Term Information

Effective Term	Spring 2017
Previous Value	*Summer 2012*

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

• New course title

• New course description

• New course syllabus and assignments

What is the rationale for the proposed change(s)?

We propose to revise this course as part of a new “Design Thinking Minor” that will be a modified version of the current “Design Minor (Design-MN) Track One: for all majors outside of Design or Pre-Design” program.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

The new “Design Thinking Minor” will no longer include elective courses that are part of the current “Design Minor (Design-MN) Track One” program, though those Design courses will continue to be offered during the transition period.

Is approval of the requrest contingent upon the approval of other course or curricular program request? Yes

Please identify the pending request and explain its relationship to the proposed changes(s) for this course (e.g. cross listed courses, new or revised program)

Proposal for a new “Design Thinking Minor.” Design 3305, Design 3505.

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area	Design
Fiscal Unit/Academic Org	Design - D0230
College/Academic Group	Arts and Sciences
Level/Career	Undergraduate
Course Number/Catalog	3105
Course Title	Exploring Design Thinking
Previous Value	*Design Concepts for Non-Majors*
Transcript Abbreviation	Explr Dsgn Thnkg
Previous Value	*Dsgn Cncpt Nn Mjr*
Course Description	An overview of concepts, processes and modes of identifying problems and proposing effective solutions from a design-oriented perspective.
Previous Value	*A studio-based introduction to the design process; creative problem-solving process emphasizes divergent thinking skills through observation, abstraction, evaluation and communication.*
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week, 12 Week
Flexibly Scheduled Course	Never

Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Previous Value	*Laboratory*
Grade Roster Component	Lecture
Previous Value	*Laboratory*
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites	
Exclusions	Not open to students with credit for 230.

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	50.0401
Subsidy Level	Baccalaureate Course
Intended Rank	Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- Define design thinking and the various components of its practice.
- Recognize and practice strategies for opportunity seeking, problem definition, and idea development.
- Explore techniques for imagining and generating innovative ideas.

Previous Value

Content Topic List

- Concepts, skills and tools of design thinking.
- Visualizing, mapping and defining problems.
- Generative design thinking leading to solution proposals.

Previous Value

- *Introduction to the design process*
- *Creative problem solving process*
- *Divergent thinking skills through observation, abstraction, evaluation and communication*

Attachments

- DSN_3105_Exploring_Design_Thinking.docx: New Syllabus

  (Syllabus. Owner: Nini,Paul Joseph)

- DSN_3105_Current_Syllabus.pdf: Current Syllabus

  (Syllabus. Owner: Nini,Paul Joseph)

- DSN_3105_Exploring_Design_Thinking_v2.docx: Revised Syllabus

  (Syllabus. Owner: Nini,Paul Joseph)

Comments

- See 3-17-16 e-mail to P Nini. *(by Vankeerbergen,Bernadette Chantal on 03/17/2016 02:40 PM)*
- Both current and new (proposed) syllabi for this course have been attached. *(by Nini,Paul Joseph on 02/22/2016 04:15 PM)*
- Return to department at their request *(by Heysel,Garett Robert on 02/22/2016 02:19 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Nini,Paul Joseph	02/12/2016 02:51 PM	Submitted for Approval
Approved	Nini,Paul Joseph	02/17/2016 10:19 AM	Unit Approval
Revision Requested	Heysel,Garett Robert	02/22/2016 02:19 PM	College Approval
Submitted	Nini,Paul Joseph	02/22/2016 04:15 PM	Submitted for Approval
Approved	Nini,Paul Joseph	02/22/2016 04:16 PM	Unit Approval
Approved	Heysel,Garett Robert	03/01/2016 11:44 AM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	03/17/2016 02:40 PM	ASCCAO Approval
Submitted	Nini,Paul Joseph	03/29/2016 10:39 AM	Submitted for Approval
Approved	Nini,Paul Joseph	03/29/2016 10:39 AM	Unit Approval
Approved	Heysel,Garett Robert	03/31/2016 07:26 PM	College Approval
Pending Approval	Nolen,Dawn Vankeerbergen,Bernadette Chantal Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler Hogle,Danielle Nicole	03/31/2016 07:26 PM	ASCCAO Approval

