

Syllabus of course Information Technology Project Management

August – December 2015

Level 8th

Professor

Alexandres Rene Hoyos Espinoza

I. Overview of Course

Course:	Information Technology Project Management	Code:	08087
Required:	Planeación Estratégica, Formulación y Evaluación de Proyectos	Semester:	2015-2
Credits:	4	Term	8 th

II. Summary

This course, understanding Information Technology (IT) Project Management, has got as a main goal that students be able to know the Project Management in relation with IT Projects. As a result of this, students should be able to first be part of and then lead a teamwork to design, develop, document, and manage a real project into IT Area, applying the knowledge, tools and techniques learned upon to PMBOK standard guide, and important topics related.

III. Objective of course

The objective of course is introducing students in concepts, tools and knowledge about Project Management in focused on IT and its challenges
Develop capabilities about management and learn tools with direct application on an IT projects.

IV. Learning Results

At the end of the course, students will be able:

- Know important concepts about Project Management, in focus to the Knowledge Management Areas proposed by The Project Management Book of Knowledge.
- Apply concepts and tools for an effective management for IT Projects.
- Design and explain a Kick Off Meeting Presentation about real project.
- Research and analyze about new topics related with Project Management.
- Analyze the importance about Soft Skills for the Project Manager.
- Explain important topics related to Project Management (PMO, Program and Portfolio Management, Agile Methods and Business Analysis).

V. Methodology

The methodology is based on active participation from students and use methods and techniques.

There will be sessions explained by the professor with lectures and discussions in group, study cases, reading papers, practice exercises and develop an integrator assignment.

There are mandatory readings from complementary material and these should be complete by students in according to schedule of course.

VI. Evaluation

The evaluation system is integral and continuous. It involves the Permanent Evaluation (60%), the Partial Exam (20%) and Final Exam (20%).

Permanent Evaluation includes these items:

PERMANENT EVALUATION AVERAGE: 60%		
Type of evaluation	Description	Weight
IT Project Management – Workshops	Each topic during the first part of course will have a workshop developed by students (The lowest grade will be eliminated)	40%
Reading Controls	Five Reading Controls (The lowest grade will be eliminated)	10%
Special Group Assignment about Project Management research	The students will present an special lecture (25 – 30 min) with a writing paper about an specific topic purpose by professor	40%
Individual researching about IT Project Management	The student should research and send an essay (between 1300 and 1500 words) about a recent new about IT Project Management	10%

The Final Average (FA) makes of this way:

$$FA = (0,60 \times PE) + (0,20 \times ME) + (0,20 \times FE)$$

Where:

FA = Final Average.

ME = Midterm Exam.

PE = Permanent Evaluation Average and,

FE = Final Exam.

VII. Content Scheduled

WEEK	UNIT	ACTIVITIES / EVALUATION
Learning Unit 1: Project Management Body of Knowledge – Part 01 Learning Results: <ul style="list-style-type: none"> • Know important concepts about Project Management, in focus to the Knowledge Management Areas like Integration, Scope, Time and Cost proposed by The Project Management Book of Knowledge. • Apply concepts and tools for an effective management for IT Projects. • Design a Project Management Plan about real project. 		
1° August 24 th - 29 th	Learning Outcomes: <ul style="list-style-type: none"> • Know and understand topics about Project Management and the relation with IT Projects. • Review the Integration Management Processes. Topics: <ul style="list-style-type: none"> • Introduction and Integration Management. <ul style="list-style-type: none"> - Project Management introduction. - Integration Management Processes. 	<ul style="list-style-type: none"> • Lecture. • Defining groups for special assignment.
2° August 31 st – September 5 th	Learning Outcomes: <ul style="list-style-type: none"> • Identify differences about Scope Project and Scope Product. • Review the Scope Management Processes. • Know the importance of Work Breakdown Structure and its application. Topics: <ul style="list-style-type: none"> • Scope Management. <ul style="list-style-type: none"> - Scope Project and Scope Product. - Scope Management Process. - Work Breakdown Structure as Fundamental Tool 	<ul style="list-style-type: none"> • Lecture. • Reading Control N° 01 • IT Workshop N° 01
3° September 7 th – 12 th	Learning Outcomes: <ul style="list-style-type: none"> • Learning estimation and compression techniques of time in projects. • Review the Time Management Processes. • Know and resolve exercises to determine Critical Path. Topics: <ul style="list-style-type: none"> • Time Management. <ul style="list-style-type: none"> - Time Management Processes. - Estimation Techniques of Time. - Critical Path Method and Techniques of Compression. 	<ul style="list-style-type: none"> • Lecture. • Exercises – Critical Path. • Selection – Topics of special assignment.
4° September 14 th – 19 th	Learning Outcomes: <ul style="list-style-type: none"> • Learning estimation techniques of cost in projects. • Review the Cost Management Processes. • Know and resolve exercises about Earned Value Method. Topics: <ul style="list-style-type: none"> • Cost Management. <ul style="list-style-type: none"> - Cost Management Processes. - Estimation Techniques of Cost. - Earned Value Method. 	<ul style="list-style-type: none"> • Lecture. • Exercises - Earned Value. • Reading Control N° 02 • IT Workshop N° 02

