Instructor Information

- Andy Moss
- Email: Andy.Moss@NYU.edu
- Office Hours: Mondays 5:30 to 6:30 pm by appointment.

Please email me at least 48 hours ahead of time to confirm office hours.

Course Information

- Class Meeting: Monday 6:45-8:25 pm
- Class Location: Zoom Meeting: https://nyu.zoom.us/j/95824062818
  Meeting ID: 958 2406 2818

Course Prerequisites

- All 5 school-wide core courses;
- PADM-GP.2132 or 2310l and PADM-GP.4130;
- one additional required SI3 specialization course.

Course Description

Capstone is learning in action. Part of Wagner’s core curriculum, it provides students with both a critical learning experience and an opportunity to perform a public service. Over the course of an academic year, students work in teams to address challenges, solve problems and identify opportunities for a client organization. Students will design the approach, conduct the data collection and analysis, and present findings, both orally and in writing, to the client.

In architecture, the capstone is the crowning piece of an arch, the center stone that holds the arch together, giving it shape and strength. Wagner’s Capstone program plays a similar role, by building on students’ previous coursework and expertise, while also enhancing student learning on policy and management issues, key process skills and research skills. Capstone requires students to interweave their learning in all these areas, and to do so in real time, in an
unpredictable, complex real world environment. Although divided into teams, the class will work as a learning community dedicated to the success of all the projects.

Course and Learning Objectives

This course will be taught as an Active / Experiential Learning model. This will revolve around your team project and adapt to the skill development needs across teams. The required & recommended readings along with select lectures may be included. We will also use videos and discussions, guest speakers (as appropriate and available), as well as student presentations.

Individual and team work outside of the classroom are essential for your learning experience. A minimum of 5 customer discovery meetings per week are required to adequately make progress on your projects.

A. Content

Students should demonstrate the ability to:
- Plan and conduct ongoing customer discovery
- understand the policy and/or management context for their project;
- be familiar with relevant specialized vocabularies;
- draw on critical research related to their content area;
- connect their project with previous coursework in their broader program and specialization.

B. Process

Overall, students should demonstrate a capacity for flexibility and resilience, as shown by adapting to changing and complex circumstances, balancing competing demands, accepting uncertainty and ambiguity, and knowing when to consult with their Capstone instructor.

a. Project Management
   Students should demonstrate the ability to:
   - frame and refine the problem as defined through the problem identification process;
   - develop an internal project work plan including scope, timeline and deliverables;
   - meet deadlines and monitor their progress against the contract and workplan;
   - revise contract and work plan as necessary.

b. Business Model Development
   Students should demonstrate the ability to:
   - identify and validate a specific problem through the customer discovery process;
   - develop and continually iterate upon the Business Model Canvas;
   - maintain regular and productive communication with key stakeholders;
   - solicit and integrate feedback from the stakeholders on design and deliverables;
   - submit deliverables on time.
c. Team Management
Students should demonstrate the ability to:
● diagnose and attend to interpersonal dynamics;
● define roles and useful division of labor;
● successfully negotiate conflicts among team members
● manage assignments and accountability;
● advocate points of view and negotiate differences of opinion;
● solicit and offer feedback;
● appreciate and learn from cultural and other differences.

C. Research
Students should demonstrate the ability to:
● identify and synthesize existing research relevant to the project
● identify and implement appropriate quantitative and/or qualitative data gathering methods;
● identify and implement appropriate data analysis procedures;
● determine findings;
● develop useful recommendations and/or tools and resources based on findings.

D. Communication
Students should demonstrate the ability to:
● synthesize and summarize large amounts of data and information;
● prepare clear and well-argued written deliverables tailored to the beneficiary’s needs;
● prepare clear and well-argued verbal presentations tailored to the beneficiary’s needs.

