

**Санкт-Петербургский филиал федерального государственного
автономного образовательного учреждения высшего образования
«Национальный исследовательский университет
"Высшая школа экономики"»**

Факультет Санкт-Петербургская школа
экономики и менеджмента
Департамент менеджмента

Рабочая программа дисциплины

Экономические основы менеджмента/ Economic Foundations of Management

для образовательной программы "Менеджмент и аналитика для бизнеса"
направления подготовки 38.03.02 «Менеджмент»

уровень магистратура

Разработчик: Maxim Storchevoy, PhD, mstorchevoy@hse.ru

Утверждена Академическим руководителем образовательной программы

« ____ » _____ 201__ г.

Санкт-Петербург, 2018

Настоящая программа не может быть использована другими подразделениями университета и другими вузами без разрешения подразделения-разработчика программы.

Course Syllabus

Title of the course	Economic Foundations of Management		
Title of the Academic Programme	Master program “Management and Analytics in Business”		
Type of the course	Core		
Prerequisites	No		
ECTS workload	6		
Total indicative study hours	Directed Study	Self-directed study	Total
	72	156	228
Course Overview	<p>The purpose of the course is to teach the students how to apply the principles and models of economic theory for making managerial decisions: 1) estimating and analyzing demand, 2) cost analysis, 3) smart pricing (price discrimination, tying, bundling, non-linear pricing), 3) competing in various market structures, 4) making decisions about product quality and differentiation, 5) using network effects, 6) spending on advertising, 7) investing in R&D. We assume that students already know the basics of microeconomics but require deep and diverse practice in application of economic principles to real life issues. The students will be need to analyze many practical mini-cases based on real experience of various companies and will need to apply economic theory for better understanding of the economic reality and making better managerial decisions.</p>		
Intended Learning Outcomes (ILO)	<p>Upon the course completion, the student is expected know how to</p> <ul style="list-style-type: none"> • Use marginal analysis in managerial decisions. • Finding optimal distribution of resources, optimal prices and quantities. • Estimate demand on the basis of available data • Make production and pricing decisions for various cost structures • Use various techniques of smart pricing (price discrimination, tying, bundling, etc.) • Make decisions about of price and quantity competition in various market structures • Make decisions about product quality and degree of differentiation • Use advertising expenses to maximize profit • Invest in R&D to maximize profit and create competitive advantage 		
Teaching and Learning Methods	<p>In class: lectures, discussions, group work, problems Home assignments: readings, problems, essay (project work)</p>		

Content and Structure of the Course					
№	Topic / Course Chapter	Total	Directed Study		Self-directed Study
			Lectures	Tutorials	
1	Demand Evaluation and Simple Profit Maximization	12	2	2	8
2	Perfect Price Discrimination	14	2	2	10
3	Group Price Discrimination	14	2	2	10
4	Versioning	14	2	2	10
5	Bundling	14	2	2	10
6	Tying and Subscription	14	2	2	10
7	Block Pricing and Two-Part Tariff	14	2	2	10
8	Optimal Tariffs	12	2	2	8
9	Cost Calculation	12	2	2	8
10	Perfect Competition	12	2	2	8
11	Quantity Competition	12	2	2	8
12	Price Competition	12	2	2	8
13	Anticompetitive Pricing	12	2	2	8
14	Collusion	12	2	2	8
15	Product Differentiation	12	2	2	8
16	Network Effects	12	2	2	8
17	Advertising	12	2	2	8
18	R&D	12	2	2	8
Total study hours		228	36	36	156
Indicative Assessment Methods and Strategy		20% - Essay (project work) 10% - Class Participation			

