

Item 19f



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BIOCEP-623: PROJECT MANAGEMENT AND IMPLEMENTATION

(3 ECTS, 4 MC)

Course Description and Syllabus

Basic Information

Type of Course	Lecture with practical case studies
Term	2 nd semester
Expected no. of participants	< 20
Language	English
Hours per week in term	4 hr/week for lecture 2 hr/week for practical

COURSE DESCRIPTION

This course guides students through all important steps of any research project (e.g., MSc, PhD) in environmental protection. It focuses on planning, executing, and finalising a research project as well as provides an overview of project management and implementation skills and competences such as defining and monitoring project resources, cost, and time schedule. In this course, students explore project management and implementation with a practical, hands-on approach through case studies and class exercises which later will be very useful for their Master thesis.

LEARNING OUTCOMES

Upon completion of the course, students should be able to:

- Understand what a project is, the project life cycle, challenges and importance of project management.
- Learn and apply the tools and techniques in initiating and planning a project such as estimating the project budget and cost, developing a project plan, developing a project schedule, and preparing project proposals.
- Learn and apply different tools and techniques from executing, monitoring and controlling, up to project closure.

TEACHING METHOD

The concepts in this course will be taught using a combination of lecture and discussion, with emphasis on active learning. The instructor will provide a set of case studies for the students to go through the project cycle.

CLASS ATTENDANCE

Students are expected to attend regularly to the class. Students need 75% of total attendance for being able to take the final exam.

GRADING

- (1) Proposal (10%)
- (2) Final report (10%)
- (3) Presentation to the class (10%)
- (4) Final exam (70%)

COURSE TOPICS

1. Introductory concepts

- What is a project?
- The project life cycle
- Structure, challenges and opportunities

2. Planning your research project

- Performing a literature search
- Formulating research questions and testable hypothesis
- Designing and planning the study or experiment
- Determining measurable indicators
- Calculating costs and budget
- Chart your route, milestones and deliverables
- Preparing a proposal

3. Executing your project

- Preparing a sampling/lab protocol
- Collecting data and conducting fieldwork
- Entering, managing and archiving data
- Monitoring your progress

4. Finalising your project

- Analysing and interpreting the data
- Writing the final report
- Project evaluation: deliverables and finances

RECOMMENDED READINGS

Rieger, J., Stanley, J. and Traynor, R. 2014 Project Management and Implementation for Ecological Restoration. Island Press. 320 pp.

Hawksworth, D. 2010. Methods and Practice in Biodiversity Conservation. Springer. 320 pp.

Kuehl, R. O. 1994. Statistical Principles of Research Design and Analysis. Wadsworth, Inc. 686 pp.

Tortajada, C. 2018. Integrated Water Resources Management: From concept to implementation. Routledge. 282 pp.