ETY310 – English Technical Terminology

COURSE OUTLINE

1. GENERAL INFORMATION

SCHOOL	SCHOOL OF ENGINEERING		
ACADEMIC UNIT	DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	ETY310	**SEMESTER**	3
COURSE TITLE	ENGLISH TECHNICAL TERMINOLOGY		

Independent teaching modules if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the entire course, give the weekly teaching hours and the total credits	**Weekly Teaching Hours**	**Credits**
Lectures, lab exercises	4	4

COURSE TYPE *general background, special background, specialized general knowledge, skills development*	Specialized General Knowledge/Skills Development
PREREQUISITE COURSES:	Preparatory Course in the English Language
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	ENGLISH
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	http://ecourse.uoi.gr/course/view.php?id=1474

2. LEARNING OUTCOMES

Learning Outcomes

Right below are described the course learning outcomes, the specific knowledge, skills and competences for each appropriate level, which the students will acquire with the successful completion of the course.
Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

Students are expected:

1. To understand introductory textbook material in their scientific field
2. To understand and reproduce specialized discourse in their scientific field
3. To paraphrase
4. To define and classify scientific concepts
5. To describe processes and graphs
6. To have acquired knowledge as to how english grammar is used in academic context.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

1. Search for analysis and synthesis of data and information
2. working independently
3. Production of free, creative and inductive thinking

3. SYLLABUS

Materials science and engineering terminology which concerns the following areas:

1. Basic categories of materials and their properties
   i. Metals
   ii. Ceramics
   iii. Glass
   iv. Polymers
   v. Composites
   vi. Semiconductors

2. The structure of the atom
   i. Ionic bonds
   ii. Covalent bonds
   iii. Metallic bonds
   iv. Secondary bonds

3. Crystalline structure
   i. The 7 systems and the 7 bravais lattices
   ii. Metallic structures
   iii. Ceramic structures
   iv. Polymer structures

4. Mechanical behavior
   i. Stress/strain
   ii. Elastic deformation
   iii. Plastic deformation

The use of grammar in academic language

1. The use of tenses in academic english
2. The use of noun phrases in academic english
3. The use of the article
4. Passive voice

Academic writing

1. Denitions
2. Classifications
3. Process description
4. Analysis of statistical data and graphs
5. Paraphrasing

4. TEACHING and LEARNING METHODS - EVALUATION

<table>
<tr><td>DELIVERY Face-to-face, Distance learning, etc.</td><td>1) Face-to-face

2) Distance learning via the moodle platform on the ecourse service of the university of Ioannina</td></tr>
<tr><td>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
Use of ICT in teaching, laboratory education, communication with students</td><td>1) Use of itc in teaching (videos, powerpoint presentations, educational games)
2) Use of itc in communication with students via the moodle platform</td></tr>
<tr><td>TEACHING METHODS
The manner and methods of teaching are described in detail.
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.
The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</td><td>
<table>
<tr><th>Δραστηριότητα</th><th>Φόρτος Εργασίας Εξαμήνου</th></tr>
<tr><td>Lectures</td><td>52</td></tr>
<tr><td>Lab exercises</td><td>26</td></tr>
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<tr><td>Course total</td><td>78</td></tr>
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<tr><td>STUDENT PERFORMANCE EVALUATION
Description of the evaluation procedure
Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other
Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</td><td>Language of evaluation: english
Evaluation method:
• Written assignments during the semester (optional)
• Written exam (multiple choice questions, short-answers, gap filling, reading comprehension exercises, writing) (compulsory)
Evaluation criteria: knowledge of the taught terminology/ acquisition of basic skills in academic writing/acquisition of academic grammar
Deliverable: via the ecourse service</td></tr>
</table>

5. ATTACHED BIBLIOGRAPHY

-Suggested bibliography:

- Shackelford, J. F. 2009. Introduction to Materials Science for Engineers. Usa: Pearson Education,
- Paterson, K. And R. Wedge. 2013. Oxford Grammar for Eap. Oxford: Oxford Press
- Moorley J., Doyle P. And I. Pople. 2001. University Writing Course. Athens: Express Publishing