



**Boston University
Metropolitan College
Administrative Sciences Department**

SYLLABUS

**Course: Qualitative and Quantitative Decision Making
(MET MG 473 B1)
Semester: 2009-2010 Spring, 4 credits**

***Instructor:* Jung Wan Lee, Ph.D.**

Office: Room 225, 808 Commonwealth Ave.

Office hours: 17:00-18:00 Mon.-Fri.

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Class Information:

Classroom: SHA 201 (School of Hospitality Administration is located at 928 Commonwealth Avenue)

Contact time: Tuesday 6:00-9:00 p.m.

Course Description

This course examines the cognitive psychology of decision-making, introduces several quantitative tools for optimizing decisions, and acquaints students with essential literature in the field of decision-making. Qualitative and quantitative methods aimed at rationalizing and optimizing decision-making will be examined and applied.

Objectives and expected outcomes

After you have completed this course, you should be able to:

- Improve your decision-making skills and enhance your professional competence as a decision-maker.
- Apply decision-making tools and theories to business organizational management.
- Understand that a rational approach to assessing decisions should focus on process and method rather than outcomes
- Appreciate humility as the greatest tool a wise decision-maker can possess.

Instructor Biography

Professor Jung-Wan Lee
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Teaching

Jung-Wan Lee holds a Ph.D. in Business Administration (Marketing) and advanced degrees in International Logistics (MBA), International Finance (MA), and Electronic Commerce (MS) with solid applied backgrounds in international business and management. He has many years of research and teaching experience in electronic commerce, international marketing, international business and management in Korea, USA, and Kazakhstan. He also has substantial experience of international business in Korea, Japan, China, and Russia.

He teaches AD655 (online) International Business, Economics and Cultures, MG520 International Business Management, AD739 (online) Marketing Management, MG431 International Marketing, MG448 Electronic Commerce and Web Design, AD745 Competitive Strategy in undergraduate and graduate programs at Metropolitan College.

Research

He has written fifty-five research papers and four books during the past five years. He has four award-winning research papers: 1) Best Paper Award at the Twelfth International Conference of International Management Development Association, in June 2006, in Vancouver, Canada, 2) Distinguished Research Award at the Spring 2009 International Conference of Allied Academies, in April 2008, in Tunica, Mississippi, 3) Distinguished Research Award at the Spring 2009 International Conference of Allied Academies, in April 2009, in New Orleans, LA, 4) Distinguished Research Award at the Fall 2009 International Conference of Allied Academies, in October 2009, in Las Vegas, NV.

Since 2005, he has served as Associate Editor of the Editorial Board for the *World Review of Entrepreneurship, Management and Sustainable Development* (ISSN: 1746-0573. Bucks, UK: Inderscience Publishers), and as Regional Editor of Eastern Europe and the CIS countries for the *World Review of Science, Technology and Sustainable Development* (ISSN: 1741-2242. Bucks, UK: Inderscience Publishers).

My Pedagogy and Methodology for Teaching Excellence:

Goal 1: To generate the enthusiasm, confidence, self-leadership and self-motivation within each student.

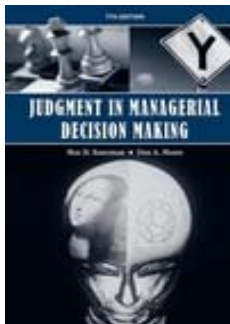
I give students at least two stimulating assignments per semester, so as to enable them to master complex subject matters and experience the pride that comes from continually striving for higher levels of competency. I motivate students to do their best work and encourage students to come to class prepared. I give students an opportunity to do well on assignments by helping students consult a structured process.

Goal 2: To create an innovative classroom environment through the myriad of technology and innovation, as well as employ a structured lecture process.

I use technology enabled teaching materials, such as online learning communities, to utilize teamwork in order to solve complex problems. I outline my lecture on the blackboard as it develops. I also write down any technical terms or names that students might not know how to spell. I begin and end lectures with summary statements. I summarize main points and emphasize conceptual understanding.

