

**EE1205-001 Introduction to Electrical Engineering Seminar**  
Spring 2014

Instructor(s): Donald Butler; <http://www-ee.uta.edu/eedept/Faculty/Dbutler.htm>

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Office Hours: M11:00AM-12:00noon, W2:30-3:30PM, F2:00-3:00PM

Section Information: EE1205-001 Introduction to Electrical Engineering Seminar

TA: TBD

Time and Place of Class Meetings: W 4:00-4:50 PM, GACB 103

**EE1205-001 (Seminar) W4:00-4:50 GACB103 Butler**

**Each student must attend EE1205-001 (Seminar) PLUS one of the following lab sections**

**EE1205-101 M 2:00-2:55 NH111 (Dillon) followed by M 3:00-4:50 NH148A (Dillon)**

**or**

**EE1205-102 Tu 9:30-10:25 NH111 (Russell) followed by Tu 10:30-12:20 NH129A (Russell)**

**or**

**EE1205-103 Th 9:30-10:25 NH111 (Popa) followed by Th 10:30-12:20 NH129A (Popa)**

**Seminar Announcements and Material will be posted on the course webpage in Blackboard**  
<http://www.uta.edu/blackboard>.

**Description of Course Content EE 1205 INTRODUCTION TO ELECTRICAL ENGINEERING (1-3)** A project based course in which basic concepts in electrical engineering, such as electrical systems, power and energy, circuit laws, measurements, and data analysis will be introduced. Student teams will engage in laboratory experiments, application hands-on projects, which cover areas of study in electrical engineering including analog and digital electronics, robotics, semiconductors, electro-magnetics, signal processing, photonics, energy management, and telecommunication systems. Corequisites: EE 1104.

**Student Learning Outcomes:**

The Seminar section (Section -001) is intended to introduce the students to different disciplines of Electrical Engineering and the importance of ABET a-k. This is to supplement the course learning objectives that are listed for lab section. Only the seminar portion is provided here.

12	An understanding of the application of electrical engineering disciplines in addressing global and contemporary issues and problems.	ABET h, j	seminar lectures
13	An understanding of system concepts and multidisciplinary nature of electrical Engineering	ABET	seminar lectures
14	An understanding of the importance of advanced degrees and lifelong learning.	ABET i	seminar lectures

**Required Textbooks and Other Course Materials:**

1. F.T. Ulaby and M.M. Maharbiz, *Circuits*, National Technology and Science Press, 2009, ISBN 978-1-934891-00-1
2. H.T. Russell, Jr., *EE 1205 Introduction to Electrical Engineering Lab Manual, V1.1*, OPAL<sub>tx</sub>, Fort Worth, TX, 2011.

Go to <http://www.uta.edu/ee/hw/ee1205-101/> and select the **Downloads**

**Descriptions of major assignments and examinations:**

*Midterm:* Take home, assigned Wed. 3/5 and due no later than Mon. 3/10 at 5:00 PM either through Blackboard or on paper to Dr. Butler at his office, NanoFab 202b. All students, without exception, **must** take the midterm examination within the scheduled dates.

*Final Exam:* Take home, assigned Wed. 4/30/2014 at 5:00 PM via Blackboard and due no later than Wednesday 5/7/2014 at 5:00PM either through Blackboard or on paper to Dr. Butler at his office, NanoFab 202b. All students, without exception, **must** take the final examination within the scheduled dates.

**Attendance:** Attendance is required. Attendance at each seminar will be recorded by having you sign in. If you do not sign in, you will not be counted as present. Attendance at the seminar will make up 5% of your course grade.

**Other Requirements:** No additional requirements.

**Grading:**

- i. There are 14 seminar class meetings scheduled plus one midterm and one Final.
- ii. Your attendance in seminar is required and will be recorded by sign-up sheets. You must sign in to be counted as present.
- iii. Periodic homework will be assigned to help you prepare for the exams.
- iv. Mid-term examination will be a take-home exam assigned Wed. 3/5 and due no later than Mon. 3/10 at 5:00 PM either through Blackboard or on paper to Dr. Butler at his office, NanoFab 202b. All students, without exception, **must** take the midterm examination within the scheduled dates.
- v. The final examination will be a take-home exam assigned Wed. 4/30/2014 at 5:00 PM via Blackboard and due no later than Wednesday 5/7/2014 at 5:00PM either through Blackboard or on paper to Dr. Butler at his office, NanoFab 202b. All students, without exception, **must** take the final examination within the scheduled dates.

