

IDS 1359 INNOVATION-IN-ACTION – Summer A 2023, 2 credits

Section/Class	Location	Day & Time	
0184/14048	Infirmary/MALC	M/W Periods 2-3	9:30am – 12:15pm
019C/14052	*Beaty/Hume	M/W Periods 5-6	2:00-4:45pm

*Beaty – Week 1 of class; Hume – Weeks 2-5 of class

INSTRUCTOR: Dr. Diane Porter-Roberts, PhD E-MAIL: <u>dianep@ufl.edu</u> PHONE (CELL): 352-317-4750 OFFICE HOURS: By Appointment E-LEARNING/ CANVAS WEBSITE: <u>http://elearning.ufl.edu</u>

REQUIRED TEXT

Knapp, J., Zeratsky, J. & Kowitz, B. (2016). *Sprint: How to solve big problems and test new ideas in just five days.* New York, NY: Simon & Schuster.

REQUIRED MATERIALS

For participation in this course, you need access to the following materials throughout the class:

- Idea Book/Sketchbook for brainstorming, diagramming, idea generation (No smaller than 8" X 5" in size with blank pages. No grid or ruled paper; you can continue in your same book from IDS 1940).
- Fusion 360 (Autodesk account with Gatorlink e-mail), Microsoft PowerPoint & Word, Google Jamboard
- (Optional) Adobe Illustrator
- Two 3" X 3" post-it notepads
- 1 dry-erase whiteboard marker
- Tablet or laptop computer with camera, microphone, and internet access
- No more than \$50 per person budgeted for final prototype and poster
- Positive attitude and curious mind!

NOTE: Students may be using small power hand tools, exacto knives, hot glue guns, soldering irons, etc. Students are required to participate in in-class demonstrations and/or video tutorials to learn appropriate use of tools. Tools should be handled with respect and care and utilized for intended purposes only.



COURSE DESCRIPTION

This course focuses on the development of creative problem-solving strategies through completion of an innovative project. Students will refine the design thinking skills developed in IDS 1940, prototype a concept, test and refine the prototype, and complete and present the final project at Catalyst. *Prerequisite: Passing grade in IDS1940: Creativity & Design Thinking for Innovation*

PURPOSE OF COURSE

Students will become fully immersed in the human-centered design thinking process. Students will be tasked with finding innovative solutions to real-world problems through building an original concept, testing and iterating the idea, and presenting a complete prototype that will be exhibited and presented in an all-class, public, IA exhibition, known as the Catalyst Showcase. Final prototypes will demonstrate knowledge and skills from IDS 1940, including design thinking, effective interdisciplinary teamwork, and 3D modeling.

COURSE GOALS & OBJECTIVES

By the end of this course students will:

- 1) Experience the human-centered design thinking process by:
 - a) Defining the path to innovation: Discover, Perceive, Ideate, Make, Connect, Launch,
 - b) Being able to find problems primed for innovation solutions,
 - c) Collecting research through human-centered methods of inquiry,
 - d) Evaluating research findings and synthesizing learning to find multiple unique solutions to the design problem,
 - e) Demonstrating application of creative thinking tools to generate original ideas during the design process, and
 - f) Effectively use the process of design thinking to iterate ideas, pivot ideas, and create a refined prototype that solves a design challenge.
- 2) Engage in interdisciplinary collaborations & consensus building to acquire an awareness of:
 - a) Teamwork structures and dynamics,
 - b) The nature and value of integrated design practices, and
 - c) Methods of conflict resolution.
- 3) Define innovation as a solution that is: novel, desirable, feasible, viable, and ethical.
- 4) Effectively and professionally present an innovation concept and prototype in a public showcase.

PARTICIPATION/ATTENDANCE

Please be advised that IDS1359 requires attendance. This is a short semester and a lot will be covered in each class. It is the student's responsibility to be present and appropriately engaged in class and to actively engage with peers on the team project outside of class. This course is highly experiential and requires active dialogue, small group work, and hands-on-exercises to facilitate



the learning process and to get the most out of the IA design thinking experience. Students are expected to complete all class assignments, readings, and participate in small group meetings as determined by the team.

Participation is defined as coming to class having completed all module work; being prepared to discuss required readings/videos; initiating meaningful contributions to class discussions; fully completing all individual and group class activities; participating actively in group work; and demonstrating the ability to apply class learning to assigned projects. Consequently, a significant percentage of the final grade will result from participation.