	<p>20% - Tests 50% - Exam</p> <p>Rules for Rounding of Cumulative grade: If grade ends with 7, 8, or 9, it rounds up. If grade ends with 0-6, it rounds down.</p>																								
Readings / Indicative Learning Resources	<p><u>Mandatory</u></p> <ul style="list-style-type: none"> • Varian H. Intermediate microeconomics with calculus. Norton and Company, 2014 <p><u>Optional</u></p> <ul style="list-style-type: none"> • Bazil L., Business games for management and economics: learning by playing. World Scientific, 2012 																								
Indicative Self- Study Strategies	<table border="1"> <thead> <tr> <th>Type</th> <th>+/-</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>Reading for seminars / tutorials (lecture materials, mandatory and optional resources)</td> <td>+</td> <td>50</td> </tr> <tr> <td>Assignments for seminars / tutorials / labs</td> <td>+</td> <td>50</td> </tr> <tr> <td>E-learning / distance learning (MOOC / LMS)</td> <td>+</td> <td>10</td> </tr> <tr> <td>Fieldwork</td> <td>+</td> <td>10</td> </tr> <tr> <td>Project work</td> <td>+</td> <td>20</td> </tr> <tr> <td>Other (please specify)</td> <td></td> <td></td> </tr> <tr> <td>Preparation for the exam</td> <td>+</td> <td>16</td> </tr> </tbody> </table>	Type	+/-	Hours	Reading for seminars / tutorials (lecture materials, mandatory and optional resources)	+	50	Assignments for seminars / tutorials / labs	+	50	E-learning / distance learning (MOOC / LMS)	+	10	Fieldwork	+	10	Project work	+	20	Other (please specify)			Preparation for the exam	+	16
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	Project work	+	20																						
	Other (please specify)																								
Preparation for the exam	+	16																							
Academic Support for the Course	Academic support for the course is provided via LMS, where students can find: guidelines and recommendations for doing the course; guidelines and recommendations for self-study; samples of assessment materials																								
Facilities, Equipment and Software	Screen, projector with PC, whiteboard, markers																								
Special conditions for organization of learning process for students with special needs	<p>The following types of comprehension of learning information (including e-learning and distance learning) can be offered to students with disabilities (by their written request) in accordance with their individual psychophysical characteristics:</p> <ol style="list-style-type: none"> 1) <i>for persons with vision disorders</i>: a printed text in enlarged font; an electronic document; audios (transferring of learning materials into the audio); an individual advising with an assistance of a sign language interpreter; individual assignments and advising. 2) <i>for persons with hearing disorders</i>: a printed text; an electronic document; video materials with subtitles; an individual advising with an assistance of a sign language interpreter; individual assignments and advising. 3) <i>for persons with muscle-skeleton disorders</i>: a printed text; an 																								

	electronic document; audios; individual assignments and advising.
Course Instructor	Maxim Storchevoy

Annex 1

Course Content

№	Topics	Total hours	Classroom hours			Homework hours
			Lectures	Seminars	Practicums	
1	Demand Evaluation and Simple Profit Maximization. Market power and demand function with negative slope. How to evaluate demand? Surveys, experiments and historical data. Class experiment with demand evaluation. Marginal revenue function.	12	2	2	-	8
2	Perfect Price Discrimination. Definition of price discrimination. Reservation prices. Perfect Price discrimination vs. traditional pricing. Examples: bazaar, professional services, B2B pricing, auctions, taxation. English, Dutch and sealed-bid auction. Class experiment with auction.	14	2	2	-	10
3	Group Price Discrimination. Observed characteristics. Personal (gender, age, citizenship, appearance, etc.). Space (country, city, district, captive audience). Time (season, weekday, hour). Examples of group prices discrimination.	14	2	2	-	10
4	Versioning. Menu of options. Self-selection of various types of consumers. Versioning in functionality and in quality. Damaging products. Examples of versioning.	14	2	2	-	10
5	Bundling. Definition of bundling. Software bundling: two products and two groups of consumers. Condition of successful bundling. Graphical tool for bundling analysis. Examples of bundling.	14	2	2	-	10
6	Tying and Subscription. Definition of tying. Tying and tied goods. Examples of tying. Ownership vs. Subscription. Examples of choice between ownership and subscription.	14	2	2	-	10

7	Block Pricing and Two-Part Tariff. Block pricing as an instrument to extract all consumer surplus. Block demand curve. Block pricing as a method of price discrimination. Two-Part Tariff: entry fee and unit price.	14	2	2	-	10
8	Optimal Tariffs. Tools for comparisons of various tariffs and designing an optimal combination of tariffs.	12	2	2	-	8
9	Cost Calculation. Fixed costs and variable costs. Total, average and marginal costs. Cost tables and cost curves. Relationship between various cost functions. Short run and long run costs. Economy of scale. Economy of scope.	12	2	2	-	8
10	Perfect Competition. Market with many sellers. Price takers. Individual firm supply. Market supply. Short run equilibrium. Long run equilibrium. Shifts in demand and costs.	12	2	2	-	8
11	Quantity Competition. Oligopoly (few sellers) and interdependency. Game theory. Duopoly. Cournot model. Simultaneous and Sequential equilibriums. How to apply this model to reality?	12	2	2	-	8
12	Price Competition. Bertrand model. Homogeneous product. Simultaneous and Sequential equilibriums. Second mover advantage. How to apply this model to reality?	12	2	2	-	8
13	Anticompetitive Pricing. Limit price and deterrence of entry. When limit price is possible? Expanding capacities. Predatory price. Credible threats. Examples of anticompetitive pricing.	12	2	2	-	8

