



Course Specification

Course Name:[Risk Management]

Course Code:[DS415]

I. Basic Course Information

Major or minor element of program:[Major]

Department offering the course: Operations Research and Decision Support Department

Academic level:[400 Level]

Semester in which course is offered:[Second (spring) Semester]

Course pre-requisite(s): [Inventory Control and Production Management (DS424)]

Credit Hours: 3

Contact Hours Through:

Lecture	Tutorial*	Practical*	Total
2.5	1.5	0.0	4.0

* 1.5 hours for **either** Tutorial or Practical

Approval date of course specification:[January 2015]

II. Overall Aims of Course

[This course is aimed to provide graduates with the main concepts of risk management; such as: Approaches to the management of risk, Uncertainty and variability, Quantifying uncertainty, Probability assessment methods, Model building and validation, Use of software packages, extensions of decision analysis, including stochastic dominance and multi-attribute methods, applications to project management, scheduling, and cost estimation. The course should enable the graduates to explore both the positive and negative aspects of risk. It also aims at improving knowledge and practical skills in the identification, assessment and control of risk.]

III. Program ILOs covered by course

Program Intended Learning Outcomes (By Code)			
Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
[K14,K16,K18,K21]	[I10,I11,I12,I13]	[P10,P12,P15,P16]	[G2,G9]



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IV. Intended Learning Outcomes of Course (ILOs)

a. Knowledge and Understanding

- K.1 Explain the concepts of risk and uncertainty in small, medium and large organizations.
- K.2 Recognize the usage of tools for risk identification and risk assessment.
- K.3 Define the concepts and criteria that underpin a risk management strategy.
- K.4 Classify key aspects to hazard and safety management.
- K.5 Identify the theories and models of operations management in relation to risk.]

b. Intellectual/Cognitive Skills

- I.1 Relate general theory to specific contexts.
- I.2 Compare and analyse different risk situations and risk environments.
- I.3 Develop problem solving approaches.
- I.4 Select and use appropriate models, methods and techniques for identifying, researching, diagnosing and dealing with risks and uncertainties.]

c. Practical/Professional Skills

- P.1 Apply risk identification and risk assessment techniques.
- P.2 Create risk strategies and plans in different and changing contexts.
- P.3 Manage hazards more efficiently.
- P.4 Undertake crisis management planning and implementation.]

d. General and Transferable Skills

- G.1 Enhance the ability to critically reflect on own and others' practice in order to improve own/others' actions.
- G.2 Enhance the capability of working autonomously and within groups.]

V. Course Matrix Contents

	Main Topics / Chapters	Duration (Weeks)	Course ILOs Covered by Topic (By ILO Code)			
			K & U	I.S.	P.S.	G.S.
1-	[Introduction and Need for Risk Management]	[2]	[K1]	[]	[P1]	[]
2-	[Risk Analysis and Identification]	[3]	[K1,K2]	[I1]	[P1,P2]	[G1]
3-	[Risk Monitoring and Handling]	[2]	[K3]	[]	[]	[G2]
4-	[Risk planning]	[2]	[K3,K4]	[]	[P3]	[]
5-	[Risk Management Implementation Considerations]	[2]	[]	[I2,I3]	[P3,P4]	[G2]
6-	[Risk Management Applications]	[2]	[K5]	[I4]	[P4]	[G1,G2]
	Net Teaching Weeks	13				



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VI. Course Weekly Detailed Topics / hours / ILOs

Week No.	Sub-Topics	Total Hours	Contact Hours	
			Theoretical Hours	Practical Hours*
1	[What is risk management? Risks and opportunities]	[2.5]	[2.5]	
2	[Principles of risk management]	[4]	[2.5]	[1.5]
3	[The process of risk management]	[4]	[2.5]	[1.5]
4	[Establishing the context]	[4]	[2.5]	[1.5]
5	[Identification and assessment]	[4]	[2.5]	[1.5]
6	[Developing a risk management policy]	[4]	[2.5]	[1.5]
7	Midterm Exam			
8	[Risks monitoring]	[4]	[2.5]	[1.5]
9	[Risk improvement plan]	[4]	[2.5]	[1.5]
10	[Risk response plan]	[4]	[2.5]	[1.5]
11	[Implementation]	[4]	[2.5]	[1.5]
12	[Review and evaluation of the plan]	[4]	[2.5]	[1.5]
13	[Enterprise risk management]	[4]	[2.5]	[1.5]
14	[Risk management for megaprojects]	[4]	[2.5]	[1.5]
15	Final Exam			
Total Teaching Hours		51	33	18

