

Global Entrepreneurship and Innovation

CS 4803/8803 — Spring 2022

MW 8:00am - 9:15am (Atlanta time)

Instructors

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Overview

This course will provide you with real-world, hands-on learning on what it's like to create a startup. You will learn the language and values of entrepreneurship, and then work in a small team to hone your entrepreneurial skills.

This course is not about how to write a business plan, nor is it an exercise on how smart you are in a classroom, or how well you do research. Instead, it is a laboratory: you will be getting your hands dirty talking to customers, partners, competitors, as you encounter the chaos and uncertainty of how a startup actually works. It is possible that you may create a startup you wish to pursue.

This is a team-based class. Your team will learn how to turn a good idea into a great company. You'll learn how to use a business model to brainstorm each part of a company and the customer development process to get out of the classroom to see whether anyone other than you would want/use your product. Every member of your team will participate in these discovery activities. Finally, you'll see how agile development can help you rapidly iterate your product to build something customers will use and buy.

Unique to this course is its focus on Global Entrepreneurship and inclusive innovation. You will form global teams across Georgia Tech's campuses and focus on global challenges and inclusive innovation. We will use the United Nations Sustainable Development Goals as a tool to reveal global challenges and opportunities.

Each week will be a new adventure as you test your business model and then share the hard earned knowledge with the rest of the class. As a part of this process, you will encounter issues on how to build and work with a startup team: your instructors are here to help you understand how to navigate this. You are encouraged to recruit any and all resources. There will be readings and assignments along the way, and you are expected to be current and well-prepared.

The startup culture is dramatically different from university or large business cultures with which you may be familiar. This course's culture mimics that startup culture, and is intentionally oriented to simulate the time- and cash-constrained environments in which startups operate. You should expect to be pushed, challenged, and questioned in a direct and open manner. Likewise, you are expected to question, challenge a point of view if you disagree, and engage in a real dialog with your classmates and with the instructors and teaching assistants. This approach may seem harsh or abrupt, but it is all part

of wanting you to learn to challenge yourself quickly and objectively, and to appreciate that as entrepreneurs you need to learn and evolve faster than you ever imagined possible.

The lectures and methodology of this course are derivations of those used in the National Science Foundation's Innovation Corps (I-Corps) program, which are in turn based upon the tenets of Lean Startup.

Course Details

This course is being taught simultaneously on all three of Georgia Tech's campuses. Therefore the course is offered as remote yet synchronous, so that students from all the campuses will be in the virtual classroom at the same time. The course time has been chosen to allow for this interaction. The class meets twice a week, with one meeting devoted to lecture or discussion, and the other devoted to presentation and feedback.

This course is both team- and individual-based. Presentations, final reports, prototypes (if any), and field work will be done in teams. Exams and individual writing assignments and reflections will be done as an individual.

We will address team formation in the first meeting of the class. However there is a strict requirement: each team must have at least one member from each GT campus. This is a class in global entrepreneurship, after all!

We encourage all teams to work on startups which address multidisciplinary global challenges that fall within the scope of the UN's Sustainable Development Goals (SDGs). These might involve novel approaches towards sustainability, globalization, food security, infrastructure, capacity building, health, water, sanitation, hygiene, ecosystem resilience, services, capacity building, and urbanization. Our goal is that you will leave the course with a sensitivity to understanding the needs of underserved and under-represented individuals and communities often in contexts different from your own, and will have developed an ability to inclusively and collaboratively innovate solutions to global challenges.

There will be a series of roughly 20 lectures on startup topics, some offered live and others prerecorded. The schedule below illustrates the anticipated timing of those lectures. You should pay careful attention to each one, and participate vigorously during live lectures. All live lectures will be recorded, and the associated slides for each will be posted within 48 hours of their delivery. As you listen to each of the lectures, try to extract the salient points and do not fall behind, as each lecture builds upon the prior.

You will have a set of individual homework assignments which will give you a chance to show your interpretation and mastery of the lecture material. These assignments may include brief quizzes or a written two or more page summation of given lectures, and your reflection over the material. Note that there may be multiple lectures assigned each week, so you should expect to have multiple assignments due each week.

Each week, your team will prepare and upload into Canvas a presentation which summarizes your customer discovery activity. Time will not permit each team to present each week, but your team should be prepared to present if selected. During the semester, every team will present multiple times to the class.