- vi. All communication devices must be turned off while in the Seminar and the Lecture/Lab Sections. Communication devices of any type are not allowed to be used on any and all exams. No exceptions. Calculators without communication capability are permitted.
- vii. As a general rule, no late or make-up mid-term or final examinations given. Make-up exams will only be given in the case of serious illness. Written documentation of the illness from a medical doctor is required to receive a make-up exam. Students requiring a makeup exam must make an appointment as soon as possible after the scheduled exam date.
- viii. The *total grade* (T) for the EE 1205 course is based on the grade received in the Seminar Section and that received in the Lecture/Lab Section. The grade for the *Seminar Section* (SS) is 20% of the total and is computed from the following: 5% attendance, 5% midterm, 10% Final. Exam material is based on Seminar material and suggested readings. 80% of your grade is determined by the Lab part of the course.
- ix. Your seminar attendance record and exam grades will be entered into Blackboard for your review.
- x. My office hours and the TA's office hours are given above. If you have any questions and/or adverse difficulty with the lectures or class material, I strongly suggest that you call or e-mail me or the GTA. I am available outside of the office hours given as my time permits. Please note, my phone has voicemail but there is no indication a message has been left. Please do not leave a voice message but send me an email instead. Appointments can be arranged as necessary.
- xi. Additional important dates:

**Final Exam:** The Final Exam for the EE1205 Seminar is a take-home exam assigned Wednesday 4/30/2014 and due no later than Wednesday 5/7/2014 at 5:00PM.

xii. Percentages for Grades

◆ 90% -100%	A
◆ 80% - 89%	B
◆ 70% - 79%	C
◆ 60% - 69%	D
◆ 0% - 59%	F

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels. Your seminar grades will be posted in Blackboard to help you keep track of your performance in the seminar portion of the class.

**Expectations for Out-of-Class Study:** Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 6 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

**Make-up Exams:** Missed exams will be given a makeup only for serious illness or emergency and require a doctors certificate or similar written documentation. Students requiring a makeup exam must make an appointment as soon as possible after the scheduled exam date.

**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 undergraduate catalog.  
[http://www.uta.edu/catalog/content/general/academic\\_regulations.aspx#19](http://www.uta.edu/catalog/content/general/academic_regulations.aspx#19)

**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://www.uta.edu/aao/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](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

As a faculty member, I am required by law to provide "**reasonable accommodation**" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with **informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.**

If you require an accommodation based upon disability, please meet with me in my office during the first week of classes.

**Academic Integrity:** 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.*

UT Arlington faculty members 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](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**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., through the following August) 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 <http://www.uta.edu/oit/cs/email/mavmail.php>.

When sending an email to me, please put the course number as part of the email subject so that I can give it prompt attention.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be 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 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, [which are located at the front of the room on either side. Once leaving the classroom, exit the building by the building exits at the end of the hall. Note: Use the nearest safe building exit to the classroom.](#) Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

Nearest building exit, immediately to the left as you exit the classroom door of GACB103.

Inclusion of this verbiage as well as a brief discussion on the matter with your students at the beginning of the term is mandated by UT Arlington Procedure 7-6: [Emergency/Fire Evacuation Procedures \(https://www.uta.edu/policy/procedure/7-6\)](#).

## Course Schedule.

### EE 1205-001 Tentative Seminar Schedule

Seminar/Date		Topic	Speaker
1	15-Jan	Introduction and logistics.	Butler
2	22-Jan	Measurements	Dillon
3	29-Jan	From materials to devices to integrated circuits	Butler
4	5-Feb	Pulsed Power	Wetz
5	12-Feb	Telecommunications	Liang
6	19-Feb	Nanotechnology	Celik-Butler
7	26-Feb	Power Generation and Distribution	Kenarangui
8	5-Mar	Midterm Review and Exam Assigned	
9	12-Mar	Spring Break: No class	
10	19-Mar	Digital Signal Processing	Schizas
11	26-Mar	TBD	
12	2-Apr	TBD	
13	9-Apr	TBD	
14	16-Apr	TBD	
15	23-Apr	TBD	
16	30-Apr	Review Week Class: Going Forward (Final Exam Assigned)	Butler
17	7-May	Final Exam Due	Butler

*As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. –Donald P. Butler.*

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Subject Librarians .....	<a href="http://www.uta.edu/library/help/subject-librarians.php">http://www.uta.edu/library/help/subject-librarians.php</a>
Database List .....	<a href="http://www.uta.edu/library/databases/index.php">http://www.uta.edu/library/databases/index.php</a>
Course Reserves .....	<a href="http://pulse.uta.edu/vwebv/enterCourseReserve.do">http://pulse.uta.edu/vwebv/enterCourseReserve.do</a>
Library Catalog .....	<a href="http://discover.uta.edu/">http://discover.uta.edu/</a>
E-Journals .....	<a href="http://liblink.uta.edu/UTAlink/az">http://liblink.uta.edu/UTAlink/az</a>
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