

**MGT411 SENIOR DESIGN
ENTREPRENEURSHIP TRACK
Stevens Institute of Technology, School of Business
Syllabus Supplement, Fall 2023**

Track Overview

The goal of the entrepreneurship track of MGT411 is to provide you, over the course of two semesters, the opportunity to work in a team on a new startup business idea of your choosing.

This is a unique experiential learning course. As such, how we use each class period (Mondays 10-12:30) will vary compared to more traditional courses. While in some class periods you will participate for the full class period with all students in the course or your track, most class periods you will meet with your advisor for a scheduled time within the class period and use the remaining time to work with your team.

Course deliverables will also vary and are designed to give students real-world experience and provide an opportunity to explore starting a business. As shown in the track grading, there are individual and team components to the course, with the majority of the grade being team-based. Projects for this track – the business you aim to develop – are proposed by you and your team. However, the advisors will help you in coming up with possible ideas and steer you toward what they believe to be a viable business.

The ultimate outcome of MGT411 will be completed in the Spring as part of MGT412 and will include a presentation of your startup during *Stevens Innovation Expo Day*, April 26, 2024.

Track Learning Goals

The senior design course (MGT411) – across all three tracks – is designed to better prepare students for their transition into the professional work environment by completing a project, which allows students to put into practice concepts they have learned during their studies at Stevens. In the main MGT411 syllabus, several related learning objectives are identified. For the entrepreneurship track, we will also focus on developing skills such as:

- Product market fit
- Business plan development as represented on a Lean Canvas and beyond
- Developing a pitch/investment presentation

Relationship of Course to Rest of Curriculum

The Entrepreneurship track combines many of the course knowledge areas and skills previously developed in other courses, and packages them in a start-up experience. And while only a few students may choose to pursue a start-up project upon graduation, the entrepreneurial track will equip you with skills to be an intra-preneur, an ability increasingly sought by businesses that understand constant reinvention is the key to long-term success. In these respects, this course can be considered a “capstone” experience.

Moreover, the course aims to increase students’ specific skills in areas such as Problem/Solution Ideation, identifying a Unique Value Proposition, Product Development, Segmenting Customers, determining a Marketing Plan and exploiting appropriate Marketing Channels, analyzing Cost Structures, and identifying multiple Revenue Streams.

Recommended Readings and References:

These readings are not required but will be discussed during the semester and should be helpful in learning about entrepreneurship and business at large. Note too that your advisor is likely to recommend additional readings and will where possible post them to Canvas.

- Maurya, Running Lean. ISBN-10: 1449305172.
- Sax, The Soul of an Entrepreneur. ISBN-13: 978-1541736009
- Horowitz, The Hard Thing About Hard Things. ISBN-10: 0062273205

Track Grading

Assignment	% Grade
Individual component	30 points
Participation & attendance	20 pts
End-of-semester individual paper w/ evaluation of your peers	5 pts
Peer evaluation by teammates	5 pts
Team Component	70 points
<i>Deliverables:</i>	
Surveys & Interviews	10 pts
Competitive Analysis Grid	5 pts
Persona Creation	5 pts
Lean Canvas	10 pts
Pitch Deck	10 pts
Business Plan	10 pts
<i>Presentations:</i>	
Initial project presentation	Included in participation
Midterm Presentation	10 pts
End of Semester Presentation	10 pts
Total	100 points (100%)

Course Schedule

Draft as of 9/7/23 – Subject to change.

- Blue= major themes that are a part of the business plan.
 - This is a guiding outline, to give you an idea of what to focus on each week, so you are meeting deliverables
 - Key Points in blue should be included in midterm presentations and business plan
- Red = contribute to Grade. See Grading Component Table.

Week	Date	Topic	Details
1	9/11	All track discussion + Track-specific discussion	ALL TRACKS. Come to class with project ideas. Course discussed. Survey results presented. Breakout discussion for tracks
2	9/18	All track discussion + Track-specific discussion and/or advisor meetings	By this date, you should know what track you are pursuing. Teams should be formed. You should be honing in on your startup ideas.
3	9/25	Track-specific discussion + advisor/team meetings	Most teams will be informed of projects and advisors. Remaining teams will have discussions about finalizing assignments. Short advisor meeting to follow to discuss projects and present the framework you will use for project development.
4	10/2	Advisor/team meetings + presentation of the ideas	Each team will have an individual meeting with their advisor for about 20 minutes. The schedule of when to meet your advisor will be provided to you and remain the same throughout the semester. You should be refining your startup idea based on an initial completion of the lean canvas.
5	10/10 (Tuesday)	Brief Startup Presentation + Team Contracts	Teams will meet with other teams that have the same advisor in one meeting. They will present a brief 10 min overview of their project. Team contracts that specify project and outline ground rules for working together are due this date.
6	10/16	Advisor/team meetings Will include discussion of Industry & Competitor Analysis Research	Each team will have an individual meeting with their advisor for about 20 minutes. Due diligence will commence in earnest. Advisor will decide with you the specific deliverables and due dates for goals

