

COURSE DESCRIPTION

This course inspires entrepreneurial innovation and creativity through interactive lectures, workshops, and case studies in contemporary issues to include energy, life sciences, healthcare, and technology. Students will gain awareness of entrepreneurial innovation sources, structures and dynamics. Students will develop individual and group skills for generating innovative ideas and find ways to apply these ideas to address current issues and problems in different industries and settings.

COURSE OBJECTIVES

The overall course objective is to provide an understanding of entrepreneurship, creativity and innovation and how they can be applied to contemporary issues in various industries and markets. Specific objectives include providing students with the following:

- Development of a personal skill set for creativity, innovation and entrepreneurship and specific concepts and tools for combining and managing creativity and innovation in an organization.
- Understanding of the sources of innovation opportunities and development of the skills to identify and analyze these opportunities for entrepreneurship and innovation.
- Understanding of the industry dynamics of and factors for developing successful innovations and apply this understanding to innovations in sectors including energy, healthcare and technology.

COURSE MATERIALS

- Innovator's Toolkit: 10 Practical Strategies to Help You Develop and Implement Innovation (Harvard Business Essentials), Harvard Business School Press (2009) ISBN-10: 1422199908
- Green, James V. (2015) The Opportunity Analysis Canvas. CreateSpace. (Continued from HEIP143)
- Additional readings of case studies, articles, reports and other materials. (see ELMS)

LOCATION & TIMES

Section 0101 Tues & Thurs 11:00am – 12:15pm La Plata Multipurpose Room  
Section 0201 Tues & Thurs 2:00pm – 3:15pm La Plata Multipurpose Room  
Section 0301 Tues & Thurs 3:30pm – 4:45pm La Plata Multipurpose Room

INSTRUCTOR(S)

Jay A. Smith, Dir., Entrepreneurship & Innovation Program, La Plata 1102, [jaysmith@umd.edu](mailto:jaysmith@umd.edu),  
Ryan N. Elza, Academic Program Specialist, EIP, La Plata Hall 1104, [relza@umd.edu](mailto:relza@umd.edu)

*Guest Lecturers:*

Design Thinking: Karen Hold UMD Academy for Innovation & Entrepreneurship Facilitator  
Ford Innovation Management Challenge: George Halow'86, Ford Vehicle Technology & Planning Mgr.  
Project Mgt.: Howard Pedolsky'61 Founder Orbital Systems Ltd, Ukram Industries Inc. [orbitaal@aol.com](mailto:orbitaal@aol.com)

TEACHING ASSISTANTS

|      |                    |                        |  |
|------|--------------------|------------------------|--|
| 0101 | Brooke Nesselt '19 | Mechanical Engineering | <a href="mailto:brookenesselt@gmail.com">brookenesselt@gmail.com</a> |
| 0201 | Conor Casey '19    | Aerospace Engineering  | <a href="mailto:callmeconor@gmail.com">callmeconor@gmail.com</a>     |
| 0301 | Edmond Lee '19     | Finance & Accounting   | <a href="mailto:potomac97@gmail.com">potomac97@gmail.com</a>         |

## TEACHING AND LEARNING STYLE

The course will be lecture-based and highly interactive. Class participation is required. The teaching style will include class discussions on academic concepts with practical examples and applications. Students will be challenged to grasp concepts and relate them to other concepts presented. Team projects, workshops, and in-class activities are essential elements of course learning and deliverables.