Learning Assessment Table

<table>
<thead>
<tr>
<th>Course Learning Objective</th>
<th>Corresponding Assignment</th>
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<tbody>
<tr>
<td>Understand the policy and/or management context for their project</td>
<td>Interim and final products</td>
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<tr>
<td>Be familiar with relevant specialized vocabularies</td>
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<tr>
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</tr>
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Develop an awareness of the importance of Culture and Principled decision making to all types of ventures. Establish/Define your team principles and culture, including agreed upon norms and workflows | Team work plan and Culture Canvas

Develop an internal project work plan | Team work plan

Meet deadlines and monitor their progress against the work plan | Team work plan

Advocate points of view and negotiate differences of opinion | Self and team peer evaluations

Appreciate and learn from cultural and other differences | Self and team peer evaluations

Identify and synthesize existing research relevant to the project | Interim and final products

Identify and implement appropriate quantitative and/or qualitative data gathering methods | Interim and final products

Identify and implement appropriate data analysis procedures | Interim and final products

Determine findings | Interim and final products

Develop useful recommendations and/or tools and resources based on findings | Interim and final products

Synthesize and summarize large amounts of data and information | Interim and final products

Prepare clear and well-argued written deliverables tailored to the client’s needs | Interim and final products
Prepare clear and well-argued verbal presentations tailored to the client’s needs

Interim and final presentations

Course Requirements

Students formed teams of 3-5 students prior to enrolling in this Capstone section. Only on a unique, case-by-case basis will student requests to change teams be considered.

The class will involve presentations from the instructor, guest speakers, class discussion, team presentations and meetings. Course requirements include:

- enrollment in both semesters;
- attendance and participation in class activities and team meetings;
- completion of assignments on time;
- participation in field work;
- participation in meetings with beneficiaries;
- participation in preparation and presentation of findings.

Evaluation and Grading

Students will receive 1.5 credits for the fall semester and 1.5 for the spring semester. At the end of the first semester, students will receive a grade of “IP” (Incomplete Pass) to reflect the “work in progress” nature of the yearlong project. I will assign final grades at the end of the second semester.

Grades will be allotted to individuals, not to the team as a whole. That is, team members may receive different grades if I feel that is warranted. I will make this judgment based both on my assessment of students’ contribution and learning and on the assessments you give each other as part of the evaluation process at the end of the first and second semesters.

Students will be graded on both the deliverables defined in the work plan and evidence of progressive learning throughout the course, based on the Learning Objectives. **60% is based on work products** identified in the milestones as well as any interim deliverables. **30% is based on evidence of the individual student’s learning** during the course through participation in the team’s work and class activities, his/her ability to act on peer and faculty feedback; individual and team preparation for and performance at team presentations; and end-of-semester faculty, peer and self-evaluations. **10% will be based on completing the necessary customer discovery meetings - 5 per week per team** (as entered into the Customer Discovery Interview Log) required for making informed decisions on project direction, validation, and progress.
Late individual or group assignments will only be considered prior to the assignment deadline. If students seek an extension on any assignment, s/he must communicate this request, along with rationale, to me via email at least 24 hours prior to the deadline. While I understand that circumstances arise and aim to be reasonable with students, as I know all students manage several commitments and obligations, I reserve the right to grant or deny extension requests on a case-by-case basis.

**Attendance**

Students are expected to attend all scheduled class meetings for the entirety of the meeting time. If a circumstance arises that interferes with this commitment, the student should email me as soon as possible, will be expected to work with teammates to catch up on missed materials, and is expected to submit materials due during the missed class meeting via Brightspace by the deadline.

**Technology in Class**

Students are welcome to bring and use personal laptops and other devices during allocated team meeting time during class. I expect that students will be engaged with the class and their teammates during the class meeting time, and use personal technology for purposes unrelated to class on an as-needed basis. Please leave all technology out of site during guest presentation time. Should you like to take notes, please do so manually. All guest presenter materials will be available after class on Brightspace, as well.

**Recommended Readings and Resources**

Varied articles and multimedia assignments are available on the Brightspace website under Resources.

The below are required readings. Specific sections may be assigned from time to time.

