

MAT4930 (Spring 2016) Industrial Problems in Applied Math Tues Thurs at 2:00 - 3:20 pm, room SO 390



Instructor: Dr. Erik Lundberg

Office: SE 264 Office Hours: Wed 11:00 am - 2:00 pm, Thurs 1:00 - 2:00 pm email: elundber@fau.edu

disclaimer: This syllabus is subject to reasonable changes.

Course Description and Objectives:

In this course, you will work together in team of 3-5 students on a semester-long project provided by an industrial partner.

The actual content of the course will consist entirely of the methods you will need to learn in order to tackle your problem. This may include modeling, computer programming, linear algebra, optimization, and/or statistics.

The main goal is that each student, while working in a classroom setting, will experience how Math is done in the real world.

Prerequisite: Calculus III (MAC 2313), or my permission.

Textbook: There is no textbook required for the course, but students will need to consult various resources to meet the needs of their project.

Course page: A schedule and course documents will be posted and updated on the **course page** (you can navigate to this page from the Math department page through my webpage).

Course grading scale:

А	70.00 - 74.99	С
A-	65.00 - 69.99	C-
B+	62.00 - 64.99	D+
В	55.00 - 61.99	D
B-	50.00 - 54.99	D-
$\mathbf{C}+$	≤ 49.99	\mathbf{F}
	A A- B+ B- C+	$\begin{array}{l lll} A & 70.00 - 74.99 \\ A- & 65.00 - 69.99 \\ B+ & 62.00 - 64.99 \\ B & 55.00 - 61.99 \\ B- & 50.00 - 54.99 \\ C+ & \leq 49.99 \end{array}$

Grade Distribution:

Group and individual evaluations:	15%
Participation (team meetings, class meetings, time sheets):	15%
Progress Reports:	20%
Final Written Presentation:	25%
Final Oral Presentation:	25%

The final written presentation will be due May 1. Final presentations will occur between Tuesday April 12 and Thursday April 21. These will be recorded on video and students will be expected to dress in professional ("business casual") attire whenever interacting with their industry liason.

Rules of client engagement:

Each team will be in contact with a client from industry for their project. I must approve all emails to this contact. Meetings with the client require the utmost respect, and students will dress professionally for any face-to-face meetings (whether in person or through video conferencing). Presentations to clients must be prepared carefully in advance. Don't get caught late in the game and have to tell the client that you aren't prepared. In order to stay on track to meet deadlines and to arrive at a deliverable final product, understand that you will need to devote substantial time *outside* of class.

Team Meetings:

Teams will meet both in and outside of class. Each week teams will summarize their own progress, agree on the next steps, and make a definite plan for the tasks of each team member.

Progress Reports:

Every two weeks there will be a written report and team presentation. After the report is submitted, each team member will evaluate the contributions of the other members.

Incomplete grades:

A grade of I (incomplete) will only be given under certain conditions and in accordance with the academic policies and regulations put forward in FAUs University Catalog. The student has to show exceptional circumstances why requirements cannot be met. A request for an incomplete grade has to be made in writing with supporting documentation, where appropriate.

Classroom etiquette policy:

University policy on the use of electronic devices states: "In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions."

Disability policy statement:

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) – in Boca Raton, SU 133 (561-297-3880) and follow OSD procedures.

Academic integrity:

Students are responsible for informing themselves about FAUs Code of Academic Integrity as stated in the student handbook. Scholastic dishonesty includes, but is not limited to, plagiarism and copying others work during an exam. Any exam or written assignment for which you are caught cheating will be marked as a zero grade, and the incident will be reported in accordance with the Code of Academic Integrity.