WEEK	UNIT	ACTIVITIES / EVALUATION
Learning Unit 2: Project Management Body of Knowledge – Part 02 Learning Results: <ul style="list-style-type: none"> • Know important concepts about Project Management, in focus to the Knowledge Management Areas Quality, Communications, Human Resources, Stakeholders, Risk and Procurement proposed by The Project Management Book of Knowledge. • Apply concepts and tools for an effective management for IT Projects. • Design a Project Management Plan about real project. 		
5° September 21 st – 26 th	Learning Outcomes: <ul style="list-style-type: none"> • Learning concepts about Quality in Project Management. • Review the Quality Management Processes. • Learning about Human Resource Management in projects. • Review the Human Resources Management Processes. Topics: <ul style="list-style-type: none"> • Quality Management. <ul style="list-style-type: none"> - Quality Management Processes. - The Seven Fundamental Quality Tools. • Human Resources Management. <ul style="list-style-type: none"> - Human Resources Management Processes - Teambuilding. 	<ul style="list-style-type: none"> • Lecture.
6° September 28 th – October 3 rd	Learning Outcomes: <ul style="list-style-type: none"> • Learning about Communication in Project Management. • Review the Communication Management Processes • Learning about Stakeholders Management in projects. Topics: <ul style="list-style-type: none"> • Communication Management. <ul style="list-style-type: none"> - Communication Management Processes. - Communication Matrix and Lessons Learned. • Stakeholders Management <ul style="list-style-type: none"> - Learning about Stakeholders techniques - Review Stakeholders Management Processes - Managing stakeholders 	<ul style="list-style-type: none"> • Lecture. • Reading Control N° 03 • IT Workshop N° 03
7° October 5 th – 10 th	Learning Outcomes: <ul style="list-style-type: none"> • Learning about Procurement in Project Management. • Review the Procurement Management Processes Topics: <ul style="list-style-type: none"> • Procurement Management. <ul style="list-style-type: none"> - Procure Management Processes. - Procure Matrix and Management of Suppliers Learning Outcomes: <ul style="list-style-type: none"> • Learning about Risk Management techniques. • Review the Risk Management Processes. Topics: <ul style="list-style-type: none"> • Risk Management. <ul style="list-style-type: none"> - Risk Management Processes. - Risk Matrix and Risk Break Down Structure 	<ul style="list-style-type: none"> • Lecture. • Reading Control N° 04 • IT Workshop N° 04
8° October 12 th – 17 th	MIDTERM EXAM	

Learning Unit 3: Complementary topics about Project Management Learning Results: <ul style="list-style-type: none"> Analyze the importance about Soft Skills for the Project Manager. Explain important topics related to Project Management (PMO, Program and Portfolio Management, Agile Methods and Business Analysis). 		
9° October 19 th – 24 th	Learning Outcomes: <ul style="list-style-type: none"> Learning about PMI's Software Extension. Topics: <ul style="list-style-type: none"> PMIS's IT Project Management Extension <ul style="list-style-type: none"> Review concepts, processes and approach. 	<ul style="list-style-type: none"> Lecture.
10° October 26 th – 31 st	Learning Outcomes: <ul style="list-style-type: none"> Learning about Soft Skills Know the importance of soft skills in Project Management Topics: <ul style="list-style-type: none"> Soft Skills in Project Management. <ul style="list-style-type: none"> The importance of Soft Skills for a Project Manager. Communication and Motivation. Leadership as fundamental skill. Negotiation and Solutions of Conflicts 	<ul style="list-style-type: none"> Lecture. Reading Control N° 05 IT Workshop N° 05
11° November 2 nd – 7 th	Learning Outcomes: <ul style="list-style-type: none"> Know and understand topics about Execution, Monitoring and Controlling, and Closing of IT Project. Topics: <ul style="list-style-type: none"> Execution, Monitoring and Controlling, and Closing of IT Project. <ul style="list-style-type: none"> Conduct Project Execution. The Control Change System and its implementation. Perform Configuration Management. Perform Project or Phase Closure Activities. 	<ul style="list-style-type: none"> Lecture. Deliver special assignment (writing paper and presentation). Special IT Workshop N° 06
12° November 9 th – 14 th	Learning Outcomes: <ul style="list-style-type: none"> Know and understand the importance of Project Management Office (PMO) in an organization. Learning PMO's roles. Topics: <ul style="list-style-type: none"> Project Management Office (PMO). <ul style="list-style-type: none"> The Role of PMO in an organization. Steps to implement a PMO. PMO and Continue Improvement in Project Management. 	<ul style="list-style-type: none"> Lecture. Presentation – PMO Roles and Perspective: PMI International Conference. Special Group Assignment Presentation.
Learning Unit 4: Advance topics about Project Management Learning Results: <ul style="list-style-type: none"> Explain important topics related to Project Management (PMO, Program and Portfolio Management, Agile Methods and Business Analysis). Research and analyze about new topics related with Project Management. Design and explain a Kick Off Meeting presentation. 		
13° November 16 th – 21 st	Learning Outcomes: <ul style="list-style-type: none"> Learning about Program and Portfolio Management as business strategies. Review the Program and Portfolio Knowledge Management Areas. Learning about OPM3 – Organizational Project Management Maturity Model. Topics: <ul style="list-style-type: none"> Program and Portfolio Management. 	<ul style="list-style-type: none"> Lecture. Special Group Assignment Presentation.