Course Resources

Required Textbook:



Judgment in Managerial Decision Making, 7th Edition

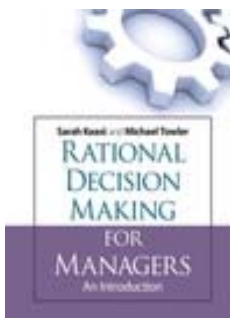
Max H. Bazerman,
Don A. Moore,

ISBN: 978-0-470-04945-7

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John Wiley & Sons, Inc.

Required Textbook:



Rational Decision Making for Managers: An Introduction

Sarah Keast,
Michael Towler,

ISBN: 978-0-470-51965-3

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John Wiley & Sons, Inc.

Additional readings:

The Instructor will be giving students teaching materials (which are teaching notes, case studies, articles, issue reports, web resources) before each class. Students are encouraged to preview the materials before a class and expected to participate in discussions. Students are also encouraged to visit websites and read articles of international marketing strategy agenda regularly during the semester to keep abreast of current events and increase interests in course topics.

Course structure and learning goals:

MG473 Quantitative Decision Making (4 credits)			
Class week	Topics	Text Book reading	Case Study
Week 1	<p>Chapter 1: Introduction to Managerial Decision Making.</p> <ul style="list-style-type: none"> • The Anatomy of Decisions. • System 1 and System 2 Thinking. • The Bounds of Human Attention and Rationality. • Introduction to Judgmental Heuristics. <p>Chapter 2: Common Biases.</p> <ul style="list-style-type: none"> • Biases Emanating from the Availability Heuristic. • Biases Emanating from the Representativeness Heuristic. • Biases Emanating from the Confirmation Heuristic. 	Bazerman Ch. 1 & 2	
Week 2	<p>Chapter 3: Bounded Awareness.</p> <ul style="list-style-type: none"> • Inattentional Blindness. • Focalism and the Focusing Illusion. • Bounded Awareness in Groups. • Bounded Awareness in Strategic Settings. <p>Chapter 4: Framing and the Reversals of Preference.</p> <ul style="list-style-type: none"> • The Framing and the Overselling of Insurance. • Mental Accounting. • Rebate/Bonus Framing. • Joint Versus Separate Preference Reversals. 	Bazerman Ch. 3 & 4	
Week 3	<p>Chapter 5: Motivational and Emotional Influences on Decision Making.</p> <ul style="list-style-type: none"> • When Emotion and Cognition Collide. • Positive Illusions. • Self-Serving Reasoning. • Emotional Influences on Decision Making. <p>Chapter 6: The Escalation of Commitment.</p>	Bazerman Ch. 5 & 6	

	<ul style="list-style-type: none"> • The Unilateral Escalation Paradigm. • The Competitive Escalation Paradigm. • Why Does Escalation Occur? 		
Week 4	<p>Chapter 7: Fairness and Ethics in Decision Making.</p> <ul style="list-style-type: none"> • Perceptions of Fairness. • Bounded Ethicality. <p>Chapter 8: Common Investment Mistakes.</p> <ul style="list-style-type: none"> • The Psychology of Poor Investment Decisions. • Active Trading. • Action Steps. 	Bazerman Ch. 7 & 8	
Week 5	<p>Chapter 9: Making Rational Decisions in Negotiation.</p> <ul style="list-style-type: none"> • A Decision-Analytic Approach to Negotiations. • Claiming Value in Negotiation. • Creating Value in Negotiation. • The Tools of Value Creation. <p>Chapter 10: Negotiator Cognition.</p> <ul style="list-style-type: none"> • The Framing of Negotiator Judgment. • Escalation of Conflict. • Overestimating Your Value in Negotiation. • Self-Serving Biases in Negotiation. 	Bazerman Ch. 9 & 10	
Week 6	<p>1: Introduction to Decision-making.</p> <ul style="list-style-type: none"> • Uncertainty and Risk in Decision-taking. • Probability. • Descriptive, and Prescriptive Decision-making. • Who Should Participate in a Decision Process?. <p>2: Time Series Forecasting.</p> <ul style="list-style-type: none"> • Average and Moving Average Forecasts. • Exponential Smoothing for Data with a Trend. • Standard Deviation of the Forecast. • Choosing Appropriate Forecasting Models. • Alternative Time Series Forecasting Techniques. 	Keast & Towler Ch. 1 & 2	
Week 7	<p>3: Explanatory and Qualitative Forecasting.</p> <ul style="list-style-type: none"> • Quantitative Explanatory Forecasting. • Linear Regression. • Elicitation of an Expert's Probabilities. • Structured Group Processes. • Scenario Analysis. 	Keast & Towler Ch. 3	
Week 8	Chapters review		

