



Is it possible to learn how to be an innovator or entrepreneur? We at the Academy for Innovation & Entrepreneurship think YES, and we are here to help make this happen all across campus!

We collaborate with faculty from all schools and colleges to integrate innovation or entrepreneurship into existing courses. AIE has a team of Innovation and Entrepreneurship (I&E) educators eager to work with faculty to design ways to integrate and teach I&E methodology and concepts in their courses.

What does AIE teach, exactly?

While there are certainly many innovation and entrepreneurship methods and processes out there, we focus on introducing students to the following:

- **Design Thinking** – a human-centered, prototype-driven, creative process that helps teams come up with unexpected solutions to problems.
Design Thinking includes the following:
 - gaining empathy for your end users
 - reframing the problem in an expected way
 - ideating or brainstorming various solutions
 - prototyping possible solutions in a quick & low-fidelity manner
 - returning back to the end user to seek feedback

- **Lean Startup** – an iterative process for developing a product and business model.
Lean Startup includes the following:
 - getting out of the classroom and off campus to interview dozens or even hundreds of potential customers and stakeholders (customer discovery)
 - understanding their problems and pain points in the market and society
 - using these interviews/experiments to validate or invalidate key components of the initial business model
 - recognizing the need to pivot (changing your business model)

How exactly does AIE work with Faculty?

We work with faculty in three different ways based on how they describe themselves: (1) Distinguished Fearless Faculty, (2) Fearless Faculty, and (3) Light-Touch Faculty. In order to choose how to describe yourself, we ask that you consider the extent to which you want to integrate I&E methodology into your course, teach the concepts on your own and contribute to the Fearless Faculty Learning Community. Rather than bore you with more details written in not-very-well-constructed prose, take a look at the tables on the following two pages for more details.

How AIE works with Faculty to integrate INNOVATION (design thinking)

Beta version!
#neverstopprototyping

Type of Interaction	AIE General Support	Curriculum Options (See ter.ps/DTmenu for details.)	Fearless Faculty Learning Community (see next page for details)
Light-Touch Faculty			
Faculty that want to introduce their students to I&E in either one or two class sessions.	AIE Teaching Staff (either an AIE Facilitator or an experienced Peer Innovation Coach) teaches 1-2 sessions of I&E methodology	<p>Design Thinking Appetizers: Choose from a set of bite-sized introductions to Design Thinking.</p> <p>In-class Support: YES — I&E modules (no more than two class sessions) are facilitated by AIE Teaching Staff.</p>	If you're interested in the AIE Learning Community consider signing up to be either a Fearless Faculty or Distinguished Fearless Faculty!
Fearless Faculty			
Faculty that teach an existing course where they want to integrate I&E into a course project.	AIE Teaching Support from AIE Facilitators to deliver a 3-session I&E module	<p>Design Thinking Appetizers: Choose from a set of tested bite-sized introductions to Design Thinking.</p> <p>Design Thinking Light Entrees: Incorporate a highly scaffolded design thinking mini-project into your course.</p> <p>Design Thinking Cooking Classes: An AIE Facilitator will coach you through designing and facilitating your own Design Thinking sessions.</p> <p>In-class Support: YES — We will be available to teach & assist in the classroom for up to three class sessions.</p>	We invite you to learn from & contribute to the Learning Community by leading a Presentation/Share-Out during one of the Learning Community sessions.
Distinguished Fearless Faculty			
Faculty that teach a Fearless Ideas course.	<ul style="list-style-type: none"> Funding Fearless Ideas course designation in Testudo AIE Teaching Support from AIE Facilitators to integrate I&E methodology into course and teach up to 8 I&E sessions Priority use of Innovation Classrooms in the new Edward Saint John Learning & Teaching Center (coming soon!...) 	<p>Design Thinking Appetizers: Choose from a set of tested bite-sized introductions to Design Thinking.</p> <p>Design Thinking Light Entrees: Incorporate a highly scaffolded design thinking mini-project into your course.</p> <p>Design Thinking Cooking Classes: An AIE Facilitator will coach you through designing and facilitating your own Design Thinking sessions.</p> <p>In-class Support: YES — We will be available to teach & assist in the classroom for up to eight class sessions.</p>	<ul style="list-style-type: none"> You're committing to contributing by leading a Presentation/Share-Out during one of the Learning Community sessions! You will be eligible to receive funding to attend Professional Development workshops in Design Thinking and Lean Startup.

