COURSE OUTLINE

1. GENERAL

| SCHOOL | School of Tochnology | | | | | |
|--------------------------|---|----------------------|-----------|---|------|--|
| | | School of Technology | | | | |
| DEPARTMENT | Department of Forestry, Wood Sciences and Design (Karditsa) | | | | | |
| LEVEL | Undergraduate | | | | | |
| CODE | ΔΠΕ961 | STUDENT SEMESTER 9th | | l | | |
| COURSE TITLE | Management Plans & Environmental Studies | | | | | |
| ACTIVITIES | | | WEEKLY HR | S | ECTS | |
| | Lectures 2 | | | | | |
| | Exercise 1 | | | | | |
| TOTAL | | 3 | | 4 | | |
| | | | | | | |
| TYPE OF COURSE | Optional course in the Orientation of Natural Environment | | | | | |
| | Management | | | | | |
| PREREQUISITES: | None | | | | | |
| | | | | | | |
| LANGUAGE TEACHING AND | Greek or English | | | | | |
| EXAMINATION: | | | | | | |
| THE COURSE IS OFFERED TO | Yes | | | | | |
| ERASMUS STUDENTS | | | | | | |
| WEBPAGES COURSE (URL) | | | | | | |
| | | | | | | |

2. LEARNING OUTCOMES

Learning Outcomes

The aim of the course is to prepare the senior student of the Department so that he/she understands the methodologies and can participate in the elaboration of management plans and environmental studies, such as Environmental Impact Studies (EIA) and Special Environmental Studies (SES), a skill that offers significant professional employment opportunities at a time when the pro-environmental profile of companies is increasingly promoted, and the trend for minimal environmental impact of public and private projects and activities seems to concern organizations and companies more than in the past.

Upon successful completion of the course, the students will be able to:

- Understand what management plans are and what areas of the natural environment they cover.
- Know the basic requirements of the relevant European directives and national legislation in the logic of multifunctional forest and environmental management
- Learn the framework of river basin management plans, protected area management plans, forest management studies and grazing management plans, through concrete examples.
- Understand how management plans should be accompanied by scientific monitoring methods for their evaluation and planned review. Similarly for EIAs, which require pre- and post-monitoring follow-up activities.
- Enrich his/her knowledge on the SES for the areas of the Natura 2000 network and how they are related to the respective management plans and the draft Presidential Decrees for the institutionalization of the protection of these areas according to the EU legislation.
- Understand the basic requirements of the legislation for the environmental licensing of public and private projects and activities through the preparation of Environmental Impact Assessments
- Be informed about the market share of environmental studies in the Greek consulting market.

General Skills

Upon successful completion of the course, the students will be able to develop and cultivate basic professional and social skills:

- Search, analysis and synthesis of data and information, using the necessary technologies
- Adaptation to new situations
- Decision making
- Teamwork
- Demonstration of social, professional and moral responsibility
- Project design and management
- Work in an interdisciplinary environment
- Respect for the natural environment
- · Promoting free, creative and inductive thinking

3. COURSE CONTENT

Through the **theoretic part** of the course the student:

- Is introduced into the concept of management plans and the areas they cover, with emphasis on river basin management plans, protected area management plans, forest management studies and grazing management plans.
- Learns the requirements of the relevant European directives (e.g. Water Directive, Birds Directive, Habitats Directive) and national legislation in the logic of multifunctional forest and environmental management.
- Is informed how to integrate scientific monitoring systems in management plans for their evaluation and review.
- Learns what the Special Environmental Studies (SPS) are for the Natura 2000 network areas and how they relate to the respective management plans and draft Presidential Decrees to institutionalize the protection of these areas.
- Understands the basic requirements of the legislation for the environmental licensing of projects and activities through the preparation of Environmental Impact Studies (EIA) of public and private projects.

The **course exercises** take place once a week (1 hour per week) and focus on the presentation, analysis and discussion of case studies of real and approved management plans and EIS, including pre- and post-monitoring activities necessary for the preparation of specific EIAs. With the tutorial exercises the students are asked to play the role of the researcher-contractor-author of environmental studies, but also to understand how he/she has to work with his clients and the competent public services, who finally license (or not) a project and approve (or not) a study. The course includes a mandatory excursion to different types of terrestrial and wetland natural ecosystems in combination or not with excursions of other courses of the Department. Attendance of the exercises by the students is mandatory by at least 50%.

Directions and enriched material on the course are posted in the e-class platform.

