Introduction to Innovation & Entrepreneurship:
Problem Discovery and Ideation
ESM 256A, Fall 2021

Class: T 2:00-3:15 pm (Bren 1424)

Instructor: Emily Cotter
Office: Bren Hall 3406
Office Hours: W 1:00-2:00 pm and by appointment
Mobile Phone: 310.569.3941
Email: ecotter@bren.ucsb.edu

Course Description
Sustainability is a critical component of the 21st-century marketplace. Addressing environmental and natural-resource problems requires ingenuity, innovative thinking, and entrepreneurship. In this course, students will learn how to use “customer discovery” to identify needs and pain points, develop new products or markets, or create value across sectors or multiple stakeholders. Skills developed in this course are applicable to future jobs in, including but not limited to, corporate social responsibility, nonprofit management, public sector leadership, or social and environmental entrepreneurship.

Course Objectives
• To learn the basics of customer discovery research.
• To acquire an agile mindset for solving environmental problems.
• To develop analytical skills through detecting patterns in customer discovery research, brainstorming ideas, observing, interpreting data, integrating new information, developing hypotheses, and determining a direction based on multiple factors and possible options.

Course Software
GauchoSpace – Learning Management System
Zoom – Online Conference System
Slack – Messaging Application
• Students should register for an account with Slack and join the esm256Afall2021 workspace. See GauchoSpace for the invitation link.

Required Reading
All required reading will be made available via download on GauchoSpace.

Optional Reading
The Entrepreneur’s Guide to Customer Development, Brant Cooper and Patrick Vlaskovits
https://startupbluebook.com/
COVID-19 and Our Classroom
In order to act in the best interests of our shared classroom community, please be sure to abide by policies established by the University of California and UC Santa Barbara. As a reminder all members of our campus community are required to follow the University of California Covid 19 Vaccination policy.

- Please complete the daily symptom survey before coming to class. Do not come to class if your badge is not green. So that we can all feel confident that we have all remembered to complete the survey, we may periodically show one another our daily clearance badges before starting the day’s class.
- Remember that we all must wear masks indoors at all times. If you forget your mask, we will have a supply in Bren Hall and will be happy to provide you with a free mask. Extra masks will be stored in classroom podiums and in the Dean’s Suite (Bren Hall 2439) and Student Affairs (Bren Hall 2510 and 2512). You will not be penalized for late arrival if you need to get a mask.
- If you are feeling ill or suspect you may have been exposed to someone who is ill, please stay home. Let me know, and we will make arrangements for you.
- Please also remember that weekly testing is required for all non-vaccinated undergraduate students and recommended for all other non-vaccinated groups. Testing is also available to any member of our campus community free of charge. For more information, visit the UCSB COVID-19 testing site.

This class is designed to be an in-person course. If the situation changes and public health guidelines or recommendations change, or if I need to self-isolate, I will let you know and we will modify our course format, using Zoom, GauchoSpace, Slack and other platforms to continue our work together. I will communicate with you via email using the address that you use to log into GauchoSpace. Please be sure to use your @ucsb email for that purpose and be sure to check your email at least once daily.

Attendance and Participation
Students are expected to attend every class. Attendance and participation will account for 25% of your grade (max. 500 points). Participation is evaluated in a number of ways. Obviously, participation is correlated with attendance. It is impossible to earn participation points if a student is not in class. Students remain responsible for submitting work due even if absent. Students should e-mail the instructor prior to any missed class.

Attendance at all class sessions is critical to the learning process and the participation component of the course. Innovation and entrepreneurship require collaboration and interactions. Innovators and entrepreneurs find opportunities, adapt, and improve themselves by listening and learning from others. Please come to class prepared to participate in the day’s activities.

Idea Generation
As part of the educational process, throughout the Eco-E program, individual students will bring a variety of ideas and information to an Eco-E class project for discussion, review and analysis. Any ideas or information introduced to an Eco-E class project by an individual student will be available for use by any student team member, both during or after the Eco-E class project, for any purpose, unless it is Prior IP. Prior IP is intellectual property that is developed by a student before the Eco-E class project began and that is both recognized and protectable under United States copyright, patent or trademark laws. Any Prior IP introduced by a student during the course of an Eco-E class project may be used by all student team members in the course of the Eco-E class project for academic purposes only.
To avoid misunderstandings and confusion, if a student wants to contribute Prior IP to an Eco-E class project, that student should clearly identify it as Prior IP to the other student team members and notify the instructor that the Prior IP is being contributed to the class project for academic use in the Eco-E class project.