AIE General Support that is common to all Faculty:

- Supplies (post-it notes, markers, prototyping materials, etc) for I&E sessions
- Access to Peer Innovation Coaches (trained juniors & seniors that can assist in coaching students through I&E projects and activities)



How AIE works with Faculty to integrate ENTREPRENEURSHIP (lean startup)

Type of Interaction	AIE General Support	AIE Teaching Support Details	Fearless Faculty Learning Community (see next page for details)
Distinguished Fearless Faculty			
Faculty that teach a Fearless Ideas course....	<ul style="list-style-type: none"> Funding Fearless Ideas course designation in Testudo AIE Teaching Support from AIE Facilitators to integrate I&E methodology into course and teach up to 8 I&E sessions Priority use of Innovation Classrooms in the new Edward Saint John Learning & Teaching Center (coming soon!...) 	<p>Custom Integration of I&E Modules: YES — An AIE Facilitator will sit down with you & help you integrate Lean Startup into your course schedule.</p> <p>Custom Curriculum Design for I&E Sessions: YES — We will rely on slide decks, activities & handouts we have used in the past, but will work with you to customize teaching materials for your specific course & student projects).</p> <p>In-class Support: YES — In the first couple offerings of the course, we will be available to teach & assist in the classroom for up to eight class sessions. This support lasts for 3 course offerings with the idea that eventually you will be leading the I&E sessions (we will help you get there!).</p>	<ul style="list-style-type: none"> You're committing to contributing by leading a Presentation/Share-Out during one of the Learning Community sessions! You will be eligible to receive funding to attend Professional Development workshops in Design Thinking and Lean Startup.
Fearless Faculty			
Faculty that teach an existing course where they want to integrate an I&E module customized to their course project....	AIE Teaching Support from AIE Facilitators to help design & deliver a 2-3 session I&E module	<p>Custom Integration of I&E Modules: YES — An AIE Facilitator will sit down with you & help you determine how to integrate Lean Startup into your course schedule.</p> <p>Custom Curriculum Design for I&E Sessions: YES — We will rely on slide decks, activities & handouts we have used in the past, but will work with you to customize for your course & student projects.</p> <p>In-class Support: YES — In the first couple offerings of the course, we will be available to teach & assist in the classroom for up to three class sessions. This support lasts for 3 course offerings, with the idea that eventually you will be leading the I&E sessions (we will help you get there!).</p>	We invite you to learn from & contribute to the Learning Community by leading a Presentation/Share-Out during one of the Learning Community sessions.
Light-Touch Faculty			
Faculty that want to introduce their students to I&E in either one or two class sessions...	AIE Teaching Staff (either an AIE Facilitator or an experienced Peer Innovation Coach) teaches 1-2 sessions of I&E methodology	<p>Custom Integration of I&E Modules: NO — You will choose from a well-tested set of stock Lean Startup modules.</p> <p>In-class Support: YES — I&E modules (no more than two class sessions) are facilitated by AIE Teaching Staff. There is no expectation for you to eventually lead the sessions.</p>	If you're interested in the AIE Learning Community consider signing up to be either a Fearless Faculty or Distinguished Fearless Faculty!