4. TEACHING AND LEARNING METHODS - EVALUATION

| DELIVERY METHOD | Combined educational methods and techniques are applied | | | | |
|----------------------------|--|-------------------|--|--|--|
| | aiming at enhancing the active participation of students and | | | | |
| | at increasing the effectiveness of "face to face" teaching: | | | | |
| | enriched presentations, questions - answers, discussion, | | | | |
| | exercises, working groups, study and demonstration of case | | | | |
| | studies, educational visit. | | | | |
| USE OF INFORMATION AND | Use of video projector for the lectures as well as thecourse | | | | |
| COMMUNICATION TECHNOLOGIES | page on the e-class platform for posting (a) notes, (b) | | | | |
| | internet links, and (c) announcements. | | | | |
| MANAGEMENT OF TEACHING | Activity | Semester Workload | | | |
| | Lectures | 25 | | | |
| | Term assignment | 25 | | | |
| | preparation and | | | | |
| | presentation | | | | |
| | Excursion | 15 | | | |
| | Individual and work | 35 | | | |

| | study for term assignment Course Total | 100 | | |
|--------------------|--|--|--|--|
| STUDENT EVALUATION | Student assessment takes place at the end of the semester by means of: (a) written examination for the theoretical part of the course (65% of the final grade – right and wrong as well as multiple choice questions) provided that the student has participated to the educational excursions of the course, and (b) grading of the essay – presentation during the | | | |
| | course (35% of the final go student has participated t | stakeholders debate game for the laboratory part of the course (35% of the final grade) provided that the student has participated to the educational excursions and to – at least – 50% of the lab courses. | | |

5. RECOMMENDED-BIBLIOGRAPHY

Books offered to students through the *Eudoxus* platform:

- Vagiona D. 2021. Environmental Impact Studies Theory and Applications. DISIMA Editions, 768 pp. ISBN: 978-618-202-065-4 (Eudoxus code: 102074486, *in Greek*).
- Vavizos, G, and A. Mertzanis. 2003. Environment Environmental Impact Studies. 2nd edition, Papasotiriou Publications, Athens (Eudoxus code: 68406906, *in Greek*).

Books offered besides the *Eudoxus* platform:

- Bonnet, B., S. Aulong, S. Goyet, M. Lutz and R. Mathevet. 2005. Integrated Management of Mediterranean Wetlands. Tour du Valat, Arles, France, 159 pp. Publications MedWet / Tour du Valat – number 13.
- Catsadorakis, G. and H. Källander (eds). 2010. The Dadia-Lefkimi-Soufli Forest National Park: Biodiversity, Management and Conservation. WWF Greece, Athens, 316 pp.
- Crivelli, A.J. and G. Catsadorakis (eds). 1997. Lake Prespa, Northwestern Greece: A unique Balkan wetland. Reprinted from Hydrobiologia, vol. 351, Kluwer Academic Publishers, 196pp.
- Gattenlöhner, U., M. Hammerl-Resch and S. Jantschke (eds.). Reviving Wetlands Sustainable Management of Wetlands and Shallow Lakes, Guidelines for the Preparation of a Management Plan. Global Nature Fund, Living Lakes, EU LIFE Programme, DG Environment.
- Jones, W., J. Eldridge, J.P. Silva and N. Schiessler. 2007. LIFE and Europe's rivers Protecting and improving our water resources. European Commission, Env. Directorate-General. 50 pp.
- Mitsch, W. J.and J. G. Gosselink. 1986. Wetlands. New York: Van Nostrand Reinhold.
- Pearce, F. 1996. Wetlands and Water resources. Tour du Valat, Arles, France, 82 pp.
 Publications MedWet / Tour du Valat number 5.
- Scott, D. A. (ed.). 1992. Management of wetlands and their birds. IWRB. Slimbridge.
- Silva, J.P., W. Jones, J. Eldridge and E. Sarvan. 2006. LIFE and the marine environment Promoting sustainable management of Europe's seas. European Commission, Environment Directorate-General. 54 pp.
- Silva, J.P., L. Phillips, W. Jones, J. Eldridge and E. O'Hara. 2007. LIFE and Europe's wetlands Restoring a vital ecosystem. European Commission, Env. Directorate-General. 66 pp.
- Silva, J.P., J. Toland, W. Jones, J. Eldridge, E. Thorpe and E. O'Hara. 2008. LIFE and Europe's grasslands Restoring a forgotten habitat. European Commission, Env. Directorate-General. pp 53.
- Zalidis, G. T.L. Crisman and P.A. Gerakis (editors). 2002. Restoration of Mediterranean
 Wetlands. Min. of Env., Land Planning and Public Works, Greek Biotope-Wetland Center.