Entrepreneurial Design Thinking Course Syllabus
ENT222
Spring 2011

Instructor Information:

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Course Summary

This course will teach students to use a design thinking approach to decision-making and problem solving. By learning this process students develop skills to help them become more successful at discovering new opportunities in any environment by refining their problem solving, listening, decision-making and team working skills. This course will actively engage students in developing tangible, conceptual frameworks to problem solve. Taught through a combination of lectures, hands-on lab work, field trips and guest lectures, Design Thinking for Entrepreneurs is a course focused on applied innovative thinking.

Course Target Audience

Open to students of all years that are interested in exploring the different approaches to design and its application to business thinking in a wide range of sectors.

Prerequisites: none

Learning Objectives

Design Thinking for Entrepreneurs focuses on how design processes and thinking can generate social and innovative products and businesses. In addition to lectures and exercises, the class will work in teams and on field research to apply the skills developed in class.

The course is intended to provide you with the following benefits:

- Understanding of design processes and thinking that can solve complex, abstract problems.
- Explore the leadership dynamic/characteristics of social entrepreneurs.
- Hands-on experience with design tools, software and methods.
- Awareness of the role of multiple functions in creating a new product (e.g., marketing, finance, industrial design, architecture, production).
- Ability to coordinate multiple, interdisciplinary tasks in order to deliver on time.
- Reinforcement of specific knowledge from other courses through practice and reflection in an action-oriented setting.
- Understanding of the similarities/dissimilarities between traditional business entrepreneurship (BE) functions and intent (i.e. economic value creation) and social entrepreneurship (SE) (i.e. social value creation).
- Provide students with an introduction to the significant challenges and opportunities facing social entrepreneurs and their ventures.

Course Format

Lecture, group discussion, guest lectures, field trips, case studies and studio workshops

Required Reading

1. The Tipping Point - Malcolm Gladwell
2. The Art of Innovation – Tom Kelley
3. Grunch of Giants - Richard Buckminster Fuller
4. Checklist Manifesto - Atul Gawande

The course is broken up into four required books, weekly readings, and weekly research on websites and contemporary examples. Weekly readings uploaded to Cicada and should be read prior to attending the session it is filed under.

Each week students are responsible for submitting 500 word responses to the weekly readings addressing one or more of the 3 questions posted to Cicada. Students should check assignments on Cicada regularly as articles will be updated throughout the semester.

Grading Procedures

Grading will be broken down as follows:
- **10%** - case studies – group presentations
- **15%** - midterm assignment
- **30%** - final project
- **15%** - class attendance

10% - class participation
20% - Weekly responses to readings

Grading is based on these standards:

A-level work demonstrates real achievement in grasping what design thinking and social entrepreneurship is, along with a development of the range of skills, abilities and behavior contained in the course learning objectives.

B-level work represents demonstrable achieving in grasping what design thinking and social entrepreneurship is, along with the clear demonstration of the range of skills, abilities and behavior contained in the course learning objectives.

C-level work illustrates some, but inconsistent, achievement in grasping what design thinking and social entrepreneurship is, along with an inconsistent demonstration of the range of skills, abilities and behavior contained in the course learning objectives.

D-level work shows only a minimal level of understanding of design thinking and social entrepreneurship, along with the development of some, but very little, of the range of skills, abilities and behavior contained in the course learning objectives.

F-level work. Student has not displayed any significant understanding of design thinking or social entrepreneurship, and has not demonstrated mastery of any of the range of skills, abilities and behavior contained in the course learning objectives.

Missed assignments will undergo deductions of one grade level for each day turned in late. A to A-, A- to B+ etc.

Student Expectations

Class participation and student preparedness is a large component of this course. The second half of each lecture will be dedicated to interactive discussions, workshops, and exercises. Students are expected to come fully prepared to engage in group discussions, offering their own ideas and listening respectfully to what others have to contribute.

Class attendance is also critical. Students should attend every session. Students should notify the instructors of any absences beforehand and are still expected to complete the required readings and assignments for that day. After one missed class, any additional absences must be accompanied with a doctor's note or it will be reflected in the student's overall class average. A to A-, A- to B+ etc.

Schedule of Assignments

INTRO

Week 1 - January 20   **Introduction to Design Thinking**

In Class:
An introduction to design thinking and its application in the field of social business and entrepreneurship.
Sample case studies presented. Students will be assigned into groups to present their own case studies in following weeks.

ISOLATING THE PROBLEM

Week 2 - January 27   Inspiration: Cause to Innovate

In Class:
Lecture: Finding Where The Opportunity for Innovation Lies
Adobe skills tutorial in computer lab

Reading In Advance of Class
Text:
Read: The Art of Innovation - Chapters 1&3
Cicada Reading:
Design Thinking by Tim Brown
Cultivating innovation: An interview with the CEO of a leading Italian design firm

Due:
Submit to Cicada 3 questions from the reading.

Week 3 - February 3   Mapping and Diagramming

In Class:
Lecture: What is the context?
Group 1 Presents Case Studies
Adobe skills tutorial in computer lab

Text:
Read: The Tipping Point – Chapter 4
Cicada Reading:
Watch: David McCandless: The Beauty of Data Visualization
Robert Harbison – Eccentric Spaces
James Corner – The Agency of Mappings: Speculation, Critique and Invention

Due:
Submit to Cicada 3 questions from the reading.

