HOLY SPIRIT UNIVERSITY OF KASLIK

Course Syllabus

I. Course Information (based on catalogue)

Code: STC720	Type: ☒ C ☐ CTP ☐ TP ☐ P ☒ TD	
Title: **Scientists and Engineers Entrepreneurship**		
Number of credits: **3**		Number of contact hours per week: 9
Pre-requisites:		Co-requisites:
Delivery Language: ☐ Fr. ☒ Eng. ☐ Ar.		

II. Course Core Curriculum

Course Description *(Slight introduction)*: **The objectives of this seminar are to introduce to the scientists and to the engineers the process of innovation, generation and protection of intellectual property, technology transfer and commercialization of inventions.**

This course starts by introducing students to the concept of entrepreneurship and to the ecosystem that supports and funds entrepreneurs. It simulates the challenges that a startup faces during the different stages of its life-cycle. The second half of the course is focusing on generating a business plan needs a methodological approach that provides students with a road map to follow to create new business ideas or develop existing ones. As most businesses seek financial sources, it helps students and future entrepreneurs to introduce potential investors to business opportunities.

Finally, the third part will shed the light on examples of biotech startups and businesses.

Description of Delivery Mode:

PowerPoint

Course Timetable ☐ **per Session** ☐ **per Week**

(Provide course topics)

1. Introduction to Entrepreneurship – Afif Abdel Nour

2. Transitioning from academic research to business – Afif Abdel Nour

3. Business Model Canvas – creating value for our customers. (ACIE)

4. Understand the need to plan before starting a business & produce full components of the business plan. Rita Sakr

5. Lean Startup Methodology – validating ideas to achieve product-market fit - Elie Akhrass

6. Digital and social media marketing - ACIE

7. Valorization of research Results: Technology Transfer and Entrepreneurship – Sandy Rihana

8. Valorization of research Results: Technology Transfer and Entrepreneurship - Startchy

9. Success stories in the sciences fields – Nemer El Hajj

10. Pitching for cash, Equity issues, share dilution, Valuation at various stages of development. Funding needs at different stages ACIE/VC

11. Prototyping - ACIE

12. Preparation for oral presentations - Afif Abdel Nour	
13. Preparation for oral presentations – Afif Abdel Nour	
14. Oral presentations – Afif Abdel Nour	
(Insert more rows when needed)	
Learning outcomes *(Students will be able to)*	**Assessment Methods** *(Define the use of the assessment method chosen)*
1. Introduction to the creative process and how ideas are generated.	☐ Exam
	☐ Assignment
	☐ Lab Report
	☐ Report
	☐ Course Survey
	☒ Other, Article analysis
2. Transitioning from idea to business.	☐ Exam
	☐ Assignment
	☐ Lab Report
	☐ Report
	☐ Course Survey
	☒ Other, Article analysis
3. Understanding the ecosystem that supports entrepreneurship.	☐ Exam
	☐ Assignment
	☐ Lab Report
	☐ Report
	☐ Course Survey
	☒ Other, Oral presentation
4. Using the BM Canvas & the Lean Start-up Methodology to validate a business model.	☐ Exam
	☐ Assignment
	☐ Lab Report

	☐ Report
	☐ Course Survey
	☒ Other, Oral presentation

III. Faculty Qualification

Faculty Name F.T (Full-Time) – P.T (Part-Time)	Academic Degrees	Related Coursework	Other Qualifications
Dr Afif Abdel Nour	**Ph.D.**	**Biotech Entrepreneur**	
Mr Elie Akhrass	**MBA Entrepreneurship**		**Serial Entrepreneur**
Dr Sandy Rihanna	**PhD**	**Biomedical Entrepreneur**	
Mrs Rita Sakr	**MBA**		**Serial Entrepreneur**
Dr Nemer El Hajj	**PhD**	**Mechanical Engineering Entrepreneur**	

IV. Course Grading

Grading Criteria (Total = 100%)	
10%	Attendance and participation
10%	Generating ideas
40%	Business plan
40%	Oral presentation

V. Course Material

Required Texts	
Supplemental References	- Alexander Osterwalder & Yves Pigneur, Business Model Generation – Online Summary can be found at: https://strategyzer.com/books/business-model-generation - *Preparing Effective Business Plans, An Entrepreneurial Approach, Bruce R. Barringer, E-text; Pearson New International Edition, First Edition, 2014.*
Required Materials	*<List any special materials or supplies required for this course>*