	<ul style="list-style-type: none"> - Differences about Project, Program and Portfolio Management. - Program Management and its Knowledge Management Areas • OPM3 – Concepts and application. 	
<p>14°</p> <p>November 23rd – 28th</p>	<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Learning about Agile Methods in Project Management and know the most popular methodologies. • Learning about Business Analysis and the relation with Project Management. <p>Topics:</p> <ul style="list-style-type: none"> • Agile Methods in Project Management. <ul style="list-style-type: none"> - Introduction to Agile Methods. - XP –Extreme Programming. - Scrum. • Business Analysis. <ul style="list-style-type: none"> - Introduction to Business Analysis. - Role of Business Analyst and relation with IT Projects. - Knowledge Areas of Business Analysis. 	<ul style="list-style-type: none"> • Lecture. • Special Assignment Group Presentation. • Deliver Essay about IT Project Management news.
<p>15°</p> <p>November 30th – December 5th</p>	<p>Learning Outcomes:</p> <ul style="list-style-type: none"> • Expose a Kick Off Meeting presentation based on Integrated Management Plan IT Project. <p>Topic:</p> <ul style="list-style-type: none"> • Final Presentation - Integrated Management Plan IT Project 	<ul style="list-style-type: none"> • Workshop – Project Management N^a 7, Final Presentation – Expose a Kick Off Meeting.
<p>16°</p> <p>December 7th – 12th</p>	FINAL EXAM	

VIII. Bibliography

Mandatory Bibliography

- Project Management Institute - PMI. (2013). *Project Management Body of Knowledge*. (5th ed). Pensilvania: PA, USA. Book Editor – PMI Publications.
- Project Management Institute - PMI. (2013). *The Standard of Program Management*. (3th ed). Pensilvania: PA, USA. Book Editor – PMI Publications.
- Project Management Institute - PMI. (2013). *The Standard of Portfolio Management*. (3th ed). Pensilvania: PA, USA. Book Editor – PMI Publications.
- Project Management Institute - PMI. (2013). *Software Extension to PMBOK Guide Fifth Edition*. Pensilvania: PA, USA. Book Editor – PMI Publications.
- Kezner, H. (2007). *Project Management a systems approach to planning, scheduling and controlling*. New Jersey: NJ, USA. John Wiley & Sons Inc.
- Levatec, C. (2006). *The Program Management Office – Establishing, Managing and Growing the Value of a PMO*. Florida: FL, USA. J. Ross Publishing Inc.
- International Institute Business Analysis – IIBA (2009). *The guide to the Business Analysis Body of Knowledge*. ISBN-13: 978-0-9811292-1-1.

Secondary Bibliography

- Brown, J. (2008). *The Handbook of Program Management*. New York: NY, USA - Mc Graw Hill Professional.
- Project Management Institute Portal. Retrieved from www.pmi.org.
- Scrum Alliance Portal. Retrieved from www.scrumalliance.org

IX. Lab Requirements

It will be using the computer labs for practical classes and evaluations.

X. Professor

Alexandres Hoyos

Master in Business Administration – International MBA Program from Centrum Catolica Business School (Peru) and Maastricht School of Management (Netherlands). Informatic Engineer – Science and Engineering Faculty from Pontificia Universidad Catolica del Peru.

Specialized in Project Management, Agile Project Management and Business Process Administration. Project Leader and Portfolio Manager at Project Management Office (PMO). Certified as Project Management Professional (PMP ®), Scrum Master (CSM ®) and SAP Business One Consultant. Professional experience in different sectors: Technology, telecommunications, finance and banking, and massive consume.

Professor in courses about Project Management. Consultant about Project Management, PMO and Strategic Planning.

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