

DCI 580 / 780 - Design in the Real World: A Practice-Oriented Seminar
Term 2017, Session Ct
Class #93570 and 76428
Aug 17 – Dec 1, 2017

COURSE INFORMATION

Instructor Information

Lead Instructor: Punya Mishra
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Office Hours: by appointment
Office Location: Farmer 430J

Catalog Description

Structured practical experience in a professional program, supervised by a practitioner and/or faculty member with whom the student works closely.

Detailed Description

This course is about design. Design as a way of thinking and as a process that values collaboration, context, and diverse perspectives. Design as an approach that generates creative solutions to complex (wicked) problems of practice, particularly in education.

Design is both a noun and a verb, a product and a process. Design is central to the construction of any process or artifact—be it a website or a car; an ATM machine or educational policy. Design touches on many different disciplines—science, technology, engineering, education, psychology, sociology, organizational behavior, and art, to name a few. In this course, we explore how this interdisciplinarity makes the act and process of design so complex and important. We explore design meanings and theory, to understand design in our lives, in education, and the world.

A multi-dimensional issue like design, particularly in education, requires a multifaceted approach. As a class, we will do many different things this semester. We will read, discuss, analyze widely from research and theory. We will examine design practice, and build new conceptions through exciting projects. Most importantly, participants in this course will engage with real-world problems, through compelling field experiences around urgent initiatives that the Mary Lou Fulton Teachers College is working on.

Prerequisite Course(s): None

Course Format

This class will be conducted as a face-to-face course. Class meetings will consist of discussion on readings and project work.

Required Course Texts, Materials, and Resources

Required Course Text

There is no textbook for this course. All course content will be shared with students either via email or the course website.

Provided Materials

ASU Online Course Materials are available via MyASU (<http://my.asu.edu>) in the My Classes area. All ASU students have free access to this web resource, including the ASU Blackboard Course Management.

- For help accessing the online course materials, including logging on, submitting work, troubleshooting, etc., please refer to the ASU Online Technical Support page (<http://asuonline.asu.edu/student-resources/technical-support>) or the Technical Support page located in the online course materials.
- To monitor the status of campus networks and services, please visit the ASU System Health portal (<https://uto.asu.edu/system-health>).
- MyApps provides free software tools, including free virus scan software, online applications, and information about discounted software for purchase. Visit <https://myapps.asu.edu/home> for more information.

Student Learning Outcomes

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

Student Learning Outcomes
Develop a deeper understanding of the role of design, design thinking, technological innovation both in educational contexts in specific and the world in general.
Become proficient in the process and application of design thinking to solving authentic problems.

Course Assignments

Assignment and Description	Assignment Type	Points	Due Date
<i>Creative Explorations of design & technology:</i>			
• Book Review Podcast	Partner	10	September 20
• Mapping an Emotional Experience	Individual	10	October 18
• Design an Introduction to Design Thinking	Group	10	November 5
<i>Reading and Participation</i>	Individual	15	November 29
<i>Journal and Paper</i>	Individual	15	December 6

Submitting your assignments

None of the assignments (except possibly the final reflection paper) will be turned in to the instructors. Instead each of you will share with the instructors a website address where all the work you do for the course will be hosted.

It is entirely up to you where you host your work. If you already have a website adding a tap for the course would be fine, as would be creating a bare-bones website thorough weebly, wix, blogger, etc.

Reading and Participation

Students should attend every class and come to class prepared, except in cases of illness and/or extenuating circumstances. Being prepared means having read and thought about assigned readings, group discussions, or having worked on projects. We expect you to read the required readings “thoughtfully” that is, read them with questions, ideas, and conjectures in mind.

Reading Reflection & tweet

Each week, by the Tuesday before class, post 1–3 comments or questions about the readings on the class Facebook page. These comments will form the foundation of our class discussion.

We also ask that you tweet key quotes, ideas etc, from the reading with the following hashtags: #MLFTC #DESIGN.

Participation

We expect each of you to participate in class. There will be much variety in the activities we do – small group discussion, group projects, readings, etc. The success or failure of each of these activities will depend in large part on your participation. We expect each of you will be able to contribute something to our discussions and will do so regularly. You are all smart, capable people and the topics, readings, and assignments are designed to engage your interest and experiences.