**Course Assessment**

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<thead>
<tr>
<th>Assessment</th>
<th>Individual Contribution</th>
<th>Team Contribution</th>
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</thead>
<tbody>
<tr>
<td>Student Profile</td>
<td>100 points (5%)</td>
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<tr>
<td><strong>Discovery Teams:</strong></td>
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<tr>
<td>Sprint 1</td>
<td></td>
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<tr>
<td>Interview Summaries</td>
<td>200 points (10%)</td>
<td>100 points (5%)</td>
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<tr>
<td>Team Formation Post</td>
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<tr>
<td>Progress Report</td>
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<tr>
<td>Sprint Presentation</td>
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<td>200 points (10%)</td>
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<tr>
<td>Sprint 2</td>
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<tr>
<td>Interview Summaries</td>
<td>200 points (10%)</td>
<td>100 points (5%)</td>
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<tr>
<td>Team Formation Post</td>
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<tr>
<td>Progress Report</td>
<td></td>
<td>200 points (10%)</td>
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<tr>
<td>Final Presentation</td>
<td></td>
<td>300 points (15%)</td>
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<tr>
<td><strong>Attendance and Participation</strong></td>
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<tr>
<td>• Attendance</td>
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<td>• In-Class Discussions</td>
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<td>• Panels/Speakers</td>
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<td>• Workshops</td>
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<td><strong>TOTAL</strong></td>
<td>600 points (30%)</td>
<td>400 points (20%)</td>
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| **GRAND TOTAL**                 | 2,000 points (100%)     |                   |

The deadline is at the beginning of class (i.e., 2:00 pm) on the due date listed for each assignment, unless otherwise instructed. Assignments submitted after the deadline but within 24 hours will lose 5% of the total points; after that, an additional 5% for each day that the assignment is late.

**Discovery Teams**

Working on teams, students will work collaboratively on customer discovery research, generate ideas and analyze potential opportunities for innovation and entrepreneurship. Discovery Teams should be comprised of three to six people. Teams are encouraged to select a Team Leader who will be responsible for helping the team perform at its highest level. This involves removing any impediments to progress, facilitating meetings and making sure the team is organized and working efficiently during each sprint.

Students will sign-up for a team on Slack. If you do not sign-up for a team by the deadline, you will be assigned to a team by the instructor. Each team will have a private channel on Slack for communication and collaboration. Students may be able to switch teams for Sprint 2, if space allows.

The Team Formation Deadline is 2:00 PM on Tue 10/19/21.

During the quarter, teams will conduct customer discovery research and perform analysis in two three-week long “sprints,” as follows:
**Sprint Period** | **Progress Report** | **Sprint Presentation**
--- | --- | ---
Sprint 1: 10/19/21 to 11/8/21 | 11/9/21 | 11/9/21
Sprint 2: 11/9/21 to 11/29/21 | 11/30/21 | 12/3/21*

*The Final Presentation will be given to the Eco-E Advisory Council (EEAC) on Friday, December 3rd and is tentatively scheduled for 9:30-11:30 am (please mark your calendar).

The goal of these sprints is to “get out of the building” and talk to potential customers and/or industry experts face-to-face (in-person or via Zoom). Teams should set milestones for each sprint (e.g., interview 5 industry experts and 5 potential customers during Sprint 1).

During each sprint, teams should set a goal to conduct at least 10-15 interviews. The required minimum for each team will be 3 interviews for every team member per sprint. For example, a team of 5 students is required to conduct at least 15 interviews during a given sprint. Interviews are defined as qualitative, in-depth interviews (not online surveys using closed-ended questions).

**Description of Course Assignments**

**Student Profile**
The purpose of a Student Profile is to provide the instructor and your classmates with some insights into your background and to help in the formation of compatible discovery teams. Note: Your responses will be shared with the entire class. You will create a post in #profiles within the esm256Afall2021 workspace on Slack. See “Instructions for Profile Post” in #profiles.

Your Student Profile must be completed by 5:00 PM on Fri 10/1/21. The Student Profile will account for 5% of your grade (max. 100 points).

