College of Information Technology and Computing
Department of Information Technology

SYLLABUS

Course Title: **Technopreneurship**
Course Code: Techno
Credits: 3 units (Lecture)

USTP Vision

A nationally-recognized Science and Technology (S&T) university providing the vital link between education and the economy

USTP Mission

- Bring the world of work (industry) into the actual higher education and training of the students;
- Offer entrepreneurs of the opportunity to maximize their business potentials through a gamut of services from product conceptualization to commercialization;
- Contribute significantly to the national development goals of food security and energy sufficiency through technology solutions.

Semester/Year: **1st Semester 2025-2026** Class Schedule: IT3R4 MTH 1:00-2:30 PM / IT3R13 TF 8:30-10:00AM Bldg./Rm. No.Modular Classroom 1/51-103	Prerequisite(s): N/A Co-requisite(s): N/A
Instructor: **Rhea Suzette Haguisan** Email: **rhea.haguisan@ustp.edu.ph** Mobile No.: **Available upon request.**	Consultation Schedule: **M-F 8:00 AM - 5:00 PM** Bldg.Rm. No.: **TPCO Office** Office Phone No./Local: **1145**

I. Course Description:

This course introduces students to the integration of entrepreneurship and technology, equipping them with the mindset and tools necessary to identify, develop, and launch tech-based innovations. It explores the technopreneurial process—from ideation to prototyping, validation, and pitching—emphasizing lean startup principles, opportunity recognition, and digital business models. Through hands-on projects, students will develop a scalable tech-based solution and pitch it to a simulated investor panel or real-world audience. The course promotes creativity, resourcefulness, and collaborative problem-solving as key skills for innovation-driven entrepreneurship.

II. Course Outcome:

Course Outcomes (CO)	Program Outcome (PO)												
	a	b	c	e	f	g	h	i	k	l	m	n	o
CO1: The students will be able to understand and experience the entrepreneurial process through generation of creative ideas.	E	E	E	E	E	E	E	E	E	E	E		
CO2: The students will be able to: 1) understand the market needs or provide a solution to a key problem, and 2) explore the	D	D	D	D	D	D	D	D	D	D	D		

USTP Core Values:

A. **Unselfish Dedication** – Selfless commitment and complete fidelity towards a course of action or goal.

B. **Social Responsiveness** – Ethical/moral responsibility leading to corrective action on social issues and contributions for the betterment of the environment and the community's quality of life.

C. **Transformational Leadership** – Leading through inspiration and by example to foster positive change with the end goal of developing followers into leaders.

D. **Prudence –** Self-governance leading to circumspection and good judgment in the management of affairs and use of resources.

Program Educational Objectives:

PEO1: To develop the learner as a holistic person who is knowledgeable, productive and self-reliant member of the society with social, economic and environmental responsibility.

PEO2: To equip students with appropriate knowledge and skills, proper attitudes and values towards work.

PEO3:

feasibility and creation of a business enterprise.													
CO3: The students will be able to implement their creative ideas into real products/services.	D	D	D	D	D	D	D	D	D	D	D		
CO4: The students will be able to experience the dynamics of participating on a business/venture team, develop a business model, pitch to potential investors.	D	D	D	D	D	D	D	D	D	D	D		

III. Course Outline:

Allotted Time	Course Outcomes (CO)	Intended Learning Outcomes (ILO)	Topic/s	Suggested Readings	Teaching-Learning Activities	Assessment Tasks/Tools	Grading Criteria	Remarks
Week 1 3 hrs	CO1	At the end of the session students will be able to: Identify the required knowledge and skills	Course Orientation University's Vision and Mission	Student Handbook Course Syllabus	Plenary Lecture	Quiz		

To translate vocational interest and diversified occupational skills through the effective utilization of appropriate technology for people's economic sufficiency.

Program Outcomes:

a: Demonstrate innovative and critical thinking in the application and integration of knowledge in mathematics and science to solve technology and engineering problems through defined and applied systems to justify the appropriateness of the solution, both tangible and intangible new ideas or ways of approaching things to create possibilities and opportunities.

b: Identify, formulate, analyze and solve broadly-defined technology and engineering problems through analytical tools and application of knowledge of diversity and multicultural competencies to promote equity and social justice in the community through shared responsibility for collaborative work and valuing the individual contributions made by each team member.