Share Design Examples

Three times during the semester you will share some good and bad examples of design in your daily life. As you notice good and bad designs, take pictures that you can share with the class. Examples are everywhere: the kitchen, the bathroom, street signs, cars, etc. The idea is to become aware of the designs around you and learn to evaluate what does and does not work.

Creative Explorations in Design and Technology (due 9/20, 10/18, and 11/15)

Design plays out in many ways in our lives (as users, creators and researchers). In this series of assignments (to be completed sequentially, as indicated below) each of you, either individually or as a group, will explore different facets of design. The first is a book review

podcast. The second is a visual representation of a process or an experience. In the final exploration, you will work with your team to design an introduction to design thinking for students or teachers. This project can include a website, videos, or other resources. An astute reader (that's you) will notice that these products of this series of activities span a range of media (text, audio, map, video). Design is often about understanding the affordance and constraints of specific media and learning to take advantage of them for achieving specific goals.

More information on each of these assignments can be found below:

1. *Book Review Podcast* (August 23 – September 20, partner)
You and a partner will read a book on design and create a book review in the form of a podcast. The podcast should represent both of your views, perhaps taking the form of a conversation.
2. *Mapping an Emotional Experience* (September 20 – October 18, individual)
3. *Design an Intro to a Design Thinking Experience* (October 18 – November 15, team)

Reflections on Learning & Design (August 23 – December 6, individual)

This assignment is your final paper for the class (approximately 5 single-spaced pages long or 2500 words) which is a reflection on what you have learned in the class and the implications for your professional practice. Unlike most final papers, you will find that when it comes time to write it towards the end of the semester, you'll already have most of the writing done, and putting it together will simply be a process of synthesizing and editing.

You will each be keeping a google doc of your design notes over the semester. Every week, you should plan to write some summary notes and reflections of your thoughts on all things design. Each week's writings can include your thoughts on the current week's class meeting, your reflections on the readings, things that occur to you about the design process overall, and things that occur to you with respect to specific design themes. Basically, you should informally write up notes each week about anything you are thinking about with regard to the course and design work. Sometimes these may be more informal notes, and other times you may wish to write these as narrative or analytical writing.

At the end of the semester, you will put these notes together into one cohesive and synthesized reflection of your learning in the course. You can cut and paste some portions as you choose, rewrite or paraphrase ideas that you commented on in your notes, or summarize and extend ideas that you've noted in the semester. So, much of the content of this final reflection should come out of your weekly notes, with the overall intention being a thoughtful and cohesive reflection on what you have learned in the course.

Due on December 6th.

Applying Design Thinking to a Real Problem (September 6 – December 6, team)

The aim of this activity is to gain experience applying design thinking to a real, practical problem. In groups of four, you will receive a real-life design problem that we at ASU are currently working on. Together, you will work through the design process to create a solution or product. You will then write a white paper describing your design.

Tentative Course Schedule

Week	Date	Topic
1	8/23	Introduction
2	8/30	The Idea of Design
3	9/6	Design Thinking
4	9/13	People and Things
5	9/20	Guest Speaker
6	9/27	Wicked Problems
7	10/4	Social Roots of Innovation
8	10/11	Individual Roots of Innovation
9	10/18	Aesthetics, Emotion, and Design
10	10/25	Design and Users
11	11/1	Design and Society
12	11/8	Fourth Order Design
13	11/15	Learning by Design
14	11/22	No Class Meeting
15	11/29	Design-Based Research

Grading Procedures

Grades in part reflect your performance on assignments and adherence to deadlines. Talk to the instructor if you have any questions.

Course Expectations

Engagement. We have very high expectations from each of you and hope you have high expectations from us and this course as well. On our side, we promise to try our best to make this course as useful and enriching as possible for each of you.

There will be times, however, when, for some reason or the other, we may not be able to meet your expectations. We trust that you will feel free to get in touch by email or phone to let us know. We promise to listen to your point of view and give it serious consideration. We may or may not choose to change what we do, but what we will do is let you know why we chose as we did.

We also have some expectations from you. We expect each of you to be prepared. We expect each of you to set aside some time in your lives for this course. Being prepared means having read and thought about assigned readings, group discussions, or having worked on projects. We expect you to read the required readings “thoughtfully” that is, read them with questions, ideas, and conjectures in mind.

