# ENTR210-: Intro to Entrepreneurship

Meeting time: Wednesday, 6:00 PM - 8:40 PM

**Location:** Kupfrian Hall 107 (NJIT Newark Campus)

**Instructors:** Dr. Kathy Naasz

Email: Kathy.Naasz@njit.edu

**Office Hours**/ Wednesdays 3:30 - 5:30 and by appointment

**Location:** Central Avenue Building, Room 3028

# **Course Description**

This course is intended for the student considering a leadership role in the commercialization of technological innovation. It covers the entrepreneurial process from conception to start-up, growth and harvesting of a new venture. It teaches students how to search for opportunities, gather resources to convert opportunities into a business, and lead the business through growth and harvest. This course covers entrepreneurship skills that are equally applicable in the startup domain and in the established corporate domain (i.e., intrapreneurship).

We consider a broad range of start-ups including high-growth, lifestyle, product-based, service-based, business-to-consumer, business-to-business, and social entrepreneurship. However, we will focus exclusively on start-ups that involve STEM-based innovation (STEM = Science, Technology, Engineering, and Math). The student is not required to develop a product or service but will be required to form a hypothetical company around such a concept.

Students will work in teams on all aspects of venture creation. They will identify a new venture opportunity, create a business plan for it, and have this business plan subjected to financial simulation and review by their peers. Students will learn to use entrepreneurship tools for market research, business model validation, customer discovery, and fundraising.

Through lectures, visits to and from entrepreneurs, case studies, and peer reviews, the course simulates the experiences that entrepreneurs undergo in conceiving, launching, and operating a business. The course enables students to evaluate an entrepreneurial career for themselves, and provides aspiring entrepreneurs with a framework for selecting, funding, and starting their own ventures or departments within existing corporations.

Any student contemplating creating a new business venture is encouraged to use this course to reduce start-up risk. Similarly, any student with an existing STEM-based business is encouraged to use this course to learn techniques to grow the business (appropriate measures will be taken

during peer-reviews to maintain the confidentiality). Students with STEM-based Capstone or co-curricular projects are also encouraged to use their projects in this class.

#### **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:

- Identify business opportunities and evaluate their commercial potential using research tools and entrepreneurial methodologies.
- Write, present and defend business plans and pro-forma financials that are ready for review by financiers including bankers and investors.
- Obtain the resources necessary to pursue an opportunity and to create an entrepreneurial organization.
- Assess the strengths and weaknesses of individuals in a start-up environment, including those of the student himself/herself.
- Integrate people, business structures and processes in entrepreneurship.
- Manage an entrepreneurial organization once it has been established.
- Grow a new business venture into a sustainable enterprise.
- Create and harvest value for the organization's stakeholders.

#### **Course Structure**

# Business Model: Research, Writing, Presenting, and Peer Review

The principal project for the semester is the development of a complete business plan for a new business that has strong growth potential. Each student team will develop a concept for an innovative product or service, and a sustainable business model centered on this innovation. Each team will present the proposed business model and company structure to the class for peer review. Students will learn both how to present innovation, and how to evaluate it. Each student will then evolve this concept into a complete business plan and submit it to two other students for evaluation from the point-of-view of investors or lenders.

# Activities and Resources at the NJIT Van Houten Library

Students must become proficient in the use of research tools in order to develop their business model. The NJIT Van Houten Library offers these tools (<a href="http://library.njit.edu/resources.php">http://library.njit.edu/resources.php</a>) and here is the list of staff (<a href="http://library.njit.edu/staff/">http://library.njit.edu/staff/</a>) who are available to assist in the use of these resources. Students are \*strongly\* encouraged to seek the assistance of library staff when researching the size and competitive landscape of their company's primary market. Before contacting them, please review the resources they have prepared a <a href="https://library.njit.edu/resources.">Business Research Guide</a> that is useful to the students in this course, a <a href="https://library.njit.edu/resources.php">Tutorials Guide</a> and other NJIT <a href="https://library.njit.edu/resources.php">Research Guide</a> that are relevant to this course. Particularly important are the research guides on <a href="https://library.njit.edu/resources.php">citing your sources</a> and on <a href="mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:ma

Below is a list of few librarians to get started:

Joseph Mercuri (Primary Contact), Research & Instruction Librarian, jmercuri@njit.edu, 973-596-8498

Ann Hoang, University Librarian, ahoang@njit.edu, 973-596-5798

Raymond Vasquez, Research & Instruction Librarian, raymond.p.vasquez@njit.edu, 973-642-4977

Quinn Morris-Pearson, Research & Instruction Librarian, quinn.i.morrispearson@njit.edu, 973-642-495

