

ENT3607 Innovation by Design

Syllabus

Course Rationale

Some believe that innovation springs from spontaneous insight that miraculously strikes the inventor. While such miracles sometimes occur, they are becoming less and less common as the problems we face become increasingly complex. Today the most useful innovations are the result of a careful and methodical study of the human condition followed by painstaking exploration of ideal solutions for observed needs.

Course Description

This course teaches methods common to human-centered innovation frameworks such as Design Thinking: empathizing with people in given situations, framing and reframing problems, ideating, prototyping and testing solutions. Students will learn the process of developing products, services, systems and other solutions from the initial discovery of needs, to presenting a tested solution ready for deployment. This course features learning by doing with the vast majority of class time dedicated to collaborative exploration, supported by inspirational case studies, insightful video lessons from thought-leaders in the field, and abundant online resources.

Essentials

- Prerequisites: None, open to all majors
- Liberal Studies Requirement this course fulfills: Scholarship in Practice
- Course Website: www.innovation.fsu.edu/design and in Canvas
- Bring your FSU ID to enter the Innovation Hub and access your classroom
- There is no final exam during Finals Week for this class. Instead final presentations will be given at the last class meeting.

Course Learning Objectives

Upon successful completion of this course students will be able to:

- Identify needs that are ripe for innovation,
- utilize innovative frameworks and the methods, tools, and practices that drive them,
- utilize valuable online software for effective remote collaboration,
- implement practices for interviewing, observing and empathizing with people in specific situations and environments around a given need,
- define and frame compelling needs and insights based on empathy findings, and scope a specific and meaningful Problem statement using established methods,

- ideate and generate design alternatives to serve as unique and meaningful solutions not currently available using established methods,
- explore prototypes of possible solutions through physical modeling, storyboarding, and/or software simulations, iterating and experimenting until a final refined solution is developed,
- test the solution with users, customers and/or stakeholders, returning to the drawing board as is necessary,
- effectively communicate and “sell” the final solution to stakeholders through the effective use of storytelling and persuasion, and
- in fulfillment of FSU’s Scholarship in Practice requirement, students will apply areas of scholarship in Design, utilizing the Design Thinking framework, to produce an original project resulting in a design solution.

Course Materials and Resources

There are no materials or textbooks to purchase for this course. All necessary materials and resources are available online.

- The Innovation by Design website (www.innovation.fsu.edu/design) is where all course content is accessed: assignments, lessons, videos, and links to online resources.
- FSU Canvas (<https://canvas.fsu.edu>) is where all class interactions occur: announcements, discussions, surveys, quizzes, assignment submissions and student grades.
- Miro (<https://miro.com/>) will be used as our virtual whiteboard and post-it notes. Set up your free account today!

Getting Help

If you have questions outside of class time, you may email the instructor at ken@innovation.fsu.edu or send a message via Canvas. Due to high volume of email it is always best to mark your emails with ENT3607 in the subject line. Other instructor contact information can be found at the top of this document.

Group Assignments, Participation, Quizzes, Projects

There are four types of point earning activities:

- **Group Assignments** make up the core work in the class. You will learn the process and tools of the innovation framework by working in teams and applying the process to a real world problem. That work, completed mostly in class, is graded as group assignments. ***Students must attend and participate in class to earn group assignment points.***
- **Individual Assignments** include reflections on the work done in group assignments and individual work outside of class.
- **Quizzes** are taken at the conclusion of each of the course topics. They may be taken multiple times until a perfect score is earned. An in-class cumulative quiz is taken at the end of the class. All quiz questions are multiple choice or True/False.

- A **Project** will be assigned that applies your creativity and innovation framework to a real world problem. Results will be presented by the groups, and each student will summarize their work and experience on the project in a final report.

Grading

Students earn grades primarily through project work and participation in groups, in class and online. Quizzes are used to emphasize important concepts and techniques. Peer grading may be implemented for final projects through critiques and group reports.

Grade distribution:

- Assignments 50%
- Attendance and Participation 35%
- Quizzes 15%

View this [detailed list of assignments, points, and tentative due dates](#).