Students are expected to log on to the Canvas course page weekly and review the week's course material. Students are responsible for checking email and e-Learning for course communications *at least once every 24 hours*. Instructors will not be held accountable for students who are unresponsive to electronic communications about coursework that could impact students' grades. If students are not receiving regular emails from e-Learning or faculty, they should check their "junk" inbox in the UF email system to make sure course emails are not being incorrectly marked.

Excused absences are religious holidays, documented illnesses and/or documented emergencies approved by the course instructor. Missed work for any absence must be made up within a timely fashion. If a student misses a class, they should email their instructor as soon as possible, consult the Canvas page for class material, and obtain any necessary information regarding class or assignments from another class member in their section or a member of their team.

Requirements for class attendance, make-up work, assignments, and other work in this course are consistent with university policies that can be found at: <u>https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</u>

Note: This course only runs for five weeks during the six-week semester. There is no class following the Catalyst Showcase at the end of week 5, although there may still be some assignments due in week 6.

PROTOTYPE INVESTMENT

When the course enters the phase of prototype development students will be given a list of places at UF and in Gainesville where they can acquire materials for prototyping. Students are encouraged to be resourceful. There are many places to acquire inexpensive and even free resources. For the final team prototype and presentation, students should invest *no more* than **\$50** *maximum* **per person** in each group. This cost will cover the team poster and prototype. Using less than this amount is encouraged as long as students design a quality product and poster presentation.



INNOVATION ACADEMY SPEAKER SERIES (Required out-of-class participation)

To further enrich course learning, students will have the opportunity to learn from industry experts who will be invited to share their stories and experiences relevant to the course learning. There will be one speaker event/webinar during each summer semester. **Attendance at the IA Speaker Series event is required.** Student participation will follow the same attendance and participation policies noted in the syllabus. More information will be shared in class prior to the event.

CATALYST

Summer A: Friday June 16, 2023, 2:00-4:30pm, Florida Gymnasium (located behind Infirmary)

(Students should arrive to the event by 1:30pm)

The course will culminate in an Innovation Academy sponsored event called the Catalyst Showcase where class teams will present prototype solutions to the Catalyst Innovation Challenge. This is a juried event with selected award winners. Attendance at this event is required unless the absence is due to an extenuating conflict approved by course instructor at least <u>2 weeks</u> prior to the event. If a student has a scheduled class during Catalyst, they can request an excuse letter from their instructor to try to be excused from their other class so that they can attend Catalyst. It is up to the other instructor's discretion if the request will be granted. If it is not granted, the student will be excused from Catalyst, but needs to make sure they have worked to support their team's presentation in other ways. Participation in Catalyst is critical. There is potential that an unexcused absence at this this event will significantly impact the final course grade.

At the Catalyst Showcase event, all teams will have a 6 ft. table to display their projects. At *minimum*, teams are required to have a refined, complete, working prototype and a professional-looking, well-designed digitally printed poster. The poster should measure 24" x 36" and be dry-mounted, spray glued, or evenly taped on to a flat piece of foam core. Student teams need to bring a stand or something to prop up the poster on the table. Students may bring other created or display items for their table that enhance their prototype demonstration and pitch, however, the total amount spent on all the items cannot exceed \$50.00 per person on the team. All team members should be prepared with a one-minute form, function, and benefit pitch for their innovation.

COURSE EVALUATION

The course requires the completion of one group project (team of 4-5 students) accounted for in the Process and Final Project sections. The required course components are weighted as follows:



PARTICIPATION (40% of final grade)

(Includes attendance, active class participation, and peer evaluations)

Attendance	200 pts
Peer Evaluations	200 pts
Speaker Series Assignment	100 pts
4 Content Accountability* (@ 100 ea)	400 pts
*Related to Readings	
2 Applied Homework (@ 100 ea)	200 pts
Team Engagement/Participation	200 pts

PROCESS (30% of final grade)

Checkpoint 1	100 pts
Checkpoint 2	100 pts
Checkpoint 3	100 pts
Design Thinking Process Documentation	100 pts

FINAL CATALYST PROJECT (30% of final grade)

Final Prototype	500 pts
Final Pitch & Poster	500 pts
Participation in Catalyst	250 pts

TOTAL COURSE POINTS

2950 pts

A	100%	to	94%
A-	< 94%	to	90%
B+	< 90%	to	87%
В	< 87%	to	84%
B-	< 84%	to	80%
C+	< 80%	to	77%
С	< 77%	to	74%
C-	< 74%	to	70%
D+	< 70%	to	67%
D	< 67%	to	64%
D-	< 64%	to	61%
Е	< 61%	to	0%