D3105 Design Concepts for Non-Majors

Design 3105
Design Concepts
for Non-Majors

Autumn | 2015
Hayes Hall | Room 105

The Ohio State University
College of Arts & Sciences
Department of Design

Allen J Cochran
Instructor

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COURSE OBJECTIVE

The goal of this course is to provide an introduction to tools and techniques from design disciplines that can help students become more innovative thinkers in their own field and at the same time be able to understand and better communicate with designers. The course objective will be accomplished by providing students with a working knowledge of how to conceptualize, define, formulate, develop and communicate concepts and ideas, using a variety of techniques and methodologies through 2D and 3D media. Through independent and team-based projects students will gain a better understanding of the impact of presenting information.

COURSE FORMAT

A studio-based introduction to the design process; creative problem-solving process; emphasizes divergent thinking skills through observation, abstraction, evaluation and communication. This is a studio-based course that requires active student participation. The class will meet 2 days per week up to 1.75 hours each day. Class sessions will be comprised of lectures and demonstrations, in-class exercises, project assignments, critique sessions, class discussions and individual meetings. We will be using Carmen during this course: https://carmen.osu.edu

LEARNING OBJECTIVES

- Development of divergent thinking strategies including design research, observation, abstraction, evaluation and communication.
- Understanding of the appropriate use and context of 2D and 3D representations
- Development of skills to visually represent methods, processes, concepts, and design ideas, in 2D and 3D.
- Understanding the phases of the design process and its non–linear, iterative nature.
- Familiarization with basic design principles with emphasis on design thinking.

REQUIRED TEXT

Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation

Tim Brown, 2009, ISBN 0061766089. Available for purchase through online sellers such as Amazon.com, BarnesandNoble.com, or Half.com.

RELATED TEXTS

- **The Art of Innovation**
  Tom Kelley & Jonathan Littman
- **Made to Stick**
  Chip Heath & Dan Heath
- **Design Methods**
  John Chris Jones
- **The Design of Everyday Things**
  Donald A. Norman

RELATED ONLINE SOURCES

- Core77
- StackOverflow
- Flickr
- Mobile UI Patterns
- Pattern Tap
- YouTube
- Dribbble
- Twitter
- CMKY Magazine
- Juxtapose Magazine
- Smashing Magazine
- IDEO's Blog
- Pentagram's Blog
- Frog Design's Blog
- Quantified Self
- Material Interaction
- Meetups
- Eventbrite

DIGITAL TOOLS OF NOTE

- Adobe Creative Cloud
- Sketch
- Balsamiq
- MockFlow
- Lucid Charts
- Apple Keynote
- Microsoft PowerPoint
- OmniGraffle
- Axure
- Slack
- Google Docs
- Monodraw
- iPadian
- Flowchart Designer
- Screenium
- NounProject
- BBedit / TextWrangler
- Sublime Text
- Snippets Lab
- Ember

OTHER TOOLS

There are tools for just about everthing you can imagine in the world of design. From wireframing, to logo design, to sketching, engineering, or architecting - they are all almost always free for a trial. If you don't know a tool, just ask. We can work it out together.

GRADING STRUCTURE

There will be weekly thought papers corresponding to assigned reading assignments, group projects, and in-class discussions. Participation will be factored into your grade for each assignment. The thought papers will be graded on completion.

Please note that classroom participation, group participation, personal feedback and group feedback will also influence your grade.

A	*(100 - 93)*
A-	*(92 - 90)*
B+	*(89 - 87)*
B	*(86 - 83)*
B-	*(82 - 80)*
C+	*(79 - 77)*
C	*(76 - 73)*
C-	*(72 - 70)*
D+	*(69 - 65)*
D	*(64 - 60)*
E	*(59 - 0)*

POINT STRUCTURE FOR GRADING

Point values for assignments and projects are as follows. Specific grade sheets for each assignment will be available on Carmen for reference. Assignments include at least the following:

Extra credit will be offered throughout the semester. Please keep record of when it is offered so that you do not miss the opportunity.

