

SYLLABUS

EE 1104 – INTRODUCTION TO ENGINEERING

Spring 2016

Classroom: NH 106

Day and Time: Mondays 4 pm – 4:50 pm

Professor: Dr. Samir Iqbal
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Course Site: Blackboard: <https://elearn.uta.edu/> Look for “2162-EE-1104-001-INTRODUCTION-TO-ENGINEERING--2016-Spring” in the left panel. Course content like lecture slides, handouts, announcements, quizzes, etc. will be posted on Blackboard.

Course Description:

This course is designed to teach skills needed to be successful in electrical engineering curriculum, such as computer basics, desktop publishing, presentation skills and tools, working with data, plotting data, understanding plots, measurements, concepts of variable dependence, laws and rules related to academic integrity, communication skills, and teamwork. Student will work individually and in teams to carry out two team-based projects, which may cover broad areas of engineering including analog and digital electronics, semiconductors, electromagnetics, signal processing, photonics, energy management, and telecommunication.

Student Learning Outcomes:

#	Course Learning Objective (CLO) for Every Week	Assessment Approach
1.	Computer Basics → Hardware, OS, File System, I/O, Peripherals	Quiz
2.	Understanding Data (Relating data to reality)	Quiz, Project
3.	Data Manipulation (Excel)	Quiz, Project
4.	Word processing (Word)	Quiz, Project, Event Report
5.	Professional Ethics	Quiz
6.	Project 1 – In-class Team Activity, Team Collaboration	Quiz, Exam, Report
7.	Project 2 – Client Interactions	Faculty Feedback
8.	Project 2 – Build	Demonstration, Report
9.	Presentation Skills (PowerPoint)	Quiz
10.	Technical Prose and Writing	Project Report, Event Reports
11.	Library Resources	Quiz
12.	Communicating with Teams, Professors, Peers, etc.	Faculty Feedback, Peer-Evaluation
13.	Math Functions and Inter-dependence (Linear, Exponential and Quadratic)	Quiz, Project
14.	Project 2 – Teamwork	Peer-Evaluation

Requirements:**Co-Prerequisite:**

EE 1105.

Required Textbook:

None

Attendance Policy and Score for Attendance:

Attendance is required for all lectures. If you skip classes, you will not get full credit for teamwork participation. The quizzes and exams will become much more difficult to attempt if you are not present in the class. Assignments, lecture notes, and other materials will be posted online, however, due to the pace of the lectures, copying someone else's notes may be an unreliable way of making up an absence. You are responsible for all material covered in class regardless of absences.

Timely attendance in this class is expected. The class will start on time and proceed with minimal interruptions. Every student will be required to swipe UTA ID Card (MAV Express card) at the beginning of every class. The students will also be required to sign out of class if leaving the classroom for any reason before the end of class. Each student will receive 3 points for each class to which he/she arrives on time. Only 2 points will be given for each tardy/early departure. Arriving more than 10 minutes late will count as an absence. Problems with the attendance score must be brought to the attention of the GTAs within two weeks of it being reported on Blackboard. Attendance will count for 5% of your course grade.

Description of Major Milestones, Assignments and Important Dates:

• Census Date	–	Feb 3, 2016
• Spring Vacation	–	Mar 14-19, 2016
• Project-1 Assigned	–	Feb 22, 2016
• Midterm Exam	–	Mar 7, 2016
• Project-1 Demo	–	Mar 21, 2016
• Project-2 Assigned	–	Mar 21, 2016
• Project-2 Demo	–	Apr 18, 2016
• Last Class	–	May 2, 2016
• Final Exam	–	May 9, 2016 (11 am-1:30 pm)

Examinations: Two exams will be given. One will be in-class midterm exam (10% of final grade) and the other will be in-class final exam (20% of the grade). No student will be allowed in the classroom 15 minutes after the start of the exam. Be on time for the exam.

