profiles/jonathan-bredow</a>)

**Office Hours:** Dr. Butler (M,Th,F, 1-2pm), Dr. Bredow (M,T,W, 1-2pm), GTA Pratik, Ghate (M,W, 2pm-4pm and T, Noon-2pm), GTA Uthra Mahendran (M,W,F, 2-4pm) (Both GTAs hours in NH 132)

Section Information: EE3417 sections 101, 102

**Time and Place of Class Meetings:** Section 101 (4:00-5:20pm, T,Th, ELAB 256 occasionally or regularly T in NH 129A and Th in NH 148),

Section 102 (2:00-3:20pm, T,Th, COBA 339 occasionally or regularly T in NH 129A and Th in NH 148A)

**Description of Course Content:** Laboratory experience involves design and development work of systems with practical applications. A few examples include temperature and pressure monitoring systems, radar systems for collision avoidance, and soil moisture detection systems. Students work in teams and go through standard design and development steps that may be encountered in industry.

Student Learning Outcomes: See Table at the end of the syllabus.

Required Textbooks and Other Course Materials: No required textbook for the laboratory section.

**Descriptions of major assignments and examinations:** Students will be expected to submit 2 intermediate reports on progress on the project as well as a final report. A final demonstration of performance of the system will be expected at the time of the final report submission. Quizzes may be given if deemed necessary by the instructors to ensure students remain on track during the course.

**Attendance:** Attendance is strongly encouraged.

**Grading**: Approximately 50% of the grade will be based on progress reported in the 2 intermediate reports on progress (and any quizzes that may be given). The remaining 50% of the grade will be determined based on the final report, demonstration, and peer evaluation.

## **Course Schedule**

Aug. 25 No lab

- ' 30 Introduction and description of design work to be done
- Sep. 1 Teamwork and introduction to topics and team
- Team assignments, communications, ethics, intellectual property, lab notebooks

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8
           Design project assignments, design process
     13
           Begin work in labs (design process continued)
     15
          Work in labs
     20
    22
     27
     29
           Report 1 due
Oct. 4
          Work in labs
     6
     11
     13
     18
     20
     25
    27
           Report 2 due
Nov. 1
     3
     8
     10
     15
     17
     22
     24
           Thanksgiving holiday
    29
           Project presentations/final reports due
           Project presentations/final reports due
Dec. 1
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**Grade Grievances**: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. See <a href="http://catalog.uta.edu/academicregulations/grades/#undergraduatetext">http://catalog.uta.edu/academicregulations/grades/#undergraduatetext</a>; and <a href="http://www.uta.edu/deanofstudents/student-complaints/index.php">http://www.uta.edu/deanofstudents/student-complaints/index.php</a>.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/).

**Disability Accommodations:** UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of **a letter certified** by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause

diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

<u>Counseling and Psychological Services, (CAPS)</u> <u>www.uta.edu/caps/</u> or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

**Non-Discrimination Policy:** The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.

**Title IX Policy:** The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit* www.uta.edu/titlelX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or <a href="mailto:imbood@uta.edu">imbood@uta.edu</a>.

**Academic Integrity:** Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at <a href="https://www.uta.edu/conduct/">https://www.uta.edu/conduct/</a>.

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., Fall through Summer II) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

**Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge

to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <a href="http://www.uta.edu/oit/cs/email/mavmail.php">http://www.uta.edu/oit/cs/email/mavmail.php</a>.

**Campus Carry:** Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <a href="http://www.uta.edu/news/info/campus-carry/">http://www.uta.edu/news/info/campus-carry/</a>

Student Feedback Survey: At the end of each term, students enrolled in face-to-face and online classes categorized as "lecture," "seminar," or "laboratory" are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback via the SFS database is aggregated with that of other students enrolled in the course. Students' anonymity will be protected to the extent that the law allows. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit <a href="http://www.uta.edu/sfs">http://www.uta.edu/sfs</a>.

**Final Review Week:** for semester-long courses, a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and GTAs will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**Student Support Services**: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include <u>tutoring</u>, <u>major-based learning centers</u>, developmental education, <u>advising and mentoring</u>, personal counseling, and <u>federally funded programs</u>. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to <u>resources@uta.edu</u>, or view the information at <a href="http://www.uta.edu/universitycollege/resources/index.php">http://www.uta.edu/universitycollege/resources/index.php</a>.

**The IDEAS Center** (2<sup>nd</sup> Floor of Central Library) offers **free** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

**The English Writing Center (411LIBR)**: [Optional.] The Writing Center Offers free tutoring in 20-, 40-, or 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Our hours are 9 am to 8 pm Mon.-Thurs., 9 am-3 pm Fri. and Noon-6 pm Sat. and Sun. Register and make

appointments online at http://uta.mywconline.com. Classroom Visits, workshops, and specialized services for graduate students are also available. Please see <a href="www.uta.edu/owl">www.uta.edu/owl</a> for detailed information on all our programs and services.

The Library's 2<sup>nd</sup> floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. http://library.uta.edu/academic-plaza.

**Emergency Phone Numbers**: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Number	Course Learning Objective (CLO)	ABET outcomes
1	Demonstrate understanding of ethical behavior and the	f
	importance of ethical conduct in practice.	
2	Demonstrate understanding of intellectual property (IP),	f,i
	how it is protected, and importance of respecting other's IP.	
3	Perform as a team including leadership, respect for others,	d
	communication, division of responsibilities, and bringing	
	together a successful project.	
4	Establish specifications that are appropriate for goals of the	c,h
	project.	
5	Demonstrate success in integrating technical ideas and skills	e,k
	learned from other classes in evaluating approaches and	
	selecting and building final solutions to the problem.	
6	Demonstrate ability to effectively communicate	g
	achievements at levels appropriate to the audience.	