

# Management Judgment and Decision Course description

March 8, 2000

## **COURSE TITLE AND TECHNICAL MATTERS**

Title:	Management Judgment and Decision Making
Course code:	JDM
Units:	2
Blocks:	3.1 and 3.2
Sessions:	$2 \times 2$
Time table:	11–13:10 Tu Th (3.1) Mo Th (3.2)
Max. students:	20 (increased to 32)
Readings:	(See section on Readings)
Assessment:	(See section on Assessment)
Related Courses:	Behavioural Finance
Topics and plan:	See below
Tutor:	Dr. Lívia Markóczy for all sessions
Website:	<a href="http://www.cranfield.ac.uk/~L.Markoczy/mn795a/courses/jdm/">http://www.cranfield.ac.uk/~L.Markoczy/mn795a/courses/jdm/</a>

## **GOAL OF THE COURSE**

We live in an uncertain world, and so we make decisions with incomplete information. Even if we could get all relevant information we wouldn't have the time to process it. Human beings use various short-cuts (heuristics) for making decisions and judgments in a world filled with uncertainty and incomplete information. In many ways, those short-cuts work very well, if we (or our ancestors) had made many disastrous decisions, we wouldn't be around to talk about them. But sometimes the short-cuts that we automatically use lead us to make some poor decisions on a regular basis. Coming to understand how these short-cuts work and when they lead to misjudgments can help us develop habits of thought which avoid many of the problems.

This course will draw on work from cognitive psychology, organizational decision making, and behavioural decision theory to come to understand how people make certain kinds of decisions, and with specific advice on how we can make better ones. Throughout the course, discussion and readings will direct the focus to how these decisions making processes affect businesses and managers in organization.

Among the topics covered will be human thinking and judgments; information selection and evaluation; learning and memory; social side of judgment and decision making; fairness, moral obligations and social dilemmas; and decision making in organizations.

## READINGS

Readings will come from many sources and most will be given out in class. However many readings come from a small number of books which cannot be distributed as class casebook without violating authors' and publishers' copyrights. Several copies of these will be available in the MRC Library, but it is highly recommended that you purchase at least some of these. The Waterstone's bookstore on campus will be given full details about these books. Some books may be made available in the MRC library for your reading. But it would be a violation of the publishers' and authors copyrights' for you to photocopy the readings from them.

- Thomas Gilovich (1991) *How we know what isn't so*. The Free Press. New York.

The required and recommended readings for this course will cover most of this book. If you buy any single book for this course, it should be this one.

This book is a clearly and amusingly written work for the non-psychologist, from an author who is a major contributor to the understanding of decision making.

- Jonathan Baron (1994). *Thinking and deciding (2nd edition)*. Cambridge University Press.

Many highly recommended readings and some required readings will be from this book.

This book is probably the best and most thorough text book on the subject. It is clearly written, but it doesn't spare the details. It is primarily intended for advanced undergraduate psychology students. This book is the place to look if you want to follow up things in more depth. It is one of

Required	★
Highly recommended	⊗
Recommended	⊙
Optional	○

**Table 1: Symbols used to indicate “requiredness” of readings**

the most widely used textbook on the subject. There is a second edition being worked on, but it will not be ready in time for this course.

- J. Edward Russo and Paul J. H. Schoemaker (1989) *Decision traps: The ten barriers to brilliant decision making and how to overcome them*. Simon and Schuster.

During the course there will be recommended readings from this book which provides not only a simple description of decision making, but concrete examples of how these work in the world of business decision makings. The recommended readings will include most of this book.

- Zur Shapira (ed.) (1997) *Organizational Decision making*, Cambridge University Press.

This is a collection of mostly academic papers, three of which are among the readings for this course. Copyright limitations made it impossible for these to be included in the case pack as originally intended. Two of the readings from this book are optional, and one is recommended.

Table 2 on the following page gives some idea of how much reading will come from each book. Note that while most of the required reading comes from Baron (1994), we will read most of Gilovich (1991). Other material will be provided in a course pack.

Note that individual readings for individual sessions may be required, highly recommended, recommended, or optional. These are indicated for each session using the symbols in table 1.

Where the readings are listed for each session, symbols listed in table 1 are used to indicate whether something is required, highly recommended, recommended, or optional. The required readers are required: All must read them. It is highly recommended that all read the highly recommended reading. For the recommended reading, it is strongly suggested that at least a few people from each study group read them. The optional reading is, of course, optional, but it will be a useful source of material when preparing group reports.

	Gilovich	Baron	Russo & Schoemaker	Shapira
★ (Required)	132	122		
⊗ (Highly rec)		20		
⊙ (Recommended)			168	25
○ (Optional)				32
Total	132	142	168	57

**Table 2: Number of pages, required and recommend from each *book*, but does not list other reading**

### COURSE STRUCTURE

We will meet for twelve sessions of two hours each, plus one initial session. Participants will be divided up into working groups during the initial session (in block 3.0).

