Syllabus for ECE 590: Graduate Seminar
(1 Credit Hour)
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Course Description

The Graduate Seminar is a series of 16 seminars presented by notable researchers on a variety of topics in engineering.

Course Objectives

Upon completion of this course, students will be able to identify key elements of research presentations and demonstrate an understanding of the seminar lecture.

Prerequisites and Co-requisites

Graduate standing.

Specific Course Requirements (If Applicable)

None

List of seminar videos for ECE 590 Graduate online seminar class

Each module includes two recorded seminars with the course objective as its module objective. The activities in each module include:
1) Watching the video and taking notes.
2) Completing the associated Quiz.

The list of seminar videos to be viewed by the students is given below:

Topic	***Speaker***
Vacuum Tubes R us	Edward D. Graham, Jr., Ph.D., P.E. from UNM Electrical and Computer Engineering
Winning the Game in Wireless Networking Arena	Eirini Eleni Tsiropoulou
A Systematic Approach to the Design of Energy Harvesting Systems for Autonomously Powered Sensor Networks	Scott Ouellette, Ph.D., R&D Engineer, Advanced Engineering Analysis Group, Los Alamos National Laboratory
Thermophotovoltaics-an introduction	G. Balakrishnan

A brief introduction to the SMILE mission Solar wind Magnetosphere Ionosphere Link Explorer	Tianran Sun, National Space Science Center, Chinese Academy of Sciences
Technical Challenges - FPAs for Space	Dr. Elizabeth Steinbergham, AFRL
Renewable & Distributed Systems Integration Program (ROSI} Distributed Energy Technologies Laboratory (DETL}	Dr. Olga Lavrova, Principal Member of Technical Staff, Sandia National Laboratories
TIPS ON RESEARCH , WRITING , PRESENTING , AND HAPPINESS	CHAOUKI ABDALLAH
Silicon Photonics	Mani Hossein-Zadeh, Associate professor, Electrical and Computer Engineering, Optical Science and Engineering Program, Center for High technology Materials
Coherent Beam Combining and Non-Linear Suppression of Multi-Kilowatt All-Fiber Amplifiers	Angel Flores, AFRL
Shadow Exploitation in Synthetic Aperture Radar	Ann Marie Raynal, PhD, Sandia National Laboratories
On Prospects of Reconfigurability and Another 50 years of Moore's Law	James Lyke, AFRL
Potential Impact of WBG and UWBG Devices on Realizing Radiation-Hard Power Electronics	R. Kaplar, Sandia National Laboratories

Blending Human-Robot Intelligence for Collaborative Autonomous Systems	Nisar Ahmed, Assistant Professor, Ann and H.J. Smead Aerospace Engineering Sciences, University of Colorado at Boulder
Celebrating 50 Years of High Power Microwaves -A Personal Journey	Edl Schamiloglu, Distinguished Professor of Electrical and Computer Engineering, Special Assistant to the Provost for National Lab Relations, Associate Dean for Research and Innovation , School of Engineering
Advanced GPS Technologies for Satellite Navigation Systems (PNT Signals 101)	Dr. Joanna C. Hinks, Advanced Signals Pl, AFRL/RVBYS

Along with each of the seminar videos, its PDF file is linked to it. Students are strongly advised to view them after seeing the videos.

Technical Skills

In order to participate and succeed in this class, you will need to be able to perform the following basic technical tasks:

- Use UNM Learn (help documentation located in "How to Use Learn" link on left course menu, and also at http://online.unm.edu/help/learn/students/ (URL)).
- Use Course Messages – including attaching files, opening files, downloading attachments
- Open a hyperlink (click on a hyperlink to get to a website or online resource)
- View and listen to recorded videos provided in each module
- Access and complete the online quiz

Technical Requirements

Computer

- A high-speed Internet connection is highly recommended.
- Supported browsers include: Internet Explorer, Firefox, and Safari. Detailed Supported Browsers and Operating Systems: http://online.unm.edu/help/learn/students/ (URL)
- Any computer capable of running a recently updated web browser should be sufficient to access your online course. However, bear in mind that processor speed, amount of RAM and Internet connection speed can **greatly** affect performance. Many locations offer free high-speed Internet access including UNM's Computer Pods (URL).
- For using the Kaltura Media Tools inside Learn, be sure you have downloaded and installed the latest version of Java (URL), Flash (URL), and Mozilla Firefox (URL). They may not come preloaded.
- Microsoft Office products are available free for all UNM students (more information on the UNM IT Software Distribution and Downloads page: http://it.unm.edu/software/index.html (URL))

For UNM Learn Technical Support: (505) 277-0857 (24/7) or use the "Create a Support Ticket" link in your course.

