COURSE OUTLINE

1. OVERVIEW

| FACULTY | FACULTY OF HUMANITIES AND SOCIAL SCIENCES | | | | |
|--|---|---------------|--|--|--|
| SECTION | DEPARTMENT OF PRIMARY EDUCATION | | | | |
| LEVEL OF STUDY | UNDERGRADUATE | | | | |
| COURSE TITLE | | | | | |
| Mathematics II | | | | | |
| COURSE CODE | MA0202 | SEMESTER | 2 | | |
| HOURS per WEEK | 6 | ECTS | 6 | | |
| COURSE CATEGORY | Compulsory | COURSE TYPE | Scientific subject | | |
| LANGUAGE OF INSTRUCTION AND EXAMINATIONS | Modern Greek | PREREQUISITES | none | | |
| OFFERED TO ERASMUS | YES | ECLASS PAGE | https://eclass.uth.gr/courses/PRE_U_203/ | | |

2. LEARNING OUTCOMES

Learning Outcomes

Upon successful completion of the course, students are expected to be familiar with naïve Set Theory and Euclidean Plane Geometry.

General Competencies

Ability to study independently

Analytic and Synthetic thinking

Justification - Argumentation

3. CONTENT

Sets. Operations with sets. Relations and functions. Cardinal numbers of sets and in particular of various function sets.

Euclidean Plane Geometry: Angles, parallel lines. Plane figures: Triangles, Congruent and similar triangles. Quadrilaterals: parallelograms (rectangles, squares, rhombs) and trapezoids. Polygons. The Circle.

4. TEACHING AND LEARNING METHODS - ASSESSMENT

| TEACHING MODE | In person | | | | |
|-----------------------|--|------------------------------|-----------|--|--|
| USE OF ICT | Power point if needed, Geogebra, Excell. Communication: Webmail / eClass / MSteams / | | | | |
| COMPULSORY ATTENDANCE | NO | | | | |
| TEACHING ORGANIZATION | | Semester Workload (hours) | | | |
| | Lectures | 78 | | | |
| | Study | 68 | | | |
| | Examination | 4 | | | |
| | Course total | 150 | | | |
| | | | | | |
| EVALUATION | Туре | Format | Weighting | | |
| | Final written exam | Open-Ended Questions | 60% | | |
| | Intermediate written examination (mid-term A) | Open-Ended Questions | 25% | | |
| | Intermediate written examination (mid-term A) | Open-Ended Questions | 15% | | |
| | | | 100% | | |
| | Description of other evaluation method / Evaluation criteria: | | | | |

5. RECOMMENDED BIBLIOGRAPHY

Core textbooks (available through the Eudoxus service)

Χατζηκυριάκου, Κ. 2017. Αριθμοί, Σύνολα, Σχήματα: Μαθηματικά για τη δασκάλα και τον δάσκαλο, Θεσσαλονίκη: Εκδόσεις Σοφία (Β έκδοση, ανατύπωση με διορθώσεις)

Other books / Notes

Κολέζα, Ε. 2020, Ψηφίδες Σκέψης στα Στοιχειώδη Μαθηματικά. Αριθμητική, Άλγεβρα & Γεωμετρία., Αθήνα: Εκδόσεις Gutenberg

Λεμονίδης, Χ. 2000. Στοιχεία Αριθμητικής και Θεωρίας Αριθμών για το δάσκαλο. Αθήνα: Πατάκης.

Τριανταφυλλίδης, Τρ. & Σδρόλιας, Κ. 2005. Βασικές μαθηματικές έννοιες για τον εκπαιδευτικό της πρωτοβάθμιας εκπαίδευσης. Αθήνα: Τυπωθήτω-Γ. Δαρδανός

Bunt, L.B.N. & Jones, Ph. S. & Bedient, J.D. 1999. Οι Ιστορικές Ρίζες των Στοιχειωδών Μαθηματικών. Εκδόσεις Γ.Α. Πνευματικού.