NULT New Jersey's Science & Technology University

MGMT 680: Entrepreneurial Strategy (a.k.a. Tech Venture Support Program)

Thursdays 6:00pm – 8:50pm Faculty Memorial Hall 408.

Instructor: Cesar Bandera 2010 Central Avenue Building bandera@njit.edu

Course Description

This experiential course teaches strategies for the formation, growth, and harvesting of technology-based start-up companies. It exposes students to real entrepreneurial ecosystems for which the students develop actionable strategies for immediate execution. Students thus learn about entrepreneurial strategies and mindsets from their interactions with actual startups and founders. The course covers strategies for product development, intellectual property protection, financing, and venture creation and management. By providing the tools and evaluation criteria with which to start and grow a venture, this course enables the student to evaluate a career as an entrepreneur, or as an intrapreneur within a larger organization.

This course is also called the Tech Venture Support Program, and is a community outreach effort by the NJIT Martin Tuchman School of Management. To see what previous MGMT680 students have done, see https://management.njit.edu/tech-venture-support-program.

Course Structure

At the start of the semester, students meet with recently formed regional companies, and then organize themselves into teams. Each team will work with their selected company for the remainder of the semester. Students help these companies commercialize new products by conducting market analysis (including focus groups, surveys, and secondary market analysis), identifying and pursuing funding opportunities (including equity investments, crowdfunding campaigns, and public and private grants), and generating pro-forma financials and valuations. Each team presents progress reports to the class, as well as a final presentation attended by company representatives. In-class and online discussions is an important component of the course, so that students learn from the work and experiences of others.

Each team will do one project, which is typically one of the following three project types:

- Write a proposal for grant funding (e.g., a <u>Small Business Innovation Research</u> proposal).
- Conduct market research and customer discovery.
- Develop financial models and company valuation estimates for equity-based funding.

Activities and Resources at the NJIT Van Houten Library

Students must be proficient in the use of research tools. The NJIT Van Houten Library offers these <u>resources</u> including a <u>Business Research Guide</u>, a <u>Tutorials Guide</u>, and <u>Research Guides</u> that are relevant to this course. Particularly important are the research guides on <u>citing your</u> <u>sources</u> and on <u>making oral presentations</u>.

Activities at the NJIT VentureLink Startup Incubator

In this course, students will uniquely benefit from access to the on-campus VentureLink <u>http://venturelink.org/</u>, one of the largest small business incubators in the region, to see entrepreneurial strategies at work. Students are encouraged to attend special entrepreneurial events and workshops hosted at VentureLink. VentureLink maintains an NJIT Entrepreneurship Calendar; to add it to your NJIT Gmail calendar, go to <u>http://bit.ly/NJITEntCal</u> and accept the calendar invitation.

Course Outcomes

In addition to the specific course objectives, the course intends to help students develop a wide range of analytical, communication, interpersonal, and technology skills. Upon completion of the course students should have the following skills:

- Evaluate the outlook of an established new venture using research tools and entrepreneurial methodologies.
- Assess the entrepreneurial strengths and weaknesses of start-up founders, and those of the student himself/herself.
- Create, articulate, and defend business plans, both verbally and in writing.

Textbook (Optional)

Kathleen R. Allen, <u>Launching New Ventures: An Entrepreneurial Approach</u>, 7th or 8th Edition (Cengage).

Prerequisites

Knowledge

Students are required to be familiar with financial and marketing concepts, financial and statistical functions in Microsoft Excel, and the Canvas Leaning Management System.

Activity Calendar

Lectures and assignments will focus on the topics jointly selected by participating students and new ventures (i.e., clients), and are subject to change in response to selections and to changes in pandemic protocols. Any changes to the calendar will be announced in Canvas and in class.