- Why the Lean Startup Changes Everything  
  [https://hbr.org/2013/05/why-the-lean-start-up-changes-everything](https://hbr.org/2013/05/why-the-lean-start-up-changes-everything)

- Talking to Humans  
  [https://www.talkingtohumans.com/](https://www.talkingtohumans.com/)

- Startup CEO: A Field Guide to Scaling Up Your Business (Techstars)  
  [https://www.amazon.com/dp/1119723663/ref=cm_sw_em_r_mt_dp_UWenFbV59ERNX](https://www.amazon.com/dp/1119723663/ref=cm_sw_em_r_mt_dp_UWenFbV59ERNX)

- Good to Great and the Social Sectors: Why Business Thinking is Not the Answer  
  [https://www.amazon.com/dp/0977326403/ref=cm_sw_em_r_mt_dp_kYenFbXWCSS4V](https://www.amazon.com/dp/0977326403/ref=cm_sw_em_r_mt_dp_kYenFbXWCSS4V)

The below are recommended, though not required, readings.
This course will heavily refer to the COR and Business Model Canvases. More information is available online, but for easy and quick reference, see here:

- COR Canvas
- Business Model Canvas: https://canvanizer.com/new/business-model-canvas

**Course Milestones**

The course has a series of milestones – both activities and products -- that will serve as interim work products. I’ve suggested time frames in parentheses, though actual timing during the course of the year may vary depending on the specific situation of each team. The milestones are included below:

- **September/October**
  - Presentation of project scope to classmates
  - Plan/execute/document customer discovery
  - Team role designations

- **October**
  - Business Model and Problem Identification

- **October/November**
  - Preliminary work agreement; presentation to class/faculty for feedback

- **November**
  - Initial iterations of the Business Model Canvas
  - Team charter

- **December**
  - End-of-first semester self, team/peer, and course evaluations; discussion of team process and progress

- **January**
  - Updated Business Model Canvas and Initial Pitch Deck/Business Plan

- **February**
  - Refined Business Model Canvas, Updated Pitch Deck/Business Plan
• Initial draft of the detailed team work plan including:
  ○ Organizational principles
  ○ Problem definition
  ○ Landscape analysis
  ○ Market competitive analysis
  ○ Value proposition
  ○ Barriers to entry
  ○ Product definition and design
  ○ Strategy and implementation plan
  ○ Organizational and operational plan (including structure)
  ○ Financial plan
  ○ Financing plan
  ○ Risk analysis/mitigation
  ○ Social impact metrics

February/March
  ● First draft of Business Case to faculty

March
  ● Revised Draft Pitch Deck/Business Plan

March/April
  ● Draft 2 of Business Case to faculty
  ● Rehearsal of presentation to class/faculty for feedback before presentation to panel

April
  ● Final Business Case & Pitch Deck and presentation to panel

May
  ● Lessons Learned reflection and celebration
  ● End-of-course self, team /peer, client and course evaluations
  ● Presentation for Capstone Expo

Class Schedule Overview

For vacations and holidays, see the university’s academic calendar for 2021-2022. (https://www.nyu.edu/registrar/calendars/university-academic-calendar.html)

Also, Capstone Expo will be on TBD.

The list of weeks and topics that follows is preliminary and subject to change. Students should expect to meet weekly as a class, one on one as teams or for independent team work unless agreed in class beforehand or indicated otherwise in the schedule below. Generally, unless
otherwise noted (i.e. dates with extended team meeting times), course meetings will follow the structure below:

- Guest presentation or panel, followed by open Q&A (when applicable, 45-60 minutes)
- Weekly team updates & Q&A: present to the class (30 minutes)
- Team meetings and work time (45 minutes)

The sequence of classes, and due dates for assignments, could change depending in part on team progress and guest speaker availability. Specific changes to the schedule contained herein for each class will be posted on Brightspace and emailed to you with enough lead time to prepare. Brightspace takes precedence over what is written here.