Even though the working and studying for this course is to be done as a team, your individual assignments must be your own personal work. Please read and understand the course policies listed below.

Reference Texts

These books are strictly for reference, and are not the only reference sources available to you. You are urged to use them to enhance your understanding of the lecture material. They are not required for this course.

Constable, G. (2014). *Talking to humans*.

Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. John Wiley & Sons.

Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2014). *Value proposition design: How to create products and services customers want*. John Wiley & Sons.

Tentative Schedule

The class will begin on January 10, 2022, and will meet according to the schedule given in Canvas/Oscar. The general flow of the weeks, except for the first, will be that the first meeting will be lecture or discussion, and the second meeting will be presentation and feedback.

Note that the assignment due dates are all Sundays at 11:59 PM in the timezone of GT's main campus.

Week Of	Lectures	Assignments and Deliverables	Due Date
1/10/22	00, 01, 02	Introductions, Team Formation, Start-of-Course Survey	1/16/22
1/17/22	03, 04	Team Presentations	1/23/22
1/24/22	05, 06	Homework 1, Team Presentations	1/30/22
1/31/22	07, 08	Team Presentations	2/6/22
2/7/22	09, 10	Team Presentations, Quarter-Course Survey	2/13/22
2/14/22		Exam 1, Midterm Presentations	2/20/22
2/21/22	11, 12	Team Presentations	2/27/22
2/28/22	13, 14	Homework 2, Team Presentations	3/6/22
3/7/22	15, 16	Team Presentations, Mid-Course Survey	3/13/22
3/14/22	17, 18	Team Presentations	3/20/22
3/28/22	19, 20	Team Presentations	4/3/22
4/4/22	21, 22	Team Presentations	4/10/22
4/11/22	23, 24	Homework 3, Team Presentations	4/17/22
4/18/22		Exam 2, Team Presentations	4/24/22
4/25/22		Final Presentations, End-of-Course Survey	4/29/22

Lectures

This course is taught remotely and synchronously. There are more than 20 lessons in all. Here are the titles.

Lectures	
00: Introduction to the Class	13: Customer Relationships
01: What We Were Wrong About	14: Revenue Models
02: BMC and CD	15: Activities and Resources
03: On Customer Discovery	16: Partnerships
04: Defining Value	17: Costs
05: Value Propositions	18: MVP
06: Customer Segments	19: Product Development
07: Market Size and Market Type	20: Founders and Culture
08: Mapping for Startups	21: Equity and Inequity
09: Prediscovery	22: The Art of the Pitch
10: Cognitive Biases	23: Storytelling
11: Pivot	24: What Comes Next
12: Channels	

Course Assessment

Your grade in this class is made of five components: three homework assignments, two exams, weekly team presentations, a midterm team presentation, and a final team presentation and report.

Grading policies are non-negotiable. To get an A, students must demonstrate excellent understanding of subject material and actively contribute to a stimulating classroom environment. This means that they must show up to all class meetings (unless there is a compelling reason why they must miss a meeting), participate in class discussions, think critically in their assignments, and produce high quality work. Students should expect a B if they complete all requirements for assignments reasonably well, and show some aptitude (but not mastery) of the material. They can expect a C if they fail to complete requirements for assignments, e.g., if they 'forget' to submit their final project report.

Final grades will be calculated as an average of all grade components, weighted according to the percentages given below. Students receiving a final average of 90 or above will receive an A; of 80 to 90 will receive a B; of 70 to 80 will receive a C; of 60 to 70 will receive a D; and of below 60 will receive an F. We do not plan to have a curve.

All written work turned in must be received in PDF format.

Homework (15%)

You will complete three homework assignments in this course, each worth 5% of your average. Each homework assignment will have four questions, which you will answer in at least three pages at a minimum. These questions will cover the lecture material as presented up to that point. You may be expected to do some outside research for some of these questions. A format rubric will be provided.

Exams (20%)

You will take two proctored exams in this class, each worth 10% of your average. Each exam is one hour long with up to 15 questions, all multiple-choice, multiple-correct with five choices and between 1 and 4 correct answers. Partial credit is awarded. Each exam will cover all lectures through the previous week. All exams are open-book, open-note, open-internet: everything except live interaction with another person. The tests will be digitally proctored.

