GSOE9220

Launching a Startup Course Outline

Never Stand Still | Engineering

Course Details

Units of Credit	6
Course Website	We are using Moodle – login via MyUNSW
Handbook Entry	https://www.handbook.unsw.edu.au/postgraduate/courses/2020/GSOE9220.html

Course Summary

Working on bringing innovative ideas or discoveries into reality, either on your own or internal to an organisation, can be a daunting task. The processes of Innovation, Startup and Entrepreneurship / Intrapreneurship require different skill sets and specialist knowledge and can be very difficult to successfully balance, particularly as an individual. This course is designed to furnish participants with an understanding of these three processes and how they differ yet support each other. Through an innovative mix of learning, teaching and assessment methods students will work in small teams, and with mentors, to identify an opportunity, innovate a solution, design a product or service and develop an entrepreneurial approach to delivering it to. Successful completion of the course should result in participants being ideal Startup founders, cofounders or team members.

Course Timetable

Tuesdays **Interactive / Collaborative Workshop Series + Guests from Industry**
1 pm – 4 pm Online

Online
24 / 7 open access to resources / peers / forums etc in Moodle.

Course Aims

This course aims to develop in students a capacity to identify opportunities for innovation and capitalise on these through intrapreneurial and entrepreneurial models in cross disciplinary teams. It will provide students with the skills necessary to successfully produce and commercialise innovative ideas. It will expose them to industry experts, successful startup founders, key theorists and UNSW staff and researchers who have either innovated, commercialised or supported the process. Through experiential learning, students will develop key skills and knowledge to work in the innovation and start up space.

Student Learning Outcomes

After completing this course, students should be able to:

- apply disciplinary principles and practices to new or complex environments.
- apply enquiry-based learning and ways of thinking to new disciplinary and/or professional contexts.
- investigate, generate and synthesise complex ideas and concepts at an abstract and/or applied level.
- analyse problems or issues, articulate appropriate solutions and justify propositions and/or professional decisions.
- communicate complex ideas in a variety of formats to diverse audiences.
- demonstrate an understanding of, and the ability to apply, the principles of teamwork and collaboration.
- demonstrate an understanding of international perspectives relevant to the discipline or professional field.

This course contributes to the development of the following graduate capabilities:

Graduate Capability	**Acquired in**
scholarship: understanding of their discipline in its interdisciplinary context	Task 2 & 3
scholarship: capable of independent and collaborative enquiry	All tasks
scholarship: rigorous in their analysis, critique, and reflection	Task 3
scholarship: able to apply their knowledge and skills to solving problems	Task 1 & 2
scholarship: capable of effective communication	Task 1 & 3

leadership: enterprising, innovative and creative	Task 2 & 3
leadership: capable of initiating as well as embracing change	Task 2
leadership: collaborative team workers	All tasks
professionalism: capable of operating within an agreed Code of Practice	Task 2 & 3
global citizens: capable of applying their discipline in local, national and international contexts	Task 2

Assumed Knowledge

There are no prerequisites for this course.

Teaching Rationale

Whilst some aspects of innovation and entrepreneurship can be learned via traditional methods such as lectures, readings, case studies, literature review and pure and applied theoretical approaches, research on innovation and entrepreneurship education has shown a learning-by-doing (experiential) approach is more effective. This course integrates the best aspects of both approaches through a strong experiential-learning focus scaffolded by a flipped-classroom model incorporating current academic literature and industry studies. The course is enriched with engaged learning opportunities from weekly interaction with industry and practicing entrepreneurs to tailored team mentoring sessions. It is also supported with weekly online topics based on the Lean LaunchPad, which is used by leaders in this space such as Stanford, Berkley and the University of Pennsylvania.

During their project, students will form small teams, identify potential business opportunities and utilise enquiry based learning to innovate, create and assess the viability of their business model. Upon completion of their project, students will pitch their business model to a panel and reflect on their learning process.

Teaching Strategies

- Lectures … Provides overview of course outcomes, and delivery of core content
- Guest Lectures ... Provide access to industry leaders, UNSW staff and researchers and disciplinary experts
- Flipped Classroom ... introduces key theories, concepts, research, case study and current examples
- Workshops ... reinforce concepts through action learning and provide additional examples
- Consultation / Mentoring ... provides opportunities for targeted feedback and review
- Assignments ... allow students to demonstrate their acquisition of skills and knowledge and ability to apply them in context

Assessment

Task 1: Individual 20%

Task 1 a 10% Week 2 & 3

Professional Profile:

There will be discussion forms for weeks 1 and 2 to participate in.