**Fall Semester**

**09/13/2021 - Introductions and Syllabus review**

**Class meeting detail:**
- I will introduce myself and how I envision the class proceeding
- Syllabus walkthrough, course structure, class structure and q&a
- Each student will introduce themselves - brief background including school/work history, what motivated interest in your team concept, how you met team members, what you want to get out of the course
- Time permitting, Business Model Canvas overview

**Assignments:**
- **Team:**
  - Prepare 10-minute team presentation - emphasis on problem definition and measurable results - DUE next session
  - Schedule and participate in one get-together purely about getting to know each other (everyone should participate). DUE next session.

**09/20/2021 - Initial Presentations to bring everyone up to speed on projects**

**Class meeting detail:**
- Each team will present for approx. 10 minutes and be prepared to answer questions
- Business Model Canvas overview walkthrough
- Begin discussions on Customer Discovery - target segments & setting up interviews

**Assignments:**
- **Team:**
  - Complete the skill development spreadsheet DUE next session.
  - Prepare 2-3 questions for the guest speaker
09/27/2021 - Customer Discovery: converting educated guesses to informed decisions - Guest Speaker: Frank Rimalovski, Executive Director, NYU Entrepreneurial Institute

Class Meeting Detail:
- Introductory lecture/videos on how to do customer discovery
- Team meetings and work time on problem hypothesis/business thesis

Assignments:
- Team:
  - Prepare 5-minute team updates presentation. DUE next session.
  - Complete twenty (20) customer interviews. Include notes from Capstone Customer Interview Log. DUE next session.

10/04/2021 - Skills Development Review/Discussion & 1st x-team exercise

Class Meeting Detail:
- Review/discuss entries in skills development spreadsheet
- First Cross Team Review/Research/Presentation

Assignments:
- Team:
  - Prepare a 5-minute team updates presentation. DUE next session.
  - Identify team member roles. Write a simple job description for each role (no more than one page, including skills, key responsibilities and deliverables). Upload to Brightspace. DUE next session.

10/12/2021 - Legislative Day (required Project Management session)

Class Meeting Detail:
- Required session on project management simplified (6:45–8:25 pm)

Assignments:
- Team:
  - Prepare a 5-minute team update presentation. DUE next session.
  - Submit your certificate of completion for the PM course to Brightspace. Due next session
  - Final work agreement, signed by all team members. DUE next session.
10/18/2021 - Discuss Team Roles/Responsibilities and Value Propositions

Class Meeting Detail:

- class discussion of team role job descriptions, short presentations on value propositions, meeting time to refine roles and establish team member role assignments

Assignments:

- Team:
  - Prepare a 5-minute team update presentation, including customer discovery to date. DUE next session.
  - Upload final team role descriptions and team member role assignments to Classes. DUE next session.

10/25/2021 - Importance of Culture, Culture Canvas

Class Meeting Detail:

- Culture Presentation
- Read brief cases, discuss your organization, complete culture canvas
- Team work time on Problem Definition, Validation and Quantification

Assignments:

- Teams:
  - Prepare a 5-minute team updates presentation. DUE next session.
  - Draft 1 Problem Identification Statements (Maximum one page); DUE next session.
  - Synopsis of customer discovery findings. Include notes from Capstone Customer Interview Log. DUE next session.

11/01/2021 - Problem Definition, Identifying Target Customers

Class Meeting Detail:

- Team work time on Problem Definition, Validation and Quantification

Assignments:

- Teams:
  - Prepare a 5-minute team update presentation. DUE next session.
  - Schedule team one on one times for following session

11/08/2021 - Team ONE ON ONE SESSION

Class Meeting Detail:

- Come prepared with an Agenda - top 2-4 prioritized items to discuss
Assignments:
- Team:
  - Prepare a 5-minute team updates presentation. DUE next session.
  - Final work agreement, signed by all team members. DUE next session.

11/15/2021 - Customer Segments / Relationships

Class meeting detail:
- First Cross Team Review/Research/Presentation
- Team work time on Business Model Canvas

Assignments:
- Team:
  - Prepare a 5-minute team update presentation. DUE next session.
  - Business Model Canvas. DUE next session.
  - Prepare agenda & goals for One on One Team Meeting. DUE next session.
  - Prepare draft worksheets for one on one discussion.

