TEXAS A&M UNIVERSITY-TEXARKANA
DRAFT COURSE SYLLABUS

EE 345 - INTRODUCTION TO ELECTROMAGNETIC THEORY
SPRING 2021

This syllabus is a guide for the course and is subject to change at the discretion of the instructor with proper notice to students.

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OFFICE HOURS TR 10:30-11:55 AM or by appointment (online/virtual meetings only)
https://tamut.zoom.us/j/2388544506
Meeting ID: 238 854 4506
Passcode: EE2021S!

COURSE DESCRIPTION
This is an introductory course in engineering electromagnetics. Emphasis is placed on time-varying topics, such as transmission lines, Maxwell's equations, and plane and guided waves. The basic concepts of electromagnetic fields, including field vectors, and potentials will be covered.

PREREQUISITE
MATH 2320 and PHYS 2326/PHYS 2126.

COURSE DELIVERY METHOD
In-person for RELLIS students and online (Blackboard) for Texarkana students.

REQUIRED TEXTBOOKS/RESOURCES

Title	Fundamentals of Applied Electromagnetics
Edition	7th
Author(s)	Fawwaz Ulaby and Umberto Ravaioli
Publisher	Pearson
ISBN	0133356817

STUDENT LEARNING OUTCOMES
By the completion of this course, the student will be able to:

- Apply vector calculus operations.
- Develop a knowledge of vector fields and scalar fields.
- Describe the fundamental nature of static fields, including steady current, static electric and magnetic fields.
- Apply Maxwell's equations and their application to time-harmonic fields, boundary conditions, wave equations, and Poynting's power-balance theorem.

TENTATIVE COURSE OUTLINE

Week no.	Topics
1	Introduction to waves and phasors (Chapter 1)
2-3	Transmission lines (Chapter 2)
4-6	Vector analysis (Chapter 3)
7-9	Electrostatics (Chapter 4)
10-12	Magnetostatics (Chapter 5)
13-15	Maxwell's equations for time-varying fields (Chapter 6)

METHODS OF EVALUATION

Component	Tentative Dates	Weight
Exam 1	Week 4	25%
Exam 2	Week 8	25%
Exam 3	Week 12	25%
Exam 4	Week 16	25%

Depending on the dynamics of the semester, an exam(s) might be replaced with semester work (homework assignments, quizzes, participation, projects, etc.). A proper notice will be given to the students.

GRADING SCALE

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

CLASS PARTICIPATION POLICY

- Student participation is encouraged.
- Students are responsible for beginning their participation on the FIRST CLASS DAY by logging on and completing assignments/quizzes according to the COURSE CALENDAR. Failure to submit online assignments between the first day of classes and the University census date (according to the University schedule) will result in an ADMINISTRATIVE DROP from the course.

COURSE ETIQUETTE

- The use of cell phones or any other personal electronic devices is strictly prohibited. All cell phones and beepers and pagers must be turned off for the duration of the class.
- No food is allowed in classroom at any time.
- Do not talk to your neighbor during class except when asked to in a cooperative learning session.
- No sleeping in class.
- Be on time for the start of class and stay until the end.
- Take notes and take responsibility for your learning.
- Students will demonstrate respect for professors and fellow students.
- Using humor to demean or disparage others is not acceptable.
- Respectful and Professional communication and writing format should be followed in all interactions in the discussion board.

DISABILITY ACCOMMODATIONS

Students with disabilities may request reasonable accommodations through the A&M-Texarkana Disability Services Office by calling 903-223-3062.

ACADEMIC INTEGRITY

Academic honesty is expected of students enrolled in this course. Cheating on examinations, unauthorized collaboration, falsification of research data, plagiarism, and undocumented use of materials from any source constitute academic dishonesty and may be grounds for a grade of 'F' in the course and/or disciplinary actions. For additional information, see the university catalog.

A&M-TEXARKANA EMAIL ADDRESS

Upon application to Texas A&M University-Texarkana an individual will be assigned an A&M-Texarkana email account. This email account will be used to deliver official university correspondence. Each individual is responsible for information sent and received via the university email account and is expected to check the official A&M-Texarkana email account on a frequent and consistent basis. Faculty and students are required to utilize the university email account when communicating about coursework.

DROP POLICY

To drop this course after the census date, a student must complete the Drop/Withdrawal Request Form, located at: (https://www.tamut.edu/Admissions/Enrollment-Services/Registrar/Dropping.html) or obtained in the Registrar's Office. The student must submit the signed and completed form to the instructor of each course indicated on the form to be dropped for his/her signature. The signature is not an "approval" to drop, but rather confirmation that the student has discussed the drop/withdrawal with the faculty member. The form must be submitted to the Registrar's

office for processing in person, email Registrar@tamut.edu, mail (7101 University Ave., Texarkana, TX 75503) or fax (903-223-3140). Drop/withdraw forms missing any of the required information will not be accepted by the Registrar's Office for processing. It is the student's responsibility to ensure that the form is completed properly before submission. If a student stops participating in class (attending and submitting assignments) but does not complete and submit the drop/withdrawal form, a final grade based on work completed as outlined in the syllabus will be assigned.

STUDENT TECHNICAL ASSISTANCE

- Solutions to common problems and FAQ's for your web-enhanced and web courses are found at this link: https://tamut.edu/Academics/Online-Education/Student-Training/index.html.
- If you cannot find your resolution there, you can submit a support request by contacting the IT Service Desk by Email: isite@tamut.edu or phone: 903-334-6603.

TECHNICAL REQUIREMENTS

The following are the minimum computer requirements for online learning:

- A computer capable of handling streaming video. A mid-range multi-core CPU should be adequate. The computer should have a functioning sound card.
- A high speed and reliable internet connection.
- Virus and adware protection software.
- Up-to-date web browser.
- Some lectures may require the use of a headset with microphone and/or a webcam. If so, the cost of these items is not included in your course fees and will need to be acquired at your own expense.

BLACKBOARD MOBILE FOR IOS AND ANDROID DEVICES

Android and iOS devices are currently supported using the Blackboard Mobile App, available for free from your App Store or scan the code below:

The Blackboard Mobile App provides limited access to courses, including the ability to read and contribute to discussions, check grades and announcements, access content, read and comment on blogs, reflect in journals, link to your personal Dropbox, and receive push notifications when courses are updated. Limited course features may also be available via your mobile device's browser; however, your mobile device does not replace your personal computer and should not be used as a substitute for one. High stakes assignments, tests, etc. should be completed on your personal computer, and not on your mobile device.

UNIVERSITY REQUIREMENTS: DISRUPTIONS, COVID REPORTING, AND SAFETY

To address issues related to disruption of university functions, COVID reporting, and safety protocols, TAMUT has prepared a general set of requirements that can be found here:
https://www.tamut.edu/About/Administration/COVID_19/COVID-19_Files/COVID_StudentGuide.pdf
These requirements are part of the expectations for this course.