Week 9	4: Inventory Management. <ul style="list-style-type: none"> • The Fixed Order Quantity Inventory System. • The Newsvendor Model. • The Economic Order Quantity Model. 	Keast & Towler Ch. 4	
Week 10	5: Payoff Matrices. <ul style="list-style-type: none"> • Payoff Matrices with Multiple Future States • Payoff Matrices with Uncertainty or Risk. • The Value of Perfect Information. • Sensitivity Analysis. 	Keast & Towler Ch. 5	
Week 11	6: Linear Programming. <ul style="list-style-type: none"> • Solving the Linear Programme. • Corner Method. • Sensitivity Analysis. • Integer Programming. • Formulating Decision-making Problems 	Keast & Towler Ch. 6	
Week 12	7: Simultaneous Move Games. <ul style="list-style-type: none"> • Zero-sum Games. • Non-zero-sum Games. • Mixed Strategies for Players with Strategies. • Continuous Strategies. • N-Player Games. 	Keast & Towler Ch. 7	
Week 13	8: Robustness Analysis. <ul style="list-style-type: none"> • Robustness Analysis. • Robustness Analysis as a Framework: Literature Examples. 	Keast & Towler Ch.8	
Week 14	9: Decision Tree Analysis. <ul style="list-style-type: none"> • Constructing a Decision Tree. • Sequential Decision and Event Nodes. • Exploratory Actions and Posterior Probabilities. • Bivariate Sensitivity Analysis. • N-Way (Multivariate) Sensitivity Analysis. 	Keast & Towler Ch. 9	
Week 15	Chapters review: Term paper presentation Guidelines for presentation: Groups should prepare a 10 to 12 slide PowerPoint presentation for abstracting their term papers. The PowerPoint slides should be developed and organized in a professional manner. Groups should demonstrate their presentation in class.		
	Final-exam		

Course Grading

Assessment Policy

Your final grade for this course will be derived from four types of assessment:

- Weekly attendance and participation
- Quiz: 1 quiz per semester
- Three assignments: take-home
- Final examination: during the final examination period

Assessment Percentage

The value (as a percentage) of each of these assessment measures is tabulated below.

1 st Attestation 30%	Quiz	10 %
	Article review and essay (assignment 1: Individual)	10 %
	Case analysis (assignment 2: Individual)	10 %
2 nd Attestation 30%	Term paper writing (assignment 3: Team project)	20 %
	Term paper presentation (Team project)	10 %
Final Attestation 40%	Final-exam (multiple choice, open-ended, essay writing)	30 %
	Class attendance and participation	10 %
Total 100%		100%

Course calendar and assignments' due

Nº	Assignments	calendar															%		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
1.	<i>Class participation</i>	*	*	*	*	*	*	*	*	*	*	*	*	I	*	*	*		10%
2.	<i>Quiz</i>				*														10%
3.	<i>Article review and essay(assignment 1)</i>							*											10%
4.	<i>Case analysis report (assignment 2)</i>										*								10%
5.	<i>Term paper (assignment 3)</i>														*				20%
6.	<i>Term paper presentation</i>															*			10%
7.	<i>Final Exam</i>																*		30%
	<i>Total</i>																		100%

Grading system:

Grade	Grade Point	%	Traditional grade
A	4.0	96-100	EXCELLENT
A-	3.67	91-95	
B+	3.33	86-90	GOOD
B	3.0	81-85	
B-	2.67	76-80	
C+	2.33	71-75	SATISFACTORY
C	2.0	66-70	
C-	1.67	61-65	
D+	1.33	56-60	
D	1.0	51-55	
F	0	= < 50	UNSATISFACTORY

While there is no fixed absolute number of grades in any one level, it is important to note that high grades reflect an excellence in the understanding of class materials and organization of thoughts. In addition, an important aspect of any class, whether online or in a classroom, is the shared thoughts and insights of the class members; grades will also reflect an individual's contributions to the class.