AIE General Support that is common to all Faculty:

- Supplies (post-it notes, markers, prototyping materials, etc) for I&E sessions
- Access to Peer Innovation Coaches (trained juniors & seniors that can assist in coaching students through I&E projects and activities)



AIE Fearless Faculty Learning Community

The AIE **Fearless Faculty Learning Community** consists of both *Distinguished Fearless Faculty* and *Fearless Faculty* that are seeking AIE Teaching Support. This learning community is a place to share both successes AND lessons learned from things we've tried in our courses with regard to innovation, such as teaching Design Thinking (DT) and Lean Startup (LS).

Each *Learning Community Session (lunch provided)* will consist of the following:

- A theme/topic
- 1 or 2 Faculty Presentations/Share-Outs + Discussion
- 1 AIE Staff Share-Out + Discussion

Potential Topics for Learning Community Sessions:

- Evaluation/Grading
- Prototyping
- Scoping a Design Project
- Empathy
- Teams
- Reframing Problems
- Ideation
- Business Model Canvas (LS)
- Value Propositions (LS)
- Customer Discovery (LS)
- Combining LS + DT
- Storytelling/Presentations

Fall 2017

September

Learning Community Lunch

October

Learning Community Lunch

November

Learning Community Lunch

Winter 2018

January

4-day DT workshop @d.school*
(by application)

Spring 2018

February

Learning Community Lunch

March

Learning Community Lunch

April

Learning Community Lunch

May

Learning Community Lunch

Summer 2018

June

4-day DT workshop @d.school*
(by application)

July

4-day DT workshop @d.school*
(by application)

**New Fearless Faculty that have not taught with AIE Teaching Staff before are required to attend either an Intro to Design Thinking workshop or an Intro to Lean Startup workshop. Everyone else is always welcome to join, but certainly not required!

*Example of a Professional Development workshop! First priority will be given to Distinguished Fearless Faculty.



How do I know if my course is a good fit?

We are certainly open to (and excited about!) finding ways to weave I&E into courses that might not seem to traditionally overlap with I&E. That being said, from our previous prototypes, we've learned that courses that either cover I&E directly as a topic or ask students to complete a collaborative project where they're coming up with solutions to problems result in the most successful collaborations.

If you'd like to talk more about whether introducing I&E into your course makes sense, please email Erica (eestrad3@umd.edu) to set up a time to chat.

What makes for a successful collaboration with AIE?

Although this is a bit dependent on how you decide to describe yourself (Distinguished Fearless Faculty, Fearless Faculty or Light-Touch Faculty), there are some general things to aspire to for spectacular collaborations;

- **Be open to learning the I&E concepts yourself!** Our Distinguished Fearless & Fearless Faculty commit to being heavily involved in learning and teaching I&E concepts; however, we also encourage Light-Touch Faculty to be highly involved as well. We've observed in the past that students can connect more to the material when their professor explains how I&E relates to the course and their field both before and during the I&E sessions.
- **Introduce I&E concepts early and often.** We've found that students engage more deeply when they are primed for I&E sessions. Specifically, it helps to introduce I&E sessions in your syllabus, and make sure they integrate seamlessly into the rest of the curriculum. AIE Facilitators can provide examples from other classes and work with you on how best to do this.
- **Help us hold our time-strapped Fearless Innovators accountable.** We've learned that, whether it's through reflecting on the process or turning in some aspect of their work, students engage best when they are held accountable for I&E aspects of the course. For example, if you ask us to help introduce the concept of prototyping in your course, students should have some sort of **graded deliverable** related to prototyping. AIE Educators can provide examples from other classes and work with you to design deliverables that will enhance the I&E experience for your students.
- **Be ready to start planning for sessions before the semester begins!** While creative breakthroughs can happen just before deadlines, we would rather not be planning up until the minute since we typically support almost 20 different courses simultaneously during a semester. To help us balance that many courses, planning for I&E sessions should take place before the semester begins. While we do try to "meet the students where they are" and can fine-tune sessions based on how things are going in the course, big last-minute changes in what we're covering and how we're teaching doesn't really work. See the table below for exact dates on when planning can begin for this semester.