## GRADING

|                                       |      |   |     |
|---------------------------------------|------|---|-----|
| Class Participation                   | 5%   | Do Good Challenge Class Activities (team) | 5%  |
| Entrepreneurship/Innovation Events    | 5%   | Do Good Challenge Proposal (team)         | 5%  |
| Indiv. Assignments, Posts & Quizzes   | 10%  | Do Good Challenge Pitch Video (team)      | 5%  |
| Ford Innovation Challenge             | 10%  | DGC Project Presentation & Report (team)  | 20% |
| Final Innovation Project Presentation | 10%* | Do Good Challenge Reflection              | 5%  |
| Final Innovation Project Report       | 10%* | Do Good Challenge Peer Evaluations        | 10% |

\*Team projects will be 8% each plus 2% for peer evaluation & 2% individual reflection

- *Class Participation (5%)* Attendance is required, as topics increase in complexity and build upon another. You are expected to come to class prepared, and play an active role in the discussions and both graded and ungraded activities that take place during class periods. Students should create and/or update their LinkedIn page and EIPConnect profile during the semester. (<http://eipconnect.umd.edu>). See the attendance policy for details.
- *Entrepreneurship/Innovation Events (5%)* Students are required to attend the following entrepreneurial events during the semester for at least 1 hour each: *Social Enterprise Symposium, Do Good Challenge Finals, 1 Whiting-Turner Lecture* and one other event of their choosing. (Substitutes may be allowed for students with conflicts.) Each student is required to provide a brief reflection of learning from activities and events which are worth up to 1 point each. Additionally, all students are required to attend the EIP Capstone Symposium Terp Tank, on May 10 (no reflection required). *Reflections on up to 2 additional entrepreneurial events may be submitted to receive up to 1 extra-credit point each.*
- *Individual Assignments, Discussion Posts & Quizzes (10%)*: To support learning, students are required to complete 10 1pt. online discussions, quizzes or other assignments related to readings or projects.
- *The Ford Innovation Management Challenge (10%)* is a simulated experience in how to foster innovation in an established organization and is led by senior Ford staff who are on the front lines of delivering innovation for the company. It is designed to introduce students to tools to manage and deliver an innovation including customer value and revenue assessment, cost assessment, business case, stakeholder mapping, implementation planning, and contingency planning. The 5-day Challenge will begin on **Sunday, February 19 at 7pm in the La Plata MPR** with an overview lecture and work session, continue with a workshop on 2/21 and end with student team presentations on Thursday, February 23. Student teams will submit a written plan and present their proposal in a 5-minute presentation in front of a panel of judges. Top 4 teams will receive cash awards of \$400, \$300, \$200 and \$100. Plans and presentations are weighted equally, and will be judged by Ford & EIP staff as well as other professionals.
- *Do Good Challenge (DGC) (50%)* Each section will divide into teams of 4-5 students and compete in the campus-wide Do Good Challenge <http://publicpolicy.umd.edu/dogood-institute/programs/do-good-challenge>. This 8-week project is meant to give students a practical experience leveraging their creativity, innovation and hard-work using social media and other resources for social impact. The challenge awards over \$20,000 of total prize money and gives students a chance to get their organization's name in front of a panel of high-profile judges and hundreds of supporters and professionals at the Finals. The Challenge

will be evaluated according to 3 main criteria: Impact, Leverage, and Creativity. Impact will assess both the scope and the depth of the project. The deliverable requirements for the course will include these requirements as well as quality of presentation.

- Dates: Challenge period: 2/7-4/4, DGC Reports Due: 4/4, Semi-finals: 4/13, Finals: 4/26
- Teams reaching the semi-finals receive 1 extra-credit point, teams reaching the finals receive additional 3 extra credit points for first place 2 extra-credit points for second place and 1 extra-credit point for third place. Teams reaching the DGC showcase receive 1 addition point.
- Teams should compete in the venture category of DGC

More details on the requirements for these deliverables will be available on ELMS

