

DES 8164 Innovation Theory and Analysis (3 cr) Fall 2015

Mondays 3:00-5:45PM—first class September 14

250 McNeal Hall

CMS: <https://umn.instructure.com/courses/186>

Instructor: Dr. Brad Hokanson

Email: brad@umn.edu

Office: McNeal 266A

Office hours: Wednesdays, 9-noon, or arranged

Phone: 612-624-4918

Course Description:

Catalog Description: Theories and factors that influence adoption and diffusion of designed products. Methodologies used in analysis of diffusion process.

Seminar format using three texts (Csikszentmihalyi, Sawyer, and Rogers) as basis for exploring theories of innovation and creativity. Additional readings (current and historic) and discussions with scholars and business leaders add to understanding of cultural context and questions of how innovation is defined and “encouraged” in various settings.

Course Objectives:

- To analyze creativity and its aspects and influences: the creator, creative process and applications in design
- To understand innovation in terms of theories and implementation, product and product attributes, the diffusion process, user and situation (contexts of culture and trends).
- To synthesize and apply the research areas involving the interrelationships of creativity, innovation and change through term projects.

Class Format:

Class members will be involved in readings, discussions, research explorations, projects and presentations. Format of each seminar will include: discussion of readings, in-class activities, critical book review, individual application projects, guest discussion leaders.

Textbooks (available in paperback):

Csikszentmihalyi, M. (2013). *Creativity: Flow and the Psychology of Discovery and Invention*. New York: Harper Collins.

Rogers, E. (2003). *Diffusion of Innovations*. (5th ed.). New York: Free Press.

Sawyer, K. (2008). *Group genius: The creative power of collaboration*. Basic Books.

Evaluation:

Class attendance is mandatory. Evaluation will be based on knowledge gained through readings and discussion and understanding of theories through evidence of application as follows:

- Class attendance and active participation in weekly discussions on readings, individual and group activities. (35%)
- Critical book review and class presentation of selected book (20%)
- Individual term written project—select from list (25%)
- Integrative examination—during finals week (20%)

Topical Course Outline

- I. Perspectives on creativity, innovation and change:
 - How does it all fit together?
 - What is creativity?
 - What is innovation?
 - What does research tell us? ... through readings and discussions with guests

- II. Creator and Creative Process
 - a. Product, innovation, design
 - b. Culture and context
 - c. Creative situation/Designer/User
 - d. Creativity and collaboration

- III. Diffusion of Innovations
 - a. Elements of diffusion: innovation/communication/time/social system
 - b. History of diffusion research
 - c. Origin and generation of innovations/motivations
 - d. Innovation-decision process
 - e. Attributes of innovations and rate of adoption
 - f. The adopter/societal groups, social systems
 - g. Characteristics related to adoption
 - h. Consumer segments/lifestyles

- IV. Research
 - a. Domains, applications
 - b. Societal trends, paradigm shifts
 - c. Project applications: class presentations

Weekly Topics and Assignments [9/14 working version]

- | | |
|----------------------|---|
| Week 1: September 14 | Introduction to course and class members
Perspectives on creativity, innovation, change: how does it all fit together? What is creativity? What is innovation? What does research tell us? Where are the “blank spots” for innovation/creativity research? Key questions for invited discussants---what do you want to know?
Readings: Csikszentmihalyi: chapters 1 & 2 (setting the stage: where is creativity? the work of creativity)
Readings: Sternberg: The Nature of Creativity [available on Canvas]
Discussion: Two questions on the readings, on Canvas |
| Week 2: September 21 | Innovation/creativity
Testing creativity and its evaluation
Readings: Csikszentmihalyi, chapters 4 |

Assignment Due: 90 seconds on Flipgrid on "Five Things that Bug Me".

Online: Epstein Creative Lifestyles test

[<http://mycreativitieskills.com>] Print your results for class.

View: MindMap video, linked from Canvas.