We expect each of you to participate. There will be much variety in the activities we do – small group discussion, design sessions, readings, etc. The success or failure of each of

these activities will depend in large part on your participation. We expect each of you will be able to contribute something to our discussions and will do so regularly. You are all smart, capable people and the topics, readings, and assignments are designed to engage your interest and experiences.

We expect each of you to come ready to learn from your peers. Classes work best when students view one another as knowledgeable and expect to learn as much from classmates as from the teacher. Also expect to challenge our ideas and those of your classmates (gently) and have yours challenged by us. We make no headway if we nod our heads politely but push neither the readings, others, nor ourselves to deeper understandings.

We expect each of you to be ready to be confused, irritated, and misunderstood, as well as appreciated, applauded, and surprised. The readings, discussions, and assignments should provoke a range of feelings and responses. Try to understand what makes you feel comfortable or uncomfortable, what you take for granted and what surprises you, what others understand or misunderstand about your ideas.

And finally, most importantly, we expect each of you to be ready to have fun. Learning happens best when it is fun. It is our hope that a lot of fun will happen in our interactions.

Academic Dishonesty. Academic dishonesty includes obvious offenses, such as copying another student's work, and less obvious offenses, such as unauthorized collaboration on a paper or copying sections of an article for an essay. Note: it is still plagiarism to change a few words in a sentence that you have otherwise copied from another source. It is assumed that all students understand the consequences of academic dishonesty at ASU.

Please note, a grade of EN (Failed, Never participated) will be assigned to students who remained enrolled but never participated in an academically-related activity for the duration of the course.

Missed Classes Due to University-Sanctioned Activities

Students who participate in university-sanctioned activities that require classes to be missed, should be given opportunities to make up examinations and other graded in-class work. However, absence from class or examinations due to university-sanctioned activities does not relieve students from responsibility for any part of the course work required during the period of the absence. The student should contact the class instructor to make arrangements for making up tests/assignments within a reasonable time.

The specific activity program coordinator (e.g., assistant athletics director for academic services, director of forensics, director of bands) should, as early as possible, provide the college-designated individual with the class schedule of any student who may be required to miss class because of a university-sanctioned activity.

Students should inform their instructors early in the semester of required class absences. Instructors should attempt to provide opportunities for equivalent work, either before or after the class absence, in accordance with any academic unit or college requirements, which may apply. <http://www.asu.edu/aad/manuals/acd/acd304-02.html>

Late and Missing Assignments

Students must submit assignments on due dates by the time stated in the course schedule (Arizona time). If you have a concern or can not turn things on time, let the instructor know, and we will work out a mutually acceptable schedule.

Collaborative Work

The student must independently complete all assignments, tests, activities, etc., unless specifically stated otherwise. In situations where collaboration is part of the assignment, the expectations will be clearly stated in the assignment overview.

Recording of Classes

Audio or video recording of class sessions is prohibited except where approved in advance in writing by the instructor. ADA accommodations approved by the Disability Resources Center will be honored where they explicitly mention recording of class sessions for the personal use of the student. Recordings approved by the instructor may not be shared for any purpose with other students or the general public and should be secure-deleted or otherwise securely destroyed at the end of the course.

UNIVERSITY/MARY LOU FULTON TEACHERS COLLEGE/DIVISION POLICIES

Technology Requirements and Skills

This course requires access to a computer with:

- Internet access, preferably with a high-speed connection
- A web browser (For the best experience, use Chrome, Mozilla Firefox, or Safari. Internet Explorer is not recommended.)
- Access to your ASU email account via <http://my.asu.edu>

In addition, it may require access to other services as required by the instructor, which may include any of the following (a non-exclusive list):

- Microsoft Office, or the ability to work with Word, Excel, and PowerPoint documents
- Adobe Acrobat Reader (free)
- Adobe Flash Player (free)
- Skype video conferencing software for potential use during office hours (free at <http://www.skype.com>)
- Speaker, microphone (optional), and webcam (optional).
- Access to Google Drive via My Drive via <http://my.asu.edu>, where you can create and share Google documents, presentations, spreadsheets, and more.

Technology Backup

It is the student's responsibility to have a backup procedure for course assignments.

