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**Department of Economics**

**Microeconomics**

**(12084 - 214)**

**Work Programme**

**2022**

Updated: 11 February 2022

Lecturer: Prof A P de Villiers: apdv@sun.ac.za

Tutors: Prof A P de Villiers

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Internal moderator: Prof RCC Jafta

**BASIC INFORMATION \***

1. **MODULE PREREQUISITES**

Prerequisite pass module: Economics 114

Prerequisite pass module: Economics 144

**2. MODULE OUTCOMES:**

For any student in economics it is important to understand the working of the market mechanism. In this module the working of the market mechanism under different circumstances is investigated.

At the end of this module the student should be able to:

* explain the role of the market in the economy;
* motivate how the market determines the production of goods and services as well as the distribution thereof;
* determine whether the market system operates efficiently under all circumstances;
* explain the interdependence of different consumers;
* explain the effect of government intervention in the economy.

###### **LANGUAGE OF INSTRUCTION**

Economics 214 is presented according to the language option indicated in the faculty’s language policy.

For this undergraduate module where both Afrikaans and English are used in the same class group, the combination of facilitated learning opportunities is as follows:

* During each lecture, all information is conveyed at least in English and summaries or emphasis on content are also given in Afrikaans. Questions in Afrikaans and English are, at the least, answered in the language of the question.
* Students are supported in Afrikaans and English during a combination of appropriate, facilitated learning opportunities (e.g. consultations during office hours, or scheduled tutorials and practicals).
* For first-year modules, SU makes simultaneous interpreting available during each lecture.  During the second and subsequent years of study, simultaneous interpreting is made available by SU upon request by a faculty, if the needs of the students warrant the service and SU has the resources to provide it.  If two weeks have passed with no students making use of the interpreting service, it may be discontinued.

**4. LECTURER:**

 Prof AP de Villiers

 CGW Schumann-building, room 502

 Tel. 021-808 2206

 E-mail: apdv@sun.ac.za

\* ***Complete information about administrative rulings and assessment of this module is outlined in a separate document on SUNLearn.***

1. **GROUP ALLOCATION**

**Formal lectures:**

|  |  |  |  |
| --- | --- | --- | --- |
| **GROUPS** | **DAY** | **PERIOD** | **BUILDING AND VENUE** |
| Gr 1 | MondayTuesdayThursday | 15:0012:0014:00 | MathsSc/IndPsych 1005MathsSc/IndPsych 1005MathsSc/IndPsych 1005 |
| Gr 2 | TuesdayWednesdayFriday | 09:0011:0012:00 | MathsSc/IndPsych 1005MathsSc/IndPsych 1005MathsSc/IndPsych 1005 |

Please check SUNLearn for further guidelines regarding the mode of lectures (face-to-face and/or online).

The attendance of all synchronous activities are compulsory.

 **Tutorial periods:**

|  |  |  |  |
| --- | --- | --- | --- |
| **LANGUAGE OF INSTRUCTION** | **DAY** | **PERIOD** | **BUILDING AND VENUE** |
| Afrikaans | Wednesday | 13:00 | CGW Schumann 104 |
| English | Thursday | 13:00 | CGW Schumann 104 |
| English | Friday | 14:00 | CGW Schumann 104 |

**6. PRESCRIBED LITERATURE:**

The prescribed textbook is: De Villiers, Pierre & Frank, Robert. 2015*. Microeconomics and Behaviour. Second Southern African Edition*. McGraw-Hill: London

Other literature used:

From time to time additional literature may be used in class. These notes will be made available in class. Notes will only be made available once in the class. If you are not present in the class you must collect the notes yourself within 2 days at Ms Wanza in Room 609.

The references in the work programme refer to De Villiers and Frank.

# 7. SUNLearn

SUNLearn is an integral part of this module and should be consulted regularly for resources, communication (including marks) and learning activities.

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**8. CONSULTATION TIMES**

Send an e-mail to your lecturer to make an appointment or you can also do it right after class.

# FLEXIBLE ASSESSMENT

Economics 214 makes use of summative and formative assessment. Summative assessment compiles out of main assessment A1; main assessment A2 as well as a main assessment A3. There is also a further assessment opportunity FA (essay) that will be taken into consideration when compiling the final mark.

