BUS 651/651P — Strategic Decision Analysis

Fall 2011 - Preliminary

Prof. Patrick S. Noonan
Rm. 417, Goizueta Business School
GBS ofc.: 404.727.0549
mobile: 678.358.5961

“Drop-in” office hours for Fall ‘11: tba
Other office appointments: contact via Patrick_Noonan@bus.emory.edu

DIA Area - Admin. Asst.: Jalisa Norton, Room 423, 404.727.8698

Teaching Assistants (TAs): We will be assisted by a team of MBAs who performed very well in the course last year – and also demonstrated great interest & skill in helping others learn the material:

Elaine Perez / Chris Nicolini / Sean Joyce / Prabhu Krishnadas

Catalog Description

Prerequisite: BUS 550 or equivalent. Advanced topics and tools for analysis of decision problems, focusing on the complication of multiple decision makers. The course starts with the fundamentals of game theory and develops conceptual frameworks and analytical tools for strategic thinking and action. Applications include models of competition and cooperation, strategic moves, negotiation, auctions & bidding, fair division, coalitions, voting and group decisions, and large systems of decision makers.

In addition, we revisit the underlying psychology of decision makers – in ourselves and in the others we interact with – and develop methods for overcoming natural weaknesses and “decision traps” in strategic interactions.

Course Meetings

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<th>Section</th>
<th>Days</th>
<th>Time</th>
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<td>000</td>
<td>Mon/Wed.</td>
<td>10:00a-11:15a</td>
<td>GBS 304</td>
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<tr>
<td>001</td>
<td>Mon/Wed.</td>
<td>1:00-2:15p</td>
<td>GBS 234</td>
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<td>P/C34</td>
<td>Mon.</td>
<td>6:30-9:30p</td>
<td>GBS 234</td>
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*** Please note that there is a reading & prep assignment for our first meeting. ***

Optional guest speakers: tba
Optional informal lunch/dinner/coffee sessions: tba

Office Hours

I will hold “drop-in” office hours most weeks, days/times tba. No appointment is necessary during those times – just come by! (Any exceptions to that normal schedule will be posted in our First Class conference.) Other meetings are available by appointment, of course.
What is this Course About???

This is another course about “reasoning about decisions.”

From your introductory ISOM Area analytics course, you may be familiar with this point of view: “Decisions are like a ‘fundamental particle’ of management. At the core of the very complex roles we play in strategy, marketing, operations, finance, and other management functions, there are identifiable decisions we must make.”

This perspective would have introduced you to the notion that there are decisions lurking in everything we do as managers, citizens, and humans — and that there is valuable insight to be gained by looking at the decisions in an informed and disciplined way.

However, we now need to move beyond the simplified settings explored in the Core. In this course (along with its companion stand-alone Spring elective, BUS 650 Decision Modeling) we re-introduce most of the various complexities that make the real world so...well, maddeningly complex.

Both these courses are, in essence, extensions of the decision analysis component of the 550 course — but not the data analysis/statistics component. SDA and DM are not “stats” courses, nor are they courses just for “quant jocks.” These courses are targeted broadly at people who want more exposure to models of decision-making that are useful in management and in explaining many of the complex phenomena we observe in business, policy, and human affairs. (Recent participants have included consultants, finance and marketing concentrators, general managers, engineers, lawyers, doctors, public health professionals, entrepreneurs and actors.)

The objective is to give each student better conceptual frameworks, more powerful analytical tools, and pathways for further exploration of those ideas that prove most important in their post-MBA careers.

Specifically, the topics and issues we will explore together in this course include:

How should we make decisions in the presence of other decision makers whose interests are not identical to ours?
- strategic thinking (starting – but not ending – with the principles of game theory)
- models of competition & cooperation
- negotiation
- auctions & bidding
- fairness & fair division
- voting & coalition building
- network & system effects

How do real people (our customers, our suppliers, our competitors and ourselves) really act, compared to how theory says they should act?
- the psychology of judgment & decision making, i.e. behavioral decision theory & experimental economics
- biases and heuristics in managerial decisions
- “decision traps” (the most common types of organizational decision process failures) and what to do about them, especially in strategic interactions

How can I incorporate analytical modeling into managerial thought, judgment & action?

Course Materials

The required materials for the course are:

- Dixit, Skeath & Reilly, Games of Strategy (3rd edition), a hardcover textbook
- a case packet, available online from Study.Net
- additional readings (from the Goizueta library’s e-Reserves, handed out in class, or posted online)

Please be sure to get the third edition, as indicated in the course book listing. We used the 2nd edition (2004) though fall 2008, but we have updated the readings & assignments to match the newer edition.
In addition, an optional but strongly recommended book is:


The detailed assignments you will receive will distinguish between the required and merely helpful “optional” readings. We will explicitly discuss in class many of the required reading assignments. Others may not be discussed directly… but will have helped you as you prepare the homework assignments. Still others may not relate directly to the week’s assignments, but instead form an important part of the increasingly sophisticated understanding of decision making that this course is attempting to nurture. At quiz times, you will responsible for all required readings, regardless of whether we discussed them in class.