Email

ASU email is an official means of communication among students, faculty, and staff. All instructor correspondence will be sent to your ASU email account. Students are expected to read and act upon email in a timely fashion, within 24 hours where possible. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly. Should you choose to set up email forwarding to a personal or other email

account, any links to course materials must be accessed through your official ASU email account to ensure authorization. You can confirm your ASU email and forwarding address by going to MyASU, clicking on the Profile tab, and selecting ASU Email Forwarding.

Drop and Add Dates/Withdrawals

This course follows a compressed schedule and may be part of a sequenced program, therefore, there is a limited timeline to drop or add the course. Please refer to the ASU Academic Calendar (<https://students.asu.edu/academic-calendar>) for relevant deadlines, and consult with your academic advisor in the Office of Student Services (<https://education.asu.edu/student-life/student-services-%E2%80%94-graduate>) on how to proceed. If you are considering a withdrawal, review the following ASU policies:

- Withdrawal from Classes (<http://www.asu.edu/aad/manuals/ssm/ssm201-08.html>);
- Medical/Compassionate Withdrawal (<http://www.asu.edu/aad/manuals/ssm/ssm201-09.html>); and
- Grade of Incomplete (<http://www.asu.edu/aad/manuals/ssm/ssm203-09.html>).

Grade Appeals

The official ASU grade record resides in MyASU, not on Blackboard. At the culmination of each course, you should verify your current student record and final course grades through MyASU. If you see a discrepancy between the grade posted on Blackboard and in MyASU, please notify your instructor immediately so that the discrepancy can be addressed in your official record.

The professional responsibility for assigning grades is vested in the instructor of the course and requires the careful application of professional judgment. A student wishing to appeal a grade must first meet with the instructor who assigned the grade to try to resolve the dispute. The process for grade appeals is set forth in the college policy, which is available at <https://education.asu.edu/sites/default/files/Grade-Appeal-Policy-Div-12.pdf>.

Course/Instructor Evaluation

The course/instructor evaluation for this course will be conducted online 7-14 days before the last official day of classes of each semester or summer session. Watch for an email to your official ASU email address, with "ASU Course/Instructor Evaluation" in the subject heading.

Completion of the evaluation is not required for you to pass this class and will not affect your grade, but your cooperation and participation in this process is important and appreciated. The evaluations are used to:

- help faculty improve their instruction;
- help administrators evaluate instructional quality;
- ensure high standards of teaching; and
- ultimately improve instruction and student learning over time.

Responses to the course/instructor evaluation are anonymous and will not be returned to your instructor until after grades have been submitted.

Copyright Notice

Copyright law may protect some course materials available through this system. This material is only for the use of students enrolled in the specific course(s) and must be used in accordance with the United States Copyright Act, Title 17 of the U.S. Code. Protected materials on this site may not be retained on the user's computer or other electronic storage device for longer than the duration of the specific class for which they are assigned, nor further disseminated by the user to any other persons.

Student Conduct

Student Conduct and Professional Behavior

It is expected that students exhibit professional behavior in all settings, including intern placements and working with other students in the online classroom. If at any time a student's behavior does not meet the standards of the syllabus or the program as delineated in the Professionalism Rubric

(https://education.asu.edu/sites/default/files/satisfactory-academic-progress-professional-conduct-policy_8-2-16.pdf), the instructor may refer the student for academic probation or to the ASU Dean of Students.

Handling Disruptive, Threatening, or Violent Individuals

Students, faculty, staff, and other individuals do not have an unqualified right of access to university grounds, property, or services. Interfering with the peaceful conduct of university-related business or activities or remaining on campus grounds after a request to leave may be considered a crime.

All incidents and allegations of violent or threatening conduct by an ASU student (whether on- or off-campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. If either office determines that the behavior poses or has posed a serious threat to personal safety or to the welfare of the campus, the student will not be permitted to return to campus or reside in any ASU residence hall until an appropriate threat assessment has been completed and, if necessary, conditions for return are imposed. ASU PD, the Office of the Dean of Students, and other appropriate offices will coordinate the assessment in light of the relevant circumstances. For more information, visit <http://www.asu.edu/aad/manuals/ssm/ssm104-02.html>.

Academic Integrity/Plagiarism

Students are expected to act with honesty and adhere to the university's Student Academic Integrity Policy. Failure to do so may result in sanctions, such as grade penalties, suspension, or expulsion from the university. Violations of academic integrity include, but are not limited to, such actions as cheating; plagiarizing; fabricating or falsifying information; or assisting with such activities. For more information, see <https://provost.asu.edu/academic-integrity>.