- *Individual Innovation Project Presentation & Report (20%)* This individual project is an examination of innovation activities for an industry, an industry sub-segment, or particular issue/problem. Students should focus on industries/issues in which they have an interest to actively participate in the future. The 5-page written report (10% of course grade), 5-minute presentation (10% of course grade), should include a thoughtful analysis of how the industry has navigated challenges and capitalized on innovation opportunities, not just a history/summary of the industry's activities. Each project should identify at least one under-recognized area for opportunity in the industry and present an innovative solution and strategy for how to capitalize on it as an entrepreneurial venture. Each student should conduct at least 2 first person interviews..
- *Final Team Project Presentation and Report* Teams of 3-5 students will examine an innovation activities related to an important issue/problem. The assignment should include a thoughtful analysis of how the industry/market has addressed the challenges and capitalized on innovation opportunities, not just a history/summary of the activities. Each team should identify at least one problem or under-recognized area for opportunity in the industry/market and present a solution for the problem and a strategy how to capitalize on it as an entrepreneurial venture. Each team will provide a 12 minute team presentation (8% of course grade), 10-12 page written report (8%), and individuals will provide a peer review evaluation of members' contributions (2%) and individual reflection (2%). Each team is required to conduct and document at least 2 first-person (field or Skype/phone) interview **per team member** on key aspects of your project. A survey may be used to replace one of the interviews for the team.

## ATTENDANCE POLICY

University policy excuses the absences of students for illness (self or dependent), religious observances, participation in University activities at the request of university authorities, and compelling circumstances beyond the student's control. Students must request the excuse in writing and supply appropriate documentation, e.g., medical documentation. Students with written, excused absences are entitled to a makeup exam at a time mutually convenient for the instructor and student. For inclement weather, the course will adhere to the university schedule. Official closures and delays are announced on the campus website and snow phone line (301-405-SNOW) as well as local radio and TV stations. The University of Maryland policy on religious observance states that students should not be penalized in any way for participation in religious observances and that, whenever feasible, they should be allowed to makeup academic assignments that are missed due to such absences. However, the student must personally hand the instructor a written notification of the projected absence within two weeks of the start of the semester. The request should not include travel time. It is the student's responsibility to inform the instructor of any intended with final examinations, since failure to reschedule a final examination before the conclusion of the final examination period may result in loss of credits during the semester.

## GUIDELINES FOR ALL COURSE ASSIGNMENTS

The following guidelines apply to all assignments without exception.

- All written assignments will be in 12 pt font, Times New Roman, & single-spaced with 1" margins, with the exception of presentations that will be delivered using PowerPoint.
- All written work must be submitted at the beginning of class on the date due. If you will not be in class on the due date, your paper must still arrive by the time and date it is due. You are certainly encouraged to turn in papers before the deadline. Late papers will not be accepted for grading.
- Do not exceed the page limit requirement as stated in each assignment.
- Assignments not meeting all of these guidelines will not be accepted.

## ACADEMIC INTEGRITY

The University is one of a small number of universities with a student-administered Honor Code and an Honor Pledge. The Code prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures. Compliance with the code is administered by the Student Honor Council, which strives to promote a "community of trust" on the College Park campus. Allegations of academic dishonesty should be reported directly to the Honor Council (314-8450) by any member of the campus community. For more information, consult the Office of Student Conduct website. For a description of the University's definition of academic dishonesty and answers to frequently asked questions about the Code of Academic Integrity, consult the Student Honor Council's website.

## ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The University will provide appropriate accommodations for students with documented disabilities. In order to ascertain what accommodations may need to be provided, students with disabilities must inform faculty of their needs at the beginning of the semester.

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| <b>SCHEDULE (SUBJECT TO CHANGE)</b> |  |  |  |
|-------------------------------------|--|--|--|

|  | Day | Date | Topic |
|--|-----|------|-------|
|--|-----|------|-------|

|   |     |        |   |
|---|-----|--------|---|
| 1 | Thu | Jan 26 | <b>Course Overview and Do Good Challenge Introduction</b> |
|---|-----|--------|---|