11/22/2021 - One on One Team Meetings - Value Proposition, MVP Strategies

Class meeting detail:
- Team One and Ones - each team will meet with me one on one for 30 min
- Team work time to revise Business Model Canvas

Assignments:
- Individual:
  - Prepare at least one question or insight to gain from guest speaker. DUE next session.
  - Self, team peer, and course evaluations. DUE next session.
- Team: Prepare 5-minute team updates presentation. DUE next session.

11/29/2021 - Value Proposition / MVP Solution Approaches

Class meeting detail:
- Each team will discuss how they are using MVPs
- Team work time to revise Business Model Canvas

Assignments:
- Individual:
  - Prepare questions for open discussion. DUE next session.
  - Self, team peer, and course evaluations. DUE next session.
- Team:
Prepare 5-minute team updates presentation. DUE next session.
Draft 2 Business Model Canvas. DUE next session.

12/06/2021 - Business and Revenue Models

Class meeting detail:
- open discussion on team business/revenue models
- Team work time on Business Model Canvas

Assignments:
- Team:
  - Begin work on Business Case outline and/or Pitch Deck DUE: First Session Next Semester

12/13/2021 - Independent Team Meetings (no formal class meeting)

Class meeting detail:
- No formal class meeting. I will be available for individual team meetings, as requested.

Spring Semester

During this semester, much of the time will be set aside for teams to meet on their own or with me. We can be flexible about the need for formal class meeting times. However, as needed, we will schedule problem-solving or skill-building sessions, so you must be available every Monday night during class time. Also, for planning purposes, I've noted here some potential deadlines, but these are preliminary and could change.

01/24/2022 - Semester Kickoff and Regroup Meeting

Class meeting detail:
- Team updates
- Discuss spring schedule
- Discuss Business Case/Pitch Deck and final decision options
  - Go/No Go
  - Lessons Learned
  - Peer Review
- Schedule times for Team One on One Meetings

Assignments Due:
- Teams:
  - Prepare business/team updates.
  - Prepare agenda/goals for One on One Team Meeting DUE next session.
  - Review and revise team charter. DUE next session.
01/31/2022 - One on One Team Meetings

Course meeting detail:
• Team One and Ones - each team will meet with me one on one for 30 min
• Review expectations for final report & presentations (Business Case/Pitch Deck)
• Team work time to revise Business Model Canvas and/or begin Pitch Deck

Assignments Due:
• **Individual:** Prepare at least one question or insight to gain from possible 2/14 guest presentations. DUE next session

• **Teams:**
  • Prepare 5-minute team updates presentation DUE next session
  • Updated Business Model Canvas. DUE next session

02/07/2022 - NO CLASS - Independent Team Meetings

02/14/2022 - Market Sizing

Course meeting detail:
• Discuss approaches and opportunities for each team
• Work time and team meetings on draft Business Case and/or Pitch Deck

Assignments Due:
• **Teams:**
  • Prepare a 5-minute team updates presentation. DUE next session.
  • Initial Draft Business Case outline. DUE next session.
  • Prepare agenda/goals for One on One Team Meeting DUE next session.

02/21/2022 - No Class Presidents Day

02/28/2022 - One on One Team Meetings - Key Metrics

Course meeting detail:
• Team One and Ones - each team will meet with me one on one for 30 min
• Review expectations/progress for business cases and pitch decks.
• Team work time to revise initial Business Case and/or Pitch Deck

Assignments Due:
• **Teams:**
  • Prepare a 5-minute team update presentation. next session.
  • Initial Draft Business Case and Pitch Deck. DUE next session.
  • Latest Iteration of Business Model Canvas. DUE next session.
03/07/2022 - Cost Structure (Revenue Streams review if desired)

Class meeting detail:

● Cross-team Team meetings and work time on Business Case and/or Pitch Deck

Assignments Due:

