## Course Syllabus

Jump to Today



# IP&T 692R Section 1 - Design Theory

- Spring 2017
- 150-B MCKB
- T from 9:00 am 10:50 am; Th from 9:00 am 11:50 am

#### **Instructor Information**

Name: Jason McDonaldOffice Location: 150-E MCKBOffice Phone: 801-422-3674

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• Office Hours: By Appointment

### **Course Description**

This course is an introduction to the theory of design. Design is an independent tradition of inquiry standing alongside science, religion, the arts, and the humanities, as a way of understanding and acting within the world. But design is not as well-understood as these other traditions, and often confused with some of them (especially science and the arts).

The purpose of this course is to inquire into the nature of design: what is it? What makes it unique? What can it help us accomplish that our other forms of inquiry can't? And, where does design fail us, that other traditions are better at accomplishing?

We will carry out this purpose by reviewing historical design theories and analyzing their relevance to current design practice. This includes looking at more contemporary design theorists and movements such as design thinking. We will review the trajectory that specific design theories and models have historically made, and work out how our knowledge of such theories can make us better design practitioners.

In this course, you will create a personal theory of design, informed by strong thinkers from the past 60 years, that helps you carry out meaningful design inquiry wherever you have influence.

#### **Materials**

Required – Nelson, H. G., & Stolterman, E. (2012). *The design way: Intentional change in an unpredictable world* (2nd ed.). Cambridge, MA: The MIT Press.

https://www.amazon.com/Design-Way-Intentional-Change-Unpredictable/dp/0262526700/ (https://www.amazon.com/Design-Way-Intentional-Change-Unpredictable/dp/0262526700/)

https://search.lib.byu.edu/byu/record/lee.5554548?holding=w71fsjoz4ujx8na9 (https://search.lib.byu.edu/byu/record/lee.5554548?holding=w71fsjoz4ujx8na9 (https://search.lib.byu.edu/byu/record/lee.5554548?holding=w71fsjoz4ujx8na9

Optional - Flusser, V. (1999). The shape of things: A philosophy of design. London, UK: Reaktion Books Ltd.

https://www.amazon.com/Shape-Things-Vilem-Flusser/dp/1861890559 (https://www.amazon.com/Shape-Things-Vilem-Flusser/dp/1861890559)

https://search.lib.byu.edu/byu/record/lee.2688277?holding=s4i825npnp9knlp5 (https://search.lib.byu.edu/byu/record/lee.2688277?)

Note: Both books are available for sale in both print and eBook format. Both are also available as online resources from the BYU Library if you prefer not to purchase them. Given that we will frequently refer to *The Design Way*, and only occasionally to *The Shape of Things*, I've marked

the first as a required text while the second is optional (at least to purchase). But I think both are worth adding to your personal library.

A list of additional readings are found below. These readings will be available on our course reserve page through the BYU Library (<a href="https://reserve.lib.byu.edu/course/12047/">https://reserve.lib.byu.edu/course/12047/</a>). Reading assignments for a specific day are listed in the course calendar.

- Banathy, B. H. (1996). Designing social systems in a changing world. New York, NY: Spring Science+Business Media. (Chapter 2, pp. 11-47)
- Bayazit, N. (2004). Investigating design: A review of forty years of design research. Design Issues, 20(1), 16-29.
- Belland, J. C. (1991). Developing connoisseurship in educational technology. In D. Hlynka & J. C. Belland (Eds.), *Paradigms regained: The uses of illuminative, semiotic and post-modern criticism as modes of inquiry in educational technology* (pp. 23-35). Englewood Cliffs, NJ: Educational Technology Publications.
- Brown, T. (2008). Design thinking. Harvard Business Review, 86(6), 84-92.
- Cross, N. (1982). Designerly ways of knowing. Design Studies, 3(4), 221-227.
- Cross, N. (2001). Designerly ways of knowing: Design discipline versus design science. Design Issues, 17(3), 49-55.
- Dunne, J. (1993). Back to the rough ground: 'Phronesis' and 'techne' in modern philosophy and in Aristotle. Notre Dame, IN: University of Notre Dame Press. (Epilogue, pp. 357-382)
- Dunne, J. (1999). Professional judgment and the predicaments of practice. Eurpoean Journal of Marketing, 33(7/8), 707-720.
- Institute of Design at Stanford (n.d.). An introduction to design thinking: Process guide. Retrieved from <a href="https://dschool-old.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf">https://dschool-old.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf</a>).
- Kimbell, L. (2011). Rethinking design thinking: Part I. Design and Culture, 3(3), 285-306. doi:10.2752/175470811X13071166525216
- Krippendorff, K. (2006). The semantic turn: A new foundation for design. Boca Raton, FL: CRC Press. (Chapter 2, pp. 39-75)
- Lawson, B., & Dorst, K. (2009). Design expertise. Burlington, MA: Elsevier Ltd. (Chapter 3, pp. 81-112)
- Norman, D. A., & Verganti, R. (2014). Incremental and radical innovation: Design research vs. Technology and meaning change. *Design Issues*, 30(1), 78-96.
- Owen, C. L. (2005). *Design thinking. What it is. Why it is different. Where it has new value*. Paper presented at the the International Conference on Design Research and Education for the Future.
- Parrish, P. (2012). What does a connoisseur connaît? Lessons for appreciating learning experiences. In S. B. Fee & B. R. Belland (Eds.), *The role of criticism in understanding problem solving: Honoring the work of John C. Belland* (pp. 43-53). New York: Springer.
- Protzen, J.-P., & Harris, D. J. (2010). The universe of design: Horst Rittel's theories of design and planning. New York, NY: Routledge.
   (Chapters 1.10 1.11, pp. 107-134)
- Schön, D. A. (1987). The reflective practitioner: How professionals think in action. Basic Books, Inc. (Chapter 3, pp. 76-104)
- Simon, H. A. (1996). The sciences of the artificial (3rd ed.). Cambridge, MA: MIT Press. (Chapter 5, pp. 111-138)
- Stolterman, E. (2016). Some thoughts about the problematic term "design thinking." Retrieved from <a href="http://transground.blogspot.com/2016/12/composing-some-blogposts-in-small-ebook.html">http://transground.blogspot.com/2016/12/composing-some-blogposts-in-small-ebook.html</a> (<a href="http://transground.blogspot.com/2016/12/composing-some-blogposts-in-small-ebook.html">http://transground.blogspot.com/2016/12/composing-some-blogposts-in-small-ebook.html</a>
- Verganti, R. (2008). Design, meanings, and radical innovation: A metamodel and a research agenda. Journal of Product Innovation
   Management, 25(5), 436-456. doi:10.1111/j.1540-5885.2008.00313.x
- Wilson, B. G. (2013). A practice-centered approach to instructional design. In J. M. Spector, B. B. Lockee, S. E. Smaldino, & M. Herring (Eds.), Learning, problem solving, and mind tools: Essays in honor of David H. Jonassen (pp. 35-54). New York, NY: Routledge.