- **Be ready to get your hands dirty!** We often design sessions that are very hands-on and action-oriented. This means that there is sometimes quite a bit of set up before class, and clean up after class. We are always ready to roll up our sleeves and encourage you to do the same!
- **Help us create a distraction-free environment.** Our favorite topic. Laptops and cell phones. Since every classroom culture is different, we'll certainly want to brainstorm with you creative ways to convincing our Fearless Innovators to disconnect for an hour or two.

You haven't scared me away yet! What is the process for initiating a collaboration?

	Details	Dates
Step 1:	Choose a Fearless Educator Designation . (https://goo.gl/forms/c2sww4sczcxz0Cck73) Use the charts on pages 2 and 3 to determine if you are a Distinguished Fearless Faculty, Fearless Faculty or Light-Touch Faculty.	You'll need to submit this before submitting the <i>Teaching Support Request</i> form due on <i>July 26</i> .
Step 2:	If you want to include Design Thinking in your course, study the Innovation Menu (ter.ps/DTMenu) and determine what you'd like to order. If you want to include Lean Startup in your course, skip to Step 3.	
Step 3:	Take a look at your syllabus and think about when you might want to include I&E in your course. (An estimate is fine – we have some world-travelin' Facilitators, so we want to make sure the Facilitator assigned to work with you will be here.)	You'll need this for the <i>Teaching Support Request</i> form due on <i>July 26</i> .
Step 4:	Submit the Teaching Support Request form . (https://goo.gl/forms/KScHdDz3Q3P03N6j1) If you submit before July 26, and are requesting customized sessions, we will do our best to match you to a facilitator immediately so that you can start working on your course early.	No later than <i>5pm Wednesday July 26!</i>
Step 5:	We will put all the courses that submit a Teaching Support Request before the deadline into a highly scientific algorithm that matches you to one of our esteemed AIE Facilitators (or Peer Innovation Coaches).	<i>July 27-August 2</i>
Step 6:	We will introduce you to your AIE Facilitator.	<i>August 4</i>
Step 7:	Work with your AIE Facilitator to set specific dates for sessions and start to design session details.	<i>August 5-August 27</i>
Step 8:	Depending on the type of collaboration, there will be opportunities to debrief the I&E sessions and the collaboration process.	Towards the end of the semester



Innovation Menu

The Academy for Innovation & Entrepreneurship works with faculty to integrate design thinking into courses. We present to you, our menu, a carefully crafted collection of curriculum for the creatively curious. This menu features ways in which we work with faculty to integrate **Design Thinking, a process that helps solve difficult real-world challenges in an iterative and human-centered way.**

We pride ourselves in the freshest and most experiential curriculum, that is constantly being tested, re-designed and tested again by our team of Design Thinking Facilitators and Peer Innovation Coaches. While we have been known to whip up some specialties “off the menu” for our most loyal customers, we encourage you to first indulge in what you see here.

Overview of Offerings:

- **Appetizers** // Taught by AIE Facilitators
- **Light Entrees** // Taught by AIE Facilitators
- **Private Cooking Classes** // AIE Facilitators prepare faculty to teach a Design Thinking session

Design Thinking Appetizers LTF, FF, DFF

Don't have a project for students to apply design thinking to? Only have time for a session or two of Design Thinking? Our appetizers are a wonderful way to introduce design thinking in small bite-sized ways. Be careful -- these are sure to build an appetite for design thinking!

Introductory Project.....75 min

Students complete an entire design thinking project which will help introduce them to the steps of the process.

Project Flavors:

- » Mon-Yays // Redesign the Monday Morning experience.
- » Oral Hygiene // Redesign the oral hygiene care experience.
- » New City // Redesign the experience of traveling to a new city.

“Skillfull” Small Plates.....75 min each

These stand-alone sessions don't require an attached project. They're grouped together below by theme.