Week 2

1. Post a professional profile on moodle. Include a photo of yourself and a short bio (200-300 words). Describe your interests, skills, specialist knowledge and what / where/ how you would like to develop. Let us know if you are a Hacker, Hipster, Hustler or Housekeeper.

   Read the personal profile posts of your peers. Connect with people you would like to work with. Comment on project ideas.

2. In an additional 150 words let us know why you want to study this course and what you expect to achieve from it.

3. If you have an idea for projects this semester post them here (150 words).

Week 3

4. In 200 - 300 words, describe a startup or an entrepreneur you admire, why you admire them and what they do.

Task 1b 10% Week 9

Individual

Reflective Practice Task:

Write a 700 - 1000 word constructively critical reflection on this course. Include details on how you have developed your skills and knowledge and how you will leverage the learning experience in the future. What aspects of the course did you find most useful and why. What would you like more / less of and why.

Task 2: Team 45%

Task 2 a 15% Week 3

Team & Idea Pitch:

In your team, pitch your idea to the class. Tell us what your opportunity is, and why your team is the right one to leverage this (skills, knowledge, experience, connections – who else you need and where you will find them if you were to develop this project commercially) .

Upload to Youtube or similar and provide a link via Moodle.

Participate in constructive critique of all the teams.

Format: 3 - 5 minute video, uploaded and shared on Moodle.

Task 2 b 15% Week 5

Progress Pitch: MVP and Value Proposition including business model & customers

In your team prepare a video pitch on your Value Proposition and what the MVP you will deliver will be? How will you develop your customer relationships and what channels will you use for distribution / fulfilment.

Tell us who your customers are, what problem you are solving for them and the business model you have chosen to deliver the product / service to them. You may use any format you feel appropriate.

Upload to Youtube or similar and provide a link via Moodle.

Participate in constructive critique of all the teams.

Format: 3 - 5 minute video, uploaded and shared on Moodle.

Task 2 c 15% Week 8

Project Pitch: IP, Financing and Compliance

In your team, pitch how you will deal with the compliance and finance aspects of your start up? What resources do you need, what are your cost considerations, what is your revenue model, what are your IP concerns, what are your compliance concerns?

Participate in constructive critique of all the teams.

3 - 5 minute video, uploaded and shared on Moodle.

Task 3: Team 35%

Task 3 35% Week 10

Demo and Investment Pitch:

Your Team will pitch your startup to a panel of guests.

Prepare a pitch and a prospectus for potential investors.

You have 5 minutes pitch time and 2 min Q & A.

Uploaded and shared on Moodle.

Academic Honesty and Plagiarism

Plagiarism is defined as *using the words or ideas of others and presenting them as your own* . UNSW and CSE treat plagiarism as academic misconduct, which means that it carries penalties as severe as being excluded from further study at UNSW. There are several on-line sources to help you understand what plagiarism is and how it is dealt with at UNSW:

- Learning Centre: Plagiarism and Academic Integrity
- MyUNSW: Plagiarism and Academic Misconduct
- CSE: Addendum to UNSW Plagiarism Guidelines
- CSE: Yellow Form (whose terms you have agreed to)

Make sure that you read and understand these. Ignorance is not accepted as an excuse for plagiarism.

Course Schedule

Week	Theme & content	Items due	Important notes

Week 1
14 September 2020
	DISCOVER
	• Introduction to course
	• Reflections on the startup journey
	• Profiling the startup industry
	• Innovation, Entrepreneurship, Intrapreneurship
	• Using design thinking to find opportunities
	• Iteration in development
	• How to identify opportunities
	• Business canvas development including:
	  ○ Lean canvas
	  ○ Business canvas
	  ○ Selecting a course canvas
	  ○ Iteration cycles & product lifecycle
	  ○ Applying canvas to your group		

Week 2
21 September 2020
	DEFINE
	• 'Defining' a problem
	• Market Research & Customer Segments & Customer Development including:
	  • Importance of understanding your market(s)
	  Developing, keeping & leveraging customers
		Task 1a 10%
		
		Due before class commences (1pm Tuesday)	

Week 3 28 September 2020	**DEFINE** • What business model suits you best? • MVP - Minimum Viable Product • Identifying and delivering the MVP • Intellectual property, Products, services and product service systems	Task 1a (cont.) 10% Due before class commences (1pm Tuesday) Task 2a 15% Due Sunday midnight 4 October	
Week 4 5 October 2020	**DEFINE**		

