THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY
COLLEGE OF ENGINEERING AND COMPUTER SCIENCE
DEPARTMENT OF MECHANICAL ENGINEERING

Course Number: MECE 6190-Fall 2017
Course Title: Graduate Engineering Seminar
Course Time/Place: Friday, 12:15 pm-1:05 pm, Eng, #1.268
Instructor: Dr. Mataz Alcoutlabi
Office/Phone: Eng. 3.262/(956) 665-8945
Office Hours: By appointment
Email: mataz.alcoutlabi@utrgv.edu
Website: http://faculty.utrgv.edu/mataz.alcoutlabi/

Textbook: No textbook required.

Prerequisites:
Students enrolled in Graduate level engineering.

Course Description
This one-hour seminar course is geared towards helping graduate students develop and improve their oral presentation skills and provide them with technical expertise in their field of study. The class will feature engineering presentations given by faculty and graduate students from various engineering disciplines and backgrounds. The students will meet for a weekly update on various research topics carried out here at UTRGV.

Learning Objectives
Students will gain experience in oral presentations and writing by having the opportunity to present their work in front of an audience, writing a research report on the results discussed in the oral presentation and by learning from other featured speakers. The Engineering Seminar will help graduate students to develop and improve their presentation and writing skills and will provide them with a plus of technical expertise and research knowledge in their field of study or related fields. The experience gained from this seminar course will prove invaluable for students in their future careers as engineers, Ph.D. students and managers.

Course Outcomes
It will be demonstrated that the student is able to:
1. Use knowledge of mathematics, basic sciences and engineering to analyze (identify, formulate, and solve) problems in mechanical engineering.
2. Design and conduct experiments and interpret the results.
3. Design mechanical devices, systems or processes that meet given specifications.
5. Communicate ideas effectively in graphical, oral and in written media.
6. Give clear and well-organized oral presentation that address all the specified content areas including background & theory, objective, impact of the work, experimental setup (and/or modeling tools), data & analysis, discussion of analysis, conclusions and future work.
7. Produce professional-quality written report that present, analyze, and interpret experimental and/or modeling results logically and which are well organized and easy to read.
8. Understand the professional responsibility of an engineer and how engineering solutions impact safety, economics, ethics, politics, and societal, cultural and contemporary issues.
9. Understand the need for lifelong learning to keep abreast of current practice.
10. Use state of the art computational hardware and software for analysis, design and documentation (techniques, skills, and modern engineering tools necessary for engineering practice).
Presentation:
Students in their final semester before graduation must prepare and give an oral presentation. Students registered for Thesis option need to present their thesis research. Student registered for the Course option should present a technical literature review. It is imperative that the review is comprehensive, generally including over 6 journal papers published in the last years on a specific research topic. Students should schedule their oral presentation in agreement with the Instructor by the first meeting of the Seminar when they should provide the title and topic for their presentation. During the presentation week, a hard copy of the presentation material should be submitted to the instructor. Student presentation should be for at least 25 minutes followed by 5 to 10 minutes of Questions and Answers. Oral presentations will be graded by three faculty members from the ME department. The grading will be based on the technical content, organization, quality of presentation materials, speaking style/effectiveness, and knowledge of the research topic demonstrated by the ability to answer questions. Students are encouraged to collaborate with their colleagues and with faculty and also to use the knowledge gathered during their Master’s program courses; however, the students must submit the outcome of their own intellectual effort to demonstrate their current understanding of the research topic. Throughout the course activities, the students must maintain clear academic integrity.

Written Report:
The students must write a research (technical) report about the results presented in their oral presentations. The report(s) must be submitted to the instructor on Friday December 1st 2017. Written reports handed in after the deadlines are subject to the penalties 5 points for the first 24 hours or fraction thereof late, and 1 point for each additional day late. The students need to produce professional-quality written reports that present, analyze, and interpret experimental and/or modeling results logically and which are well organized and easy to read. The report must not exceed 8 pages (without counting the figures and tables) with 1.5 line spacing and Times New Roman, 12-point font size. The report must contain the following sections:

1) Introduction and literature review on the research topic discussed in the oral presentation (three pages) and the appropriate references (typically, 7-15 references).
2) A description of the problem that needs to be solved or addressed in the research project (three pages without Figures and Tables). The description section can be organized as follows:
   a) Describe and define the problem that you try to solve in your research project (what, why and how to solve the problem). This means that you need to discuss in this section the motivation, goals and objectives of the research project discussed in the oral presentation.
   b) Discuss the methodology used to solve and address the problem (How did you solve the problem? modeling, experimental methods, equations, parameter variables used in the methodology/method…etc.).
   c) Results and analysis.
3) Discussion, conclusions of the results (one page)
4) Outcomes, future work and outlook (one page)
5) References (No page limit).

Grading Policy:
Attendance: 10%
Oral Presentation: 50%
Written Report: 40%
Final grades are assigned according to the following grading policy:

- 90 and above     A
- 80-89.9          B
- 70-79.9          C
- 60-69.9          D
- 59.9 and below   F

**Attendance:**

1. Attendance will be taken every time the class meets. Any student arriving to class 5 minutes after the class has started will not be allowed in class. Students will be allowed a maximum of **one absence of the students' presentations for the entire semester**. The students must attend all the presentations given by the invited speakers. **Five points** will be deducted from the total (100%) for the absence exceeding the maximum allowable unless documentation justifying that absence is provided.

2. Students will not be permitted to leave the classroom during presentation except for **extreme emergencies**.

**Scholastic Integrity:**

As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; 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. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

**Students with Disabilities:**

If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time.

- **Brownsville Campus**: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at accessibility@utrgv.edu.
- **Edinburg Campus**: Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at accessibility@utrgv.edu.

**Sexual Harassment, Discrimination, and Violence:**

In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

**Mandatory Course Evaluation Period:**

Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (https://my.utrgv.edu/home); you will be contacted through email with further
instructions. Online evaluations will be available November 15, 2017 - December 6, 2017. Students who complete their evaluations will have priority access to their grades.

**Drop Policy:**
Students can withdraw from a course through the Office of the Registrar on or prior to:
- September 13th, 2017, Wednesday: Last day to drop a class before it appears on the transcript and counts toward the “6-drop” limit. Last day to receive a 100% refund for dropped classes (other policies apply when a student is withdrawing from all classes).
- November 15th, Wednesday 2017, Thursday: Drop/Withdrawal Deadline; last day for students to drop the course and receive a “DR” grade. After this date, students will be assigned a letter grade for the course that will count on the GPA.

**Course Drops:**
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.
ACKNOWLEDGEMENT OF RECEIPT OF SYLLABUS

By signing below, I hereby affirm that I have received a copy of the syllabus for MECE 6190 - Engineering Seminar and have been informed by the Instructor that it is my responsibility to carefully read and understand this document and abide by all its content.

__________________________________________  Student ID Number

__________________________________________  Printed Name

__________________________________________  Signature

__________________________________________  Date