INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE

EEPITM

Course Outline

Course Title	**IT Risk Management**
Instructor(s)	Anjan Kumar Swain
Course credit	2
Total No. of Hours	18
Year	2013

1. Introduction

Risk produces various challenges in IT projects. To become a successful IT project manager one should necessarily be a skilled risk manager. Normally, all IT projects deal with stakeholders challenging expectations and subsequent requirements, and highly nonlinear, complex and dynamic micro and macro environment factors. This course concentrates on how to look at risk management as a way to capitalize on opportunities and minimize threats so as to achieve success.

2. Objectives and scope

This course will train the students to become a proactive risk manager by understanding both qualitative and quantitative approaches to risk management. Further, they can learn how to evaluate and respond to risk at the project and task levels, and to determine how to establish an acceptable level of risk and develop a practical risk response plan. Students can learn how to identify, qualify, quantify, prioritize, and manage IT project risks.

3. **Reference Materials:**

Books:

- G. Westerman and R. Hunter, *IT Risk: Turning Business Threats into Competitive Advantage*, Harvard Business School Press, 2007.
- D. Kahneman. *Thinking, Fast and Slow*, Allen Lane, PenguinBooks Ltd, 2011.
- Peter L. Bernstein, *Against the Gods: The Remarkable Story of Risk,* John Wiley & Sons, Inc, 1998.
- Terje, Aven. *Foundations of Risk Analysis,* John-Wiley and Sons Ltd, England, 2003.
- J. Kouns and D. Minoli. *Information Technology Risk Management in Enterprise Environment*, John Wiley & Sons, Inc., Publication, 2010.
- D.F. Cooper et al. *Project Risk Management Guidelines: Managing Risk in Large Projects and Complex Procurements*, John Wiley & Sons, Inc., Publication, 2004.
- P. Weill and J.W. Ross, *IT Governance*, Harvard Business School Press, 2004.
- D. Evans, *Risk Intelligence: How to Live with Uncertainty*, Atlantic Books, London, 2012.
- F. Funston and S. Wagner, Surviving and Thriving in Uncertainty, John-Wiley and Sons Ltd, England, 2010.
- Abderrahim Labbi, *Hand-book of Integrated Risk Management,* J. Ross Publishing Inc., USA, 2005.
- C. R. Pandian, *Applied Software Risk Management*, Auerbach Publications, NY, 2007.
- D.D. Galorath and M.W. Evans, *Software Sizing Estimation and Risk Management*, Auerbach Publications, NY, 2006.
- Banks, E., *The Simple Rules of Risk*, John-Wiley and Sons Ltd, England, 2002.

- Igor Rychlik and Jesper Rydén, *Probability and Risk Analysis*, Springer-Verlag Berlin Heidelberg, 2006
- G. Gigerenzer, *Calculated Risks*, Simon & Schuster, 2002.
- C. Ray, *Extreme Risk Management*, McGraw-Hill, 2010.
- B. Kosko, *Fuzzy Thinking*, Flamingo, 1993.

Cases:

- S. Overby, Bound to fail, CIO Magazine, May, 1, 2005.
- M. Jeffery, Return on Investment Analysis for E-Business Projects, Northwestern University, 15 APR 2004
- Tektronix, Inc.: Global ERP Implementation, HBS Case, 9-699-043, 1999
- Cisco Systems, Inc.: Implementing ERP, HBS Case, 9-699-022, 2002
- Harley Davidson Motor Company: Enterprise Software Selection, HBS Case, 9-600-006, 2003

Other Publications & Handouts:

- To be uploaded after each platform session.

4. Evaluation Scheme

Components	Weightage (%)
Class Participation and Assignments	20%
Quizzes	30%
End Term Exam.	50%

6. Course Outline

	Topics
1	Background: Foundations of risk management, Measures for risk and uncertainty
2	Risk Classification, frameworks, measurements and metrics
3	Risk Attitudes: Utility theory, choice under uncertainty, biases and risk aversion
4	Risk Management Methods and Tools
5	Risk Identification, Qualification, Quantification and Analysis
6	Risk Infrastructure, Risk Response Planning, and Risk Monitoring and Control
7	Simulation for risk analysis, Risk Applications

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