Formative assessment is not used in the calculation of the final mark and in In Economics 214 formative assessment will be done by means of electronic tutorials. The tutorial questions will be made available electronically on Mondays. Students must answer these questions electronically before Wednesdays 12:00. These assessment marks will be compiled into the final tutorial mark at the end of the semester. The worst two tutorial assessment marks will not be taken into consideration in this calculation. A student must achieve a mark of at least 50% in these electronic tutorials to pass this module. A student can pass the module if the requirements are not met by achieving a mark of 60% or above in A2 or A3.

Students have to write at least **two** of the three main assessment opportunities. Further summative assessment (FAS) is done with the aid of an essay.

**The weights of the main assessment tests in the calculation of the final mark if summative main assessments A1 and A2 are written is as follows:**

|  |  |
| --- | --- |
|  | **MARK** |
| Summative Main Assessment A1 | 30 |
| Summative Main Assessment A2 | 60 |
| Essay FAS | 10 |
| FINAL MARK  | 100 |

**If a student did not achieve a final mark of at least 50% after summative main assessment A2, the student may write summative main assessment A3. The weights of the final mark are then as follows:**

|  |  |
| --- | --- |
|  | **MARK** |
| Summative Main Assessment A1 | 30 |
| Essay FAS | 10 |
| Summative Main Assessment A2 | 60 |
| Summative Main Assessment A3 | 60 |
| FINAL MARK  | 160 |

In this case where a student uses A3 as a supplementary assessment to pass a **maximum final mark** of **50%** can be obtained.

If a student missed summative main assessment A1, such a student may write summative main assessment A2. The student must then also write summative main assessment A3.

**The weights of the main assessments in the calculation of the final mark if summative main assessment A1 is not written, but summative main assessments A2 and A3 are written are as follows:**

|  |  |
| --- | --- |
|  | **MARK** |
| Essay FAS | 10 |
| Summative Main Assessment A2 | 60 |
| Summative Main Assessment A3  | 60 |
| FINAL MARK | 130 |

*In this case a student will* ***not*** *be entitled to any further assessment opportunities.*

If a student wrote summative main assessment A1, but missed summative main assessment A2 the student may write summative main assessment A3.

**The weights of the main assessments in the calculation of the final mark if summative main assessment A1 and the summative main assessments A3 are written are as follows:**

|  |  |
| --- | --- |
|  | **MARK** |
| Summative Main Assessment A1  | 30 |
| Essay FAS | 10 |
| Summative Main Assessment A3  | 60 |
| FINAL MARK | 100 |

*In this case a student will* ***not*** *be entitled to any further assessment opportunities.*

**NB: If a student missed two summative main assessment opportunities (irrespective of the reason) you cannot pass the course, because no student can pass on the grounds of only one main assessment opportunity.**

1. **ASSESSMENT DATES**

|  |  |
| --- | --- |
|  | **DATE** |
| Summative Main Assessment A1 | Friday 29 April |
| Summative Main Assessment A2 | Tuesday 31 May |
| Summative Main Assessment A3 | Monday 20 June |

**11. LECTURES:**

This course consists of 21 lectures. The prescribed material will not be covered in detail in the lectures. PowerPoint slides and/or transparencies will only give the **main points**, and are **not complete notes**. Therefore, it is important that you attend classes and take down class notes. It is also advisable to try to read through the relevant literature before a specific lecture. Prepare long enough before evaluations and come and see your lecturer if you have problems.

Lectures commence on 14 February (Group 1) and 15 February (Group 2) and will end on 31 March (Group 1) and 1 April (Group 2). Monday 21 March is Human Rights Day and we follow a Monday's timetable on Friday 25 March.

**12. WORK PROGRAMME**

**General:** Assume you are familiar with basic derivatives, know the rules of derivatives and can apply it in practical examples.

Certain sections that are covered have been done in Economics 114. As indicated in the work programme, it will be discussed in the tutorials and in class it will be assumed that you are familiar with it.

