

TE 461: Technology Entrepreneurship

Technology Entrepreneur Center
GRAINGER ENGINEERING



Fall 2022

- 3 credit hours
- Monday/Wednesday
- 9:00-10:50am
- 8-week course
- 4070 Electrical and Computer Engineering Building

Instructor

Dr. Brian Lilly

blilly@illinois.edu

Zoom Meeting Info

Meeting ID:

873 4680 9272

Password: 189657

<https://illinois.zoom.us/j/87346809272?pwd=NDRNdkZXNHpjdVdoMGVBVmhfQitDZz09>

Course Purpose

The course covers a broad range of topics that critically affect technology-based companies and start-up businesses. Primary emphasis is placed on the marketing concerns, company financials, and business plan preparation for these technology-based businesses. The students will apply this information by preparing a business plan for a technology-based product or service of their choice. As an alternative to a business plan, some students will produce prototypes of their idea or work on a grant/funding proposal for their work. Plans may be prepared in teams or as individuals. Several of the best plans will be entered into the Cozad Business Plan competition. Prerequisite: An entrepreneurial spirit and a passion for solving the world's problems with innovative products and solutions.

Students must have an idea for a new venture to participate in the course and must be prepared to develop this new venture idea as part of the course.

Learning Objectives

Upon completion of this course, you will be able to understand critical factors affecting technology-based ventures including:

1. opportunity assessment,
2. the entrepreneurial process,
3. founders and team building, and
4. preparation of a business plan including market research, marketing and sales, finance, and manufacturing considerations.

Required Texts

The class lectures and case study discussions will cover considerable material that may not be contained in the textbook. Therefore, class attendance and class participation are an important component of the final grade.

Grading

40% - Project

15% - Homework - Due on the date shown 20% - Final Presentation

10% - Final Multimedia Communication File about Product-Market Fit

15% - Attendance and class participation (show up for class/Zoom)

Reading assignments, chapter exercises, and case study summaries are due on the date shown at the start of class. No late work will be accepted. All assignments and dates are subject to change.

Case Studies

You will be assigned case studies most weeks. Your written assignments are due on Canvas before class starts. Please bring a copy to the Zoom meeting as a reference during discussion. We will discuss each study in class.

For each case study, you are required to write a critical review before we discuss the case in class. Please bring a paper copy of the review to class.

Critical Review Requirements:

- Identify and describe key individuals and organizations
- Create a timeline of events
- Identify and describe key decisions
- Give a recommendation and reasoning for action to be taken
- Discuss environmental, social, or economic challenges if applicable
- Discuss the relevance of this case study to your entrepreneurial concept

Your critical review of each case study should be approximately 1 page typed, single-spaced. Due dates are posted on the syllabus. No credit will be given to late assignments.

Our goal of the case studies is to stimulate your business mind. Pay attention to the Case Study Critical Requirements. Really try to draw parallels between each study and your plans for the future. If you are a budding entrepreneur, you can learn a lot from these documents and our discussions. Each case study is worth 50 points. All together it will make up 40% of your final grade. On Canvas you can view good and bad examples of Case Studies from previous semesters.

Do not submit one paragraph, and take time to format your paper. It does not need to be longer than one page, size 12, Times New Roman. It should take you no more than an hour (outside of the reading) to complete each study and receive full credit.

Project Process

In this course, we want to see you bring your ideas to life. Specifically, bring ideas that have great potential. By the second week you will decide on your semester long project. For this project, you may work alone or in a team (no more than 3 people), to construct a business model, minimum viable product, presentation, apply for grants, scholarships, incubators, and accelerators and attempt to start a business. Your initial idea must be approved by the instructors, but we are pretty much open to everything.

We do not expect you to form a full company and break a million dollars in sales in one semester but we want to see **REAL PROGRESS**. You need to create measurable milestones to be reached throughout the course. These milestones are the criteria we will use to grade your work. Again, if a milestone is something big, it is ok that it was not reached, as long as significant effort has been shown.