Thought Papers (8 Total)	*10 points / each*
Design Innovation	*10 points*
Project 02	*100 points*
Project 03	*100 points*
Project 04	*100 points*
Project 05	*300 points*

ACADEMIC MISCONDUCT

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

SPECIAL NEEDS + DISABILITY SERVICES

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu/.

D3105 Course Schedule

Schedule Key

[+]	Item is due before class	[TPEC]	Thought Paper Extra Credit	[●]	Project Workday
[TP#]	Thought Paper	[▶]	Project Start	[✖]	Wrap up, Critiques, Present

WEEK	T	R	DESCRIPTION	
01	08/25	08/27	*Class Cancelled*	*Class Cancelled*
02	09/01	09/03	+ TP01 + DI	▶ PR02
03	09/08	09/10	+ TP02 ● PR02	✖ PR02 Critique ▶ PR03 Intro
04	09/15	09/17	+ TP03 *Class Cancelled*	● PR03
05	09/22	09/24	+ TP04 ● PR03	✖ PR03 Critique
06	09/29	10/01	+ TP05 ▶ PR04 Intro	● PR04
07	10/06	10/08	+ TP06 ● PR04	● PR04
08	10/13	10/15	+ TP07 ● PR04	● PR04
09	10/20	10/22	+ TP08 ● PR04	✖ PR04 Critique
10	10/27	10/29	*+ TPEC* ▶ PR05 Intro	● PR05
11	11/03	11/05	*+ TPEC* ● PR05	● PR05
12	11/10	11/12	● PR05	● PR05
13	11/17	11/19	● PR05	● PR05
14	11/24	11/27	● PR05	● PR05
15	12/01	12/03	✖ PR05 Presentations	✖ PR05 Presentations
16	12/08	12/10	✖ Final TBD	

Please note that the schedule is subject to changes per the instructor. Should changes be made the instructor will do everything possible to make the students aware of the necessary information.

THE OHIO STATE UNIVERSITY

SYLLABUS: DSN 3105
EXPLORING DESIGN THINKING
AUTUMN 2016

Course overview

Instructors

Instructor: _____

Email address:

Phone number:

Office hours:

Course catalog description

An overview of concepts, processes and modes of identifying problems and proposing effective solutions from a design-oriented perspective.

Course emphasis

If design is devising a course of action that consists of changing existing situations into preferred ones,[1] then design thinking is an approach to problem seeking and problem solving that uses designerly perspectives and methods to speculate about the forms that these improvements might take. It is a means of generating good ideas and a path to using design thinking tools and design-based knowledge to look at the world in new and constructive ways.

This course provides an introduction to key concepts of design thinking, including adopting the mindset required for thinking like a designer. It will provide opportunities to learn about and practice design thinking tools and will encourage their application to problems found in any domain or realm. These tools will be used to engage in empathetic, non-linear and iterative processes of imagination and idea generation. Opportunities for interaction will expose students to collaborative practices and encourage the development of leadership skills.

[1] Herbert Simon, *The Sciences of the Artificial* (Cambridge: MIT Press, 1969): 130.

Course format of instruction

The format of instruction of this course is lecture/discussion. Students will complete projects and exams. They will submit assignments that are completed outside of class.

Course learning outcomes

By the end of this course, students should successfully be able to:

- Define design thinking and the various components of its practice;
- Recognize and practice strategies for opportunity seeking, problem definition, and idea development;
- Organize and analyze disparate information into messages that make sense;
- Explore techniques for imagining and generating innovative ideas;
- Explain the advantages and disadvantages of techniques for relating to others and empathizing with users;
- Measure the potential of ideas by using iterative and critical practices;
- Navigate collaborative engagements and group dynamics.

