COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF SCIENCES		
DEPARTMENT	DEPARTMENT OF CHEMISTRY		
LEVEL OF STUDIES	ISCED level 6 – Bachelor's or equivalent level		
COURSE CODE	PEDN201	**SEMESTER**	2nd
COURSE TITLE	Principles of General Didactics		

TEACHING ACTIVITIES *If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.*	**TEACHING HOURS PER WEEK**	**ECTS CREDITS**
	3	3
Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.		

COURSE TYPE *Background, General Knowledge, Scientific Area, Skill Development*	Specialised background / specialization
PREREQUISITES:	NONE
TEACHING & EXAMINATION LANGUAGE:	Greek
COURSE OFFERED TO ERASMUS STUDENTS:	NO
COURSE URL:	

(2) LEARNING OUTCOMES

Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

At the end of the course, the student is able to:

- recall information and approach basic concepts regarding the subject matter and the importance of General Didactics;
- understand and foster reflection on issues related to the content, methods and tools of the course;
- evaluate theoretical pedagogical principles and foundations and promote those that fit the teaching framework applied in Greece;
- carry out an overview and comparison of debates on didactic principles and education policy at European level;
- understand the role of the teacher in multidimensional learning environments;
- understand the reflective and metacognitive dimension of teaching practice.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Upon completion of the course, the student is expected to:

- select the appropriate assessment method, the optimal teaching method and suitable supporting material depending on the type of lesson;
- consult sources and cross-check them;
- have control over the overall teaching and learning process;
- understand the social and institutional frameworks that influence educational practice;
- have developed pedagogical awareness and basic theoretical training regarding teaching and learning;
- have assimilated lesson-planning skills, with aims, activities and assessment harmonised with the subject matter;
- have developed the ability to adapt teaching to different learning styles and population groups;
- have developed skills of reflection and self-improvement of educational practice through microteaching and feedback;
- understand the importance of differentiated instruction and educational inclusion.
  More specifically, the content of the course promotes the following competences:
- Search for, analysis and synthesis of data and information, using the necessary technologies;
- Working in an interdisciplinary environment;
- Project planning and management;
- Respect for diversity and multiculturalism;
- Exercise of criticism and self-criticism;
- Promotion of free, creative and inductive thinking.

(3) COURSE CONTENT

1. Introduction to Didactics: Definitions, basic concepts, teaching models.

2. Learning objectives and categories of cognitive domain (Bloom, SOLO taxonomy).

3. Teaching styles and learning types (Kolb, Gardner).

4. Lesson planning: structure, timing, expected learning outcomes.

5. Introduction to educational scenarios and projects in the teaching of the natural sciences.

6. Teaching methods: traditional vs active (cooperative, inquiry-based, etc.).

7. The classroom as a learning environment: physical, digital and emotional space.

8. Assessment in teaching: formative, summative, alternative tools.

9. Technologies in education: ICT, educational software, flipped classroom.

10. Curriculum planning and development: aims – content – means.

11. Cultivation of metacognitive skills: thinking strategies and self-regulation.

12. Special population contexts: teaching in inclusion classes and mixed groups.

13. Skills of the contemporary teacher: digital competence, adaptability and lifelong learning.

(4) LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD *Face to face, Distance learning, etc.*	Face to face

<table>
<tr><td>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)
Use of ICT in Teaching, in Laboratory Education, in Communication with students</td><td>Use of ICT in teaching and communication with students:
digital slides;
videos;
MsTeams / e-class, webmail.</td></tr>
<tr><td>TEACHING ORGANIZATION
The ways and methods of teaching are described in detail.
Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</td><td><table><tr><th>Activity</th><th>Workload/semester</th></tr><tr><td>Lectures</td><td>39</td></tr><tr><td>Assignment writing</td><td>10</td></tr><tr><td>Bibliographic research & analysis</td><td>10</td></tr><tr><td>Final examination</td><td>2</td></tr><tr><td>Mid-term test</td><td>1</td></tr><tr><td>Student’s study hours</td><td>13</td></tr><tr><td>Total</td><td>75</td></tr></table></td></tr>
<tr><td>STUDENT EVALUATION
Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed</td><td>Final (cumulative) written evaluation with multiple-choice or short-answer questions in Greek. Samples of the questions are provided during the last class of the semester.
Final grade = 30% × assignment grade + 20% × mid-term test grade + 50% × final examination grade.*
*Participation in the final examination is compulsory for all students in order for a grade to be announced.
The written individual or group assignment (up to 5 students) is optional and is prepared extensively during the course of the semester.</td></tr>
</table>

(5) SUGGESTED BIBLIOGRAPHY

1. Matsagouras, H. (2000). Στρατηγικές διδασκαλίας: Η κριτική σκέψη στη διδακτική πράξη. Athens: Gutenberg.
2. Matsagouras, H. (2003a). Η σχολική τάξη: Χώρος – Ομάδα – Πειθαρχία – Μέθοδος. Athens: Grigoris.
3. Matsagouras, H. (2003b). Η διαθεματικότητα στη σχολική γνώση: Εννοιολογική αναπλαισίωση και σχέδια εργασίας. Athens: Grigoris.
4. Ministry of National Education and Religious Affairs – Pedagogical Institute. (2002). Διαθεματικό Ενιαίο Πλαίσιο Προγραμμάτων Σπουδών (Δ.Ε.Π.Π.Σ.). Athens: P.I.
5. Fraser, B. J. (2005). Using learning environment assessments to improve classroom and school climates. In J. Freiberg (Ed.), School climate: Measuring, improving and sustaining healthy learning environments (pp. 65–83). London: Routledge Falmer.
6. Directorate-General for Education, Youth, Sport and Culture (European Commission). (2019). Key competences for lifelong learning. Brussels: European Commission.
7. Organisation for Economic Co-operation and Development (OECD). (2020). PISA 2018 and the EU: Striving for social fairness through education. Paris: OECD Publishing.
8. Council of the European Union. (2021). Council resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021–2030). Brussels: Official Journal of the European Union.
9. Tilavoldiev, Sh., & Madaliev, R. (2022). General didactic principles of pedagogical technologies. Journal of Pedagogical Innovations and Practices.
10. Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. Teachers College Record, 108(6), 1017–1054.