Although there will be some variation. Each session will consist of the following structure: (1) A presentation by the tutor on some of the material that was in the reading. These are not substitutes for the reading, but often additional information. (2) One of the groups of participants being randomly selected to present on the topic of their “written group exercise”. This should then be used to launch into a general class discussion, with the tutor providing both direction and additional information. (3) The tutor will present information and guidance to help with the reading for the coming section. As part of (1) and (3) there may be several in class decision making problems and exercises.

There will be small written assignments from each group to be handed in at the beginning of each session. These will generally be small one or two page notes. The questions are described in more detail in the section on assessment.

Readings for each session should be done before each session. Anything listed as required reading is absolutely required. Additionally, some other readings are listed as highly recommended, recommended, and optional. Participants should read at least most of the highly recommended reading throughout the course. Some of the supplementary reading is listed to provide illustrations for the main reading to make it easier. The indicators for what category reading falls into is listed in table 1 on the preceding page.

### ASSESSMENT

Evaluations will be based on the groups written reports for each session (usually less than 1000 words), the group presentations (fifteen minutes, maximum), class participation, and a small individual report/exam due at the end of the

examination period.

Sixty-five percent of each student's grades will be based on their group reports and presentations; 30% will be based on the individual final exam, and 5% will be based on participation in course discussion. However, it is required that each student must meet a minimum in each of these. (This is to prevent students who, say have excellent group reports and class participation ignoring the exam entirely.) Additionally the tutor reserves the right to use a 7% subjective fudge factor to adjust final scores if the formal evaluation differs greater from the tutors' overall evaluation of the student. If any such fudge factor is used and grade will included a written explanation.

### **Written group assignments**

The standard questions for group presentations and reports will include

- What are the key issues of the reading?
- Think about decision situations when these issues could be of relevance for decision making. Decision situations might include personal decisions and business decisions. These can be real or imaginary (but plausible).
- Considering decisions that you have already made think about the following question: What would you have had done differently had you known what you know now about judgment and decision making and particularly the topic of the readings.
- What are the strengths and weaknesses of the approaches discussed? (The question may not always be applicable.)

For any session that does not specify a specific set of questions for the written group assignments, please use these.

Each written exercise will be graded on a ten point scale and returned to the groups within a week of submission. If some assignments are considered particularly heavy or light, then the scales will be adjusted in totaling for final grades. Students will be informed prior to any assignment whether it deviates from the normal weighting. For work which goes well beyond what could reasonably be expected, the tutor reserves the right to give extra credit points of not more than 15% of an assignments' value. It is possible that this option is never used.

No handwritten assignments will be accepted. But don't spend time on fancy formatting, either. Clarity and readability (as well as clarity of the ideas) are what matter, not graphics and fancy fonts. Plain text is often fine.

**Surprise Quiz**

There will also be a mini-examination (“quiz”) which will take no more than 10 minutes of class time. It will meet both of the following conditions.

1. It will be a surprise. This means that you will have no way of knowing before the particular session that the quiz will occur in that session.
2. The quiz will occur in one of the twelve scheduled sessions.

**The final essay**

The final essay which will make up 20% of your grade will be one or more questions which you should write about drawing on and referring to the information from the course. The total length should not exceed more than 3500 words, and may be much less under certain circumstances.

**COURSE WEBSITE**

A website will be associated for the course, although it is not anticipated at this point (October, 1999) that there will be much there beyond this course description. However, if additional material needs to be distributed it will be there. The site is <http://www.cranfield.ac.uk/~L.Markoczy/mn795a/courses/jdm/>.

**ABOUT THE TUTOR**

One of Dr. Lívia Markóczy’s principle research interests is managerial cognition and human decision making. She is an internationally recognized scholar in these and other areas. Her undergraduate (1984) degree and ‘doktori’ (1987) degrees in Business Economics are from the Budapest University of Economics, and her PhD (1995) in Management is from the Judge Institute of Management Studies, Cambridge University. In addition to Budapest, Cambridge and, of course, Cranfield, she has studied or worked at Stanford University, Aston University and the Hungarian Ministry of Industry.

At Cranfield she has taught in International Strategy course and the Management Theory and Practice elective on the MBA and has been active teaching Organizational Behavior, Research Methods, and Research Ethics among other topics on the PhD course. Elsewhere she has taught strategy, business economics, and other topics at all levels. Her publications range from articles in leading academic journals to articles in the *Financial Times* and *Across the Board*.

More information about her can be found at her website:  
<http://www.cranfield.ac.uk/~l.markoczy/>

**Session 1: WHY STUDY RATIONALITY AND DECISION MAKING?**

Before we begin any discussion, everyone will complete a “survey” which will be used in future sessions but correctness of answers will not count as part of the grade.