c: Design a system, component, or process to meet the desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety,

		set for the assessment of every learning outcomes.	College Goals and Objectives Class Policies and Agreement Grading System Course requirements Course syllabus, course outline					
Week 2 3 hrs	CO1	At the end of the session, students will be able to explain the concept of technopreneurship and its relevance in the digital age.	Introduction to Technopreneurship Entrepreneurial Thinking in the 21st Century	Academic models (Shane, Nab), study.com	Plenary Lecture Workshop, ideation, lecture on theory	Problem-opportunity map + write-up	Rubrics	
Week 3-4 6 hrs	CO1, CO2	At the end of the session, the students will be able to synthesize user insights and clearly define actionable	Problem Identification and Opportunity Recognition	Plenary Lecture Workshop, ideation, lecture on theory	Problem-opportunity map + write-up	Interview plan + reflection log + mock or actual interview	Rubrics	

manufacturability, and sustainability, in accordance to standards and work collaboratively and respectfully as member and leader of diverse team and community in sustainable development.

d: Conduct investigations, design and experiments, as well as to analyze and interpret data responsibly and sustainably on current economic demands at local, national and global levels in the face of adverse circumstances and uncertainties.

e: Demonstrate expertise and articulate views, thoughts and ideas effectively using modern enabling technology and engineering tools necessary for the practice in a specialized discipline of study.

f: Communicate ideas clearly through knowledge of contemporary issues in the development of quality human capital, technology solutions and enterprise to engage in independent and life-long learning at local, national, and global levels.

g: Understand the impact of technology and engineering solutions in the face of adverse circumstances and uncertainties through broad education necessary for sustainable economic and environmental development in local, national and global context.

		problem statements based on empathy and discovery.						
Week 5-6 6 hrs	CO1, CO2	At the end of the session, students will be able to conduct problem analysis and generate opportunity areas for tech-driven innovation.	Customer Discovery How to talk to problem owners	Blank & Dorf (2012); Ries (2011); HBR; Steve Blank Blog	Plenary Lecture interview role-play, empathy mapping, script writing	Interview plan + reflection log + mock or actual interview	Rubrics	
Week 7-8 6 hrs	CO2	At the end of the session, students will be able to construct a Business Model Canvas for a proposed tech solution.	Value Proposition Canvas	Osterwalder, A., & Pigneur, Y. (2014). *Value Proposition Design*, Chapters 1–3	Plenary Lecture Instructor-led walkthrough of the VPC framework (Customer Profile + Value Map) Analyze and critique sample VPCs from real startups - Group activity:	- Submission of a completed Value Proposition Canvas - 1-page write-up justifying product–market fit based on the VPC	Rubrics	

h: Understand professional, social and ethical responsibility in the application of diverse knowledge and multicultural competencies to promote equity and social justice in the community.

i: Function independently, collaboratively and effectively as individual, member or leader of multidisciplinary, trans-disciplinary and multi-cultural teams through modern communication tools.

j: Communicate ideas, perspectives, and values effectively, clearly and persuasively in English (and as much as possible local language and Filipino) as well as be able to listen and comprehend and write effective reports, design documentation, make effective presentations, and give and receive clear instructions.

k: Effectively demonstrate knowledge and understanding of technology and engineering management principles as a member and leader in a team, to manage projects and in multidisciplinary environments.

l: Recognize the need for, and engage in life-long learning to discuss and demonstrate expertise through integration of ideas, methods, theory and practice in the latest development in relevant technologies.

					students choose a tech product idea and build a VPC based on target users Use customer empathy tools (interviews, observation, or persona worksheets)			
Week 9	Midterm Examination							
Week 10 3 hrs	CO1, CO3	At the end of the session, students will be able to apply lean startup principles in the development of a tech-based business idea.	Lean Startup Methodology	- Ries, E. (2011). *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses* (Chapters 1–3) - Blank, S., & Dorf, B. (2012). *The Startup*	Plenary Lecture Lean Canvas Workshop: Fill out a Lean Canvas for a proposed tech venture	Submission of Lean Canvas for student-generated idea	Rubrics	

m: Able to think critically and creatively; and apply analytical and quantitative reasoning to address complex challenges and everyday problems through participation and engagement in research and development aligned to local and national					*Owner's Manual* - Article: "Build-Measure-Learn Feedback Loop" (Harvard Business Review, hbr.org)				
	Week 11 3 hrs	CO1, CO3	At the end of the session, students should understand that a strong business model defines how a venture creates, delivers, and captures value, while a marketing model ensures that the right customers know, trust, and buy the product.	Business and Marketing Models	-Business Model Generation – Alexander Osterwalder & Yves Pigneur A visual guide to designing innovative business models, featuring the Business Model Canvas. -Value Proposition Design – Alexander Osterwalder, Yves Pigneur,	Plenary Lecture Go-to market simulation Group Work	Submission of groupwork on business model and marketing model	Rubrics	

