Course Unit Descriptor

Study Programme: Master Academic Studies in Physics

Course Unit Title: Academic Skills

Course Unit Code: M18AV

Name of Lecturer(s): Full Professor Tijana Prodanovic

Type and Level of Studies: Master Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 8

Prerequisites: None

Course Aims:

The goal of this course is for students to obtain basic academic skills, both general as well as those specific for the field of physics and astrophysics, which will help them become better in presenting and delivering their knowledge and teach them some general skills that every researcher should posses.

Learning Outcomes:

After the completion of this course students will have general skills necessary in academic work as well as related skills specific for the field of physics. Students will learn how to write articles and papers inlatex, how to use and search scientific journals and databases, they will learn how to structure and write papers (research, master thesis, PhD thesis), and present their work.

Syllabus:

Theory

Scientific writing – general instructions; Latex; Writing of term, expert and research papers; Searching scientific literature in the field of physics and astrophysics; How to give good presentations; Presenting work in science conferences; Popular lectures; Presenting physics to general public and in the media; Hand on demonstrations and experiments in physics.

Practice

In order for students to better adopt freshly learned concepts a lot of attention will be given to practical exercises where students will be encouraged to read and present science papers, to write popular science texts, to write science reports, construct and prepare demonstrations, make posters, take part in outreach activities.

Required Reading: P. Laszlo, Communicating Science: A Practical Guide, Springer-Verlag Berlin Heidelberg, 2006.

Weekly Contact Hours: Lectures: 3 Practical work: 2

Teaching Methods:

Lectures, practical work and seminars.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class		written exam	30

participation			
Practical work	25	oral exam	30
Preliminary exam(s)			
Seminar(s)	15		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.