Are there such things as good and bad ways of making decisions? Can decision making be improved? Does it matter for real world decisions? Can decision making be improved by one course of 12 2-hour sessions?

Although I believe that the answer to all of these questions is “yes”, the answer is not “of course”. Some of these need to be argued for.

Some individuals will be asked to make the “yes” case and others the “no” case.

**Written group work**

There is no written group work for this session as groups have not been formed. However, each individual should try to invent a “fair” system for me to decide which group should present at which session. Such a system should be

1. Unbiased: I can’t play favorites or pick on anybody.
2. Maintains alertness: Each group should always feel that there is a real possibility that it will have to present at the next session.
3. Even distribution: No one group should present very often while some other group rarely (or never) presents.

If there is a solution substantially better than the tutor’s, then it might be used for the class, but we may not have time to talk about this.

**Readings**

(See introductory remarks regarding table 1 on page 3 for an explanation of the symbols listed for each reading.)

- ★ “Introduction” (pp. 1–6) from Gilovich (1991).

This very briefly explains why everybody, and especially managers and decision makers, should study decision making and be aware of potential judgment errors.

- ⊗ Chapter 3 from Baron (1994). “Good thinking: The nature of rationality” (pp. 29–48).

Is rational thinking good thinking? See especially section 3.3. (Some of this reading may be a bit tough going. Mark anything that you have questions about for class discussion.)

- ⊙ Introduction (pp. xi–xix) and Chapter 1 (pp. 1–11) of Russo and Schoemaker (1989)

A lighter introduction to these questions.



**Session 2: THINKING AND PROBLEM SOLVING**

In this session we will continue the discussion of good thinking and rationality and will move into a discussion of problem solving. We will also look at how experts and non-experts differ in their thinking.

**Written group work**

Standard questions (See introductory notes for the course).

**Readings**

- ★ A discussion of problem solving from Baron (1994) (pages 49–74) with what makes some problems difficult and others easy. (Note that there is a typo or two in the solution to the missionaries and cannibals problem on page 59.)

Leave lots of time to read this chapter since it works best if you first try to solve the problems yourself before reading the solutions.

- ⊙ For a practical example on how experts make decisions and how irrelevant information and training might influence expert judgment read Gaeth and Shanteau (1984)
- For a practical example on how real estate agents made anchoring errors see: Northcraft and Neal (1987)

***Session 3: PERCEPTION AND EVALUATION I***

Good decision making requires accurate assessment of the information around us. But as we take in that information we automatically transform it in ways that can lead to misperceptions. (Optical illusions are an example of this from visual perception.) In this session we will start to look at sources of the misperceptions that affect decision making.

**Written group work**

Standard questions.

**Readings**

- ★ For a description of human misperceptions and biased evaluation of information see: Gilovich (1991) Chapters 2–3: “Something out of nothing”, “Too much from too little” pp: 9–48.
- ⊙ For a practical discussion of the problems with information selection and evaluation and for potential practical solutions see Russo and Schoemaker (1989) Chapters 4 and 5: “Knowing what you do not know” and “Improving your intelligence gathering” pp: 67–116. I suggest that you complete “Self-Test of Over-confidence” in Russo and Schoemaker (1989) pp: 71. You can use the result as a self-measure on over-confidence. If several of you chose to fill out the test the result would also be highly informative to everybody in the class.

**Session 4: PERCEPTION AND EVALUATION II**

How what we expect to see shapes what we see. And introduction to how a decision is “framed” effects how it is evaluated.

**Written group work**

Standard questions (See introductory notes for the course).

**Readings**

- ★ For a description on how our motivations influences what we see Gilovich (1991) Chapter 4: “Seeing what we expect to see” pp: 49–72.
- ⊗ A description of the framing from one of the leading researchers in the area: Tversky and Kahneman (1986)
- ⊙ For a discussion of framing and how to come up with ‘winning frames’ see: Russo and Schoemaker (1989) Chapter 2: “The power of frames” pp: 15–36

**Session 5: PERCEPTION AND EVALUATION III**

More on framing, and how what we want shapes what we see.

**Written group work**

Standard questions (See introductory notes for the course).

**Readings**

- ★ For a description on how our motivations influences what we believe see Gilovich (1991) Chapter 5: “Seeing what we want to see” pp: 73–87.
- ⊙ For a discussion of framing and how to come up with ‘winning frames’ see: Russo and Schoemaker (1989) Chapter 3: “Winning frames” pp: 37–63. I suggest that you complete “the “Frame analysis worksheet” from Russo and Schoemaker (1989) pp: 43. The result of this worksheet could be useful to you as well as could well be used for the class discussion.
- For a practical demonstration for judgment errors in investment decisions see: Slovic (1972)

**Session 6: LEARNING AND MEMORY**

As they say, “If we have learned anything from our experience, it is that we often don’t learn from our experience.” Why do we sometimes fail to learn from experience, and what can we do about it?

