Strategic Sourcing

Updated on January 8, 2024

1 Course description

In recent years, procurement has transformed from a basic operational function into a pivotal strategic element within modern business structures. This evolution is particularly evident as companies increasingly rely on outsourcing for non-core activities, thereby escalating the intricacy and significance of procurement. Today's procurement managers are entrusted with more than mere transactional duties; they are expected to navigate complex strategic landscapes, balancing the avoidance of unwarranted dependencies with the foresight of long-term competitive dynamics and technological choices.

This course examines the nuanced realm of sourcing using game theoretical concepts to analyze the strategic interactions of manufacturers and suppliers. Students will engage in the analytical dissection of auctions and negotiations, allowing them to understand the implications of details of the procurement design.

By the end of this course, participants will be equipped with the ability to plan and implement a strategic procurement project. This course is not only a journey into the mechanics of procurement but also a deep dive into the strategic thinking (game theory) and decision-making skills essential for procurement professionals in today's dynamic business environment. Students will also use Python to run simulations.

2 Administration

Class times	Tuesday, 12:00 - 13:30, HS XIb
	Wednesday, 12:00 - 13:30, HS XIb
	Thursday, 16:00 - 17:30, Kleiner HS XXXI
Faculty	Nicolas Fugger
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Teaching assistant	Dylan Gellert
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Secretary	Stephanie Rauscher
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Assignments	There are regular homework assignments. Students can earn bonus points by uploading complete solutions to Ilias on time. For each assignment, students can earn bonus points. Bonus points improve the grade.
Grading	Exam (75%) and Project (25%)
Project	XXX
Handouts	Handouts will be available for download on Ilias.
Language	English
Prerequisites	Basic skills in Python and interest in game theory.
Exam	XXX

3 Assignments

To qualify for bonus points, you must upload your fully completed solutions to Ilias 18 hours before the scheduled problem class. If you encounter challenges while attempting an exercise, you can still earn bonus points by providing detailed descriptions of the obstacles you faced. While group work of up to three members is permitted, each member must upload their individual solution. By submitting your solution, you agree to present it during the upcoming problem class. If you are unable to present on the scheduled date, you have the option to submit a pre-recorded video of your solution presentation.

4 Project

Throughout the semester, you will undertake a project involving the preparation of a procurement auction. This project can be completed in groups of up to three members, and your final solution should be saved and uploaded to Ilias for evaluation.

5   Course agenda

	Monday	Tuesday	Wednesday	Thursday	Friday
	3	4	5	6	7
June		**Lecture 1:** Welcome & Introduction	**Lecture 2:** Strategic Thinking	**Lecture 3:** Consideration of Non-Price Attributes	
	10	11	12	13	14
		Lecture 4: Introduction Project	**Lecture 5:** Negotiations	**Problem Class 1:** Assignment 1	
	17	18	19	20	21
		Lecture 6: Procurement Auctions	**Lecture 7:** Procurement Auctions	**Problem Class 2:** Assignment 2	
	24	25	26	27	28
		Lecture 8: Scoring Auctions & Buyer-Determined Auctions	**Lecture 9:** Tuning Auctions	**Problem Class 3:** Assignment 3	
	1	2	3	4	5
July		**Lecture 10:** Guest Lecture	**Lecture 11:** Multi-Sourcing	**Problem Class 4:** Assignment 4	
	8	9	10	11	12
		Lecture 12: Procurement of Innovation	**Lecture 13:** Common Value Auctions	**Problem Class 5:** Assignment 5	
	15	16	17	18	19
		Lecture 14: Wrap-Up, Q&A			