Grading Scale*

*Note that a C- is not an acceptable grade for any course in which a 2.0 GPA is required. In IA all courses must be completed with an overall 2.0 GPA in the minor and a cumulative 2.0 UF GPA. For additional information on UF grade policies see: <u>https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</u>



UF POLICIES:

ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Students requesting accommodation for disabilities must first register with the Dean of Students Office <u>https://disability.ufl.edu/students/</u>. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. Students must submit this documentation prior to submitting assignments or taking any quizzes or exams. Accommodations are not retroactive; therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

ACADEMIC HONOR CODE

Every University Student is subject to the following Honor Pledge: *We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."* The Honor Code

(<u>https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</u>) specifies several behaviors that are in violation of this code and the possible sanctions. Review the most up-to-date version of the <u>Orange Book</u> for more information on violations of the Student Honor Code. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the course instructor. Bottom line: Do your own work!

***NOTE**: As an innovative addition to the classroom experience, students will be using various Al tools (i.e., ChatGPT - a language model developed by OpenAI) to enhance learning and foster creative thinking. By incorporating these tools into class activities and discussions, students are encouraged to engage with course materials in new ways and explore a wide range of ideas. Al tools are to be used only as a resource and not as a generator of student work. Students are expected to cite sources as necessary and submit original work.

*(ChatGPT was consulted to aid in writing this paragraph)

INTELLECTUAL PROPERTY

The student team holds the rights to intellectual property created and designed as a part of the course unless the student is paid by the University of Florida. The Office of Technology Licensing http://www.research.ufl.edu/otl/ is available to assist students for copyrighting and licensing of an original idea. They can also assist in releasing rights to the appropriate owner if, and when, it is applicable.



TECHNICAL SUPPORT

If you have any technical issues, including issues with Canvas in e-learning please immediately contact the UF Help Desk at helpdesk@ufl.edu; 352-392-HELP (4357) and select option 2; or the UF Help Desk website at: http://helpdesk.ufl.edu/

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

COURSE EVALUATIONS

"Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available

at <u>https://gatorevals.aa.ufl.edu/students/</u>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <u>https://ufl.bluera.com/ufl/</u>. Summaries of course evaluation results are available to students at <u>https://gatorevals.aa.ufl.edu/public-results/</u>."

UF CAMPUS RESOURCES:

HEALTH AND WELLNESS

U Matter, We Care:

Students' well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, place contact <u>umatter@ufl.edu</u> so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

- Counseling and Wellness Center: <u>https://counseling.ufl.edu</u>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
- Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161.
- University Police Department, 392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/



ACADEMIC RESOURCES

- e-Learning technical support, 352-392-4357 (select option 2) or e-mail to <u>Learningsupport@ufl.edu</u> <u>http://helpdesk.ufl.edu/</u>
- *Career Connection Center/Clothes Closet*, Reitz Union, 392-1601. Career assistance, counseling, & clothing. <u>https://career.ufl.edu/</u>
- *Library Support*, <u>http://cms.uflib.ufl.edu/ask</u> Various ways to receive assistance with respect to using the libraries or finding resources.
- *Teaching Center*, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <u>http://teachingcenter.ufl.edu/</u>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <u>http://writing.ufl.edu/writing-studio/</u>