#### **Learning Outcomes**

- 1. Identify major thinkers Know major design theorists and philosophers from the last 60 years, not only their names but also their contributions.
- 2. Summarize design theories Succinctly explain the noteworthy components of major design theories. Implied in this objective is also the ability to distinguish design theory from another type of theory, like scientific theory.
- 3. Evaluate the claims of design theories Judge how useful the claims of a particular design theory or design approach are likely to be in real-world design practice (particularly your own).
- 4. Analyze the state of current design practice Given a foundation of design theory, analyze how well current design practice (both individual movements as well as specific examples) are fulfilling the promise of design as a tradition of inquiry.

5. Create a personal design theory - Using the material form this course as well as any additional research, create a personal theory of design that helps you carry out meaningful design inquiry.

#### Classroom Procedures

This is an advanced graduate course, with all that this statement implies. Our classroom procedure will be to engage in deep discussion of a wide range of readings (some difficult; some more straightforward).

The discussion will be driven primarily by the analysis of the readings you complete before class. So your questions, criticism, examples, and all other contributions are not only welcomed, but expected. I expect discussions will flow from the highly philosophical to the highly practical, maybe even within the period of a few minutes.

I will also note that I expect to learn as much from the class as you. This is a difficult subject that few people have thoroughly explored. I mention this to set the expectation that our class will be a class of peers. I may bring the readings and a little organization, but the class as a whole will bring the practical wisdom that will really breathe life into the topic.

#### **Attendance Policy**

The attendance policy is you need to be in class.

This class is based on discussion and collaboration, which, of course, can only take place if you with us during our discussions. I want to accommodate unavoidable absences. But there really isn't a substitute for the lost benefit of learning from other students, on whatever topic was addressed in your absence. Plus, other students will miss out on your contributions to their learning, which is a loss that cannot be replaced.

To accommodate the travel schedules of some students, you can attend class at a distance through Zoom. The URL is: <a href="https://byu.zoom.us/j/7944921715">https://byu.zoom.us/j/7944921715</a>. (https://byu.zoom.us/j/7944921715.%20)

This option is available to all students; but if you can make it to campus to meet in-person please do.

To help encourage good behavior, there is a small number of points attached to your attendance. You can drop two unavoidable absences without loss of points. If other circumstances come up where you have additional absences, talk to me as soon as possible about options for making up the points.

#### **Grading Policy**

This course is graded through the following assignments:

- Regular attendance in class
- Weekly reflection papers on readings and class discussions
- A culminating paper, in which you will describe the personal theory of design you've developed throughout the term.

Your final exam will be to present your theory to the rest of the class.

As mentioned, two class periods can be missed without penalty. Likewise, one reflection paper can be dropped without penalty. Otherwise, reflection papers will be due at the beginning of class, every Tuesday. Late submission will result in a loss of half the points available for that paper. Your final paper will be due on the last day of class.

Instructions for the papers and presentation are found in the assignments section of Canvas.

The instructor reserves the right to change any aspect of this course (including but not limited to assignments, readings, due dates, topics of class meetings) at any time for any reason.