		Competitive Analysis Grid Industry Professional Interviews (if applicable)	on the project particularly in relation to market research. Key Points <ul style="list-style-type: none"> • Industry Size, Growth Rate • Industry Structure • Key Success Factors • Industry Trends • Competitor Analysis
7	10/23	Advisor/team meetings Will include discussion of Market & Customer Analysis Persona Creation Customer Surveys & Interviews	Each team will have an individual meeting with their advisor for about 20 minutes. Key Points <ul style="list-style-type: none"> • Market Segmentation and Target Market Selection • Customer Demographics • Buyer Behavior
8	10/30	Advisor/team meetings Will include discussion of Financial Analysis	Each team will have an individual meeting with their advisor for about 20 minutes. Key Points <ul style="list-style-type: none"> • Revenue Drivers and Profit Margins • Identification of Major Expenses • Break-Even Chart and Calculation
9	11/6	Midterm presentations Lean Canvas is Due	Teams will meet with other teams that have the same advisor in one meeting and present their project for feedback. At this time, we will discuss the creation of the Pitch Deck.
10	11/13	Advisor/team meetings	Each team will have an individual meeting with their advisor for about 20 minutes.
11	11/20	Advisor/team meetings	Each team will have an individual

		Will include discussion of Sales Process	meeting with their advisor for about 20 minutes. Key Points <ul style="list-style-type: none"> • B2B, B2C, C2C • Sales Tactics • Sales Projections
12	11/27	Advisor/team meetings Will include discussion of Marketing Plan	Each team will have an individual meeting with their advisor for about 20 minutes. Key Points <ul style="list-style-type: none"> • Establishing a unique position • Establishing a brand • Marketing Campaigns • How will you reach your customers
13	12/4	Advisor/team meetings Will include discussion of Operations Plan	Each team will have an individual meeting with their advisor for about 20 minutes. Key Points <ul style="list-style-type: none"> • Key Partners • How will you get your product/ service to your customers
14	12/11	End of Semester Presentation + Pitch Deck	Teams will meet with other teams that have the same advisor in one meeting and present their Pitch Deck for feedback.
Exam Week		Business Plan, Individual reflection paper, + peer evaluation due	Individually submit via Canvas Assignment Tab or as directed by Advisor.

Notes: (1) The schedule of group vs. individual team meetings with the professor above may vary based on team progress, common problems best addressed with shared solutions and other situations where a group or team meeting may facilitate better understanding of the subject matter; (2) There is no final exam

TEMPLATES & OUTLINES FOR DELIVERABLES

COMPETITIVE ANALYSIS GRID (Group Assignment)

	Competitor 1	Competitor 2	Competitor 3	Competitor 3	Competitor 5
Factor 1 (ex: Price)					
Factor 2 (ex: Selection)					
Factor 3					
Factor 4					
Factor 5					
Factor 6					
Factor 7					

Key

Advantage- your company has an advantage over the competitor for the specific factor

Disadvantage- your company is at a disadvantage over the competitor for the specific factor

Even- your company has even the competitor for the specific factor

PERSONA CREATION (Group Assignment)

Personas



Customer Name & Image:	Demographic:	
Bio/Journey/Story:		Goals/Jobs
Motivations/Gains:		Frustrations/Pains

Lean Canvas (Group Assignment- Due for Midterm)

The Lean Canvas

Designed for:

Startup Name

Designed by:

Name1, Name2, ...

Date:

DD/MM/YYYY

Version:

X.Y

Problem Top 3 problems	Solution Top 3 features	Unique Value Prop. Single, clear and compelling message that states why you are different and worth buying	Unfair Advantage Can't be easily copied or bought	Customer Segments Target Customers
Existing Alternatives List how these problems are solved today.	Key Metrics Key activities you measure	High-Level Concept List your X for Y analogy (e.g. YouTube = Flickr for videos)	Channels Path to customers	Early Adopters List the characteristics of your ideal customers.
Cost Structure List your fixed and variable costs. Customer acquisition costs Distribution costs Hosting People Etc.			Revenue Streams List your sources of revenue. Revenue Model Life Time Value Revenue Gross Margin	

Lean Canvas is adapted from The Business Model Canvas (www.businessmodelgeneration.com/canvas). PowerPoint implementation by: Neos Chronos Limited (<https://neoschronos.com>). License: CC BY-SA 3.0

BUSINESS PLAN (Group Assignment- Due End of Semester)

- I. Executive Summary
- II. Industry Analysis
 - A. Industry Size, Growth Rate
 - B. Industry Structure
 - C. Nature of Participants
 - D. Key Success Factors
 - E. Industry Trends
- III. Company Description
 - F. Company History
 - G. Mission Statement
 - H. Products and Services
 - I. Current Status
 - J. Key Partnerships (if any)
- IV. Market Analysis
 - K. Market Segmentation and Target Market Selection
 - L. Customer Demographics & Buyer Behavior
 - M. Competitor Analysis
- V. The Economics of the Business
 - N. Revenue Drivers and Profit Margins
 - O. Identification of Major Expenses
 - P. Start-up Costs
 - Q. Break-Even Chart and Calculation
- VI. Sales Plan
 - R. B2B, B2C, C2C
 - S. Sales Tactics
 - T. Sales Projections
- VII. Marketing Plan
 - U. Establishing a unique position
 - V. Establishing a brand
 - W. Marketing Strategy
- VIII. Design and Development Plan
 - X. Development Status and Tasks
 - Y. Challenges and Risks
- IX. Operations Plan
 - Z. Key Partners
 - AA. How will you get your product/ service to your customers
- X. Overall Schedule
- XI. Appendices