

Microeconomics 2

Module 2, AY 2020-2021

Andrei v. Bremzen

NES

abremzen@nes.ru

Course information

Course Website: my.nes.ru

Instructor's Office Hours: by appointment

Class Time: Tuesday 19.00-22.15

Room Number: TBA

TA: Alexander Kalchevskiy, akalchevskiy@nes.ru

Course description

The course follows Microeconomics 1 in the Intermediate Microeconomics sequence. This part concentrates on production and supply of an individual firm and on market structure, going from perfect competition to monopoly to oligopoly.

Course requirements, grading, and attendance policies

There will be up to four home assignments that count for 20% of the grade; the final exam will count for the rest 80% of the grade.

Course materials

Required textbooks and materials

The basic textbook for the class is *Microeconomics* by Robert Pindyck and Daniel Rubinfeld (we will focus on chapters 6-12 and 18). It is available from the library.

Additional materials

A somewhat more advanced textbook is *Microeconomic Theory* by Walter Nicholson. It is also available from the library.

Course contents

The course will cover producer theory. The topics include:

1. Production decision of a firm. Technology, returns to scale.
2. Cost of production. Long run and short run costs.
3. Profit maximization and competitive supply.
4. Analysis of competitive markets.
5. Market power. Price discrimination.
6. Oligopoly and monopolistic competition.
7. Externalities and public goods.

Description of course methodology

While I will mostly be talking in the classroom, occasionally I will expect students to answer questions that I pose, for which it is helpful that you read a chapter ahead of what was covered last time. I do not use slides which means that you have to be in class to take notes. If you have to miss a class, you should ask your classmate(s) what was covered *before* the next class; believe me, it is more time efficient to attend than to recover what was covered.

Sample tasks for course evaluation

1. A utility produces electricity to meet the demands of a city. The price it can charge for electricity is fixed and it must meet all demand at that price. It turns out that the amount of electricity demanded is always the same over every 24-hour period, but demand differs from day (6:00 AM to 6:00 PM) to night (6:00 PM to 6:00 AM). During the day, 4 units are demanded, whereas during the night only 3 units are demanded. Total output for each 24-hour period is thus always equal to 7 units. The utility produces electricity according to the production function

$$y_i = (KF_i)^{1/2}, i = \text{day, night},$$

where K is the size of the generating plant, and F_i is tons of fuel. The firm must build a single plant; it cannot change plant size from day to night. If a unit of plant size costs w_k per 24-hour period and a ton of fuel costs w_f , what size plant will the utility build?

2. A price-discriminating monopolist sells both in its home market at price p_H and in a foreign market at price $p_F > p_H$. Assume that his marginal cost curve is upward sloping and marginal revenue is diminishing at every market. Will this monopolist necessarily increase sales in the foreign market if willingness to pay of domestic consumers falls by $\alpha\%$?

Provide (i) graphical solution (with comments) assuming linear demand; (ii) intuitive explanation and (iii) algebraic solution for any (not necessarily linear) demand curves.