 Develop deep empathy & spot design opportunities

HOW TO TALK TO STRANGERS

By following a series of prompts sent to their mobile device, students conquer their fear of approaching strangers. This session builds up to them conducting empathy interviews.

HOW TO SEE THE WORLD FROM A FRESH PERSPECTIVE

Students learn strategies for spotting innovation-ripe opportunities.

HOW TO SEE THE WORLD LIKE AN ANTHROPOLOGIST

Students improve their observation skills by listening to a podcast which will prompt them to “notice” the world around them more deeply and fully

“Skillful” Small Plates, cont.

 Brainstorm to generate radical ideas

HOW TO BE AN IDEA-GENERATING MACHINE

Students practice conducting effective brainstorming by learning various brainstorm techniques

 Radical Collaboration

HOW TO LEVERAGE A DIVERSE TEAM

Students experiment with different ways of thinking and working in teams, and learn to leverage these different ways of thinking and working while doing teamwork

Design Thinking Light Entrees ^{FF, DFF}

If you want to introduce students to the entire design thinking process in an in-depth and highly scaffolded way, consider these light entrees. These offerings pair well as a pre-cursor to a longer course project where design thinking will be applied.

Mini Project.....3 sessions x 75 min

Students complete an entire design thinking project that will walk them through three steps: Build Empathy, Brainstorm Ideas, Test Solutions. You will be paired with an AIE facilitator to conduct this project. You may choose from the Project flavors provided, or work off menu a bit as long as the flavor meets the criteria for a good mini project.

Examples of Project flavors:

- » Redesign the Campus Move-In Day experience for in-coming UMD freshman.
- » Redesign the commute experience for UMD staff, faculty and students that live off-campus.
- » Redesign the campus wellness experience.

Design Thinking Private Cooking Classes ^{FF, DFF}

Want to seamlessly integrate the concept of prototyping, empathy or some other Design Thinking topic of your choice? Try one of our Private Cooking Classes where you are the chef, and we coach you through designing and facilitating a session on Design Thinking. This option works well if your students are working on a course project, and you want them to apply a specific design thinking concept or method to their project.

Private Cooking Class.....It depends.

The length of class time depends on what you and your AIE Facilitator cook up! You will be paired with an AIE Facilitator to design the sessions, activities, assignments (and whatever else might be needed) for you to facilitate with your students. If this is your first time taking the lead on teaching a Design Thinking concept, we recommend choosing one concept to start.

Design Thinking concepts:

- » Empathy (Interviewing, Observation, Immersion)
- » Synthesis and Define (Finding patterns in data, Creating a Point of View)
- » Ideation (Brainstorming)
- » Prototyping (Experience Prototyping, Prototype to Test)
- » Storytelling (Story Arc, Storyboards, Show don't tell)
- » Team Formation (Crossing the Line & Speed-dating)
- » Define your own...

APPENDIX A – Design Thinking and Lean Startup Introductory Resources

DESIGN THINKING

Success By Design Segment from 60 minutes // <http://www.cbsnews.com/videos/team-looks-to-get-kids-eating-healthier-in-just-two-days/>

IDEO Shopping Cart Video // <http://www.youtube.com/watch?v=M66ZU2PClcM>

“Design Thinking” in Harvard Business Review // <http://www.ideo.com/by-ideo/design-thinking-in-harvard-business-review>

LEAN STARTUP

The Lean Approach Introduction Video from Kauffman Foundation’s Startup School // <http://www.entrepreneurship.org/Founders-School/The-Lean-Approach>

The Lean Approach: The Lean Method Video from Kauffmann Foundation’s Startup School // <http://www.entrepreneurship.org/Founders-School/The-Lean-Approach/The-Lean-Method.aspx>

“Why the Lean Start-Up Changes Everything” in Harvard Business Review // <http://steveblank.com/2013/04/16/when-hell-froze-over-in-the-harvard-business-review/>