**SECTION 1: INTRODUCTION**

**12.1 BASIC CONCEPTS OF DEMAND AND SUPPLY**

 *Chapters 1 & 2 [Only an overview will be given - Selfstudy]*

Scarcity problem

 Key issues

 Cost benefit analysis

 Implicit costs

 Sunk costs

 Proportions vs percentages

 Marginal/average distinction

 Positive and normative questions

 Micro and macroeconomics

 Factors of production

 Labour specialisation

 Economic systems

 Production possibility curve

 Demand

 Determinants

 Supply

 Determinants

 Market equilibrium

 Consumer and producer surplus

 Price regulation

 Floor and ceiling prices

 Incidence of a tax

**12.2 BASIC MATHEMATICAL CONCEPTS**

 Derivatives and their applications

**SECTION 2: THE THEORY OF CONSUMER CHOICE**

**12.3 RATIONAL CONSUMER CHOICE**

 Indifference curve analysis

 Consumer preferences

 Underlying assumptions

 Indifference curves

 Cardinal and ordinal utility

 Assumptions and properties

 Special cases

 Marginal rate of substitution (MRS)

 Slope indifference curve

 Decreasing

 Meaning

 Budget restriction

 Budget line

 Meaning

 Slope

 Effect of change in income

 Effect of change in prices

 Kinked budget lines

 Consumer equilibrium

 Why is that equilibrium

 Slope budget line = slope indifference curve

 Increase/decrease in price

 Increase/decrease in income

 Corner solutions

 Why corner solution

 Practical applications

 Trust fund, food coupons, drinks

 Marginal utility

 *Chapter 3*

**12.4 INDIVIDUAL AND MARKET DEMAND**

 Price changes and derivation of individual demand curve

 How price changes influence equilibrium

 Price-consumption curve

 Individual demand curve

 Income changes and derivation of the Engel curve

 How changes in income influence equilibrium

 Income-consumption curve

 Engel curve

 Normal and inferior goods

 Income and substitution effect

 Price increase and decrease

 Normal good

 Inferior good

 Giffen good

 Market demand curve

 Horizontal summation of individual demand curves

*Chapter 4; page 93-110*

 Price elasticity of demand

 Calculation

 Interpretation

 Elasticity and total income

 Determinants

 Income elasticity of demand

 Calculation

 Application

 Energy tax with tax rebate

 Cross-price elasticity of demand

 Calculation

*Chapter 4; page 110-127*

 Network Externalities

 Other consumers influence consumption patterns of a consumer

 Positive - Bandwagon effect

 Negative - Snob effect

*Chapter 4; page 127-130*

Intertemporal consumption bundles

 Budget constraint

 Indifference curves

 Optimal intertemporal solution

*Chapter 4; page 130-135*

**SECTION 3: THE THEORY OF THE FIRM AND MARKET STRUCTURES**

**12.5 PRODUCTION**

 Intermediate products

 Fixed and variable inputs

 Short run *[Revision of the short run will be done in tutorial 1.]*

 Only one input can change

 Production with one variable input

 Total product (TP)

 Average product (AP)

 Marginal product (MP)

 Relationship between above-mentioned three curves

 Law of diminishing marginal returns

 Practical applications

*Chapter 7; page 195-209*

 Long run

 All inputs can change

 Production with two variable inputs

 Isoquants

 Definition and shape

 Technical efficiency

 Special cases

 Slope is marginal rate of technical substitution (MRTS)

 Returns to scale

 Increasing

 Constant

 Decreasing

 *Chapter 7; page 210-218*

**12.6 COSTS**

 Cost of production

 Short run *[Revision of the short run is done in tutorial 2.]*

 Fixed costs (FC)

 Variable costs (VC)

 Cost curves

 Total cost (TC) [=TFC + TVC]

 Average fixed costs (AFC)

 Average variable costs (AVC)

 Average cost (ATC)

 Marginal cost (MC)

 Optimum production

 MC all production units the same

 Relationship MP, AP, MC and AVC

 *Chapter 8; page 225-238*

 Long run

 Isocost curves

 Slope

 Isoquants

 Technical efficiency

 Optimum production levels

 Slope isoquant = slope isocost curve

 Economic efficiency

 Applications

 Expansion path

 Short run with restrictions

 Long run

 Derive LAC curve

 Economies and diseconomies of scale

 Learning curve

 Old vs new firms

 Difference between learning curve and economies of scale

 *Chapter 8; page 238-251*

**12.7 PERFECT COMPETITION**

 Goal profit maximization *[This section up to page 266 will be covered in tutorial 2.]*

 Other goals

 Assumption

 Total cost (TC) and total income (TR) curves

 Profit maximization

 Relationship industry and individual firm

 Marginal analysis (MC and MR)