Note: If an exam is canceled due to inclement weather or other unexpected reasons, it will take place in the subsequent scheduled class time unless posted otherwise on the course page on Blackboard. Only pocket calculators will be allowed. No borrowing of items including calculators or erasers will be allowed in exams. No other electronic devices or cell phones will be allowed in exams.

Projects: Project reports and demonstrations will be essential in the process of understanding and assimilating engineering concepts. Students will be divided into teams. For Project-1, each team will write a one-page report. For Project-2, the teams will submit a report and present demo of their work. The first project report will carry 10% of the final grade for all the team members. The demo, report, and client grade of Project-2 will carry 30% of the grade for all team members. (IEEE Templates)

Peer-Evaluation: A max of 10% score will be assigned towards final grade for each team member. This will be the curved average of the peer-evaluation scores of that team member assigned by other team members. This will be a direct measurement of the team member's contributions to the end product. Each team member will be required to assign a series of numbers to each of the rest of the team members. No two team members will get same score by one evaluator.

Quizzes: Quizzes will be given throughout the course. Every student will be required to answer quizzes. In case of a failed quizz (no show, student not familiar with the work, IT problems, etc.), no credit will be given. Quizzes will count 10% towards the final grade. Quizzes will be conducted through Blackboard. Get familiarized with Blackboard as soon as possible. The professor and GTAs are not well-versed with technical troubleshooting of Blackboard.

Event Reports: Each student will be required to attend two outside of class **Approved Events** and turn in an Event Report Form for each event. The filled and signed Event Report Form will be due the next week at the beginning of class. Turn-in the hard copy at the start of the lecture.

These events will be on-campus seminars that will be "Approved" to be appropriate for the level and scope of the course. The blank Event Report Form is posted on Blackboard and must be printed out and taken to the event to be signed by a seminar-sponsoring faculty member or student officer. Events approved for this assignment will be announced in the class and posted on Blackboard. The two event reports will count for 5% of final course grade. No late event report will be accepted.

Grading Policy

To summarize, each student will have the opportunity to earn points over the semester as follows:

Attendance	5%
Midterm Exam	10%
Final Exam	20%
Project-1	10%
Project-2	30%
Peer-Evaluation	10%
Quizzes	10%
Event Reports	5%

Course letter grades will be earned based on the following criteria:

A	=	90% and above
B	=	80% - 89%
C	=	70% - 79%
D	=	60% - 69%
F	=	0% - 59%

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor and GTAs) if their performance drops below satisfactory levels.

Incomplete Grade: **No grade of "Incomplete"** will be given.

Missed Exams: Missed exams will be assigned a grade of 0%, unless legitimate emergency or medical reasons are given prior to the exam. In that case, a make up exam will be arranged with the instructor.

Expectations for Out-of-Class Study: As with all courses taken as a College of Engineering student, students enrolled in this course should expect to spend at least an additional 3 hours per week (3 * 1 credit hour) of their own time in course related-activities beyond the time required to attend each class meeting. This would include reading required materials, completing assignments/quizzes, preparing for exams, project meetings, etc.

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 he/she does 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://web.uta.edu/ses/fao>).

Americans with Disabilities Act: The University of Texas at 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)*. 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 that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX: The University of Texas at Arlington is committed to upholding U.S. Federal Law "Title IX" such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

Academic Integrity: All students enrolled in this course 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.

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) 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.

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 tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. 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 resources@uta.edu, or view the information at www.uta.edu/resources.

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 <http://www.uta.edu/oit/cs/email/mavmail.php>.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a 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 enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week: 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 instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

Writing Center. : The Writing Center, 411 Central Library, offers individual 40 minute sessions to review assignments, *Quick Hits* (5-10 minute quick answers to questions), and workshops on grammar and specific writing projects. Visit <https://uta.mywconline.com/> to register and make appointments. For hours, information about the writing workshops we offer, scheduling a classroom visit, and descriptions of the services we offer undergraduates, graduate students, and faculty members, please visit our website at www.uta.edu/owl/.

<p>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.</p>