This class is designed to be interactive, not overly demanding, and we hope that you will enjoy it. It is a core class for the Innovation, Leadership and Engineering Entrepreneurship (ILEE) BS dual degree program, so we take our work seriously, and we want you to be an engaged and active student. We want to see you advance and grow as engineers, entrepreneurs, and as adults.

Tentative Schedule & Assignment Dates

Day	Date	Discussion	Assignments Due as indicated
1	August 22	<ul style="list-style-type: none"> Class meeting 9-10:50 Zoom and in class 	
2	August 24	<ul style="list-style-type: none"> Work at Home No class meeting 	<ul style="list-style-type: none"> Watch video 1: Turn in 10 bullet points you learned from video 1 Prepare 1-2 paragraphs describing your business idea(s) Read case study 1. Turn in 1 page case study writeup as described in course description above. Previous examples are in canvas All assignments submitted by 9 AM on Day 3.
3	August 29	<ul style="list-style-type: none"> Class meeting 9-10:50 Zoom and in class 	
4	August 31	<ul style="list-style-type: none"> Work at Home No class meeting 	<ul style="list-style-type: none"> Watch video 2. Turn in 10 bullet points Refine business idea based on instructor feedback. Read Case Study 2 prepare writeup All assignments submitted by 9 AM on Day 5
5	September 5	<ul style="list-style-type: none"> Class meeting 9-10:50 Zoom and in class 	
6	September 7	<ul style="list-style-type: none"> Work at Home No class meeting 	<ul style="list-style-type: none"> Watch video 3. Turn in 10 bullet points Watch -- https://www.youtube.com/watch?v=QoAOzMTLP5s Watch -- https://www.youtube.com/watch?v=IP0cUBWTgpY Submit three sentences about who you think your customer is and what your value proposition is right now. Record a max 2-minute video overview of your business idea. All assignments due before 9 AM Day 7.
7	September 12	<ul style="list-style-type: none"> Class meeting 9-10:50 Zoom and in class 	
8	September 14	<ul style="list-style-type: none"> Work at Home No class meeting 	<ul style="list-style-type: none"> Watch video 4. Turn in 10 bullet points Read case study 3. Prepare a writeup Prepare a Business Model Canvas for your business Templates are available on-line All assignments due before 9AM on Day 9
9	September 19	<ul style="list-style-type: none"> Class meeting 9-10:50 Zoom and in class 	
10	September 21	<ul style="list-style-type: none"> Work at Home No class meeting 	<ul style="list-style-type: none"> Watch video 5. Turn in 10 bullet points Prepare Midterm Presentation Check out past examples on Canvas. Your video must be engaging to watch!! You will be graded on creativity and message. Think of this as your first impression with an investor. All assignments due before 9AM on Day 11
11	September 26	<ul style="list-style-type: none"> Class meeting 9-10:50 Zoom and in class 	
12	September 28	<ul style="list-style-type: none"> Work at Home No class meeting 	<ul style="list-style-type: none"> Watch videos 6, and 7. Turn in 10 bullet points for each. Due before 9AM Day 13 Work on Final Presentation: Funding Plan/Financial Projections/ Key Metrics slides (See examples on Canvas) Sales strategy, Go to Market slides (See examples on Compass) Due 9 AM on Day 15.

13	October 3	<ul style="list-style-type: none"> • Class meeting 9-10:50 • Zoom and in class 	
14	October 5	<ul style="list-style-type: none"> • Work at Home • No class meeting 	<ul style="list-style-type: none"> • Work on Final Presentation 2 minute video. • Prepare remaining slides, Executive Summary, Presentation Video (See examples on Compass) • Due 9 AM on Day 15. • Turn in 10 bullet points from remaining videos. • Due 9 AM on Day 16.
15	October 10	<ul style="list-style-type: none"> • Class meeting 9-10:50 • Zoom and in class 	
16	October 12	<ul style="list-style-type: none"> • Class meeting 9-10:50 • Zoom and in class 	

COVID

Following University policy, all students are required to engage in appropriate behavior to protect the health and safety of the community. Students are also required to follow the campus COVID-19 protocols.