					Gregory Bernarda, Alan Smith A practical handbook for crafting products and services that customers truly want. -The Lean Startup – Eric Ries Introduces the build–measure–learn loop for quickly testing ideas and bringing products to market.				
	Week 12-13 6 hrs	CO2, CO3	At the end of the session, students will be able to build or design a minimum viable product using appropriate tools and frameworks.	Prototyping and MVP Development	- Ries, E. (2011). *The Lean Startup*, Ch. 5–6 (Build–Measure–Learn, MVP concept) - Blank, S. & Dorf, B. (2012). *The Startup Owner's Manual* –	Plenary lecture Prototyping Workshop	Prototype submission	Rubrics	

					MVP validation section - IDEO.org (2015). *The Field Guide to Human-Centered Design* – Prototyping chapter - Harvard Business Review Article: "Why the Lean Start-Up Changes Everything" by Steve Blank				
	Week 14 3 hrs	CO2, CO3	At the end of the session, students will be able to plan and conduct customer interviews to validate their assumptions and business model.	AI Tools and Support	*NVIDIA AI Startups Guide* (NVIDIA, 2023)	Plenary lecture	Integrating AI in their pitch and prototype	Rubrics	

Week 15 3 hrs	CO1, CO4	At the end of the session, students will be able to identify basic intellectual property rights and legal considerations for tech ventures.	Intellectual Property and Legal Aspects	WIPO Primer on Intellectual Property (WIPO, 2020)	Plenary lecture	Reflection IP Application Mapping Worksheet Quiz	Rubrics	
Week 16-17 6 hrs	CO1, CO4	At the end of the session, students will be able to create an effective pitch deck and deliver a compelling business presentation.	Art of Storytelling	Guber, P. (2011). *Tell to Win: Connect, Persuade, and Triumph with the Hidden Power of Story*	Plenary lecture Pitch	Final Pitch Deck	Rubrics	
Week 18	Final Examination							

IV. Course Requirements:

1. Class attendance and participation policy:

   - Attendance refers to Student Handbook
   - Expected classroom behavior (may want to develop this with the students, e.g., What guidelines are appropriate for behavior and participation in a large class

a. Students are expected to address everyone with respect in every online media class.
b. Students should also address the Instructor properly. Student may send a message a public or private message for any further clarification in the lessons/topic and in a polite manner.

- Ground Rules for participation in discussions or activities.
  Only one student may talk at a time.

0. Course Readings/Materials:

(a) Titles, authors and editions of textbooks and other materials, required and recommended

- How to Build a Startup by Steve Blank
- The Berkeley Method of Entrepreneurship, SCET UC Berkeley
- The Lean Startup by Eric Ries
- Startup guide : construction and contracting. Call #: CIR 624.068 S79 ©2022; Sublocation: Main Library
- Launching new ventures : an entrepreneurial approach, Kathleen R. Allen, University of Southern California. CIR 658.1141 Al53 c2016, Sublocation: Main Library
- Student start-ups : the new landscape of academic entrepreneurship, Mike Wright, Philippe Mustar, Donald Siegel., CIR 658.1 W94 ©2020,
- Technology Entrepreneurship (Taking Innovation to the Marketplace), Second Edition, by Thomas N. Duening, Robert D. Hisrich, and Michael A. Lechter. Sublocation: Main Library
- Accounting for Entrepreneurs by Sonia Gil

(b) Supplies needed (calculators, softwares, workbooks, disks, CDs, lab supplies, art supplies, etc.)

(c)URLs for online resources

3. Assignments, Assessment and Evaluation

(a) Policy concerning homework (grading, posting, late policy, etc.)

(b) Policy concerning make-up exams

- refer to student handbook

(c) Policy concerning late assignments/requirements

- late assignments will be accepted with deduction

(d) Preliminary information on term papers or projects, with due dates

- late projects will be given equivalent deduction per hour

(e) List of assignments that will impact the final grade and % weight given each

- Non-submission of blog and Non-participation of final pitching.

(f) Description in detail of grading processes and criteria (how many quizzes, tests, papers; weighting of each; amount of homework, etc.) or the GRADING POLICY

Criteration: Passing score is 70% of the score per examination.

