Course Guide: HI250 Business Aspects in Medical Informatics

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Course Description

HI250 Business Aspects in Medical Informatics is a graduate-level course designed to provide students with a comprehensive understanding of business principles, models, and frameworks specific to the Healthcare Information Technology sector. The course progresses from fundamental business modeling concepts through practical applications, emphasizing hands-on learning through case studies and business idea development. Students will analyze existing health IT businesses and develop their own business proposals using established frameworks such as the Business Model Canvas, Lean Canvas, and Value Proposition Canvas. This course combines theoretical knowledge with practical entrepreneurial skills within the context of health informatics.

Course Learning Objectives

Upon completion of this course, students will be able to:

1. Apply business modeling frameworks to analyze and develop healthcare IT solutions
2. Analyze real-world health IT companies using business analysis frameworks
3. Develop comprehensive business proposals for healthcare IT solutions
4. Create and present effective business pitches
5. Evaluate market opportunities and challenges in the health IT sector
6. Understand financial and regulatory aspects of healthcare IT businesses
7. Provide constructive feedback on business proposals

Course Topic Outline

1. Business Models and Business Model Canvas Introduction
2. Business Model Canvas Deep Dive
3. Healthcare IT Landscape Analysis
4. Lean Canvas and Value Proposition Canvas
5. Value Creation in Healthcare IT
6. Business Model Innovation in Healthcare
7. Digital Entrepreneurship and Scale-up Strategies
8. Case Study Presentations

9. Financial Models and Regulatory Considerations

10. Business Plan Development

11. Business Pitch Presentations

12. Future Trends and Opportunities

Course Schedule (by Week)

Week 1: Business Models and Business Model Canvas Introduction

- Introduction to business model concepts

- Overview of Business Model Canvas

- Reading assignments and self-study materials

- Initial framework discussion

Week 2: Business Model Canvas Deep Dive

- Detailed exploration of Business Model Canvas components

- Real-world healthcare IT examples

- Interactive online lecture

- Practice exercises

Week 3: Healthcare IT Landscape Analysis

- Overview of healthcare IT domains

- Analysis of major players and companies

- Case study selection process

- Market segmentation discussion

Week 4: Lean Canvas and Value Proposition Canvas

- Introduction to Lean Canvas

- Value Proposition Canvas framework

- Initial business idea brainstorming

- Framework comparison and application

Week 5: Value Creation in Healthcare IT

- Value proposition development

- Stakeholder analysis

- Revenue models in healthcare IT

- Business idea refinement

Week 6: Business Model Innovation in Healthcare

- Innovation frameworks

- Disruptive innovation in healthcare
- Case study progress updates
- Business idea development

Week 7: Digital Entrepreneurship and Scale-up Strategies

- Startup methodologies
- Implementation strategies
- Growth and scaling considerations
- Partnership models

Week 8: Case Study Presentations

- Student case study presentations
- Peer feedback sessions
- Discussion and analysis
- Business idea progress updates

Week 9: Financial Models and Regulatory Considerations

- Healthcare IT revenue models
- Cost structures and funding
- Regulatory compliance
- Risk management

Week 10: Business Plan Development

- Business plan components
- Financial projections
- Risk analysis
- Implementation planning

Week 11: Business Pitch Presentations

- Student business pitch presentations
- Feedback sessions
- Presentation skills
- Pitch refinement

Week 12: Future Trends and Opportunities

- Emerging technologies
- Market opportunities
- Final reflections
- Course synthesis

Assignments and Grading

1. Case Study Analysis and Presentation (30%)
   - Written analysis using business frameworks
   - Oral presentation
   - Peer feedback participation

2. Business Idea Development (40%)
   - Framework applications
   - Business plan
   - Final pitch presentation
   - Documentation

3. Class Participation (20%)
   - Weekly discussions
   - Peer feedback
   - Online engagement

4. Reading Assignments (10%)
   - Weekly readings
   - Discussion contributions
   - Framework applications

About the Instructor

Dr. Mike Muin is a Medical Doctor and Healthcare IT professional with over 22 years of experience in enterprise healthcare systems. He served as Chief Information Officer at The Medical City, where he led the development of their EMR platform and clinical data repository. During his tenure at St. Luke's Medical Center, he worked as Medical Informatics Consultant across both Quezon City and Global City campuses, implementing critical clinical systems and integration solutions.

Through his consulting firm MedProjects Inc., Dr. Muin has guided major healthcare institutions through digital transformation initiatives. He recently led the implementation of a centralized Electronic Medical Record system across 91 health centers in Quezon City, achieving unified patient records at the local government level.

Dr. Muin completed his medical degree at the UP College of Medicine and holds a Postdoctoral Research Fellowship in Medical Informatics from the US National Library of Medicine. He specializes in Hospital Information Systems, Electronic Medical Records, and healthcare systems integration, with particular expertise in HL7 integration and clinical informatics. He has developed and implemented medical and nursing informatics training programs for healthcare professionals.