We follow the Boston University, Metropolitan College recommendations concerning grading standards. As such, a maximum 5 percent of the class would earn an A grade and approximately 15 percent would earn an A- grade. The next 60 percent segment would earn a B+ or B grade. The remaining group, approximately 20%, would earn a grade between B- and F. As grades are earned and not awarded, the College does give grades B-/C+/C/- for work that is below average/standards.

NOTE:

This course will strictly follow the Code of Academic Conduct of Boston University. Please keep this in mind.

Grading, attendance and examination policies and procedures will be applied to the course in accordance with Boston University rules, and "Code of Academic Conduct."

Quiz:

A quiz will cover conceptual materials from chapters, questions relating to lectures, and discussion materials from the class. No make-up quiz will be given.

Assignment 1: Article Review and Essay Writing (Individual assignment, 10% of total grade)

Guidelines for essay writing:

1. Students should select an essay topic they are interested in either from the following list, or they may explore/develop any topic they are interested in.

<ul style="list-style-type: none">• Judgmental heuristics• The representativeness heuristic• The affect heuristic• The availability heuristic• The conformation heuristic• The rules of thumb• Cognitive tools for decision-making• Bounded awareness• Preference reversals• Positive illusions• Self-serving reasoning• Emotional influences on decision making• The escalation of commitment• Fairness and ethics in decision making• Negotiator cognition	<ul style="list-style-type: none">• Rational decision making• Qualitative decision making tools• Quantitative decision making• Time series forecasting• Explanatory forecasting• Qualitative forecasting• Inventory management• Payoff matrices• Linear programming• Game theory• Robustness analysis• Decision tree analysis• Sensitivity analysis• Monte Carlo simulation• Simultaneous games• Sequential games
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2. Each essay will be **8 pages** in length, including a title page and references. It should be typed in **12 point font, Times New Roman, and double-spaced**.
3. Avoid verbosity and do not plagiarize work of others. You must cite your sources. Provide adequate citations and use the **APA style** ([see APA style guide here](#)) for bibliography.
4. You should use at least **five articles** from peer-reviewed academic journals. You can find a good source from the BU Library's electronic resources. Use the link <http://www.bu.edu/library/index.shtml>.
5. **Students should analyze and synthesize the information from the articles to form a cohesive essay (1300~1500 words). The essay should be concise.**
6. Do not simply summarize the articles. Use the information from the articles to support your conclusions and recommendations.
7. **Submission: 1) Two sets of printed copies** should be submitted, **and 2) a written essay as an MS Word document** should be sent **not later than the class day of week 7.**

Grading Criteria (10 points)

1. **Timeliness:** Whether it is submitted by due date - Maximum 3 points
2. **Content and Context:** Whether its context is well organized by the guidelines - maximum 3 points
3. **Citation and reference:** Whether it is appropriately cited on body texts and bibliography, according to the citation guidelines - maximum 4 points

Assignment 2: case analysis and report writing (Individual assignment, 10% of total grade)

Guidelines for case writing:

1. Students should select a case topic they are interested in either from the following list, or they may explore/develop any topic they are interested in.

<p>http://www.facebook.com/ http://www.myspace.com/ http://www.webvan.com/ http://www.freshdirect.com/ http://www.google.com/ http://www.yahoo.com/ http://www.ebay.com/ http://www.travelocity.com/ http://www.verisign.com/ https://www.paypal.com/ http://www.netflix.com/ http://www.costco.com/ http://www.youtube.com/</p>	<ul style="list-style-type: none">• Wal-Mart Stores• Carrefour• Nestlé• Procter & Gamble• Siemens• Samsung Electronics• Hewlett-Packard• IBM• Sony• Vodafone• Nokia• Boeing• General Electric
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2. Each case report will be **15 pages** in length, including a title page, tables, figures, appendixes, and references. It should be typed in **12 point font, Times New Roman, and double-spaced.**
3. Avoid verbosity and do not plagiarize work of others. You must cite your sources. Provide adequate citations and use the **APA style** ([see APA style guide here](#)) for bibliography.
4. You may use **any article** from websites, newspapers, company reports, and other forms of information.
5. **Students should analyze and synthesize the information from the reading materials to form a cohesive report (2000~2500 words). The report should be concise.**
6. Do not simply summarize materials of a company. Use the information from the materials to support your evaluations, conclusions, and recommendations.
7. **Submission: 1) Two sets of printed copies** should be submitted, **and 2) a written report as an MS Word document** should be sent **not later than the class day of week 10.**