- Week 3: September 28 Creator and Creative Process/ Invention
Readings: Csikszentmihalyi, chapters 3 and 5 (the creative personality, the flow of creativity)
Assignment Due: Review others in class and see if they have similar "bugs". Select one of the things that "bug" you and develop an Ideation (or mind) Map proposing solutions to what "bugs" you.
Format---8.5X11 page or a sketchbook if you use one regularly.
Discussion: Two questions on the readings, on Canvas + Flipbook
- Week 4: October 5 The Creative Process and Culture
Guest: *To be announced*
Readings: Csikszentmihalyi, Chapters 13 and 14 (The making of culture, enhancing personal creativity)
Readings: Sawyer introduction and chapter 1
Assignment Due: come prepared to propose your initial idea for the major paper for the class
Discussion: Two questions on the readings, on Canvas
- Week 5: October 12 Product Development/Design
Readings: Csikszentmihalyi, Chap 6 (creative surroundings); Rogers Chap 10 (innovations in organizations)
Readings: Sawyer chapter 2, 3
Discussion: Two questions on the readings, on Canvas
- Week 6: October 19 Characteristics of Change: Acceptance/rejection
Guest speaker: *Greg Daigle*
Readings: Sawyer chapters 5, 8
Assignment Due: Bring a mind-map of your paper ... on paper
Discussion: Two questions on the readings, on Canvas
- Week 7: October 26 Diffusion of Innovations—elements of diffusion
Readings: Rogers chaps 1, 4, 5 (elements of diffusion, generation of innovation, innovation diffusion processes)
Assignment Due: brief description/outline of paper
Discussion: Two questions on the readings, on Canvas
- Week 8: November 2 Guest speaker: *Karen Labat*

Meet as class with copy of book review; groups of 3-4; cross read papers, discuss with author.

Readings: Sawyer chapter 10 , 11

Assignment Due: book reviews due - written version

Discussion: Two questions on the readings, on Canvas

Week 9: November 9

Diffusion of Innovations—attributes

Guest speaker: *To be confirmed*

Readings: Rogers chaps 6 & 7 (attributions of innovations, rate of adoption, innovations & adopter categories)

Discussion: Two questions on the readings, on Canvas

Assignment Due: Book Review Oral Reports:

Approximately 10 minutes per report [time by signup]

Week 10: November 16

Diffusion of Innovations

Readings: Rogers, chaps 8 & 11 (diffusion networks, consequences of innovations)

Discussion: Two questions on the readings, on Canvas

Assignment Due: Book Review Oral Reports:

Approximately 10 minutes per report [time by signup]

Week 11: November 23

Summative discussions

Begin mind map of your perceptions of speakers and readings in relationship to innovation and creativity

Assignment Due: Final Written Papers due

Groups meet to discuss papers

Week 12: November 30

Final Paper Oral Presentations

20-25 minutes per report with questions

Week 13: December 7

Final Paper Oral Presentations

20-25 minutes per report with questions

Week 14: December 14

Final Paper Oral Presentations [as needed]

20-25 minutes per report with questions

Week 15 December 19

[Final 10 am] Conclusions and integrative exam

General Materials

1. Grade definitions:

<http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html>

2. Scholastic dishonesty and student conduct code:

http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.pdf

3. Makeup work for Legitimate Absences:

<http://www.policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html>

4. PEDs in classroom:

<http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html>

5. Use of class notes and materials:

<http://policy.umn.edu/Policies/Education/Education/CLASSNOTESSTUDENTS.html>

6. Sexual Harassment:

<http://www1.umn.edu/regents/policies/humanresources/SexHarassment.pdf>

7. Statement on Climate of Inclusivity:

http://www1.umn.edu/regents/policies/administrative/Equity_Diversity_EO_AA.pdf

8. Academic Freedom and Responsibility:

http://www1.umn.edu/regents/policies/academic/Academic_Freedom.pdf

9. Statements about the availability of disability and mental health services:

<http://ds.umn.edu/student-services.html>

10. Release of Work: Students understand that enrollment in this course grants consent for their work to be selected for inclusion in college or departmental publications (online or in print). Your instructor may select to use your work to represent her/his skills as an instructor in a teaching portfolio (online or in print).