## **Grading Scale**

- A 93%
- A- 90%
- B+ 87%

- B 83%
- B-80%
- C+ 77%
- C 73%
- C-70%
- D+ 67%
- D 63%
- D- 60%
- E 0%

#### **Respectful Environment**

"Sadly, from time to time, we do hear reports of those who are at best insensitive and at worst insulting in their comments to and about others... We hear derogatory and sometimes even defamatory comments about those with different political, athletic, or ethnic views or experiences. Such behavior is completely out of place at BYU, and I enlist the aid of all to monitor carefully and, if necessary, correct any such that might occur here, however inadvertent or unintentional. "I worry particularly about demeaning comments made about the career or major choices of women or men either directly or about members of the BYU community generally. We must remember that personal agency is a fundamental principle and that none of us has the right or option to criticize the lawful choices of another." President Cecil O. Samuelson, Annual University Conference, August 24, 2010

#### Student Disability

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 422-5895, D-285 ASB.

## **Sexual Misconduct**

#### **Academic Honesty**

The first injunction of the Honor Code is the call to "be honest." Students come to the university not only to improve their minds, gain knowledge, and develop skills that will assist them in their life's work, but also to build character. "President David O. McKay taught that character is the highest aim of education" (The Aims of a BYU Education, p.6). It is the purpose of the BYU Academic Honesty Policy to assist in fulfilling that aim. BYU students should seek to be totally honest in their dealings with others. They should complete their own work and be evaluated based upon that work. They should avoid academic dishonesty and misconduct in all its forms, including but not limited to plagiarism, fabrication or falsification, cheating, and other academic misconduct.

#### **Honor Code**

In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty

means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

# **Course Summary:**

Date	Details	
Tue May 2, 2017	Session 1 Readings (https://byu.instructure.com/calendar?event_id=2406&include_contexts=course_726)	9am to 10:50am
Thu May 4, 2017	Session 2 Readings (https://byu.instructure.com/calendar?event_id=2407&include_contexts=course_726)	9am to 11:50am
Tue May 9, 2017	Session 3 Readings (https://byu.instructure.com/calendar?event_id=2408&include_contexts=course_726)	9am to 10:50am
	Bi Reflection 1 (https://byu.instructure.com/courses/726/assignments/20145)	due by 9am
Thu May 11, 2017	Session 4 - No class (https://byu.instructure.com/calendar?event_id=2409&include_contexts=course_726)	9am to 11:50am
Tue May 16, 2017	Session 5 Readings (https://byu.instructure.com/calendar?event_id=2410&include_contexts=course_726)	9am to 10:50am
	Bi Reflection 2 (https://byu.instructure.com/courses/726/assignments/20146)	due by 9am
Thu May 18, 2017	Session 6 Readings (https://byu.instructure.com/calendar?event_id=2411&include_contexts=course_726)	9am to 11:50am
Tue May 23, 2017	Session 7 Readings (https://byu.instructure.com/calendar?event_id=2412&include_contexts=course_726)	9am to 10:50am
	Bi Reflection 3 (https://byu.instructure.com/courses/726/assignments/20147)	due by 9am
Thu May 25, 2017	Session 8 Readings (https://byu.instructure.com/calendar?event_id=2413&include_contexts=course_726)	9am to 11:50am
Tue May 30, 2017	Session 9 Readings (https://byu.instructure.com/calendar?event_id=2414&include_contexts=course_726)	9am to 10:50am
	Bi Reflection 4 (https://byu.instructure.com/courses/726/assignments/20148)	due by 9am
Thu Jun 1, 2017	Session 10 Readings (https://byu.instructure.com/calendar?event_id=2415&include_contexts=course_726)	9am to 11:50am

Tue Jun 6, 2017	Session 11 Readings (https://byu.instructure.com/calendar?event_id=2416&include_contexts=course_726)	9am to 10:50am
	Bi Reflection 5 (https://byu.instructure.com/courses/726/assignments/20149)	due by 9am
Thu Jun 8, 2017	Session 12 Readings (https://byu.instructure.com/calendar?event_id=2417&include_contexts=course_726)	9am to 11:50am
Tue Jun 13, 2017	Session 13 Readings (https://byu.instructure.com/calendar?event_id=2418&include_contexts=course_726)	9am to 10:50am
	Bi Reflection 6 (https://byu.instructure.com/courses/726/assignments/20150)	due by 9am
Thu Jun 15, 2017  Thu Jun 22, 2017	Session 14 Readings (https://byu.instructure.com/calendar?event_id=2419&include_contexts=course_726)	9am to 11:50am
	Bi Personal design theory paper (https://byu.instructure.com/courses/726/assignments/20151)	due by 11:59pm
	Bi Personal design theory presentation (https://byu.instructure.com/courses/726/assignments/20152)	due by 9am
111u Juli 22, 2017	(https://byu.instructure.com/courses/726/assignments/20430)	due by 11:59pm
	Bi Roll Call Attendance (https://byu.instructure.com/courses/726/assignments/204	28)