COURSE OUTLINE¹

Week	Topics	Reading for the Week	Due – check Canvas for
			date/time
< ~ ~	SET THE STAGE	<i>Sprint</i> – Introduction & Ch. 1-5;	-Skills & Interests Survey
1A VER	Course Introduction	pp.1-67 (discussion on week 2A)	
8	Review Syllabus		
1A DISCOVER	Review Design Thinking		
_	Introduce the Sprint Design		
	Challenge		
	Discuss Class Format		
	Build a Team		
6 6	MAPPING – TEAM DESIGN		
1B VER	THINKING PROCESS		
1B DISCOVER	Team Roles & Goals		
DIS	Map the Challenge		
	Set up Jamboard		
		-	
ΑIJ	SET A TARGET	<i>Sprint</i> –Ch. 6-9; pp. 68-123	-Content Accountability 1 –
2A EIVE	Brainstorming	<i>Sprint</i> –Ch. 6-9; pp. 68-123 (discussion on week 3A)	Sprint Chapters 1-5 discussion
2A ERCEIVE	Brainstorming Journey Mapping		Sprint Chapters 1-5 discussion -Design Sprint Team Role
2A PERCEIVE	Brainstorming Journey Mapping Empathizing with the User		Sprint Chapters 1-5 discussion
2A PERCEIVE	Brainstorming Journey Mapping		Sprint Chapters 1-5 discussion -Design Sprint Team Role
2A PERCEIVE	Brainstorming Journey Mapping Empathizing with the User		Sprint Chapters 1-5 discussion -Design Sprint Team Role
	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews		Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1
	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research		Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments
	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM		Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1
	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned		Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1
	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning	(discussion on week 3A)	Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1
A 2B E PERCEIVE	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned	(discussion on week 3A) <i>Sprint</i> – Ch. 10-14; pp. 127-190	Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1 -Applied Homework 1 -Content Accountability 2 –
A 2B E PERCEIVE	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned Begin to Brainstorm	(discussion on week 3A) <i>Sprint</i> – Ch. 10-14; pp. 127-190 (discussion on week 4A)	Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1 -Applied Homework 1
A 2B E PERCEIVE	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned Begin to Brainstorm REMIX AND IMPROVE	(discussion on week 3A) <i>Sprint</i> – Ch. 10-14; pp. 127-190 (discussion on week 4A) <i>Note: Even if you do not have</i>	Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1 -Applied Homework 1 -Content Accountability 2 –
A 2B E PERCEIVE	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned Begin to Brainstorm REMIX AND IMPROVE Decision Making	(discussion on week 3A) Sprint – Ch. 10-14; pp. 127-190 (discussion on week 4A) Note: Even if you do not have class because of Memorial Day,	Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1 -Applied Homework 1 -Content Accountability 2 –
A 2B E PERCEIVE	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned Begin to Brainstorm REMIX AND IMPROVE Decision Making Concept Development	(discussion on week 3A) <i>Sprint</i> – Ch. 10-14; pp. 127-190 (discussion on week 4A) <i>Note: Even if you do not have</i> <i>class because of Memorial Day,</i> <i>you are still responsible for the</i>	Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1 -Applied Homework 1 -Content Accountability 2 –
A 2B E PERCEIVE	Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned Begin to Brainstorm REMIX AND IMPROVE Decision Making Concept Development Build a Storyboard	(discussion on week 3A) Sprint – Ch. 10-14; pp. 127-190 (discussion on week 4A) Note: Even if you do not have class because of Memorial Day,	Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments -Checkpoint 1 -Applied Homework 1 -Content Accountability 2 –



	SKETCH & DECIDE – TEAM		-Checkpoint 2
3B TE	DESIGN THINKING PROCESS		-Applied Homework 2
3B IDEATE	Concept Development		Applied Homework 2
₽	Build a Storyboard		
	Design & Branding		
	PROTOTYPE	<i>Sprint</i> – Ch. 15-17 & Liftoff; pp.	-Content Accountability 3 –
4A MAKE	Prototyping/Fusion Team	195-231 (discussion on week	Sprint Chapters 10-14
ž	Evaluate the Solution	5A)	discussion
	Refine Concepts		
	Discuss Pitch and Presentation		Catalyst Registration
	Catalyst Readiness		Catalyst Fellows visit this
	Catalyst Fellow visits class		week
е ш	PROTOTYPE – TEAM DESIGN		-Checkpoint 3
4B MAKE	THINKING PROCESS		
Σ	Evaluate the Solution		
	Refine Concepts		
	Pitching General Business Models		
	TEST & ITERATE		-Content Accountability 4 –
5A CONNECT	Quick User Testing		Sprint Chapters 15-17
N N	Integrating Feedback		
ő	Iteration		Mock Catalyst this week
Ŭ	Mock Catalyst in Class with IA		
	Ambassadors		
ω⊢	PRESENTATION & PERSUASION		DUE IN-CLASS Final Prototype
5E CONNECT	Professionalism		& Presentation
ZZ	Being Prepared		
00	Making a Concept Real		
	Planning for What's Next		



5B ² CATALYST	CATALYST Summer A: June 16, 2023 – Florida Gym All students arrive at 1:30pm Event from 2:00pm-4:45pm	Attend Catalyst
WEEK 6 – WRAP UP	No class this week	-People's Choice Voting -Final Peer Evaluations -Design Thinking Documentation -Final Course Evaluations

¹Course schedule subject to change at instructor's discretion ²NO CLASS, BUT MUST ATTEND CATALYST