Course materials

Required textbook(s)

Tom Kelley and David Kelley. *Creative Confidence: Unleashing the Creative Potential Within Us All*. (Crown Business, 2013). ISBN-13: 978-0385349369

Required supplemental materials

Sketchbook and black and colored markers or pencils

Optional materials

1. *From a Design Science to a Design Discipline: Understanding Designerly Ways of Knowing and Thinking,* Nigel Cross, 2007. ONLINE
2. *The Core of 'Design Thinking' and its Application*, Kees Dorst, 2011. ONLINE
3. *Ten Tools for Design Thinking,* Jeanne M. Liedtka, 2010. ONLINE
4. *Design Thinking: Past, Present and Possible Futures,* Ulla Johansson-Sköldberg, Jill Woodilla and Mehves Çetinkaya, 2013. ONLINE
5. *Beyond "Design Thinking",* Richard Sosa, *2105.* http://www.researchgate.net/publication/283856180
6. *Design Fiction,* Bruce Sterling, 2009. ONLINE
7. *Paradigm Shift: The New Role of Design in Business and Society*, Gjoko Muratovski, 2015.

Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** http://ocio.osu.edu/selfservice
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

Grading and faculty response

Grades

Project-based assignments

For the three project-based assignments, the class will be divided into teams consisting of 4 to 5 students. Each project will require a final PDF report of no more than 20 slides documenting the processes undertaken and the results. Each team will also be required to deliver an oral 10-minute in-class presentation of their project.

Exams

Examinations will be conducted in class and administered via Carmen. Each will consist of 50 multiple choice, true-false, or short answer questions and two open-ended essay questions.

Please note

Individual project sheets are not included as part of this syllabus, but will be provided by the instructor via Carmen at appropriate times throughout the term. As well, a review of important topics will occur, in preparation of the exam. Examples of successful, past projects will be included for reference on Carmen, and will be discussed in class.

Assignment or category	Points
Assignment 01: Brainstorming Teams will be assigned a problem-solving topic. The team will then explore a variety of brainstorming techniques and methods. They will reflect on this exploration and document the entire process.	20

Assignment 02: Visual diary Teams will be assigned a problem-solving topic. The team will apply a variety of visual and verbal narrative techniques to document thinking and process to arrive at a hypothesis about their topic.	20
Assignment 03: Poster/Map Teams will be assigned a problem-solving topic. The team will explore the full range of design thinking techniques covered over the course and apply these learnings to a future scenario. They will reflect on this exploration and document the entire process.	20
Reflection papers on readings (4 @ 10 pts) Students will be asked to adopt and defend a position with regard to design thinking for each of the assigned readings within an 800-word paper. This is an individual assignment.	40
Mid-Term Examination The exam will cover material from the first half of the term.	50
Final Examination The exam will include material from the entire semester.	50
Total	200

See course schedule, below, for due dates

Late assignments

It is anticipated that all due dates will be met. However, in the event that a student **requests and is granted a deferral of no more than 48 hours** on an assignment, finished work received up to 48 hours after the due date and time will be accepted but will be penalized by the reduction of one-third letter grade (A achieves A-, A- achieves B+, etc.). Assignments or projects received beyond 48 hours after the due date & time will receive a grade of E (0 points) without exception.

Arrangements for deferred submissions can be made for medical or compassionate reasons only. If possible, students seeking deferrals should notify the instructor in advance of the original assignment due date.

Students seeking deferrals must submit medical and/or other documentation to your instructor. Deferred work must be completed by a date and time agreed upon by the student and the professor in order to receive an adjusted grade as described above.

Grading scale

93–100%: A
90–92.9%: A-
87–89.9%: B+
83–86.9%: B
80–82.9%: B-
77–79.9%: C+
73–76.9%: C
70 –72.9%: C-
67 –69.9%: D+
60 –66.9%: D
Below 60%: E

Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

Grading and feedback

For assignments, you can generally expect feedback within **7-10 days**.

E-mail

I will reply to e-mails within **24 hours on weekdays**.

Attendance and participation

Student participation requirements

The following is a summary of everyone's expected participation:

- **Class meetings: EXPECTED**
  Attendance of all class meetings is recommended. Listening to and participating in class meetings is the best and easiest way to ensure your successful performance in this course. The majority of the material included on exams will be presented and discussed during class meetings. These are the best times to speak to instructors and ask questions.
- **Logging in to Carmen site**: **AT LEAST ONCE PER WEEK**
  Be sure to log in to the course in Carmen each week, including weeks with holidays.

Lecture guides and illustrations will be posted there after they have been presented and other resources such as some electronic readings will be provided there.