### **Textbook**

Zacharakis, A., Bygrave, W. D., & Corbett, A. C. (2019). Entrepreneurship (5th ed.). Wiley Global Education US. <a href="https://bookshelf.vitalsource.com/books/9781119563099">https://bookshelf.vitalsource.com/books/9781119563099</a>

Required Simulation: Available for purchase at: <a href="https://hbsp.harvard.edu/import/1134298">https://hbsp.harvard.edu/import/1134298</a>

This course uses the business plan guidelines of the Small Business Administration (during the Obama administration)

https://web.archive.org/web/20170211022242/https:/www.sba.gov/starting-business/write-your-business-plan

# **Prerequisites**

### Knowledge

Students are required to have conducted market research, generated pro-forma financial statements, and implemented financial and statistical functions in Microsoft Excel.

#### Courses

None.

# Tentative Schedule of Classes, subject to change Assignments must be uploaded to Canvas before class on the due date.

Class	Agenda	Reading/Viewing Assignment Due	Written Assignment Due
1/17	Activity: Introductions to each other, to the course, and to the discipline. Lecture: The Value Proposition Canvas (VPC) Lecture: Mind Maps	B&Z Chapter 1 "What We Now Know" in https://www.udacity.com/course/how-to-build- a-startupep245	Entrepreneurship Survey (link posted in Canvas)
1/24	Activities: present your VPC in class (5 min max).	WPC instructions <a href="http://bit.ly/NJIT_Value_Prop_Canvas">http://bit.ly/NJIT_Value_Prop_Canvas</a> B&Z <sup>(1)</sup> Chapter 2 The Entrepreneurship Process	Initial Mind Maps Value Proposition Canvas (5)
	Lecture: B&Z Chapter 2	Forward and Introduction chapters in Talking To Humans TTH (2)  Lesson 3 Business Models and Customer Development in https://www.udacity.com/course/how-to-build-a-startupep245	
	Activity: New Venture Simulation: The Food Truck Challenge	Business Assumptions Exercise, and Screwing Up Customer Discovery, in Appendix of TTH (2)	
	Lecture: the Entrepreneurial Mindset		
1/31	Activity: "Where to Play" strategic planning	B&Z Chapter 3 Opportunity Recognition, Shaping, and Reshaping <a href="http://bit.ly/NJIT Where 2 Play">http://bit.ly/NJIT Where 2 Play</a>	
	Lecture: business models and the business model canvas (BMC).	Business Model Design Workbook Guide: link	Lead or join a team (3 students/team)
		Lesson 3 Business Models and Customer Development in <a href="https://www.udacity.com/course/how-to-build-a-startupep245">https://www.udacity.com/course/how-to-build-a-startupep245</a>	
2/7	Activity: BMC draft review  Lecture: Chapter 4	B&Z Chapter 4 Understanding Your Business Model and Developing Your Strategy	Post Worksheets of the Where to Play exercise.
	Lecture: Lean Startup Methodology	Introduction chapter in TLS (3)	
2/14	Activity: Review a Peer BMC. For each BMC block, include a short analysis and suggest improvements.  Lecture: Lean Startup testing markets, "too many pivots". Testing Business	"Testing and Experimenting in Markets" in <a href="http://bit.ly/NJIT_Lean_Startup">http://bit.ly/NJIT_Lean_Startup</a>	Post your Color-coded BMC (5)

	Models		
2/21	Guest Speaker Lecture: The Business Plan	SBA web site <sup>(4)</sup> B&Z Chapter7 Business Planning Process.	Count the Pivots Exercise
2/28	Lecture: Legal and Tax Issues  Activity: Professor meets with each team to review Business Plan Outline  Activity: Creating your financial model (bring a laptop with Excel)	B&Z Chapter 13 "Legal and Tax Issues, IP"  "Introduction" worksheet in Financials Spreadsheet	Select and review a sample business plan (12 paragraphs, one per criteria) Bring to class a draft (paper copy, one per team) business plan <b>outline</b> for your startup with questions for the professor.
3/6	Team time to work on the Business Plan  Additional: Food Truck Challenge	B&Z Chapters 10 "Raising Money"	
3/13	SPRING BREAK		
3/20	Lecture: Market research	"Why Customer Interviews Are Important" and "The Rules for Customer Interviews" videos in https://bit.ly/NJIT_Customer_Discovery http://researchguides.njit.edu/citations http://bit.ly/NJIT_Sample_Biz_Plans Citations vs. references, Styles, captions, cross-references, B&Z Chapter 5 Entrepreneurial Marketing, Market analysis section of SBA web site (4)	
3/27	Lecture: Sources of Finance: Loans and Grants   Equity Investors	B & Z Chapter 11 "Debt and Other Forms of Financing"  SAFE by Y Combinator	
	Activity: What is the valuation of your startup firm?  Activity: Startup Funding and Loans (bring a laptop with Excel)	"Required Start-up Funds" worksheet in Financials Spreadsheet  "John Ason" in <a href="http://bit.ly/NJIT_Valuation">http://bit.ly/NJIT_Valuation</a>	
4/3	Activity: Expenses (bring a laptop with Excel) Activity: Revenue (bring a laptop with Excel)	"Salaries & Wages" and "Fixed Operating Expenses" worksheets in Financials Spreadsheet "Sales Forecast" worksheet in Financials Spreadsheet.	Draft of business plan. (5)
4/10	Activity: Startup Funding and Loans (bring a laptop with Excel)  Bootstrapping, Harvesting, and Valuation	"Required Start-up Funds" worksheet in Financials Spreadsheet	Draft of ProForma Financials. (5)