Weekly Team Presentations (30%)

Your team will conduct customer discovery for your startup and compose a presentation weekly that illustrates the startup's current status, illustrates your progress, and highlights your discoveries and challenges. Each week, a subset of the teams in the class will be selected to present live to the entire class. Those presenting will not be notified in advance, so every team must come to class that day well-prepared if selected. A format rubric will be provided.

Midterm Presentation (15%)

Your team will make a summation presentation at the midterm of the course, more detailed than the usual weekly presentation, illustrating your startup's status and customer discovery progress up to that point. A format rubric will be provided.

Final Presentation and Report (20%)

Your team will make a final summation presentation, substantially more detailed than the usual weekly presentation, illustrating your startup's final status and customer discovery progress. A written report of no fewer than 10 pages must be submitted. A format rubric will be provided.

Course Policies

The following policies are binding for this course.

Official Course Communication

You are responsible for knowing the following information:

- Anything posted to this syllabus (including any information linked herein). The syllabus is subject to change and those changes will be posted on Canvas.
- Anything emailed directly to you by the teaching team (including announcements via Canvas), 24 hours after receiving such an email.

Generally speaking, we will post announcements via Canvas and may also cross-post their content to Slack; you should thus ensure that your Canvas settings are such that you receive these announcements promptly, ideally via email (in addition to other mechanisms if you'd like). Georgia Tech generally recommends students to check their Georgia Tech email once every 24 hours. So, if an announcement or message is time sensitive, you will not be responsible for the contents of the announcement until 24 hours after it has been sent.

Office Hours

All official course communication takes place via Canvas. However, we do have a class-associated Slack organization you may use to chat with each other and with instructors. This is entirely optional.

You may sign up for the student Slack community at the link we will provide during the first week of class. Slack office hours are not scheduled at specific times; instead, the instructor is usually available on Slack throughout their day and responds quickly. In general, you may ask questions in the public #office-hours room, or message individuals directly.

Late Work

Running this class involves a detailed workflow for accepting assignments, grading those assignments, and returning those grades. As such, work that does not enter into that workflow presents a major delay. Thus, we cannot accept any late work in this class. All assignments must be submitted by the posted deadlines. We have made the descriptions of all assignments available on the first day of class so that if there are expected interruptions (business trips, family vacations, etc.), you can complete the work ahead of time.

If you have technical difficulties submitting the assignment to Canvas, immediately email the instructors and attach your submission. Then, submit it to Canvas as soon as you can thereafter. If you experience internet outages on the due date please document the internet outage and submit your assignment as soon as connectivity is restored.

If you have an excused absence and cannot submit an assignment by the posted deadlines, we ask you to go through the Dean of Students' office regarding class absences. The Dean of Students is equipped to address emergencies that we lack the resources to address. Additionally, the Dean of Students office can coordinate with you and alert all your classes together instead of requiring you to contact each professor individually. You may find information on contacting the Dean of Students with regard to personal emergencies here: https://gatech-advocate.symplicity.com/care_report/

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>.

Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

In addition, the following policies apply to this class:

- In written essays, all sources are expected to be cited according to APA style, both in-line with quotation marks and at the end of the document. You should consult the [Purdue OWL Research and Citation Resources](#) for proper citation practices, especially the following pages: [Quoting, Paraphrasing, and Summarizing](#), [Paraphrasing, Avoiding Plagiarism Overview](#), [Is It Plagiarism?](#), and [Safe Practices](#). You should also consult our dedicated pages on [how to use citations](#) and [how to avoid plagiarism](#).
- Any non-original figures must similarly be cited. If you borrow an existing figure and modify it, you must still cite the original figure. It must be obvious what portion of your submission is your own creation.
- During exams, you are prohibited from interacting directly with any other person on the topic of the exam material. This includes posting on forums, sending emails or text messages, talking in person or on the phone, or any other mechanism that would allow you to receive live input from another person.
- Unless you are quoting the course videos directly, you are not required to cite content borrowed from the course itself (such as figures in videos, topics in the video, etc.). The assumption is that the reader knows what you write is based on your participation in this class, thus references to course material are not inferred to be claiming credit for the course content itself.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Please also [see this catalog page](#) for more information about institute expectations and restrictions around attendance, including information about excused absences.

Student-Faculty Expectations Agreement

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See [this catalog page](#) for an articulation of some basic expectation that you can have of us and that we have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, we encourage you to remain committed to the ideals of Georgia Tech while in this class.