Part 1: Introduction to Innovation

|   |     |        |   |
|---|-----|--------|---|
| 2 | Tue | Jan 31 | <b>Team Formation &amp; Broad Issue Selection</b>       |
| 3 | Thu | Feb 2  | <b>The Innovation Process</b>                           |
| 4 | Tue | Feb 7  | <b>Introduction to Design Thinking Experience – AIE</b> |
| 5 | Thu | Feb 9  | <b>Idea Generation &amp; Design Thinking for DGC</b>    |
| 6 | Tue | Feb 14 | <b>Opportunity Recognition &amp; Value Creation</b>     |
| 7 | Thu | Feb 16 | <b>Opportunity Evaluation &amp; Support</b>             |
|   | SUN | Feb 19 | <b>FORD “Innovation Management Challenge” Kickoff</b>   |
| 8 | Tue | Feb 21 | <b>FORD Challenge Workshop</b>                          |
|   | Wed | Feb 22 | <i>Written reports due</i>                              |
| 9 | Thu | Feb 23 | <b>FORD Challenge Student Team Presentations</b>        |

PART 2 DGC Implementation

|    |     |        |  |
|----|-----|--------|--|
| 10 | Tue | Feb 28 | <b>Implementing Your DGC Project Solution</b>                  |
| 11 | Thu | Mar 2  | <b>DGC Project Management Workshop</b>                         |
|    | Fri | Mar 3  | <i>Social Innovation Symposium (attend for 1 hour)</i>         |
| 12 | Tue | Mar 7  | <b>Scaling the Solution: Collaboration &amp; Distribution</b>  |
|    | Tue | Mar 7  | <i>Pitch Dingman Finals</i>                                    |
| 13 | Thu | Mar 9  | <b>Spreading the Idea: Marketing &amp; Communication</b>       |
| 14 | Tue | Mar 14 | <b>Story Telling—AIE Exercise moved to 5/2 due to Snow Day</b> |
| 15 | Thu | Mar 16 | <b>Do Good Challenge Coaching &amp; Team Time</b>              |

**SPRING BREAK**

|    |     |        |   |
|----|-----|--------|---|
| 16 | Tue | Mar 28 | <b>DGC Workshop –Check-in and Coaching</b>              |
| 17 | Thu | Mar 30 | <b>DGC Workshop – Accomplishments &amp; Challenges</b>  |
|    | Thu | Mar 30 | <b>W-T Lecture: Pat Antkowiak, CTO Northrop Grumman</b> |
| 18 | Tue | Apr 4  | <b>Do Good Challenge Presentations</b>                  |
|    | TUE | Apr 4  | <b>DO GOOD CHALLENGE FINAL REPORTS DUE 11:59pm</b>      |

Part 3: Contemporary Issue Innovation Project

|    |      |        |   |
|----|------|--------|---|
| 19 | Thu  | Apr 6  | <b>Project Kickoff and The Discipline of Innovation</b>                     |
| 20 | Tue  | Apr 11 | <b>Innovation &amp; Technology Trends</b>                                   |
| 21 | Thu  | Apr 13 | <b>Industry and Market Research (@McKELDIN 6<sup>th</sup> Floor)</b>        |
| 22 | Tue  | Apr 18 | <b>Innovation in Selected Industries/Markets</b>                            |
| 23 | Thu  | Apr 20 | <b>Innovation &amp; Global Business (Guest Speaker - Howard Pedolsky)</b>   |
| 24 | Tue  | Apr 25 | <b>Project Prototype Expo</b>   |
|    | Wed. | Apr 26 | <b>Do Good Challenge Finals</b>   |
| 25 | Thu  | Apr 27 | <b>Intellectual Property &amp; Innovation (Guest Speaker – Les Bookoff)</b> |
|    | Thu  | Apr 27 | <b>W-T Lecture: Michael Armani, CEO M3D</b>                                 |
| 26 | Tue  | May 2  | <b>Storytelling–AIE (Guest Speaker–Karen Hold, AIE) moved from snow day</b> |
| 27 | Thu  | May 4  | <b>Project Workshop, Discussion &amp; Review</b>                            |
| 28 | Tue  | May 9  | <b>Final Presentations 1</b>  |
|    | Wed  | May 10 | <b>EIP SOPHOMORE “TERP TANK” CAPSTONE EVENT</b>                             |
| 29 | Thu  | May 11 | <b>Final Presentations 2 &amp; Evaluations</b>                              |

**Final Reports Due Monday May 15 @ Noon**

