COURSE OUTLINE

RESEARCH METHODOLOGY AND SCIENTIFIC WRITING IN BIOLOGICAL ANTHROPOLOGY

1. GENERAL

SCHOOL	CLASSICS AND HUMANITIES		
DEPARTMENT/UPS	HUMANITIES / PHILOLOGY, HISTORY AND ANTHROPOLOGY		
LEVEL OF STUDIES	UNDERGRADUATE – LEVEL 6		
COURSE CODE	**XXXXX**	**SEMESTER**	7TH
COURSE TITLE	RESEARCH METHODOLOGY AND SCIENTIFIC WRITING IN BIOLOGICAL ANTHROPOLOGY		

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	5
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*	SCIENTIFIC AREA
PREREQUISITES:	NO
TEACHING & EXAMINATION LANGUAGE:	GREEK
COURSE OFFERED TO ERASMUS STUDENTS:	YES
COURSE URL:	https://eclass.duth.gr/courses/XXXXXX/

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.

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

- Understand the basic principles and methods of scientific research in Biological Anthropology.
- Design research protocols and experimental procedures for data collection and analysis.
- Critically evaluate literature and resources related to Biological Anthropology.
- Analyse data using statistical methods and interpret results.
- Write scientific papers and articles according to international standards.
- Present the results of their research to scientific audiences using proper presentation techniques.
- Apply the ethical principles and codes governing research in anthropology.

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

- Search, analysis and synthesis of data and information, ICT Use
- Production of new research ideas
- Producing free, creative and deductive thinking
- Project design and management
- Critical thinking

• Decision making • Exercise of criticism and self-criticism • Teamwork • Autonomous work • Working in an interdisciplinary environment • Working in an international environment

3. COURSE CONTENT

1	Introduction to Research Methodology in Biological Anthropology	• Familiarization with the students and presentation of the course objectives, expected learning outcomes, and requirements • Definition and purpose of scientific research • Historical development of research in biological anthropology • Basic principles of research
2	Research design: formulating hypotheses and objectives	• Developing research questions • Formulating hypotheses and setting objectives
3	Literature review and source finding	• Bibliography search techniques • Organisation of bibliographic sources
4	Ethical Issues in Research	• Codes of ethics in Biological Anthropology • Ethical issues in the management and interpretation of anthropological material
5	Data Collection: methods and techniques	• Data collection and management techniques in Biological Anthropology • Good sampling practices and study population design • Techniques for combining data from different biological anthropology analyses
6	Statistical Data Analysis in Biological Anthropology	• Introduction to statistical analysis • Descriptive statistics: Means, variances, standard deviations and their interpretation in Biological Anthropology • Computational data analysis (SPSS, R) • Interpretation of statistical results • Machine learning models and their correct use in biological anthropology
7	AI tools in scientific text production: achievements, risks and limitations	• Review of text generation tools (ChatGTP etc.) • Common risks and limitations of using AI tools in research • Good practices in the use of AI tools in scientific texts
8	Introduction to scientific writing: writing a thesis	• Methodology of scientific writing of assignments • Structure of a thesis in Biological Anthropology (introduction, methodology, results, discussion) • Use of correct bibliographical reference • Issues of ethics and plagiarism
9	Presentation of scientific assignments	• Oral presentation techniques • Creating PowerPoint presentations and posters • Managing the audience and answering questions
10	Writing a scientific article: from research idea to implementation	• Structure of a scientific article (title, abstract, introduction, methodology, results, discussion, conclusions) • Presentation of types of scientific articles (original research, meta-analysis, review papers, case studies) • Selection of appropriate scientific journal and submission requirements • Submission process, peer-review and response to

		comments • Practical tips for improving scientific writing and avoiding common mistakes
11	Writing proposals for scholarships and research projects	• Available scholarships and funding sources for research in Biological Anthropology • Search and submit proposals for research programmes (e.g. Erasmus+, Horizon Europe, national and international programmes) • Key steps for writing a successful research proposal • Managing the timeframe and resources for the implementation of research procedures
12	Essay Presentations	• Presentation of essays • Discussion of results based on modern methods and theories • Development of presentation and communication skills
13	Recap	• Recap and resolving questions • Student feedback

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD *Face to face, Distance learning, etc.*	• Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) *Use of ICT in Teaching, in Laboratory Education, in Communication with students*	Use of ICT in teaching and communication with students • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email
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.*	

Activity	***Workload/semester***
Lectures	39
Essay	65
Study and analysis of bibliography	42
Written examination	4
Total	150

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*	Formative Laboratory work: 10% Essay (compulsory): 20% Essay Presentation: 10% Final written examination: 60%

5. SUGGESTED BIBLIOGRAPHY

Greek:

1. Robson, C., McCartan, K. (2023) Η Έρευνα του Πραγματικού Κόσμου. Ένα εγχειρίδιο μεθόδων κοινωνικής έρευνας σε εφαρμοσμένα πλαίσια

English:

1. Field A., Miles J., Field Z. (2015) Discovering Statistics Using R
2. James, G., Witten, D., Hastie, T.,Tibshirani, R. (2023) An Introduction to Statistical Learning with applications in R

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	ESPA
Contact details:	
Supervisors: (1)	YES
Evaluation methods: (2)	Laboratory work: 10% Essay (compulsory): 20% Essay Presentation: 10% Final written examination: 60%
Implementation Instructions: (3)	Laboratory work: 10%: Laboratory work includes a report and practical training according to the laboratory protocols. It focuses on the students' practical skills, such as the ability to follow laboratory procedures, and the clarity and completeness of the report they submit. Essay (compulsory): 20%: Prepares students for scientific and thesis writing. It includes a literature review and original data analysis. Assessment focuses on students' ability to review relevant literature, analyse data and judge the quality, relevance and originality of their work. The choice of the topic of the essay will be made in collaboration with the lecturer during the second lecture, in order to ensure sufficient time for the preparation of the project and the presentation. The final paper will be submitted via the eClass platform to the lecturer. Essay Presentation: 10%: Students are asked to prepare a presentation in a ppt file format and present their esay in public. The assessment focuses on the students' ability to clearly present their work, answer questions and manage discussion. Final written examination: 60%: The final written examination assesses the understanding of the basic theories, concepts and principles of the course. The examination will be taken in person at a date and time to be announced in advance, together with the duration and content of the examination.

(1) Please write YES or NO

(2) Note down the evaluation methods used by the teacher, e.g.

- *written assignment* or/and exercises
- written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are ensured.

(3) In the **Implementation Instructions** section, the teacher notes down clear instructions to the students:

a) in case of **written assignment and / or exercises:** the deadline (e.g. the last week of the semester), the means of submission, the grading system, the grade percentage of the assignment in the final grade and any other necessary information.
b) in case of **oral examination with distance learning methods:** the instructions for conducting the examination (e.g. in groups of X people), the way of administration of the questions to be answered, the distance learning platforms to be used, the technical means for the implementation of the examination (microphone, camera, word processor, internet connection, communication platform), the hyperlinks for the examination, the duration of the exam, the grading system, the percentage of the oral exam in the final grade, the ways in which the inviolability and reliability of the exam are ensured and any other necessary information.
c) in case of **written examination with distance learning methods**: the way of administration of the questions to be answered, the way of submitting the answers, the duration of the exam, the grading system, the percentage of the written exam of the exam in the final grade, the ways in which the integrity and reliability of the exam are ensured and any other necessary information.
There should be an attached list with the Student Registration Numbers only of students eligible to participate in the examination.