Tracking Course Activity UNM Learn automatically records all students' activities including: your first and last access to the course, the pages you have accessed. This data can be accessed by the instructor to evaluate class participation and to identify students having difficulty

Textbook and Supplemental Materials

Required Textbooks:

There is no textbook, and there are no required supplementary materials.

Coursework and Participation

Instructor Response Time

Course messages are checked daily Monday through Friday and all messages will be responded to within 72 hours. If you do not hear from the instructor within 72 hours, please send your message again.
Posting of grades: Grades of submitted work will be posted and available via My Grades in Learn within five (5) business days of the due date.

Procedures for Completing Coursework

- *Each week includes a Module, whose quizzes are due in 7 days (subject to change) after they are posted at 11:59 AM. Late submissions in justified cases will have to be preapproved by the instructor.*
- *If you have a difficulty using a tool to complete work, use the "Create a Support Ticket" link in the Course Menu immediately and notify your instructor as well.*

Assignments

There are 8 Modules. Each includes two recorded videos and its Quizzes. Each Quiz is worth 4 points.

Please see the Course Plan PDF through Syllabus & Course Schedule link in UNM Learn for more details.

Expectations for Participation

- *time required (2-3 hours per week)*
- *students are expected to learn how to navigate in Learn*
- *students are expected to keep abreast of course announcements*
- *students are expected to use the Learn course email as opposed to a personal email address*
- *students are expected to keep instructor informed of class related problems, or problems that may prevent the student from full participation*
- *students are expected to address technical problems immediately*
- *students are expected to observe course netiquette at all times*

Netiquette

- Netiquette refers to a set of guidelines in online communication that help to ensure positive interactions. These guidelines seek to keep this online class a positive learning environment for everyone.
- *Link to Netiquette document:* http://online.unm.edu/help/learn/students (URL)

Grading Procedures

This course contains 16 seminar videos. After viewing a video, the students will take a quiz exam. Each quiz has four question and each question is worth 1 point. The number of attempts for each quiz is 2. ***Students are required to complete all the quizzes of every module provided in UNM Blackboard Learn****.*

- *This quiz tests the student's understanding of the seminar*
- ***The time allotted for each quiz is 20 minutes***
- *how weighted grades will be calculated (if using)*

Grading Scale

Points	Grade
45 - 64	CR
0 - 44	NC

UNM Policies

Title IX: Gender Discrimination

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg. 15 http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf (PDF)). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu (URL)).
For more information on the campus policy regarding sexual misconduct, see:
https://policy.unm.edu/university-policies/2000/2740.html (URL)

Copyright Issues

All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course.

Accessibility

The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodations of their disabilities. If you have a disability requiring accommodation, please contact the UNM Accessibility Resource Center in 2021 Mesa Vista Hall at 277-3506 or http://arc.unm.edu/ (URL) . Information about your disability is confidential.

- Blackboard's Accessibility statement: http://www.blackboard.com/accessibility.aspx (URL)
- Microsoft: https://www.microsoft.com/enable/microsoft/mission.aspx (URL)
- *Include links to accessibility statements for all other technologies included in the course.*

Academic Misconduct
You should be familiar with UNM's Policy on Academic Dishonesty (URL) and the Student Code of Conduct (URL) which outline academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

Example Drop Policy:
This section states your departmental policy for dropping students.

UNM Policies: This course falls under all UNM policies for last day to drop courses, etc. Please see http://www.unm.edu/studentinfo.html or the UNM Course Catalog for information on UNM services and policies. Please see the UNM academic calendar for course dates, the last day to drop courses without penalty, and for financial disenrollment dates.

UNM Resources

CAPS Tutoring Services http://caps.unm.edu/services/online-tutoring/online-writing-lab.php (URL)

CAPS is a free-of-charge educational assistance program available to UNM students enrolled in classes. Online services include the Online Writing Lab, Chatting with or asking a question of a Tutor.

Embedded Tutor – if this course has a tutor assigned, substitute the following:
This course has tutoring services incorporated into the course. Please see the "CAPS Tutor" link in the course menu on the left for more details.

UNM Libraries http://library.unm.edu (URL)

Student Health & Counseling (SHAC) Online Services http://shac.unm.edu/ (URL)