Week 4 - February 10   Field Trip

LOCATION TBD

Text:
Read: The Art of Innovation – Chapters 4&6
Cicada Reading:
Michel de Certeau - Spatial Stories, The Practice of Everyday Life

Due: Submit to Cicada 3 questions from the reading.

Week 5 - February 17   Interactive Visualization

In Class:
Group 2 presents case study.
Guest Lecturer

Text:
Read: The Art of Innovation - Chapters 8&9
Cicada Reading:
Watch: Hans Rosling: Let my data set change your mindset
Steve Batty: The Strategic Arc of Interaction Design

Due: Submit to Cicada 3 questions from the reading.

Week 6 - February 24   Model Making, Rendering, 3d Vis. & Animation

In Class:
Tutorial on different presentation methods
Group 3 presents case study
Guest Lecturer
Midterm assignment handed out.

Text:
Read: The Art of Innovation - Chapters 10-12
Cicada Reading:
Cohen: Perfecting Animation, Via Science**.**

Due: Submit to Cicada 3 questions from the reading.

Week 7 - March 3   **Mid-Term Presentations**

In Class:
Presentations followed by group discussion.

Text:
Read: The Art of Innovation - Chapters 12-15

Due: Submit to Cicada 3 questions from the reading.

Week 8 - March 10   *Spring Break – No Class*

ANALYZING THE PROBLEM

Week 9 - March 17   **Industrial Design**

In Class:
Group 4 presents case study
Guest Lecturer

Text:
Read: Checklist Manifesto - Chapters 1-2
Cicada Reading:
Robert Fabricant: Design With Intent
Goo Sung: IV Pole for Cardinal Health

Due: Submit to Cicada 3 questions from the reading.

Week 10 - March 24   **Architecture**

In Class:
Group 5 presents case study.
Guest Lecturer

Text:
Read: Grunch of Giants
Cicada Reading:

Robert Campbell: Design in another dimension: Morality

Due: Submit to Cicada 3 questions from the reading.

Week 11 - March 31   Advocacy Projects

In Class:
Book design, marketing, development
Guest Lecturer
Group 6 presents case study

Text:
Read: Checklist Manifesto - Chapters 3-4
Cicada Reading:
Mariana Amatullo: Deserve Your Dream: Design Education and Advocacy
Alice Rawsthorn: Winning Ways of Making a Better World

Due: Submit to Cicada 3 questions from the reading.

Week 12 - April 7   Field Trip

TBD

Text:
Read: Checklist Manifesto - Chapters 5-6

Due: Submit to Cicada 3 questions from the reading.

Week 13 - April 14   Social Entrepreneurs

In Class:
Group 7 presents case study
Guest Lecturer
Final projects assigned in class

Text:
Read: Checklist Manifesto - Chapters 7-8
Cicada Reading:
Alice Rawsthorn: Creative solutions in tough times
Niti Bhan and Dave Tate: Design for the Next Billion Customers
Segal: in search of the perfect brainstorm
Tim Brown: Ideo interview

Due: Submit to Cicada 3 questions from the reading.

PROPOSING A SOLUTION

Week 14 - April 21	**Studio Session**

In Class: workshop.
Sign up for timeslots for 4/28 session.

Week 15 - April 28	**Studio Session: Individual Time Slots**

TBD

Week 16 – May 6 (Friday)	**Final Review**

TBD

Guidelines for Written Assignments
Written assignments should be handed in double spaced, 12pt font, with 1" margins. All references must be included, and may be done with the student's choice of citation format.

Clark University's writing error policy will be enforced:
> The first five grammatical or spelling errors will be circled. The grade is automatically reduced by a partial grade (i.e., from a B to a B- or a C+ to a C) if there are five or more grammatical or spelling errors.

Students who need assistance with writing at all stages of the writing process should contact the writing center. Appointments can be scheduled by calling (508) 793-7405 (x7405). Information is also available on the web at
http://www.clarku.edu/offices/aac/support.cfm#writingcenter

Guidelines for Group Projects
Group projects will be assessed as a whole. As this course is introducing the practices of business and entrepreneurship, part of the assignment will be task delegation and management knowing that the final product will result in a group grade. Students are expected to resolve all issues amongst themselves. Students should therefore develop an execution strategy with clear responsibilities before undertaking the assignment. Any serious issues should be brought to the instructors' attentions.

Academic Integrity/Cheating & Plagiarism
Academic integrity is a basic value for all higher learning. Simply expressed, it requires that work presented must be wholly one's own and unique to that course. All direct quotations must be identified by source. Academic integrity

can be violated in many ways: for example, by submitting someone else's paper as one's own; cheating on an exam; submitting one paper to more than one class; copying a computer program; altering data in an experiment; or quoting published material without proper citation of references or sources. Attempts to alter an official academic record will also be treated as violations of academic integrity.

To ensure academic integrity and safeguard students' rights, all suspected violations of academic integrity are reported to the College Board. Such reports must be carefully documented, and students accused of the infraction are notified of the charge. In the case of proven academic dishonesty, the student will receive a sanction, which may range from an F in the assignment or course to suspension or expulsion from the University.

The complete academic integrity policy is available with Academic Advising at
http://www.clarku.edu/offices/aac/integrity.cfm

Students with Disabilities

Students who require accommodations in this course should contact Jane Daigneault, Coordinator of Disability Services at Clark University at 508-793-7468 or jdaigneault@clarku.edu.]

Disclaimer

The instructors reserve the right to make changes to any information contained in this syllabus at any time during the semester. An updated version of the syllabus will be discussed and distributed to students if changes are made.