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| **Class:** | **MS(PM)-2(A,B&C)** |
| **Subject:** | **Project Risk Management** |
| **Instructor:** | **Suhail Iqbal, PE, PfMP, PgMP, PgMP, PMP, PMI-PBA, PMI-RMP, PMI-SP, PMI-ACP, PME, PRINCE2 Practitioner, MCT** |

**SYLLABUS**

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| **Unit** | **Content** | **Learning Objectives** |
| 1. Overview: Issue, Problem, Change, Uncertainty, Risk, Threat, Opportunity, Hazard, Disaster and Crisis | * Issue * Problem * Change * Uncertainty * Risk * Threat * Opportunity * Hazard * Disaster * Crisis | Understand various terms related with Project risk management or its variants. |
| 1. Change Management in Projects and It's Linkage to Risk Management | * Change Management * Projects, Programs and Portfolios * Project Management * Project Management Office * Uncertainty and Risk * Managing Change during Projects * Impact of Change on Risk Management | Understand the concept of how change affects an organization and a project and how risks are directly impacted by change in projects. |
| 1. Introduction to Project Risk Management | * Project Risk Management: Definition * Why Project Risk Management? * The Nature of Risk Management * Project Risk Management is Pro-active * Risk and Decision Makers * Integrating Risk into Project Management * Good Risk Management Practice * Critical Success Factors for Project Risk Management | An introduction to the Knowledge Area of Project Risk Management and establishing how this fits into the whole picture of Project Management |
| 1. Principles and Concepts | * Definition of Project Risk * Individual Risks and Overall Project Risk * Integrating Risk into Project Management * The Natural Risk Management Process * Risk Management – An Integrative Function * Stakeholder Risk Attitudes * Variations of Risk Factors Through the Project Life Cycle * Four-Phase Approach * Iterative Process * Communication * Responsibility for Project Risk Management * Project Manager’s Role for Project Risk Management | Understand various principles and concepts involved in Project Risk Management specifically indicating various roles and responsibilities of Stakeholders and Project Manager |
| 1. Risk Management Processes | * Role of Project Risk Management in Project Management * Project Risk Management Processes   + Plan Risk Management   + Identify Risks   + Perform Qualitative Risk Management   + Perform Quantitative Risk Management   + Plan Risk Responses   + Monitor and Control Risks | Understand the role of Project Risk management in the overall Project management and define specifically the Project Risk Management Processes |
| 1. Risk Management Planning | * Purpose and Objective of the Plan Risk Management Process * Critical Success Factors for the Plan Risk Management Process * Tools & Techniques for the Plan Risk management process * Documenting the Results of the Plan Risk Management Process | Understand how the Project Risk Management Plan can be developed and what Tools and Techniques can be used for the same. |
| 1. Risk Identification | * Risk in Corporate Business Management * Risk in Project Management * Purpose and Objective of the Identify Risk Process * Types of Risk * Risk Sources * Risk Configuration * Risk Factors * Critical Success Factors for the Identify Risk Process | Understand the process of Identify Risks clearly outlining the various risk types, sources, categories and factors. |
| 1. Risk Identification Techniques | * Tools & Techniques for the Plan Risk management Process * Documenting the Results of the Plan Risk Management Process | Understand use of various Risk Identification tools and techniques and mechanism of documenting its results. |
| 1. Performing Qualitative Risk Analysis | * Risk Assessment Goals * Assessment Methodology * Advantages of Assessment Methodology * Purpose and Objective of the Perform Qualitative Risk Analysis Process * Critical Success Factors for the Perform Qualitative Risk Analysis Process | Understand the process of analyzing the identified risks, firstly by having a clear picture of Risk Assessment goals and methodology and then performing qualitative analysis of the risks. |
| 1. Techniques for Qualitative Analysis | * Tools & Techniques for the Perform Qualitative Risk Analysis Process * Documenting the Results of the Perform Qualitative Risk Analysis Process | Understand use of various Qualitative Risk Analysis Tools & Techniques. |
| 1. Perform Quantitative Risk Analysis | * Purpose and Objective of the Perform Quantitative Risk Analysis Process * Critical Success Factors for the Perform Quantitative Risk Analysis Process | Understand the process of in-depth analysis or Quantitative Risk Analysis of only those risks shortlisted from earlier process. |
| 1. Techniques for Quantitative Analysis | * Tools & Techniques for the Perform Quantitative Risk Analysis Process * Documenting the Results of the Perform Quantitative Risk Analysis Process | Understand use of various Quantitative Risk Analysis Tools & Techniques. |
| 1. Planning Risk Responses | * What is the Project Environment? * Response Options * System Standards * Insurance * Response Planning * Purpose and Objective of the Plan Risk Responses Process * Critical Success Factors for the Plan Risk Responses Process | Understanding the Project Environment and various types of Risk Responses which can be planned for positive as well as negative risks (threats and opportunities) |
| 1. Techniques for Planning Risk Responses | * Contingency Reserves * Risk and Safety * Principal Determinants * Managing by Stakeholder Groupings and categories * The Means and Value of Exercising Positive Influence * Risks in Contracts   + Contract Strategy Considerations   + Suggested Risk Sharing Principle   + Types of Contract   + Different Contract Risk Implications   + More Than One Risk   + A Question of Attitudes * Tools & Techniques for the Plan Risk Responses Process * Documenting the Results of the Plan Risk Responses Process | Understand the various types of reserves and how through different tools and techniques, these can be planned to be used to respond to selected risks. |
| 1. Monitoring and Controlling Risks and Techniques | * Role of Risk Owners * Risk Sensors and Risk Triggers * Risk Audits * New Risk Identification and Handling * Purpose and Objective of the Monitor and Control Risks Process * Critical Success Factors for the Monitor and Control Risks Process * Tools & Techniques for the Monitor and Control Risks Process * Documenting the Results of the Monitor and Control Risks Process | Understand how to Monitor and Control the planned responses and keep an eye on any new risks. |
| **Final Examination** |  |  |