	• IP • Finding the right distribution model / channels • Value Proposition Canvas		
Week 5 12 October 2020	**DEVELOP** • Customer Relationships • Customer journey mapping • Delivering the Value proposition		
Week 6 19 October 2020	**DEVELOP** • Designing the best revenue model for your start up + financing + capital • Revenue strategy workshop	Task 2b 15% Due 11:59pm 31 October **(extended from week earlier)**	
Week 7 26 October 2020	**DEVELOP** • Identifying, connecting working with and managing partners • Collaborating with Partners • Resourcing • Understanding and planning for the resources you need and the costs you will have		
Week 8 2 November 2020	**DEVELOP** • Presentation Skills • Presentation workshop • Winning them at the pitch! Effective entrepreneurial communication. •	Task 2c 15% Due 11:59pm 10 November	
Week 9 9 November 2020	**WORKSHOP** • Guest Lecture	Task 1b 10% Due by 5pm Friday	
Week 10 16 November 2020	**DEVELOP** Final Pitch; each student team to pitch their work to a panel of judges.	Task 3 35% Due before class commences (1pm Tuesday)	

Stuvac 23 November 2020	**NO LECTURE THIS WEEK**		

Resources for Students

Texts and recommended readings:

All resources for this course ae available via the course moodle site.

Course Evaluation and Development

This course is evaluated each session using the CATEI system.

This is the first delivery of this course. As such there has not been any prior evaluation.

Appendix: relevant videos

Video Title: StartUp Mondays - Jay Spence talks about Creating Value Proposition
theBox Link: http://thebox.unsw.edu.au/video/startup-mondays-jay-spence-talks-about-creating-value-proposition
YouTube Link: https://www.youtube.com/watch?v=2h2yblzphmw

Video Title: StartUp Mondays - Simon Foster from Shoeboxed talks Revenue Models
theBox Link: http://thebox.unsw.edu.au/video/startup-mondays-simon-foster-from-shoeboxed-talks-revenue-models
YouTube Link: https://www.youtube.com/watch?v=EFqbByYMsic

Video Title: Startup Mondays - Win at the pitch – Mash Up with Brent Clark from WattBlock and James Smith from Masters Academy
theBox Link: http://thebox.unsw.edu.au/video/startup-mondays-win-at-the-pitch
YouTube Link: https://www.youtube.com/watch?v=Hh0JOeD_meY

Video Title: Start Up Monday Oct 10 16 Daniel Zafir – planning for understanding costs and resourcing your start up
theBox Link: http://thebox.unsw.edu.au/video/start-up-monday-oct-10-16-daniel-zafir
YouTube Link: https://www.youtube.com/watch?v=3lvceuOPvKI

Video Title: Startup Monday 6 t2 12 Rayan & Cox – Identifying and delivering the MVP
theBox Link: http://thebox.unsw.edu.au/video/startup-monday-6-t2-12-rayan-and-cox
YouTube Link: https://www.youtube.com/watch?v=pxLz7YNFTC8

Video Title: Startup Monday Legal Vision - Intellectual Property
theBox Link: http://thebox.unsw.edu.au/video/startup-monday-legal-vision-intellectual-property

YouTube Link: https://www.youtube.com/watch?v=SHJsVlbkpQU

Video Title: Startup Monday 3 t2 16 Adam Brimo – establishing distribution models / channels
theBox Link: http://thebox.unsw.edu.au/video/startup-monday-3-t2-16-adam-brimo
YouTube Link: https://www.youtube.com/watch?v=rkFbJgZ3qZ0

Video Title: Start_Up Mondays - 3 - Todd Heslin - The importance of understanding your customer
theBox Link: http://thebox.unsw.edu.au/video/start-up-mondays-3-todd-heslin-the-importance-of-understanding-your-customer
YouTube Link: https://www.youtube.com/watch?v=iRnpyLnQ_Ok

Video Title: StartUp Monday 2 The New Wave of Female Entrepreneurs
theBox Link: http://thebox.unsw.edu.au/video/startup-monday-2-the-new-wave-of-female-entrepreneurs
YouTube Link: https://www.youtube.com/watch?v=2kFcPk9tA2Q

Video Title: Start Up Monday - Why launch a start up?
theBox Link: http://thebox.unsw.edu.au/video/start-up-monday-why-launch-a-start-up
YouTube Link: https://www.youtube.com/watch?v=Mg4smNN31Cc