

EE5309 – 001 : Renewable Energy Sources
Fall 2013

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Office Hours: 8:00 – 9:20 AM, Tuesday and Thursday

Section Information: EE5309-001

Time and Place of Class Meetings: 2:00PM – 3:20PM, Tuesday and Thursday, NH 111

Description of Course Content: In this course fundamentals of renewable energy sources including those of solar, wind, and hydrogen will be discussed. Various aspects of energy harvesting, processing, and interfacing will be addressed. This includes introducing advances in material, electromechanical converters, energy storage, and power processing networks which form various blocks in a modern renewable energy system.

Student Learning Outcomes: With the increasing demand for energy consumption and environmental concerns, development of sustainable and clean sources of renewable energy has attracted the attention of government and industry. This course is aimed to develop necessary skills and an insightful understanding for design of a renewable energy harvesting system and their system related issues and challenges. This course emphasizes the characteristics of different renewable energy resources, applications of renewable energy resources in the power system.

Renewable energy is essential to the future development of the power system. Learning the materials in this course is an important step toward a rewarding career as a power engineer.

Requirements: The general format of the class will be a formal lecture and hand-on experiments to develop the ideas and knowledge required for the understanding renewable energy.

Required Textbooks and Other Course Materials: Various notes and resources will be provided by the team of instructors.

Descriptions of major assignments and examinations:

HOMEWORKS: are due at the end of the class on the day the assignment is due. All work presented must meet professional standards regarding materials and format. Homework will be checked as to effort and number of problems presented. The homework grade is based on ten (10) points per problem per assignment. Since it is faculty's strongly belief that a student's success is directly proportional to success with homework, it is imperative that the homework be done.

It is the expressed policy of the faculty of the department to take decisive action involving any incidence relating to academic dishonesty. The instructor of this course will strictly enforce this policy!

LATE HOMEWORK ASSIGNMENTS: Homework must be turned in at the end of the class period on the day the assignment is due. No late homework will be accepted after the solution is posted in the copy center or web site. There will be a 25% grade reduction for each class period late.

MAKEUP OF MISSED EXAMINATION: There will be no makeup of a missed examination. All missed examination points will be reassigned to the point value of the next examination.

MAKEUP OF MISSED FINAL EXAMINATION: There will be no makeup of a missed examination. If the missing of the final examination is unexcused, the student will receive the course grade computed with a Final Exam with score of zero. If the student has an excused absence from the final examination, there are two options: 1) the student may elect to receive the course grade earned with the final counted as a zero, or 2) the student may elect to receive the grade of X and make arrangements to complete the course by taking the final examination. If the student elects the second option, it is the responsibility of the student to make necessary arrangement with the instructor to complete the course.

Attendance: Since this is your education, you will be required to participate by:

- Being aware of class procedures as set forth in this syllabus,
- Attending all the lectures and labs,
- Reading all assigned materials prior to the lecture,
- Working the assigned homework problems,
- Being aware of the course calendar, particularly examination times and dates

Grading:

<u>STUDENT COURSE AVERAGE</u>	<u>FINAL LETTER GRADE</u>
90.0 - 100.0	A
80.0 - 89.9	B
70.0 - 79.9	C
60.0 - 69.9	D
0.0 - 59.9	F

The grade of “W” will be assigned only if the conditions imposed by the University are met. The grade of “I” will be assigned only if the student has encountered circumstances beyond his or her control and the student’s previous actions have not created these circumstances. The assignment of this incomplete grade will be made at the decision of the instructor after consideration of the facts as presented in a written request from the student. See the Registrar’s Bulletin or the University Calendar in the front part of the UTA catalog for drop dates.

Grade Grievances: It is the student’s responsibility to keep up with various grades assigned to their work by the instructor. If there is any question concerning the assigned grade, the instructor will accept a formal request to examine the grading in question if such a request is presented to the instructor within one-week following the returning of the material in question from the instructor. The entire original work in question must be submitted to the instructor. The instructor reserves the rights to re-grade the entire materials. Please check the following website for detail information.

<http://www.uta.edu/gradcatalog/2012/general/regulations/#grades>

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/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.

Academic Integrity: At UT Arlington, academic dishonesty is completely unacceptable and will not be tolerated in any form, including (but not limited to) "cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts" (UT System Regents' Rule 50101, §2.2). Suspected violations of academic integrity standards 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 contact the Maverick Resource Hotline by calling 817-272-6107, sending a message to resources@uta.edu, or visiting 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 will be asked to complete an online Student Feedback Survey (SFS) about the course and how it was taught. Instructions on how to access the SFS system will be sent directly to students through MavMail approximately 10 days before the end of the term. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback data is required by state law; student participation in the SFS program is voluntary.

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.