Students who feel ill must not come to class. In addition, students who test positive for COVID 19 or have had an exposure that requires testing and/or quarantine must not attend class. The University will provide information to the instructor, in a manner that complies with privacy laws, about students in these latter categories. These students are judged to have excused absences for the class period and should contact the instructor via email about making up the work.

Students who fail to abide by these rules will first be asked to comply; if they refuse, they will be required to leave the classroom immediately. If a student is asked to leave the classroom, the non-compliant student will be judged to have an unexcused absence and reported to the Office for Student Conflict Resolution for disciplinary action. Accumulation of non-compliance complaints against a student may result in dismissal from the University.

Emergency Response Recommendations

Emergency response recommendations can be found at the following website:

<http://police.illinois.edu/emergency-preparedness/>. I encourage you to review this website and the campus building floor plans website within the first 10 days of class.

<http://police.illinois.edu/emergency-preparedness/building-emergency-action-plans/>.

Sexual Misconduct Reporting Obligation

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX Office. In turn, an individual with the Title IX Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: wecare.illinois.edu/resources/students/#confidential. Other information about resources and reporting is available here: wecare.illinois.edu.

Academic Integrity

You are expected to uphold the highest ethical standards, to be honest, and to practice academic integrity. **This includes doing original work and citing sources**, including the work of other students. Please give special care to prepare high-quality submissions with proper grammar and spelling. The University of Illinois at Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: <http://studentcode.illinois.edu/>. Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: <https://studentcode.illinois.edu/article1/part4/1-401/>. Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Religious Observances

Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to admissions, class attendance, and the scheduling of examinations and work requirements. You should examine this syllabus at the beginning of the semester for potential conflicts between course deadlines and any of your religious observances. If a conflict exists, you should notify your instructor of the conflict and follow the procedure at <https://odos.illinois.edu/community-of-care/resources/students/religious-observances/> to request appropriate accommodations. This should be done in the first two weeks of classes.

Disability-Related Accommodations

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-4603, email disability@illinois.edu or go to <https://www.disability.illinois.edu>. If you are concerned you have a disability-related condition that is impacting your academic progress, there are academic screening appointments available that can help diagnose a previously undiagnosed disability. You may access these by visiting the DRES website and selecting "Request an Academic Screening" at the bottom of the page.

Family Educational Rights and Privacy Act (FERPA)

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <https://registrar.illinois.edu/academic-records/ferpa/> for more information on FERPA.

Anti-Racism and Inclusivity Statement

The Grainger College of Engineering is committed to the creation of an anti-racist, inclusive community that welcomes diversity along a number of dimensions, including, but not limited to, race, ethnicity and national origins, gender and gender identity, sexuality, disability status, class, age, or religious beliefs. The College recognizes that we are learning together in the midst of the Black Lives Matter movement, that Black, Hispanic, and Indigenous voices and contributions have largely either been excluded from, or not recognized in, science and engineering, and that both overt racism and micro-aggressions threaten the well-being of our students and our university community.

The effectiveness of this course is dependent upon each of us to create a safe and encouraging learning environment that allows for the open exchange of ideas while also ensuring equitable opportunities and respect for all of us. Everyone is expected to help establish and maintain an environment where students, staff, and faculty can contribute without fear of personal ridicule, or intolerant or offensive language. If you witness or experience racism, discrimination, micro-aggressions, or other offensive behavior, you are encouraged to bring this to the attention of the course director if you feel comfortable. You can also report these behaviors to the Bias Assessment and Response Team (BART) (<https://bart.illinois.edu/>). Based on your report, BART members will follow up and reach out to students to make sure they have the support they need to be healthy and safe. If the reported behavior also violates university policy, staff in the Office for Student Conflict Resolution may respond as well and will take appropriate action.