14	Collusion. Types of collusion: explicit agreement, cartel, implicit collusion. Profit maximization. Factors of stability of a cartel (number of seller, stability of demand, differentiation of products, etc.). Class experiment with cartel.	12	2	2	-	8
15	Product Differentiation. Vertical and horizontal differentiation. Demand for characteristics model (hedonic demand). Hotelling model. Choice of price and choice of location. Collusion. Median voter theorem.	12	2	2	-	8
16	Network Effects. Externalities and network effect. Demand for network good. Types of network effect. Battle of standards. Excess Inertia and Excess momentum. Compatibility. Two-side markets (platforms).	12	2	2	-	8
17	Advertising. Optimal spending of advertising. Information vs. persuasion advertising. Advertising under monopoly. Advertising under competition: homogeneous vs. heterogeneous products. Free-riding problem and its solutions. Wasteful Persuasion.	12	2	2	-	8
18	R&D. Product and process innovation. Innovation under monopoly, competition and oligopoly. Trade secrets vs. patents. Economics of patents.	12	2	2	-	8
	TOTAL	228	36	36	156	156

Annex 2

Assessment Methods and Criteria

Assessment Methods

Types of Assessment	Forms of Assessment	Modules			
		1	2	3	4
Formative Assessment	Lecture Quiz			-	-
	Tests			4	4
	Essay			1	
	Project				1
	In-class Participation			9	9
	Other (write appropriate control forms for the course)				
Summative Assessment	Exam				1

Assessment Criteria

In-class Participation

Grades	Assessment Criteria
«Excellent» (8-10)	A critical analysis, which demonstrates original thinking and shows strong evidence of preparatory research and broad background knowledge.
«Good» (6-7)	Shows strong evidence of preparatory research and broad background knowledge. Excellent oral expression.
«Satisfactory» (4-5)	Satisfactory overall, showing a fair knowledge of the topic, a reasonable standard of expression. Some hesitation in answering follow-up questions and/or gives incomplete or partly irrelevant answers.
«Fail» (0-2)	Limited evidence of relevant knowledge and an attempt to address the topic. Unable to offer relevant information or opinion in answer to follow-up questions.

Project Work

Grades	Assessment Criteria
«Excellent» (8-10)	A well-structured, analytical presentation of project work. Shows strong evidence and broad background knowledge. In a group presentation all members contribute equally and each contribution builds on the previous one clearly; Answers to follow-up questions reveal a good range and depth of knowledge beyond that covered in the presentation and show confidence in discussion.
«Good» (6-7)	Clearly organized analysis, showing evidence of a good overall knowledge of the topic. The presenter of the project work highlights key points and responds to follow up questions appropriately. In group presentations there is evidence that the group has met to discuss the topic and is presenting the results of that discussion, in an order previously agreed.

«Satisfactory» (4-5)	Takes a very basic approach to the topic, using broadly appropriate material but lacking focus. The presentation of project work is largely unstructured, and some points are irrelevant to the topic. Knowledge of the topic is limited and there may be evidence of basic misunderstanding. In a group presentation, most of the work is done by one or two students and the individual contributions do not add up.
«Fail» (0-2)	Fails to demonstrate any appropriate knowledge.

Written Assignments (Essay, Test/Quiz, Written Exam, etc.)

Grades	Assessment Criteria
«Excellent» (8-10)	Has a clear argument, which addresses the topic and responds effectively to all aspects of the task. Fully satisfies all the requirements of the task; rare minor errors occur;
«Good» (6-7)	Responds to most aspects of the topic with a clear, explicit argument. Covers the requirements of the task; may produce occasional errors.
«Satisfactory» (4-5)	Generally addresses the task; the format may be inappropriate in places; display little evidence of (depending on the assignment): independent thought and critical judgement include a partial superficial coverage of the key issues, lack critical analysis, may make frequent errors.
«Fail» (0-2)	Fails to demonstrate any appropriate knowledge.

