

Fa18 - SENIOR DESIGN PROJECTS I (21060)

AET 372 Senior Design Project I

DFA 4.126. T, TH 9:30 am-11:00 am

Instructor: Yuliya Lanina

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Office Hour: Tuesday, 2-3pm, DFA

Prerequisites: Completion of all core AET coursework. That includes AET 101, 102, 103, 304, 310 and three lower division courses.

Description

Students will work on a project in teams of 3-4 people, bringing to it the skills they have acquired in previous years. Each team proposes their project in writing. Once the project is approved, the team is responsible for the concept, design, testing, and physical presentation of the project. Some projects will be sponsored by industry professionals and represent current areas of concern to the sponsors. Occasionally, faculty members may propose an idea for the project. In addition we will cover career preparation, networking and marketing as well as strategies for jobs.

Course Objectives and Outcomes

This experience is meant to prepare you for workplace challenges and to serve as a calling card to future employers or graduate schools.

Learning goals will include:

- Utilize your experience and knowledge to solve real-world problems
- Gain experience in the design process from start to finish
- Learn to collaborate and effectively communicate with team members
- Learn to learn on your own
- Present your completed projects in a professional manner
- Start preparing for job market

Course Structure

1. We will be meeting twice a week. Class time will be spent mostly on in-class presentation of your work in progress, class discussions and class lectures.

2. **On the first day of the class** you need to come in ready to **pitch your idea to the class.**

Everyone must present one project they would like to work on. Have a 5-minute “sales pitch” of your project ready. Be as specific as possible. Include the roles you envision for all members of your team (3-4 team members, including yourself). This presentation will not be graded.

If you don't have a project in mind, present yourself, your interests and experience, examples of your past work and what role you envision for yourself.

If you have a group that agreed to work on the project, that is great. Each member of the team needs to present. Each member will present themselves, their expertise, their past work, their role in the project and why they decided to be a part of the project. Keep in mind that your project might not be picked. Make sure that your presentation is convincing enough for this not to happen.

Similarly, industry people will be pitching their idea to the class during our first meeting. Everyone will participate in choosing the best projects through an anonymous voting system. At that point, the four best projects will be picked and the groups formed.

If you miss the first class, I will assign you to a project and a group.

3. Before the first class, I will send you a **questionnaire** about your major/specialization, experience, group partner preference, what you are interested in working on, and whether you are interested in working on the industry project. Make sure you fill it out before our first meeting.

4. **Attendance** of lectures is mandatory. If you miss four classes without verified, official documentation excusing your absence, your grade will be lowered by one letter. Attendance of group meetings is required of all students. Your group will come up with its own meeting schedule.

5. Each team is required to have a **Faculty Advisor** who will mentor the project throughout the semester. It is recommended you contact the Faculty Advisor prior to our second class.

6. Project Proposal

Each group, once formed, must submit:

- a "Team Collaboration" form. You can find this form in the FILES folder on Canvas.
- a "Team Contract": a one-page, double-spaced statement describing your proposed project. Clearly describe your project objectives, timeline, assigned roles and outcomes, as well as the reason for choosing a particular advisor.
- your project proposal must be approved by the instructor and your advisor in order for you to move forward.
- Project proposal deadline is September 6th.

7. Final Presentation

Each team will periodically report on the project, culminating in a final presentation, given in front of the sponsors, faculty, and AET students.

The report will be graded based on quality, state of completion, and effort. Sponsor and faculty advisor feedback will be used to determine final grades. Industry people will be invited to these presentation for additional feedback.

The final presentation and final report take the place of a final exam.

The date and location of the final presentation will be announced at a later date.

8. **Project Notebook:** Each team member needs to keep a notebook, physical or electronic, in which they record sketches, research, design notes, progress, meeting notes and other related material. I will be checking the notebook periodically. This is to ensure an equitable distribution of workload among team members.

9. **Text:** No text is required. If needed, the course materials will be posted on Canvas.

10. **Deadlines** for the required reports and oral presentations will be posted on Canvas. Your grade may be lowered if your work is received after the deadline. No extensions!

Grades

Team grades

Written Project Proposal 10%

Team presentations throughout the semester 30%

Project Checklist 60%

(Overall grade for the project is based on points for concept, design, testing, teamwork, presentation, notebook)

Final project presentation to sponsors & faculty (Visual and Oral) 30%

The following considerations may result in grade adjustments:

1. INDIVIDUAL STUDENT GRADES may be adjusted based on your individual performance within the team.
2. ABSENCES will result in modification of an individual student's final grade.
3. FAILURE TO WORK WITH YOUR FACULTY ADVISOR OR SPONSOR will result in a significant grade reduction.
4. Failure to complete assignments

Calendar

The schedule is subject to change. Any changes will be announced in class, via email or on Canvas. You are responsible for keeping up with any changes in the syllabus.

University Policies: Academic Integrity

Each student in the course is expected to abide by the University of Texas Honor Code: “As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity.” Plagiarism is taken very seriously at UT. Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT’s Academic Honesty and the University Honor Code which can be found at the following web address: http://deanofstudents.utexas.edu/sjs/acint_student.php

Q Drop Policy

If you want to drop a class after the 12th class day, you’ll need to execute a Q drop before the Q-drop deadline, which typically occurs near the middle of the semester. Under Texas law, you are only allowed six Q drops while you are in college at any public Texas institution. For more information, see: <http://www.utexas.edu/ugs/csacc/academic/adddrop/qdrop>

University Resources for Students

Your success in this class is important to me. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we’ll develop strategies to meet both your needs and the requirements of the course. There are also a range of resources on campus:

Services for Students with Disabilities

This class respects and welcomes students of all backgrounds, identities, and abilities. If there are circumstances that make our learning environment and activities difficult, if you have medical information that you need to share with me, or if you need specific arrangements in case the building needs to be evacuated, please let me know. I am committed to creating an effective learning environment for all students, but I can only do so if you discuss your needs with me as early as possible. I promise to maintain the confidentiality of these discussions. If appropriate, also contact

Services for Students with Disabilities, 512-471-6259 (voice) or 1-866-329- 3986 (video phone). <http://ddce.utexas.edu/disability/about/>

Counseling and Mental Health Center

Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. <http://www.cmhc.utexas.edu/individualcounseling.html>

The Sanger Learning Center

Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit <http://www.utexas.edu/ugs/slc> or call 512-471-3614 (JES A332).

Undergraduate Writing Center: <http://uwc.utexas.edu/>

Libraries: <http://www.lib.utexas.edu/>

ITS: <http://www.utexas.edu/its/>

Student Emergency Services: <http://deanofstudents.utexas.edu/emergency/>

Important Safety Information:

If you have concerns about the safety or behavior of fellow students, TAs or Professors, call BCAL (the Behavior Concerns Advice Line): 512-232-5050. Your call can be anonymous. If something doesn't feel right – it probably isn't. Trust your instincts and share your concerns.

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/>

Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building. Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.

In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.

Link to information regarding emergency evacuation routes and emergency procedures can be found at:

www.utexas.edu/emergency