Case Analysis Grading Criteria (10 points)

1. **Timeliness:** Whether it is completed on time: Maximum 3 points
2. **Content and context:** Whether its content has flourished by extended research, relating to a case: maximum 3 points
3. **Analytical Skills:** Whether the work focus on key points to managerial and marketing issues: Maximum 4 points

Assignment 3: Case Analysis Term Paper and Presentation (Team assignment, 30% of total grade)

Instructions for a term paper:

A term paper on managerial decision making will be written by a group of students (a **team consists of three (3) students. Students may volunteer themselves to form/choose their team members**). As the semester progresses, various components of the paper should be worked. At the end of the semester, all sections will be integrated into one final paper.

1. **Students should select a term paper topic they are interested in either from the following list, or they may explore/develop any topic they are interested in.**

<ul style="list-style-type: none">• Judgmental heuristics• The representativeness heuristic• The affect heuristic• The availability heuristic• The conformation heuristic• The rules of thumb• Cognitive tools for decision-making• Bounded awareness• Preference reversals• Positive illusions• Self-serving reasoning• Emotional influences on decision making• The escalation of commitment• Fairness and ethics in decision making• Negotiator cognition	<ul style="list-style-type: none">• Rational decision making• Qualitative decision making tools• Quantitative decision making• Time series forecasting• Explanatory forecasting• Qualitative forecasting• Inventory management• Payoff matrices• Linear programming• Game theory• Robustness analysis• Decision tree analysis• Sensitivity analysis• Monte Carlo simulation• Simultaneous games• Sequential games
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2. Each term paper will be **about 25 pages** in length, including a title page and references. It should be typed in **12 point font, Times New Roman, and double-spaced**.
3. Avoid verbosity and do not plagiarize work of others. You must cite your sources. Provide adequate citations and use the **APA style** ([see APA style guide here](#)) for bibliography.
4. You may use **any article** from websites, newspapers, company reports, and other forms of information.
5. **Students should analyze and synthesize the information from the reading materials to form a cohesive paper (3000~ 3500 words). The paper should be concise.**
6. Do not simply summarize materials of companies and/or cases. The written paper should focus on analyzing the material, evaluating the strategy employed by companies, and making appropriate recommendations. Use the information from the materials to support your conclusions and recommendations.
7. **Submission: 1) Two sets of printed copies** should be submitted, **and 2) a written paper as an MS Word document** should be sent **not later than the class day of week 14.**

Grading Criteria (maximum 30 points)

The project will count for 30% (written report 20%, presentation 10%) of the total grade. Each member of a project team will receive the same grade for their project submission.

1. **Timeliness:** Whether it is completed on time - Maximum 4 points
2. **Content and context** (conceptual skills): Whether its content has flourished by extended research, relating to the case - maximum 8 points
3. **Analytical Skills:** Whether the work focus on key points to marketing decision-making issues - Maximum 8 points
4. **Professional presentation:** Maximum 10 points*

Guidelines for the presentation:

Groups should prepare a 10 to 12 slide PowerPoint presentation for abstracting their term papers. The PowerPoint slides should be developed and organized in a professional manner ("Your use of hyperlinks, layouts, and contents are the elements of your own creativity. Audio narration can definitely add to your presentation, but is not required. If you choose to narrate your presentation, please limit the audio length to no more than 10 minutes (i.e. 1 minute per slide).

Final Exam: Individual 30%

There is a final exam in this course during a final exam period. The final exam will be proctored. The exam will cover information from lectures, cases, and readings. The exam is closed book/notes/course materials. The final exam will be structured to promote and reward learning outcomes, and the understanding of the course materials. The test may contain three types of question methods: **multiple choice, open-ended, and essay writing.** **The exam has a 100-minute time limit.**

Attention!

- **20% of absence without valid reasons leads to «F (Fail)»**
- **"0" will be marked, if students are late on the final examination;**
- **"F" will be marked, if students use a crib (on a paper or electronic base) during the final examination.**

Cell Phones:

Any student cell phone that rings during class will result in an automatic 5 % reduction from the total grade.