SAMPLE HOMEWORK ASSIGNMENTS

Online Auctions and price discrimination

Does the presence of online auction sites, such as eBay, make it easier or harder for traditional retailers and wholesalers to engage in profitable price discrimination? It may be argued that both influences take place. Explain.

WinAmp vs. Adobe Reader

WinAmp Media Player and Adobe Reader are well-known products that are distributed in similar way. You may download WinAmp Lite and WinAmp Full for free and WinAmp Pro at \$19.95. The WinAmp Pro can burn CDs at higher speed (up to 48x) and rip CDs at unlimited speed, while WinAmp Full can do this only at very limited speed and WinAmp Lite cannot burn or rip at all. Adobe Reader may be downloaded for free, while Adobe Acrobat that allows to create and edit PDF files sells at about \$500.

- What pricing concept is used in both strategies?
- Why Adobe company may be more successful with this strategy?

Telecom Competition

The Russian market of mobile communications is divided between three largest operators MTS, BeeLine and Megafon, and a smaller TELE2.

- What theoretical model describes the nature of their competition?
- When these operators need to reduce prices they prefer to introduce new tariffs with

lower prices of talk and text services instead of reducing prices in existing tariffs. Why?

- Imagine that the government issued a law that gives to customers the right to keep their phone numbers while migrating from one operator to another. How this will change the nature of competition?

New Subscribers

New subscribers to many newspapers and magazines (e.g. The Economist) usually pay less for the year subscription than existing subscribers for renewal of their subscription. However, many software companies usually offer the newer versions of their software for their existed users at smaller prices (with discount) than to new users. Explain the reason for two strategies.

Guru Lecture

You want to organize a lecture of a health guru. You may rent one of three conference rooms: 1) large (120 seats, 700 euros), 2) medium (70 seats, 500 euros), 3) small (30 seats, 300 euros). You pay the rent for a room only if you rent it. The guru asks for 1000 euros as compensation for the lecture. The demand curve for this lecture is $Q = 175 - 2.5P$.

- Draw your long run AC, AFC, AVC and MC costs curves.
- What price should you charge to earn maximum profit? What will be your output, AC, and profit?
- Suppose that the guru asks as a compensation 30% from every ticket sold (instead of 1000 euros). Draw new cost curves and find new equilibrium (price, output, AC and profit).
- Suppose that the guru asks as a compensation 15 euros from every ticket sold (instead of 1000 euros). Draw new cost curves and find the new equilibrium (price, output, AC and profit).

Movie Theater Prices

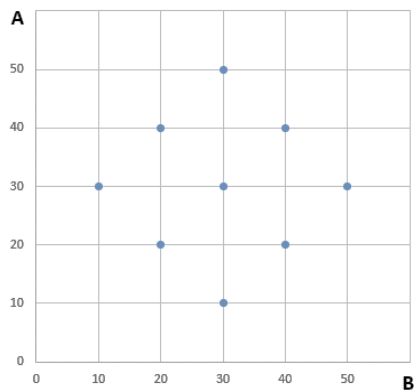
You are the manager of the movie theater chain. You may run three new films: a thriller, a comedy and a romance movie. You ordered a marketing survey of your potential visitors and get the next data. What maximum profit might be squeezed from this market and how?

	Number thousands people	Reservation prices (in rubles)		
		Thriller	Comedy	Romance
Students	100	100	50	20
Men 25-35	80	300	100	50
Women 25-35	80	80	200	300
Men 35-50	70	200	200	100
Women 35-50	70	20	100	400
Pensioners	60	10	50	50

Nine Consumers

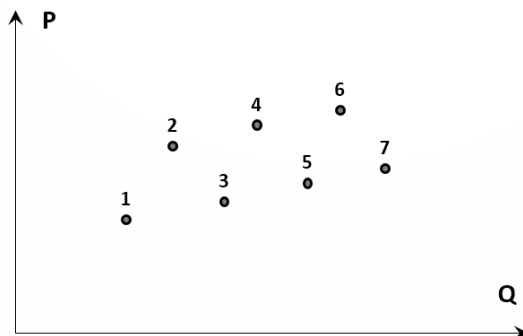
Nine consumers would like to buy two textbooks A and B. Their reservation prices shown on the graph (one point is one consumer).