- **Office hours**: **OPTIONAL**

  If you wish to discuss anything related to the course such as an assignment with me, please contact me in person or by email if you need to schedule a time for the meeting outside my scheduled office hours. Meetings during my scheduled office hours are first come, first served.

Communication guidelines

The following are my expectations for how we should communicate as a class: in classroom discussions; in written communication; and in what you write as part of assignments and examinations. Above all, please remember to be respectful and thoughtful.

- **Writing style**: Any written submissions should follow the standard English guidelines for using proper grammar, spelling, and punctuation. Informality (including an occasional emoticon) is fine for non-academic topics.
- **Tone and civility**: In verbal exchanges and in writing, let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.
- **Citing your sources**: In any form of academic submission, please cite your sources to back up what you say. (For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.)
- **Backing up your work**: Consider composing anything you submit for this course using a word processor where you can save your work, and then copying into the Carmen drop box for submission.

Course schedule

Week	Dates	Topics, Readings, Assignments, Deadlines
1	Tues Thurs	Course introduction Weekly reading: *Creative Confidence*, pp. 1-35 Defining design thinking/Human-centered design
2	Tues Thurs	Concepts, skills and tools of design thinking Weekly reading: *From a Design Science to a Design Discipline: Understanding Designerly Ways of Knowing and Thinking,* Nigel Cross, 2007.

		Concepts, skills and tools of design thinking
3	Tues Thurs	Trend mapping Weekly reading: *Creative Confidence*, pp. 37-65 Reflection paper #1 due (Cross article) Emerging consumer trends
4	Tues Thurs	Visualizing and mapping Weekly reading: *Creative Confidence*, pp. 67-107 Modeling
5	Tues Thurs	Ordering, hierarchy, and relationships Weekly reading: *Creative Confidence*, pp. 109-147 The role of empathy in design thinking
6	Tues Thurs	Assignment 01 project presentations Assignment 01 project presentations
7	Tues Thurs	Emerging Regulatory Frameworks Weekly reading: *Creative Confidence*, pp. 147-209 Sustainability, Environment, Society and Responsibility
8	Tues Thurs	Spring Break
9	Tues Thurs	Mid-term examination Weekly reading: *Creative Confidence*, pp. 212-260 Value generation and “What if?”
10	Tues Thurs	Problem definition Weekly reading: *Ten Tools for Design Thinking,* Jeanne M. Liedtka, 2010. Synthesis
11	Tues	Narrative in design Weekly reading: *Design Fiction,* Bruce Sterling, 2009.

	Thurs	Reflection paper #2 due (Liedtka article) Scenarios and personas
12	Tues Thurs	Assignment 02 project presentations Assignment 02 project presentations
13	Tues Thurs	Future studies Weekly reading: *Beyond "Design Thinking",* Richard Sosa, *2105.* Design fiction strategies Reflection paper #3 due (Sosa article)
14	Tues Thurs	Generative design thinking for the front end of design Weekly reading: *Paradigm Shift: The New Role of Design in Business and Society*, Gjoko Muratovski, 2015. Crowd sourcing and philanthropic models
15	Tues Thurs	The future of design thinking Reflection paper #4 due (Muratovski article) Assignment 03 project presentations
16	Tues	Assignment 03 project presentations
	Assigned exam time	Final exam

Other course policies

Performance expectations

- **Exams**: You must complete the midterm and final exams yourself, without any external help or communication.
- **Written assignments**: Your written assignments should be your own original work. In formal assignments, you should follow a consistent in-text citation style to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work. If you have questions about formatting, consult with the GTAs.

- **Reusing past work**: In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with me.
- **Falsifying research or results**: Any research you conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- **Collaboration and informal peer-review:** While study groups and peer-review of written projects is encouraged, remember that comparing answers on an assignment is not permitted. There will be times when you are encouraged to talk to one another in small groups and to share ideas. If you're unsure about a particular situation, please feel free just to ask ahead of time.
- **Group projects**: This course does not include a group project.

Academic integrity policy

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- *Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)*
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

Accessibility accommodations for students with disabilities

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu/.