* No Practical/Tutorial during the first week of the semester

VII. Teaching and Learning Methods

Teaching/Learning Method	Selected Method	Course ILOs Covered by Method (By ILO Code)			
		K & U	Intellectual Skills	Professional Skills	General Skills
Lectures & Seminars	<input checked="" type="checkbox"/>	[K1,K2,K3,K4,K5]	[]	[P3,P4]	[]
Tutorials	<input checked="" type="checkbox"/>	[]	[I1,I2,I3,I4]	[P1,P2]	[]
Computer lab Sessions	<input type="checkbox"/>	[]	[]	[]	[]
Practical lab Work	<input type="checkbox"/>	[]	[]	[]	[]
Reading Materials	<input type="checkbox"/>	[]	[]	[]	[]
Web-site Searches	<input checked="" type="checkbox"/>	[K1,K3,K5]	[I1,I2]	[]	[]
Research & Reporting	<input type="checkbox"/>	[]	[]	[]	[]
Problem Solving / Problem-based Learning	<input type="checkbox"/>	[]	[]	[]	[]
Projects	<input type="checkbox"/>	[]	[]	[]	[]
Independent Work	<input type="checkbox"/>	[]	[]	[]	[]
Group Work	<input checked="" type="checkbox"/>	[]	[I1,I3,I4]	[P1,P2,P4]	[G1,G2]
Case Studies	<input checked="" type="checkbox"/>	[K2]	[I2]	[P3]	[]
Presentations	<input type="checkbox"/>	[]	[]	[]	[]
Simulation Analysis	<input type="checkbox"/>	[]	[]	[]	[]
Others (Specify):	<input type="checkbox"/>	[]	[]	[]	[]



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VIII. Assessment Methods, Schedule and Grade Distribution

Assessment Method	Selected Method	Course ILOs Covered by Method (By ILO Code)				Assessment Weight / Percentage	Week No.
		K & U	I.S.	P.S.	G.S.		
Midterm Exam	[✓]	[K1,K3,K4,K5]	[I1,I2]	[P2]	[]	[20%]	7
Final Exam	[✓]	[K1,K3,K4,K5]	[I1,I2]	[P2]	[]	60%	15
Quizzes	[]	[]	[]	[]	[]	[]	[]
Course Work	[✓]	[K2]	[I3,I4]	[P1,P2,P4]	[]	[10%]	[12]
Report Writing	[]	[]	[]	[]	[]	[]	[]
Case Study Analysis	[]	[]	[]	[]	[]	[]	[]
Oral Presentations	[]	[]	[]	[]	[]	[]	[]
Practical	[]	[]	[]	[]	[]	[]	[]
Group Project	[✓]	[]	[I1,I2,I3,I4]	[P1,P4]	[G1,G2]	[10%]	[10]
Individual Project	[]	[]	[]	[]	[]	[]	[]
Others (Specify):	[]	[]	[]	[]	[]	[]	[]

IX. List of References

Essential Text Books	<ul style="list-style-type: none"> [Risk Management. By: Michel Crouhy, Dan Galai, and Robert Mark. [The Fundamentals of Risk Measurement. By: Christopher Marrison. [Integrated Risk Management: Techniques and Strategies for Reducing Risks. By: Neil A. Doherty.]
Course notes	<ul style="list-style-type: none"> [Lecturer own notes]
Recommended books	<ul style="list-style-type: none"> [Managing Corporate Reputation and Risk. By: Dale Neef. [Integrated Risk and Vulnerability Management Assisted by Decision Support. By: Adrian V Gheorghe.]
Periodicals, Web sites, etc....	<ul style="list-style-type: none"> [Different search engines]

X. Facilities required for teaching and learning

<ul style="list-style-type: none"> [Teaching accommodation and aids]

Course coordinator: Prof. Mohamed Mostafa Saleh

Head of Department: Prof. Mohamed Mostafa Saleh

Date:[January 2015]