- What maximum profit you may earn through individual pricing? (3 points)
- What maximum profit you may earn through pure bundling? (3 points)
- What maximum profit you may earn through mixed bundling? (4 points)



Seven points

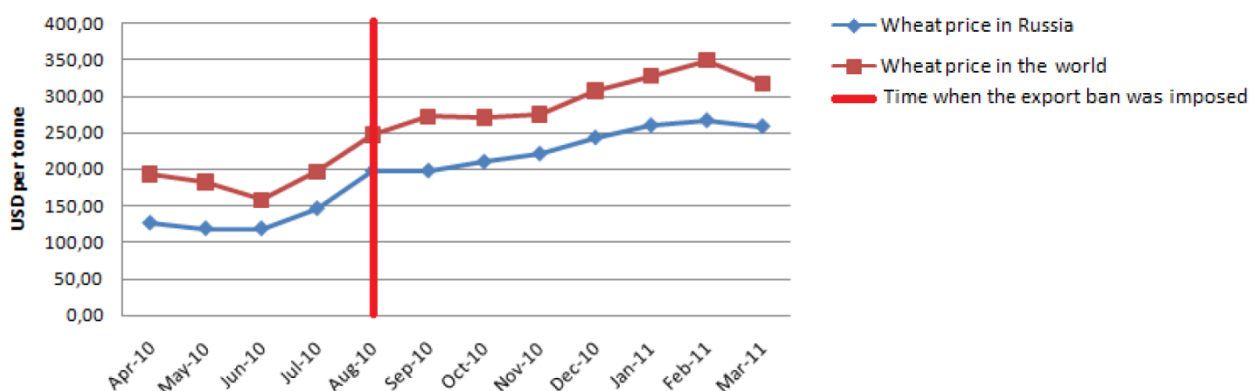
There are seven equilibrium points in a market of some product (the equilibrium moved from 1 to 7). Explain what might happen in this market.



Russian grain production and export

In 2009 Russia, one of the biggest producers of grain in the world, produced 61.7 MMT of wheat and exported 21 MMT (to Egypt, Pakistan, Turkey, Syria, and other countries). In 2010 a summer of drought and wildfires has dramatically hit harvests across Russia. The wheat crop in 2010 turned to be only 42 MMT (the exact number was calculated only later in the year). However, Russia decided to act immediately and banned the export of grain from 15 August to 31 December. "I think it is advisable to introduce a temporary ban on the export from Russia of

grain and other agriculture products made from grain. We have enough reserves of 9 MMT although it is crucial not to allow an increase of domestic food prices" Russian Prime Minister Vladimir Putin said. In June 2010, the average international wheat price was 147 USD per MT. In August it was already about 250 USD. The price of wheat futures with delivery in December 2010 was 275 USD just before the Mr. Putin's announcement and 300 USD immediately after it.



The volume of wheat international trade in 2008 year was 130 MMT, however in 2009 it decreased to 115 MMT. The president of Russian Grain Union, A. Zlochevsky, said that the export ban is an unnecessary measure because taking into accounts the reserves the country still could export about 10-15 MMT of wheat. The export ban is unfair for wheat producers and traders, because last two years they suffered from good crops and low prices, and now they could recover their losses and get funds for development. The member of Federation Council of Russia A. Pochinok said the Russian farmers will not be happy because of this measure. The only beneficiary of the ban is the grain trader Glencore who made many foreign contracts for supply of wheat at low prices and now it will lose money on these contracts. The grain export ban creates the situation of act of God (force majeure) and remove all liabilities of Glencore before foreign customers. The grain ban was illegally avoided by some exporters who declared wheat as some other products at customs and successfully exported about 0,16 MMT. In July 2011 the export ban was lifted, however the Russian exporters faced a lower demand for Russian wheat. Now they had to offer a discount up to 30USD per MMT to get a sale contract with foreign buyer.

1. Draw the approximate curves of supply and demand for Russian wheat in 2009.
2. Draw the approximate curves of supply and demand for Russian wheat in 2010.
3. What should be the consequences of grain export ban in 2010?
4. Why Russian domestic wheat prices followed the international price?
5. What factors make the competition at the international wheat market imperfect?
6. How export tax will influence on the market?
7. What is the best way of regulation of this market in case of crop failure?