There is no required software for this course, but continuing to invest in Excel skills will be helpful.  

**Course Format and Grading**

**Summary:**

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<th>Percentage</th>
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<tr>
<td>30%</td>
<td>Routine work &amp; participation</td>
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<tr>
<td>40%</td>
<td>2 Take-home quizzes</td>
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<tr>
<td>10%</td>
<td>Course blog</td>
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<td>20%</td>
<td>Final project</td>
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We will approach these topics using a mixed pedagogy consisting of conceptual & real-world cases, lectures, news & trade articles, conceptual readings, research articles, textbook chapters, experiential exercises, computer simulations and other information technology-based demonstrations. (Expect to do a lot of work for this course, including a lot of reading and case analysis.)

The primary requirement is for each student to prepare the readings, cases and exercises and to come to every class ready to actively contribute to our discussions. (On several occasions, your advance preparation will lead to something that must be turned in to me.)

In addition, there will be two short quizzes (individual work), contributions to a course blog (individual work), and a final project (team work).

**Routine Work & Participation [30%]**

The nature of our meetings will vary from week to week, although each week is likely to contain one case discussion session, and one session covering readings and exercises. In every session, the emphasis will be on interaction, even in some of the more lecture- or demonstration-oriented sessions. To maximize our collective learning, everyone must engage and participate to the best of their abilities, which will require thoroughly preparing all assigned readings, cases, experiential exercises (experiments, negotiations, games, etc.) and assignment problems in advance of class. (Also, please be sure to bring your name card to every class, all semester.)

When our focus is a case, you are expected to have thoroughly prepared the assignment, including: reading the cases and any accompanying notes, performing the necessary and appropriate analyses (whether they’re spelled out for you or not – often the point is for you to figure out what you’re supposed to do to crack the key issues of the case), and preparing answers to the case questions. Discussing the assignments in groups is strongly encouraged, although once you’re in the classroom, generally you’re “on your own.”

Class participation will be graded each meeting. The impact of your contributions (be they helpful insights, articulate skepticisms, or thoughtful questions) to the quality of our discussions and collective learning over the semester will count for 30% of your course grade. The relatively few assignments that must be turned-in as well as your participation in our First Class discussion conference also count in this

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2 Some students have found the free, open-source software, Gambit, which is available for download online, to be helpful in depicting and confirming their analysis of simple game trees and tables.

3 including several interactive homework exercises, for which you must submit your game results online, in advance of class.
portion of your course grade. In most cases, however, there is no practical way to “make up” missed classes, so unless an absence is excused (due to illness, religious observance, family emergency, non-negotiable work commitments for Evening MBA students, etc.) you cannot get credit for participation if you do not attend class.

We will review standards and expectations for class participation at the one of our first course meetings.

(Note w/r Evening Section: For those of you in the evening section, we will meet once per week for 3 hours. However, in effect we will be conducting 2, 80-minute sessions each time we meet. As there would be for a twice-per-week course in the fulltime program, there are 24 sessions of material to cover, and 24 sessions of assignments to prepare. We’ll just happen to group them into 3-hour meetings. But note that this means that there will be considerable amount of preparation to do between our weekly meetings, as well as some creative sequencing of topics from time to time.)

Quizzes [40%]
You will have two take-home Quizzes, which will focus on the various types of analytical techniques we will cover, and confirm the development of your problem-solving skills. Each Quiz will be worth 20% of your course grade and will be strictly individual, non-collaborative work.

Course Blog [10%]
Identifying & organizing specific real-world examples of the course issues & tools – in the news, on web sites, in your organization, etc. – will be an important part of your learning to apply these issues & tools. Part of your graded work will involve creating an online “portfolio” that connects the major topics of the course to the real world, and reading/commenting on your classmates’ portfolios.

I will post to our First Class conference some specific instructions about when and how to do this, but the short version is this: Every day you should keep your eyes open for course-related items, and every week or so you should post the best of them on our course blog. You also should regularly visit the course blog to see what others have posted, and occasionally add your own comments and feedback.

Final Project [20%]
A final project, which is a group effort (you will organize yourselves; 2-5 students per team), will count for the remaining 20% of your course grade.

Each team will make a presentation of its work to other classmates (and me) during our designated Final Exam period, and turn in a very concise written summary. You will receive more detailed information about this assignment during the first few weeks of class; however, there is no point to organizing teams or selecting topics until much later in the semester.

Schedule and Assignments

Detailed assignments will be posted in our First Class conference; each such posting will cover 3-6 weeks of coursework.