

TE 498 ORI: Organizing for Innovation

Technology Entrepreneur Center
GRAINGER ENGINEERING



Fall 2022

- 3 credit hours
- Wednesday
- 10:00-11:50am
- 106B8 Engineering Hall

Instructor

Prof. Mark Karasek
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Office Hours

TBD

Professor Karasek has decades of experience leading innovation in the enterprise and years of experience coaching startups. The course content is based on real life experiences in developing and leading organizations that are the primary drivers of innovative growth in the enterprise.

Building an innovation practice in enterprises competing in an ecosystem platform marketplace

Companies must grow to survive over the long term. Innovation is the lifeblood of growth in corporations and startups. But innovation is arguably the most difficult thing an organization can try to do. And the challenge of innovative growth is getting more complicated. Product companies are adding software services. Service companies are adding products. Value in the marketplace is moving from products or services to ecosystems platforms. As ecosystems define value in a marketplace, the profit pool can redistribute creating new winners and losers.

Markets are evolving—engineering leadership must evolve with them

Organizing for Innovation is an ideal course for engineering graduate students and advanced undergraduates who aspire to having a seat at the enterprise innovation leadership table.

Technology Leadership

How does the emergence of ecosystems change how we organize for innovation? What are the toolsets of innovation that a modern ecosystem participant needs to master? How can an enterprise develop a portfolio of innovation investments and effectively execute programs to realize profitable growth? This course has a proven track record of providing students with a working understanding of the toolsets and structures that support profitable growth through managing an innovation portfolio.

Learning Objectives

Upon completion of this course, you will be able to:

1. Recognize the differences among innovation, creativity, and invention,
2. Explain how to use innovation in a corporation to create value, and how to implement innovation differently in a start-up versus an established enterprise,
3. Explain the key aspects of tools of innovation and how to use them effectively,
4. Generate an innovation portfolio for a company, and
5. Explain how to form innovation teams.

Required Reading

The syllabus includes a list of links for reading materials and videos for each week of the class. Students are expected to read the articles and blogs and watch the videos in these links before class each week and be prepared to discuss the content during the discussion session. One or more links at the bottom of the reading list each week will be business books that provide more depth and context on each of the lecture topics. It is highly recommended, but not required, that students purchase and read these books for deeper insights and as reference material during their innovation careers.

Grading

- 10% - Class participation including responses to questions
- 15% - Weekly individual assignments
- 15% - Weekly team assignments
- 20% - Individual midterm exam
- 20% - Individual final exam
- 20% - Team final oral and written submission (Class 15)

Assignment Requirements

Weekly individual and team homework assignments are listed on Canvas. Individual and team assignments must be submitted in Canvas prior to the start of the next class for full credit. Late assignments may be submitted but penalized 50% on points awarded unless prior arrangements are made with the instructor. The individual midterm exam will be completed on Canvas during Class 8 and the Final Exam will be completed on Canvas during the assigned Final Exam session.

Classroom Rules of Conduct

1. Cell phones must be turned off during class.
2. Class start times and break times should be respectfully observed. Please be in your seat and ready to listen at the prescribed times.

Tentative Schedule & Assignment Dates

Day	Date	Lecture/Discussion	Assignments Due as Noted
1	August 24	• Invention versus Innovation	•
2	August 31	• Types of Innovation	•
3	September 7	• Where innovation starts: Voice of the Customer	•
4	September 14	• Products, Services and Ecosystems	•
5	September 21	• The Innovation Portfolio	•
6	September 28	• Tying the Portfolio Plan to Strategy	•
7	October 5	• Assessing Proposed Portfolio Projects	•
8	October 12	• The Fuzzy Front End	• Midterm Exam
9	October 19	• Trends and Technology Road Mapping	•
10	October 26	• Phase-gate Processes: Managing Execution Risk	•
11	November 2	• Agile Processes: Managing Flexibility	•
12	November 9	• Lean Startup Toolset – Managing Learning	•
13	November 16	• Project Leadership	•
14	November 23	• Fall break	•
15	November 30	• Bringing It All Together in the Real World	•
16	December 5	• Final Project Presentations	• Final Exam

COVID

Following University policy, all students are required to engage in appropriate behavior to protect the health and safety of the community, including wearing a facial covering properly, maintaining social distance (at least 6 feet from others at all times), disinfecting the immediate seating area, and using hand sanitizer. Students are also required to follow the campus COVID 19 testing protocol.

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 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 diagnosis 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.