Economics of Strategy – book exam

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Instructions for exchange students who plan to take this course as a book exam (independent option study)

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Basics

The general rule is that the book exams of this course, as described in this document, are for JSBE exchange students.

This course can be taken at intermediate (KTTA245) or at advanced (KTTS245) level. The former is recommended for students who major in business economics. Those who major in economics (or feel like being more analytically oriented) can choose either, depending on which level of the course best fits their needs. Note that there are extra readings that are compulsory for KTTS245, but optional for KTTA245.

You can take the book exam either during the Autumn or Spring term. Once the book exam dates have been fixed, they can be found from here: https://www.jyu.fi/jsbe/en/studying/exchange. There is one book exam possibility per term.

To take the book exam, register in Korppi and send me an email (ari.hyytinen[-at-]jyu.fi), just to inform me that you plan to take the exam. It is very important that you remember use the correct course code (intermediate = KTTA245; advanced = KTTS245) when registering for the exam.

Kindly note also that despite the name ("book exam"), you are NOT allowed to use the assigned or any other books when you actually take the exam.

Course description

The course focuses on corporate decision making in various market and strategic environments. The course covers the basic concepts of game-theory and industrial organization and applies them to decision-making, especially from the perspective of corporate management. The course shows how economic analysis and game-theoretic thinking can be applied to business decision-making and more broadly.

Literature

The course books are:

• Harrington, J. E. “Games, Strategies and Decision Making” 2009 or later, Worth Publishers

Note that

• ... you are not required to read all these books (see the more detailed reading instructions below);
• ... Besanko et al. covers game theory only very briefly;
• ... the books by Harrington and Dixit et al. are largely substitutes for the purposes of this course; and that
• ... there is, in addition to the assigned chapters of these books, a small amount of extra readings and material (again, see the more detailed reading instructions below), which you may find very useful.

Other entry-level textbooks on game theory are useful and can also be used. Examples of such books include but are not limited to Watson, J. “Strategy: An Introduction to Game Theory” and Gibbons, R. “Game theory for applied economists”. A much less formal but excellent introduction to strategic thinking is Dixit, A. K. and Nalebuff, B. J. “Thinking strategically: The competitive edge in business, politics and everyday life” (highly recommended complementary reading). See also “The Art of Strategy”, which is a newer non-technical book on strategic thinking by the same authors.

**Syllabus and required readings**

The course consists of four parts (I-IV). Parts I-III are compulsory for all. Part IV is compulsory only for those who take the course at the advanced level (KTTS245), but the topics of the part should be useful and of interest to all.

The required readings are as follows:

**Part I: Introduction**

• Economics primer

  *Besanko et al.: Economics primer: Basic principles + Chapter 2 (Horizontal boundaries of the firm)*

• Game theory primer

  *Besanko et al.: Economics primer: Basic principles, especially the sub-section on Game theory + Harrington Chapters 1-2 and/or Dixit et al., Chapters 1-2.*

• Strategy primer

*Besanko et al.: Introduction: Strategy and economics + Harrington, Chapter 2.4. + van Steen (2012, HBS working paper) “A theory of explicitly formulated strategy” (Introduction + Discussion + Conclusions; you can ignore the mathematical model for the purposes of this course)*

**Part II: Strategic reasoning and game-theoretic thinking**

• Rational reasoning with sequential moves (extensive form games)

*Besanko et al.: Economics primer: Basic principles, sub-section on Game theory + Harrington, Chapter 3 and 8 and/or Dixit et al. Chapter 3.*


• Rational reasoning with simultaneous moves (normal form games)

*Besanko et al.: Economics primer: Basic principles, sub-section Game theory + Harrington, Chapter 4 and/or Dixit et al., Chapter 4*


**Note: Extra required readings for KTTS245**: Continuous games and strategies from Harrington, Chapter 6 and/or Dixit et al., Chapter 5.

• Bayes rule and Bayesian updating


**Part III: Market and competitive analysis**

• Competitors and competition

*Besanko et al., Chapter 5*
• Entry and exit
  Besanko et al., Chapter 6

• Dynamics and competition across time
  Besanko et al., Chapter 7

Part IV: Games of strategy -- required only for KTTS245

• Games with imperfect and/or private information
  Harrington, Chapter 9-12 and/or Dixit et al., Chapter 9.


• Cooperation and reputation
  Harrington, Chapter 13-14 and 10 and/or Dixit et al., Chapter 11.


Note #1: The chapter numbers for Besanko et al., as given above, refer to the 2013 edition (International Student Version). If you use an older version or some other edition, it is in your responsibility to identify the chapters and parts that correspond to those listed above.

Note #2: You should pay special attention to the various reviews, summaries and exercises at the end of each dedicated chapter, as they allow you to test how well you master the course material. If you do not do a reasonable amount of exercises to check your learning, it is unlikely that you will pass the exam.