

# Course Syllabus: Information Technology Management

August – December 2018

X Term

**Professor** 

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## I. General Information

Course: Information Technology Management ID: 10319

Pre-requisite Strategic Planning, Project Management Semester: 2018-2

Credits: 3 Term: X Hours: 4 hours (2 hours of theory and 2 hours of practice)

#### II. Course Outline

The course aims to present concepts, approaches, techniques and tools for developing an Information Technologies (IT) Strategic Plan, whose objectives are perfectly aligned with the strategic objectives of the organization. The course develops an analysis of the current state of business and IT management and evaluates the information architecture, IT strategy, technology architecture and applications that support the business in order to determine the gap between current and desired situation and what are the strategies to bridge the gap.

## **III.** Course Objectives

The course aims to teach participants the skills necessary to develop a strategic IT plan for a company.

## IV. Learning Outcomes

### **Proficiency**

Design and implement an Information Technology Strategic Plan, aligned with the business strategic objectives, integrating technology solutions with business processes in order to develop competitive advantages.

Upon successful completion of this course, the student will be able to:

- Identify and apply the Information Technologies in order to develop competitive advantages
- Develop an IT Strategic Plan aligned to business objectives
- Planning technological architecture of the organization.
- Identify, assess and prioritize those Information Technologies projects adding value for companies

# V. Methodology

The teaching method used for this course includes lectures supported by pre-assigned reading and case studies.

## **VI.** Assessment Method

Your grade in the course will be determined as follows:

PERMANENT ASSESSMENT AVERAGE 40%				
Appraisal Type	Description	Weigth		
Quizzes	3 Quizzes	20%		
Business Cases	5 Business Cases	20%		
Course Project	2 Deliveries	30%	30%	

$$FS = (0.30 \text{ x ME}) + (0.40 \text{ x PAA}) + (0.30 \text{ x FE})$$

FS = Final Score ME = Midterm Exam

**PAA** = Permanent Appraisal Average

**FE** = Final Exam

# **VII. Scheduled Contents**

WEEK	CONTENTS	ACTIVITIES / APPRAISAL		
LEARNING UNIT I: A Strategic Perspective of Information Technologies				
<b>LEARNING OUTCOMES:</b> Identify and apply the Information Technologies in order to develop competitive advantages				
1° August 20 - 25	<ul> <li>A strategic perspective of Information Technologies</li> <li>Information Systems (IS) and Information Technology (IT).</li> <li>The Evolution of IT in the Organizations</li> <li>The Three-Era Model</li> <li>The Strategic Information Systems Era</li> <li>Strategic uses of IT</li> <li>Defining an IT Strategy and its alignment with the business</li> <li>Benefits of IT Planning</li> <li>The context for IT Strategy</li> </ul>	Presentation of IT Strategic Plan Project		
<b>2°</b> August 27 – September 01	<ul> <li>The Planning Process</li> <li>Problems and Barriers</li> <li>Planning Components</li> <li>Planning Process</li> <li>Plan Contents</li> <li>Plan Development</li> </ul>	Quiz		
3° September 03 - 08	<ul> <li>An Overview of Business Strategy and the IT Strategy Implications</li> <li>The Strategic Framework</li> <li>Business Strategy Formulation and Planning Process</li> </ul>			

WEEK	CONTENTS	ACTIVITIES / APPRAISAL
	<ul> <li>External Environment</li> <li>Pressure Groups and Stakeholders</li> <li>Strategy Tools and Techniques</li> <li>Three Paths to Market Leadership</li> </ul>	
4° September 10 - 15	<ul> <li>Analyzing and Documenting the Business Strategy and its Implications on IT</li> <li>The Internal Value Chain Analysis</li> <li>The Industry Value Chain Analysis</li> <li>Alternative Value Configuration Models</li> <li>Information Technologies and the Value Chain</li> <li>Business Analysis</li> <li>Document Business Impact on IT</li> </ul>	Quiz
LEARNING UNIT	II: Analyzing the Current IT Situation	
5° September 17-22  6° September 24-29	<ul> <li>COMES: Planning technological architecture of Understanding the Current IT Situation</li> <li>Review IT Documentation</li> <li>Documenting the Business Applications Environment</li> <li>Documenting the Technical Infrastructure Environment</li> <li>Documenting the IT Organization</li> <li>Documenting the IT Processes</li> <li>Analyzing the Current IT Situation</li> <li>Conduct Industry Benchmarking</li> <li>Identify IT Industry Trends and Competitor Profiles</li> <li>Identify High-Level Functional Requirements and Gaps</li> <li>IT SWOT Analysis</li> <li>Develop Business Application options and recommendations</li> <li>Develop IT Infrastructure options and recommendations</li> <li>Develop IT Processes options and recommendations</li> <li>Develop IT Processes options and recommendations</li> </ul>	Case: United Services Automobile Association (USAA)  Case: MDCM (A) - IT Strategy Synchronization
<b>7°</b> October 01-06	First Delivery of IT Strategic Plan Project	
8° October 08-13	MIDTERM EX	AM