**Reference Material**

**Core References:**

1. ***A Manager’s Guide to Project Management (PMBOK®)***, Fifth Edition by PMI, PMI
2. ***Practice Standard for Project Risk Management***, First Edition by PMI, PMI
3. ***Project & Program Risk Management***, R. Max Wideman, PMI
4. ***Risk Management – Tricks of the Trade® for Project Managers***, 2nd Edition by Rita Mulcahy, RMC Publications

**Other References:**

1. ***Risk and Decision Analysis in Projects***, 2nd Edition, John Schuyler, PMI
2. ***Project Management Disasters & How to Survive Them*** by David Nickson with Suzy Siddons, Kogan Page
3. ***Project Rescue – Avoiding a Project Management Disaster*** by Sanjiv Purba and Joseph J. Zucchero, McGraw Hill Osborne
4. ***Applied Software Risk Management – A Guide for Software Project Managers*** by C. Ravindranath Pandian, Auerbach Publications
5. ***Project Risk Management – The Commercial Dimension (A Specially Commissioned report)*** by Tim Boyce, Thorogood Professional Insights
6. ***Effective Opportunity Management for Projects – Exploiting Positive Risk*** by David Hillson, Marcel Dekker, Inc.
7. ***Identifying and Managing Project Risk – Essential Tools for Failure-Proofing Your Project*** by Tom Kendrick, AMACOM
8. ***Managing Project Risk – Business Risk Management for Project Leaders*** by Yen Yee Chong and Evelyn May Brown, Financial Times Prentice Hall
9. ***Managing Project Risk and Uncertainty – A Constructively Simple Approach to Decision Making*** by Chris Chapman and Stephen Ward, John Wiley & Sons, Ltd.
10. **Managing the Unknown – A New Approach to Managing High Uncertainty and Risks in Projects** by Christoph H. Loch, Arnoud DeMeyer and Michael T. Pich, John Wiley & Sons, Ltd.
11. ***Project Management and Risk Management in Complex Projects – Studies in Organizational Semiotics*** Edited by Pierre-Jean Charrel and Daniel Galarreta, Springer
12. ***Project Manager’s Spotlight on Risk Management*** by Kim Heldman, Sybex
13. ***Project Risk Management***, 2nd Edition by Chris Chapman and Stephen Ward, John Wiley & Sons, Ltd.
14. ***Project Risk Management Guidelines – Managing Risks in Large Projects and Complex Procurements*** by Dale Cooper, Stephen Grey, Geoffrey Raymond and Phil Walker, John Wiley & Sons, Ltd.
15. ***Risk Management in Software Development Projects*** by john McManus, Elsevier