Also consider when we shouldn’t learn from our experience.

**Written group work**

Standard questions.

**Readings**

- ★ For a general discussion on learning: Baron (1994) Chapter 5 “Learning: basic processes”. Pages 74–89.
- ⊙ For a practical discussion why people fail to learn and for a practical guidance on how to improve learning see: Russo and Schoemaker (1989) Chapters 8–9 “Why people fail to learn” and “Improving feedback” pp:173–210.

**Session 7: THE SOCIAL SIDE**

Our judgments are often influenced by others. Decisions are made differently when done in groups or individually.

**Written group work**

Standard questions.

**Readings**

- ★ For a general discussion on social influences on judgments see Gilovich (1991) Chapters 6–7: “Believing what we are told” and “The imagined influences of others” pp: 88–122.
- ⊙ For a practical discussion on how groups make decisions: Russo and Schoemaker (1989) Chapter 7 “Group decisions” pp: 145–169.

***Session 8: FAIRNESS AND MORAL OBLIGATIONS***

Our decisions affect others, and others decisions affect us. People naturally and routinely talk about whether some decisions are “fair”. In this session, we will talk about different notions of fairness, and fairness perception.

**Written group work**

Standard questions.

**Readings**

- ★ For a general discussion on fairness and social dilemmas see: Baron (1994) Chapters 22: “Fairness and justice”. Page 450–473.
- ⊙ A discussion on the importance of fairness in management: Kim and Mauborgne (1997)

**Session 9: SOCIAL DILEMMAS AND PARADOXES OF FAIRNESS**

Some problems lead to seemingly paradoxical situations, where the “best” choice any individual could make is the “worst” if everybody behaves that way.

**Written group work**

Standard questions.

**Readings**

- ★ Baron (1994), chapter 23: “Social dilemmas: cooperation versus defection” pp: 474–501.
- ⊙ For a detailed discussion of the “voters’ illusion” and related phenomena and how some cognitive illusions might lead to cooperation in social dilemmas: Goldberg and Markóczy (1997).



**Session 10: DECISIONS FOR THE FUTURE**

Decisions about the future are difficult for a number of reasons. One is that a bird in the hand is worth two in the bush. Another is to not throw good money after bad. And another is that sometimes we have to decide to restrict our freedom of choice in the future, as Odysseus did when he tied himself to the mast so that we wouldn't give in to the Sirens' songs.

**Written group work**

Standard questions.

**Reading**

- ★ For a general discussion on decisions about the future see: Baron (1994) Chapter 24 "Decisions about the future" pp: 502–533
- ⊙ For a detailed discussion on the sunk-cost-effect or escalating commitment see: Staw (1997) (in Shapira (1997))
- For discussion on how individuals manage conflict in their own short term and long term preferences: Bazerman, Tenbrunsel and Wade-Benzoni (1998)

**Session 11: MAKING DECISIONS IN ORGANIZATIONS**

We now know a great deal about how people make decisions (and what can go wrong), and also how small groups make decisions. But how are decisions made in an organization? How does organizational politics effect not only what gets decided, but what receives attention.

In this session, we will only have the chance to touch upon some of these issues. But the sessions that have gone before allow us to develop a more sophisticated understanding of how decisions in organizations gets made.

**Written group work**

Standard questions.

**Readings**

- ★ For a comparison between behavioral decision theory and organizational decision theory see: March and Shapira (1982)
- For a discussion on attention allocation see: Dutton (1997) (in Shapira (1997)).
- For a discussion on the role of power within organizations see: Salancik and Brindle (1997) (in Shapira (1997))

**Session 12: HOW DID WE GET HERE AND WHERE DO WE GO FROM HERE?**

Are people as stupid as all of these errors and biases we have studied suggest? Or are we very smart, but sometimes misapply our natural ability to detect patterns and judge outcomes in an unnatural world? In either case, how can we use what we have learned in this course to improving our decision making in real life practice?

**Written group work**

Standard questions.

**Readings**

- ★ For a discussion that the mind is naturally much better at judging uncertainty than some people believe, see Markóczy and Goldberg (1998) particularly the section titled “Gigerenzer and the Attack on the Heuristics and Biases Program” pages 400–402.
- ★ For a discussion of what to do against erroneous beliefs see: Gilovich (1991) Part IV: “Where do we go from here” pp: 185–194.
- ⊙ For practical advice on how to make better decisions see: Russo and Schoemaker (1989) Chapter 10: “Changing the way you are deciding” pp: 211–223. I suggest that you complete the “Decision evaluation” (pp: 215) and “Personal decision audit” (pp: 217) exercises from Russo and Schoemaker (1989). Completing this will help your own learning as well as could contribute to class discussion.

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