 Optimise profits

 Shutdown point

 P = min AVC

 *Chapter 9; page 257-266*

 Short run supply

 Market supply curve horizontal summation individual supply curves

 Profit maximisation

 Economic profits/losses

 Individual firm supply curve

 Breakeven point – normal profits, but zero economic profits

 Producer surplus

 Difference between market price and price willing to sell for

 Individual firm

 Market

 Consumer surplus

 *Chapter 9; page 266-274*

 Long run supply

 Profit maximisation

 Long run competitive equilibrium

 Firm vs industry

 Long run supply curve

 Constant cost industry

 Increasing cost industry

 Decreasing cost industry

 Increase in demand and effect on long run industry supply curve

 Decrease in demand and effect on long run industry supply curve

 Price elasticity of supply

 Applications

*Chapter 9; page 274-288*

**12.8 MONOPOLY** *[This section up to page 312 will be covered in tutorial 3.]*

 What is a monopoly

 Sources of monopoly

 Profit maximizing monopolist

 Total income

 Total cost

 Profit = TR - TC

 Elasticity and profit maximizing

 Average income/demand curve

 Marginal income

 Average cost

 Marginal cost

 Profit maximization

 Marginal principles

 Can influence market prices

 Optimal ‘mark-up’

 Measuring monopoly power

 Monopolist’s shutdown condition

 *Chapter 10; page 295-312*

 Pricing with market power

 Consumer surplus

 Reservation price

 Reaping of consumer surplus

 First degree price discrimination

 Perfect and imperfect price discrimination

 Second degree price discrimination

 Based on volumes

 Third degree price discrimination

 Split market into two

 Rush hour price policy

 Hurdle model

*Chapter 10; page 312-321*

 Monopoly

 Deadweight loss with the aid of consumer / producer surplus approach

 Natural monopoly

 State ownership

 Regulation

 Price at level of perfect competition

 Price at minimum average cost

 Exclusive contracting

 Enforcement antitrust laws

 Laissez-faire policy

*Chapter 10; page 321-330*

**12.9 IMPERFECT COMPETITION: A GAME THEORETICAL APPROACH**

 Oligopoly

 Cournot model

 Competitor keeps output the same

 Reaction curves

 Profit maximizing

 Bertrand model

 Competitor keeps prices the same

 Equilibrium

 Stackelberg model

 Price leadership

*Chapter 11; page 337-346*

 Price rigidity

 Kinked demand curve

 Equilibrium if costs change

 Price leadership of dominant firm

 Determination of market price

 Who supplies what in the market

 Practical applications

*Chapter 11; page 346-352*

 Monopolistic competition

 Chamberlain model

 Characteristics

 Equilibrium

 Short run

 Long run

 Monopolistic competition vs perfect competition

 Practical applications

*Chapter 11; page 352-356*

 Game theory

 Dominant strategy

 Nash equilibrium

 Maximin strategy

 Sequential games

*Chapter 11; page 356-367*

Applications

*Chapter 11; page 367-376*

**SECTION 4: FACTOR MARKETS**

**12.10 LABOUR**

 Competitive markets

 Derived demand

 VMPL

 Imperfect market

 MRPL

 Supply curve of labour

 Equilibrium

 Income and substitution effects of change in wages

 Monopsony

 Average factor cost (AFC)

 Total factor cost (TFC)

 Marginal factor cost (MFC)

 Optimum strategy

 *Chapter 12; page 383-400*

 Minimum wages

 Labour unions

 Monopoly power and wages

 Labour market discrimination

 Statistical discrimination

 Internal wage structure

 Winner-take-all

*Chapter 12; page 400-413*

**SECTION 5: EXTERNALITIES, PUBLIC GOODS AND WELFARE**

**12.11 GENERAL EQUILIBRIUM AND MARKET EFFICIENCY**

 Partial analysis

 As we have always done

 General equilibrium analysis

 Build in time dimension

 Interdependence between different markets

 Pareto efficient allocation of resources (simple exchange economy without production)

 Edgeworth exchange box

 Pareto optimal allocation

 Contract curve

 Competitive equilibrium in consumption

 Pareto efficient allocation of resources (with production)

 Efficiency in production

 Efficient combination goods and services

 Production possibility frontier (PPC)

 Marginal rate of transformation (MRT)

 Slope PPC

 General competitive equilibrium

 Consumers and producers

 MRT = MRS

 Sources of inefficiency

*Chapter 16; page 495-513*