Final Grade Calculation

Name:	Range:	
A	100 %	to 93.0%
A-	< 93.0 %	to 90.0%
B+	< 90.0 %	to 87.0%
B	< 87.0 %	to 83.0%
B-	< 83.0 %	to 80.0%
C+	< 80.0 %	to 77.0%
C	< 77.0 %	to 73.0%
C-	< 73.0 %	to 70.0%
D+	< 70.0 %	to 67.0%
D	< 67.0 %	to 63.0%
D-	< 63.0 %	to 60.0%
F	< 60.0 %	to 0.0%

Attendance and Participation

Design Thinking is a collaborative activity that is learned through participating in group exercises. Students that miss class, miss out on those learning experiences and fail to contribute to group assignments. **Because of this 10 points will be deducted from students group assignment score for each day they miss without an acceptable excuse.**

Late Assignment and Quiz Policy

- A ten percent point penalty per day is applied to assignments submitted late.
- All quizzes must be completed prior to the final quiz.

Scholarship in Practice

This course has been approved to meet FSU's Liberal Studies Scholarship in Practice requirement and helps you become a critical thinker, a creative user of knowledge, and an independent learner.

In order to fulfill FSU's Scholarship in Practice requirement, the student must earn a "C–" or higher in the course.

Course Agenda

The semester will progress as follows:

- Course Introduction and Student Introductions
- Innovation Frameworks
- Tools for Empathy
- Tools for Problem-Framing and Ideation
- Tools for Prototyping
- Group Project Presentations (Storytelling), Reports and Reflection

Final Group Project

Human-centered design methodologies, including Design Thinking, arrive at optimal solutions to problems by gathering thoughts and ideas from a diverse set of individuals using established tools and methods. Students will work on a real-world Design Challenge as they learn the tools and methods of Design Thinking. Groups will be created each containing four to six diverse students. A Design Challenge will be assigned to each group, and one student will be designated as the facilitator for each group. Design Challenges will be wide-ranging and varied. They will be different for each group over the lifetime of the class. Examples of possible design challenges include:

- integrating the homeless back into society
- developing a cycling culture in Tallahassee
- developing a student culture for a full and rich college experience at the Panama City campus
- designing a new college course
- reducing road congestion on campus
- designing a better backpack

Students will work together in groups, during class time and outside of class, progressing through the stages of Design Thinking to develop what they feel is the best human-centered Design Solution for their assigned Design Challenge. They will then present/pitch their Design Solution through an online video working to tell the story of their challenge and selling the audience on their solution. Upon conclusion, each student will independently submit a paper detailing the process of the team's work, the resulting Design Solution, their unique contribution toward the solution development, and the lessons they learned along the way.

FSU Syllabus Boilerplate Content

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy:

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>)

Academic Success:

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Dept. of Student Support and Transitions office to learn more.

Americans with Disabilities Act:

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.

To receive academic accommodations, a student: (1) must register with and provide documentation to the Office of Accessibility Services (OAS); (2) must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and, (3) should

communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor. Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the Office of Accessibility Services, 874 Traditions Way, 108 Student Services Building, Florida State University, Tallahassee, FL 32306-4167; (850) 644-9566 (voice); (850) 644-8504 (TDD), oas@fsu.edu, <https://dsst.fsu.edu/oas/>

Confidential campus resources:

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

- **Victim Advocate Program**
University Center A,
Room 4100, (850) 644-7161, Available 24/7/365,
Office Hours: M-F 8-5
<https://dsst.fsu.edu/vap>
- **Counseling and Psychological Services**
Askew Student Life Center, 2ndFloor,
942 Learning Way
(850) 644-8255
<https://counseling.fsu.edu>
- University Health Services Health and Wellness Center
(850) 644-6230
<https://uhs.fsu.edu>

Free Tutoring from FSU:

On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list of on-campus tutoring options at <http://ace.fsu.edu/tutoring> or contact tutor@fsu.edu. High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

Syllabus Change Policy:

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.