**Interview Summaries**
Students will demonstrate their analytical skills and their ability to perform customer discovery research through interviews with academic experts, industry experts or potential customers. Each student is required to participate in at least 3 interviews per sprint. You may have more than one team member participate in an interview and work together on the interview summary. However, each team is required to have a minimum number of interviews per sprint, equal to 3 interviews per team member. For example, a team of 5 students must conduct a minimum of 15 interviews during a given sprint.

An interview summary should be submitted for each interview conducted. It is a brief report of the key insights from an interview with an academic expert, industry expert or potential customer. Be sure to list all students who participated as interviewees. Students should be prepared to provide a link to the full interview (e.g., transcribed interview from Zoom), in case anyone would like to read the full transcript. You will create an “Interview Summary” post in the relevant research channel(s) within the esm256Afall2021 workspace on Slack. For further instructions, see “Submit Your Interview Summary by Post” in #tips-for-slack.

Your interview summaries for Sprint 1 must be completed by 2:00 PM on Tue 11/9/21. These Interview Summaries will account for 10% of your grade (max. 200 points).

Your interview summaries for Sprint 2 must be completed by 2:00 pm on Tue 11/30/21. These Interview Summaries will account for 10% of your grade (max. 200 points).
Team Formation Posts
At the beginning of each sprint, teams will create “Team Formation” posts in Slack. The post should provide the team’s working name and the name of each team member, followed by the team’s research focus. In a brief paragraph, explain why the team came together and address at least one of the following questions:

- What environmental problem does the team want to help solve?
- Is there a particular industry that interests all the team members?
- Is there a trend in a specific industry that may represent an opportunity?
- Is there a potential customer identified based on observations of a customer problem?

The Team Formation Post for Sprint 1 must be submitted in #sprint-1-teams within the esm256Afall2021 workspace on Slack by 2:00 PM on 11/16/21. This Team Formation Post will account for 5% of your grade (max. 100 points). These points will be the same for each team member.

The Team Formation Post for Sprint 2 must be submitted in #sprint-2-teams within the esm256Afall2021 workspace on Slack by 2:00 PM on 11/16/21. This Team Formation Post will account for 5% of your grade (max. 100 points). These points will be the same for each team member.

Team Progress Reports
At the end of each sprint, teams will submit Progress Reports. Each team will report what they learned through customer discovery research during the sprint, which may include: (1) any new insights about an environmental problem; (2) any customer needs or pain points identified; (3) any new product or market opportunities hypothesized; (4) any potential ways to create value across sectors or multiple stakeholders. Based on the team’s key takeaways, any new ideas generated or any resulting pivots should be shared, along with the team’s future direction. Teams will be evaluated based on the quality of the research/analysis performed, not the volume of ideas generated through this course. However, each team is encouraged to generate and analyze more than one idea during the quarter, guided by customer and industry research.

Each team will create a “Progress Report” post in their private team channel within the esm256Afall2021 workspace on Slack. For further instructions, see “Submit Your Team’s Progress Report by Post” in #tips-for-slash.

The Progress Report for Sprint 1 must be completed by 2:00 PM on Tue 11/9/21. This Progress Report will account for 5% of your grade (max. 100 points). These points will be the same for each team member.

The Progress Report for Sprint 2 must be completed by 2:00 PM on Tue 11/30/21. This Progress Report will account for 10% of your grade (max. 200 points). These points will be the same for each team member.

Team Presentations
Each team will give one Sprint Presentation in class on Tue 11/9/21 and one Final Presentation to the Eco-E Advisory Council (EEAC) on Fri 12/3/21. Specific guidelines for the Sprint Presentation and Final Presentation will be posted on GauchoSpace.

A soft copy of the Sprint Presentation must be uploaded onto GauchoSpace by 2:00 PM on Tue 11/9/21. The Sprint Presentation will account for 10% of your grade (max. 200 points). These points will be the same for each team member.
Please use the following format for submission of your team’s Sprint Presentation:
Sprint Presentation_(Team Name)

A soft copy of the Final Presentation must be uploaded onto GauchoSpace by 9:00 AM on Fri 12/3/21. The Final Presentation will account for 15% of your grade (max. 300 points). These points will be the same for each team member.

Please use the following format for submission of your team’s Final Presentation:
Final Presentation_(Team Name)