Class	Topics and Activities	Reading Assignment	Written Assignment Due
9/7	Innovation vs. entrepreneurship, business model canvas, lean startup methodology, mindset change (from startup to growth).	Lesson 2 "What We Now Know" by Eric Reis ⁽¹⁾	Introduce yourself.
9/14	De-Risking Business Models	Lesson 3 "Business Models and Customer Development" by Eric Reis ⁽¹⁾ ; Allen Chapter 6 "Prototyping and Validating a Solution" ⁽²⁾ ; Forward and Introduction chapters in TTH ⁽³⁾	What 3 things could a client pitch that would attract you to her/his project?
9/21	Entrepreneurs present to the class their ventures, value propositions, and request.	Research the candidates ⁽⁴⁾	
9/28	Feasibility analysis of the market and the business model	Allen Chapters 4 "Analyzing the Industry and Market" and 5 "Developing and Testing a Business Model"	Team rosters ⁽⁴⁾ : students, company, spokesperson
10/5	Prototyping & validating offerings	Allen Chapters 1, 2, and 3	Proposal: deliverables, Gantt chart, dependencies
10/12	Your evaluation of your client.	Business Model Design Workbook Guide in http://bit.ly/NJIT_BMC	Business Model Canvas and SWOT Table of client
10/19	The SBIR Program and Customer Discovery	 (a) <u>https://www.sbir.gov/tutorials/program-basics/</u> and <u>https://www.sbir.gov/tutorials/preparing-proposal/tutorial-1</u> "Understanding evaluation criteria" (b) Allen Chapter 14 "Developing a Startup Marketing Plan" 	
10/26	Pro-Forma Financials and Valuation	 ^(a) Read about agencies relevant to the client: <u>https://www.sbir.gov/tutorials/individual-agency-requirements/</u> <u>https://www.sbir.gov/tutorials/agency-solicitations/</u> <u>https://www.sbir.gov/tutorials/finding-topics/</u> ^(b) Business Assumptions Exercise, and Screwing Up Customer Discovery, in Appendix of TTH ⁽³⁾ ^(c) B&Z⁽⁵⁾ Chapter 8, Part 4 in Leach ⁽⁶⁾, Intro worksheet in FinancialsRevN.xlsx in <u>http://bit.ly/NJIT_Valuation</u> 	(a) Select specific topic(s) (b) Biz. Assumptions Exercise in Appendix of TTH ⁽³⁾ ; list at least two assumptions. (c) Populate worksheets 1-4 in FinancialsRevN.xlsx
11/2	Angel Investing	"Guide_to_New_York_Angels_Standard_Term_Sheet _Explained" and "John Ason"in <u>http://bit.ly/NJIT_Term_Sheets</u>	
11/9	Legal Considerations	Read the links relevant to your client: <u>https://www.sbir.gov/tutorials/itar/</u> , <u>https://www.sbir.gov/tutorials/animal-human-subjects-protection/</u> <u>https://grants.nih.gov/policy/humansubjects/research.htm</u> <u>https://www.fda.gov/training-and-continuing-education/fda-learning-portal-students-academia-and-industry</u> and <u>https://www.fda.gov/about-fda/what-we-do</u>	
11/16	Bootstrapping New Ventures	Allen Chapter 16 "Funding Startup and Growth"	
11/ <mark>21</mark>	Culture and ethics	Allen Chapters 11 and 15	
	Protecting intellectual property	Allen Chapter 7	
12/7		Allen Chapter 17 « Planning for Growth and Change"	Final deliverables to clients
12/14	Reading Day (NO CLASS)		
12/21	(Finals) Final Team Presentations to class and to clients		Presentation File or URL

(1) <u>https://www.udacity.com/course/how-to-build-a-startup--ep245</u>

(2) Kathleen Allen, Launching New Ventures in http://bit.ly/NJIT_Allen

(3) Giff Constable, <u>Talking to Humans</u> in <u>http://bit.ly/NJIT_Lean_Startup</u>

(4) Team roster and client information in https://bit.ly/TVSP_Fall2022

(5) William Bygrave & Andrew Zacharakis, <u>Entrepreneurship</u>, 2nd Edition (Wiley & Sons, 2011) in <u>http://bit.ly/NJIT_Bygrave_Slides</u>

(6) J. Chris Leach, Ronald W. Melicher, <u>Entrepreneurial Finance</u>, 4th Edition (Cengage, 2011) in <u>http://bit.ly/NJIT_Valuation</u>

(a) For students working on Grant (SBIR) proposals

(b) For students working on Market Research and Customer Discovery

(c) For students working on Financial Models and Valuation

Grading

- 1. Proposal for Client 20%
- 2. Client Analysis (BMC, SWOT) 20%
- 3. Deliverables to Client 40%
- 4. Final Presentation 10%
- 5. Classroom Participation 10% (participation in extra credit events adds 5%)

Academic Integrity and Honesty

Integrity and honesty are of paramount importance in this course, and in the careers it supports. We will adhere to the NJIT Honor Code http://www.njit.edu/academics/pdf/academic-integrity-code.pdf.