4/17	How to Pitch	Review Pitch Resources (coming soon in Canvas)	Review of peer business plan and financials (one paragraph per each of 12- point criteria)
4/24	Final Presentations		Final business plan and final presentation.
5/1	Reading Day 1		
5/8	Final Quiz Online		Final Quiz Online Final Mind Maps, Final Survey
5/11	Final grades submitted		

- (1) Textbook is referred to as "B&Z"
- (2) <u>Talking to Humans</u> by Giff Constable, in <a href="http://bit.ly/NJIT\_Lean\_Startup">http://bit.ly/NJIT\_Lean\_Startup</a>
- (3) The Lean Startup by Eric Ries, in <a href="http://bit.ly/NJIT\_Lean\_Startup">http://bit.ly/NJIT\_Lean\_Startup</a>
- (4) <a href="https://web.archive.org/web/20170211022242/https:/www.sba.gov/starting-business/write-your-business-plan">https://web.archive.org/web/20170211022242/https://www.sba.gov/starting-business/write-your-business-plan</a>
- (5) Post your work to the Canvas assignment and to the Peer Review discussion thread. If you are posting a review of a peer's assignment, reply to that peer's post of the assignment.

# **Graded Assignments, Percent of Total Course Grade, and Type**

1. Initial Mind Maps & Survey	2.5%	Individual
2. Value Proposition Canvas	2.5%	Individual (Peer access)
3. Where to Play forms	2.5%	Team
4. Business Model Canvas (BMC)	5.0%	Team (Peer access)
5. Count the Pivots	2.5%	Individual
6. BMC Peer Review	2.5%	Individual (Peer access)
7. Sample Biz Plan Review	5.0%	Individual
8. Draft Pro-Forma Financials	5.0%	Team (Peer access)
9. Draft Business Plan	5.0%	Team (Peer access)
10. Peer Biz Plan & Fin Review	10.0%	Individual (Peer access)
11. Final Business Plan	15.0%	Team
12. Final Pro-Forma Financials	10.0%	Team
13. Final Pitch	10.0%	Team
14. Comprehensive Quiz	10.0%	Individual
15. Final Mind Maps & Survey	2.5%	Individual
16. Participation	10.0%	Individual

The grade on a team assignment is shared among the team members so long as all the members contributed fairly. Every student must upload her/his assignment to Canvas, even if s/he is in a team. "Peer access" assignments must also be posted in the "Peer Review Forum"

so that fellow students can access them. Late assignments will not be accepted for grading unless there is a severe illness or an emergency situation. In these cases, legitimate documentation of the emergency must be presented and approved by the instructor and the office of the Dean of Students before extensions will be granted. Please be advised that it is crucial for you to submit the assignments on time as there are peer reviews for some of the assignments.

Grade	Score
A	90% ≤ weighted sum
B+	85% ≤ weighted sum < 90%
В	80% ≤ weighted sum < 85%
C+	75% ≤ weighted sum < 80%
С	70% ≤ weighted sum < 75%
D	60% ≤ weighted sum < 70%
F	weighted sum < 60%

## **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 <a href="http://www.njit.edu/academics/pdf/academic-integrity-code.pdf">http://www.njit.edu/academics/pdf/academic-integrity-code.pdf</a>.

A link to TurnItIn is provided in Canvas with which students can test the authenticity of their business plan drafts. The test generates a plagiarism report. Students are strongly encouraged to revise any draft that is over 25% copied in order to make it original. The submission of a final business plan that is more than 25% copied requires prior approval of the instructor and an explanation as to why so much of it is copied. Any student submitting a final business plan that is more than 40% copied, regardless of references, receives an automatic F in the course.