



THE GEORGE WASHINGTON UNIVERSITY
SCHOOL OF
BUSINESS

DEPARTMENT OF DECISION SCIENCES
Risk Management Fall 2019 Draft

Course Number:	Decision Science 6254
Course Title:	Risk Management
Course Description:	Concepts and principles of risk management including identifying, analyzing, mitigating, and communicating risks.
Professor:	Dr. Ernest Forman. Fungler 404. 202-994-6206. E-Mail: forman@gwu.edu
Office Hours:	By Appointment: See http://mdm.gwu.edu/forman On-line Mondays @ 8:50 pm
Prerequisite:	Either DNSC 6261 and DNSC 6202 or MBAD 6221 and MBAD 6222.
Recommended Textbooks (Optional)	Free on-line or download via Library: <i>The Flaw of Averages: Why We Underestimate Risk in the Face of Uncertainty</i> by Sam L. Savage From: https://learning.oreilly.com/library/view/the-flaw-of/9780470488126/ <i>Fundamentals of Risk Management : Understanding, Evaluating and Implementing Effective Risk Management</i> Paul Hopkin From < https://ebookcentral.proquest.com/lib/gwu/detail.action?docID=5437165 > <i>Risk Management</i> Thomas Wolke From < https://ebookcentral.proquest.com/lib/gwu/detail.action?docID=5144613 > <i>Winning with Risk Management</i> Russell Walker From < https://ebookcentral.proquest.com/lib/gwu/detail.action?docID=1223950 > <i>Project Manager's Spotlight on Risk Management</i> by Kim Heldman , and Kim Heldman From < https://ebookcentral.proquest.com/lib/gwu/reader.action?docID=267263 > <i>Project Risk Management : Essential Methods for Project Teams and Decision Makers</i> Yuri Raydugin and Yuri Raydugin From < https://ebookcentral.proquest.com/lib/gwu/detail.action?docID=1469456 >

<p>Readings:</p>	<p>Draft Paper: Risks-We_Face and Risks-We-Take; Enterprise Risk Management - A New Paradigm http://bit.ly/risksfacetake</p> <p>Optional:</p> <p>DoD Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs</p> <p>PWC A practical guide to risk assessment</p> <p>OMB Circular No. A-123: Management's Responsibility for Enterprise Risk Management and Internal Control</p> <p>FAA/NAS System Engineering Manual</p> <p>Homeland Security Risk Lexicon</p> <p>NIST Guide for Conducting Risk Assessments</p> <p>NIST Special Publication 800-53. Recommended Security Controls for Federal Information Systems</p> <p>Open Group 2013-- IT Risk Risk Analysis Risk Taxonomy</p> <p>MITRE Risk Management Toolkit</p> <p>ISO 31000 (Praxiom's Interpretation)</p> <p>PMBOK Chapter 11</p>
<p>Course Objectives:</p>	<p>Explore various risk definitions and taxonomies. Learn sound principles and concepts of risk management including the identification, measurement, control, deciding, and communication of risk in general with an emphasis on project risk.</p>
<p>Software:</p>	<p>Riskion (to be supplied)</p>
<p>Method of Instruction:</p>	<p>Literature review and critique, secondary research, risk project, and student presentations. Students will learn by applying concepts and theory to cases and/or real projects.</p>

Assignments/Deliverables	Hypothetical Case or Real World Project: ~50% Weekly quizzes (5): ~20% Available Sunday noon; closes Wed 7 PM (before real class time) Final Exam ~30% Class Participation: If on borderline of two grades. (Campus Students: Classroom discussion and 1 Minute Summaries; Distance Students: Collaborate Sessions and 1 Minute Summaries)

Session 1 8/28	Overview of Risk Management Risk Management Framework and Taxonomies Risk Informed Decision Making Risk Assessment and Management Course Project Description
Session 2 9/4	Identifying Risk Elements Sources/Threats, Events, Objectives, Participants, Roles
Session 3 9/11	Measuring likelihood of events (sources; vulnerabilities) Measuring impact of events (consequences; priorities)
Session 4 9/18	Analyzing risks <ul style="list-style-type: none"> • Examining and communicating event and total risks • Monetary Values • Risk Maps • Bowtie Diagrams • Monte Carlo Simulations <ul style="list-style-type: none"> • To compensate for Flaw of Averages – inflated computed values • Loss Exceedance Curve <ul style="list-style-type: none"> • Risk Tolerance
Session 5 9/25	Identifying and assessing controls Controls for Sources/Threats Controls for Event Vulnerabilities Controls for Impact Mitigation
Session 6 10/2	Selecting/Optimizing risk controls <ul style="list-style-type: none"> • Manual Selection • Selecting via optimization • Efficient Frontier • Time Periods (optional)
Session 7 10/9	Presentations/Review of Student Projects Discussion of selected course readings