Periodic Grades:		*Grades:*	
Periodic Pitching	*- 30 %*	*Midterm*	*- 50 %*
Group Presentation & Evaluation	*- 30 %*	*Final*	*- 50 %*
Project	*- 20 %*	*Final Grade*	*- 100%*
Assignment /Journal	*- 20%*		
	100 %		

(g) Subject-to-change notice - TBA

(h) Date and time of Final Exam -Depending on the scheduled time by the University.

4. Use of USTeP and PRISMS in class

to distribute course materials, to communicate and collaborate online, to post grades, to submit assignments, and to give you online quizzes and surveys.

5. Rubrics Midterm Examination

Criteria	Excellent (25 pts)	Proficient (20 pts)	Developing (15 pts)	Beginning (10 pts)	Weight
1. Clarity of Problem Identified	Clearly defines a real, specific, and relevant problem with measurable pain points. Shows evidence of urgency and scope.	Problem is defined and relevant but lacks depth or specificity.	Problem is somewhat vague or broad. Lacks supporting context or clarity.	Problem is unclear, generic, or unrelated to real user needs.	25%

2. Customer Discovery Process	Provides strong evidence of direct customer discovery through interviews, surveys, or observation. Insights are clear and actionable.	Conducted basic customer discovery with partial insights. Some connection to problem validation.	Minimal effort in customer discovery. Insights are shallow or inconsistent.	No real customer input gathered; assumptions are unsupported.	25%
3. Value Proposition Canvas (VPC) Alignment	Clearly maps customer jobs, pains, and gains with matching products/services, pain relievers, and gain creators. Excellent problem-solution fit.	VPC elements are mostly aligned and reflect an understanding of user needs. Some mismatches or unclear points.	VPC is partially filled; connections between customer side and value side are weak.	VPC is incomplete or shows major misunderstandings of the tool.	30%
4. Presentation or Report Organization	Content is well-organized, logically presented, and professionally written or delivered. Visuals/data enhance clarity.	Content is organized but could be more concise or polished. Visuals support communication.	Organization is uneven. Visuals or formatting may distract.	Content lacks structure or clarity. Difficult to follow.	10%
5. Reflection and Insight	Demonstrates deep insight into user needs, assumptions tested, and next steps. Shows entrepreneurial mindset.	Reflects on some insights and outlines next steps. Some learning from the process.	Limited reflection. Generic next steps or unclear learning points.	No clear insights or learning derived from the process.	10%

5. Rubrics Final Examination

Criteria	Excellent (25 pts)	Proficient (20 pts)	Developing (15 pts)	Beginning (10 pts)	Weight
1. Problem and Solution Clarity	Clearly defines a relevant and validated problem; solution is highly aligned and compelling.	Problem and solution are understandable; some alignment shown.	Problem or solution lacks clarity or detail; weak relevance.	Problem is vague; solution lacks connection or feasibility.	20%
2. MVP and Prototyping Execution	Functional prototype/MVP shows core features; demonstrates testing, feedback, and refinement.	MVP is usable but basic; some evidence of development and testing.	Prototype is incomplete or lacks clarity in function or purpose.	No MVP/prototype or unrelated to the proposed solution.	25%
3. Value Proposition and Market Fit	Clearly communicates a unique, validated value proposition with strong customer insight.	Value proposition is evident but may need clearer differentiation or deeper user focus.	Generic or unclear value proposition; lacks strong customer grounding.	No clear value proposition; missing connection to user needs.	15%
4. Business Model & Scalability	Well-structured business model with defined revenue streams, customer channels, and growth potential.	Business model is functional; some growth strategy shown.	Basic model with unclear viability; missing components.	Business model is incomplete or lacks logic.	15%
5. Presentation Delivery & Visuals	Highly engaging, professional delivery with cohesive slide deck and demo; visuals enhance clarity.	Clear and confident delivery; minor improvements needed in visuals or flow.	Delivery is uneven; visuals cluttered or inconsistent.	Poorly delivered; visuals disorganized or missing.	15%

6. Q&A Handling	Answers questions confidently and accurately; demonstrates mastery of content and customer understanding.	Responds to most questions well; minor gaps in depth or clarity.	Struggles with clarity or misses key insights in responses.	Unable to answer questions effectively; lacks understanding.	10%

7. Definition of Terms

- Tech-Based Venture - core offering, business model, or delivery mechanism is driven by technological innovation. This may include software platforms, mobile apps, digital products, hardware solutions, or AI-powered services.
- Minimum Viable Product (MVP) - A prototype or basic version of a product developed with the least effort but enough functionality to be tested by early adopters. The MVP allows entrepreneurs to validate assumptions and iterate quickly based on user feedback.

Prepared by:	**Recommending Approval:**	**Approved by:**
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