Harassment

ASU policy prohibits harassment on the basis of race, sex, gender identity, age, religion, national origin, disability, sexual orientation, Vietnam era veteran status, and other protected veteran status. Violations of this policy may result in disciplinary action,

including termination of employees or expulsion of students.

If you feel that another student is harassing you based on any of the factors above, contact the Office of Student Rights and Responsibilities:

- Downtown Phoenix: Post Office, Room 243, 602-496-0670;
- Polytechnic: Administration Building, Room 102, 480-727-5269;
- Tempe Students: Student Services Building, Room 263, 480-965-6547; or
- West: University Center Building, Room 301, 602-543-8152; or
- Online Students: Student Services Building, Room 263, 480-965-6547

If you feel that an ASU employee is harassing you based on any of the factors above, contact the Office of Equity and Inclusion at 480-965-5057.

For further information on ASU's policy on discrimination, harassment, and retaliation, visit <http://www.asu.edu/aad/manuals/acd/acd401.html>.

Title IX

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any educational program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex are prohibited. An individual who believes that he or she has been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or has been sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/resources>.

Electronic Communication

Acceptable use of university computers, Internet, and electronic communications can be found in the Student Code of Conduct (<http://www.asu.edu/aad/manuals/usi/usi104-01.html>) and in the university's Computer, Internet, and Electronic Communications Information Management Policy (<http://www.asu.edu/aad/manuals/acd/acd125.html>).

Accommodations

Disability Accommodations for Students

Mary Lou Fulton Teachers College is committed to student success and ensures an inclusive learning environment for all students. Students with disabilities or disabling health conditions who need accommodations are required to document their condition with the Disability Resource Center (DRC). Mary Lou Fulton Teachers College encourages admitted students with disabilities or disabling health conditions who believe that they may need an accommodation to register with the DRC prior to enrolling in the program. That way, all reasonable accommodations can be in place at the beginning of the program. Students who are registered with the DRC will be key participants in establishing reasonable and appropriate accommodations with course instructors. For information about the DRC, visit <https://eoss.asu.edu/drc>.

Religious Accommodations for Students

Students who need to be absent from class due to the observance of a religious holiday or participate in required religious functions must notify the faculty member in writing as far in advance of the holiday/obligation as possible. Students will need to identify the specific holiday or obligatory function to the faculty member. Students will not be penalized for missing class due to religious obligations/holiday observance. The student should contact the class instructor to make arrangements for making up tests/assignments within a reasonable time. For more information, visit

<http://www.asu.edu/aad/manuals/acd/acd304-04.html>.

Military Personnel Statement

A student who is a member of the National Guard, Reserve, or other U.S. Armed Forces branch and is unable to complete classes because of military activation may request complete or partial administrative unrestricted withdrawals or incompletes, depending on the timing of the activation. For information, see

<http://www.asu.edu/aad/manuals/usi/usi201-18.html>.

UNIVERSITY SERVICES

Tutoring

Tutoring is available on all ASU campuses and online for a variety of courses in small groups on a walk-in/drop-in basis. Appointments are not taken. For a full list of sites and courses, visit <https://tutoring.asu.edu>.

Writing Center

The Writing Center, located on all ASU campuses and online, offers free tutoring for all enrolled students. All writers, including undergraduate and graduate students, can benefit from visiting the Writing Center to:

- explore, plan, and develop ideas;
- organize and structure a paper;
- integrate and cite sources; and
- write, revise, edit, and proofread.

For more information about ASU's Writing Centers, including how to make an appointment, visit <https://tutoring.asu.edu/writing-centers>.

Student Purchases

Discounted pricing for students purchasing select technology items may be available through the ASU bookstore or online. Visit <http://bookstore.asu.edu/>, and select Store News & Offers.

Hardware and Software Support

ASU Technology Studio provides support to students on all four campuses for hardware, software, operating systems, security, networking, etc. Visit <https://ucc.asu.edu/techstudio/> for more information.

This syllabus is subject to change at the discretion of the instructor and/or college. Every effort will be made to avoid changing the syllabus or course schedule, but the possibility exists that unforeseen events will make changes necessary. If so, changes will be communicated via ASU email and/or the course site.

Continued enrollment in this course assumes that you have read and understand the information outlined in the syllabus.