● Teams:
  ○ Prepare a 5-minute team updates presentation. DUE next session.
  ○ Final Report final draft. DUE next session.
  ○ Initial Balance Sheet/Cash Flow DUE next session.
  ○ Prepare agenda/goals for One on One Team Meeting. DUE next session

03/14/2022 - No Class Spring Break

03/21/2022 - One on One Team Meetings - Balance Sheets

Course meeting detail:

● Team One and Ones - each team will meet with me one on one for 30 min
● Walk thru Key Metrics, Review Balance Sheet/Cash Flow, Update Status on business cases and pitch decks.
● Discuss future Class Determined Topics - prioritize & scope
● Team work time to revise Business Case and/or Pitch Deck

Assignments Due:

● Teams:
  ○ Prepare a 5-minute team updates presentation. DUE next session.
  ○ Drafts for Business Case and Pitch Deck DUE next session.
  ○ Revised Balance Sheet/Cash Flow DUE next session.

03/28/2022 - One on One Team Meetings

Course meeting detail:

● Team One and Ones - each team will meet with me one on one for 30 min
● Walk thru Key Metrics, progress on business cases and pitch decks.
● Discuss future class topics - prioritize & scope
● Team work time to revise Business Case and/or Pitch Deck

04/04/2022 - No Class - Independent Team Meetings

Class meeting detail:

● No formal class meeting.
● I will be available for individual team meetings, as requested.
04/11/2022 - Presentation Skills, Initial Pitches & Culture Canvas Redux

Course meeting detail:
- Review/Update Culture Canvas assess changes since first semester
- Teams rehearse pitch deck presentations;
- Work time to update pitch decks / Business Cases

Assignments:
- Team:
  - Draft Pitch Decks. DUE 4/25.
  - Final Pitch Decks. DUE 5/02.
  - Final Business Case. DUE 5/02.
  - Prepare agenda/goals for One on One Team Meeting. DUE next session

04/18/2022 - One on One Team Meetings

Course meeting detail:
- Team One and Ones - each team will meet with me one on one for 30 min
- Walk thru Key Metrics, Updates on Business Cases and Pitch Decks.
- Discuss future class topics - prioritize & scope
- Team work time to revise Business Case and/or Pitch Deck

Assignments:
- Individual: Self & peer evaluations. DUE 5/03.
- Team:
  - Final Pitch Decks. DUE 5/02.
  - Final Business Case. DUE 5/02.

04/25/2022 - Present Pitch Decks to External Panel

Course meeting detail:
- Teams Pitch Final Business Case to a professional panel.
- Each Team Presents Business Pitch Deck
- Discuss Go/No Go Decisions
- Discuss Lessons Learned

05/02/2021 - Present, Reflect and Celebrate!

Course meeting detail:
- Present Pitch Deck with Go/No Go Decision & Lessons Learned
- Reflect & Celebrate
Assignments:
- **Team**: Capstone Expo. **DUE DATE TBD.**

**05/10/2021 - CAPSTONE EXPO!**

**Academic Integrity**

Academic integrity is a vital component of Wagner and NYU. All students enrolled in this class are required to read and abide by *Wagner’s Academic Code*. All Wagner students have already read and signed the *Wagner Academic Oath*. Plagiarism of any form will not be tolerated and students in this class are expected to report violations to me. If any student in this class is unsure about what is expected of you and how to abide by the academic code, you should consult with me.

**Henry and Lucy Moses Center for Students with Disabilities at NYU**

Academic accommodations are available for students with disabilities. Please visit the *Moses Center for Students with Disabilities (CSD) website* and click on the Reasonable Accommodations and How to Register tab or call or email CSD at (212-998-4980 or mosescsd@nyu.edu) for information. Students who are requesting academic accommodations are strongly advised to reach out to the Moses Center as early as possible in the semester for assistance.

**NYU’s Calendar Policy on Religious Holidays**

*NYU’s Calendar Policy on Religious Holidays* states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. Please notify me in advance of religious holidays that might coincide with exams to schedule mutually acceptable alternatives.