WEEK	CONTENTS	ACTIVITIES / APPRAISAL			
LEARNING UNIT	III: The IT Strategic Plan				
LEARNING OUT	LEARNING OUTCOMES: Develop an IT Strategic Plan aligned to business objectives				
9° October 15-20	<ul> <li>Determining the IT Strategy Direction</li> <li>Developing IT Vision and Mission</li> <li>Developing IT Values, Goals and Strategies</li> <li>Application Architecture Definition</li> <li>Classifying the applications in the portfolio</li> <li>Generic Application Management Strategies</li> <li>Applications Portfolio and the Boston Matrix</li> </ul>				
10° October 22-27	<ul> <li>IT Infrastructure Architecture Definition</li> <li>Strategies for Managing the IT Infrastructure</li> <li>Linking the IT Infrastructure with The Business Strategy</li> <li>Justifications of Infrastructure Investments</li> </ul>	Quiz			
11° October 29 – November 03	<ul> <li>IT Governance</li> <li>IT Governance Definition</li> <li>IT Governance Framework</li> <li>IT Governance Domains</li> <li>COBIT as IT Governance Framework</li> </ul>	Case: Information System Strategy at Neelkanth Drugs			
<b>12°</b> November 05 - 10	<ul> <li>Organizing and Resourcing</li> <li>Organizing Strategies for IT         <ul> <li>Management</li> <li>Organizational Design</li> <li>Outsourcing Strategies</li> </ul> </li> </ul>	Case: West Jet Airlines- IT Governance and Corporate Strategy			
LEARNING OUTCOMES: Identify, assess and prioritize those Information Technologies projects adding value for companies.					
13° November 12-17	<ul> <li>Managing Investments in IT</li> <li>Identifying IT Projects</li> <li>Investments and Priority Settings Process</li> <li>Evaluating IT Investments</li> <li>Setting Priorities for Applications</li> <li>Assessing and Managing Investments Risk</li> </ul>	Case: MDCM (B) – Strategic IT Portfolio Management			
14° November 19-24	<ul> <li>Managing IT Services</li> <li>IT Services Strategies</li> <li>Types of IT Services</li> <li>Application Development and Provisioning Strategies</li> <li>ITIL Framework</li> <li>Measuring the IT Strategy: The balanced scorecard</li> <li>The IT Balanced Scorecard</li> </ul>				

WEEK	CONTENTS	ACTIVITIES / APPRAISAL	
	<ul> <li>Altering the Balanced Scorecard for IT</li> <li>IT Balanced Scorecard Metrics</li> </ul>		
15° November 26 – December 01		Final Delivery of IT Strategic Plan Project	
16° December 03-08	FINAL EXAM		

# VIII. Bibliography

Strategic Planning for Information Systems
By Jhon Ward and Joe Peppard (Third Edition)

Strategy-Focused IT Organization, a Balanced Scorecard Reader Harvard Business Review

Harvard Business Review on Aligning Technology with Strategy Harvard Business Review

A Practical Guide to Information Systems Strategic Planning, Second Edition By Anita Cassidy

How To Write A Great Information Technology Strategic Plan - And Thrill Your CEO By Thomas S. Ireland

Implementing the IT Balanced Scorecard: Aligning IT with Corporate Strategy By Jessica Keyes

From Business Strategy to IT Action: Right Decisions for a Better Bottom Line By Robert J Benson

Enterprise 2.0: New Collaborative Tools for Your Organization's Toughest Challenges by Andrew McAfee

# IX. Workgroups

Students should form workgroups to develop the cases and the course project. The number of people that will make up the groups will be determined by the first day of classes based on the number of students enrolled.

#### X. About the Cases

The cases are an important tool in the learning process of the course, but to be successful it relies on active and meaningful participation of class members. Everyone should read and be prepared to discuss the assigned case. Each workgroup should analyze the assigned case and submit a written report according with the schedule detailed in the syllabus.

The cases will be discussed in class, and each group must be ready to give a presentation about their analysis. Cases will be assigned in the first class.

## XI. About the Readings

Each class session has an associated set of readings that are intended to strengthen students' knowledge about each of the topics developed in class. The students should come to class having read the readings corresponding to the lecture.

The quizzes taken in class will be based on the readings and the topics covered in class.

## XII. Course Project

The students will develop an IT Strategic Plan of a real company, which will be chosen by the group. In the first class of the 2nd week, the students will present a brief description (one page) describing the business and industrial sector where it operates, products and / or services that sells, company size, an overview about its information technologies (ERP, CRM, web site, etc.) that the company uses, sources of information used to develop the project, etc. With my approval of the company chosen, the group will then be able to start the project.

There will be two official submissions according to the course syllabus, although students can bring drafts of their project to be reviewed in class,

Papers should be written in a style that is suitable for submission to boards and senior managers of the enterprise. The length of the term paper will not exceed 15 pages (excluding exhibits). Any paper that exceeds this length might receive a lower score.

#### XIII. Professor

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