UNIVERSITY *of* NICOSIA

Course Syllabus

Course Code	Course Title	ECTS Credits
COMP-499	Final Year Project II	6
Prerequisites	**Department**	**Semester**
COMP-498	Computer Science	Fall, Spring
Type of Course	**Field**	**Language of Instruction**
Required	Computer Science	English
Level of Course	**Lecturer(s)**	**Year of Study**
1st Cycle	Dr Vasso Stylianou	4th
Mode of Delivery	**Work Placement**	**Corequisites**
Face-to-face	N/A	None

Course Objectives:

The final year project is taken in the 4th year of study of the student in two semesters as COMP-498 (1st semester) and COMP-499 (2nd semester) and is completed only upon completion of both courses in the second semester.

This course provides an opportunity for students to extend their studies in particular fields of interest that appertain to their future career aspirations. Students are expected to bring together the academic content and skills developed in a range of courses in an interdisciplinary way.

This core module provides development opportunity for self-awareness in regards to one's personal strengths and weaknesses; understanding the limits and applicability of the subject discipline and being able to perform in a variety of contexts; working through problems and making creative and purposeful change with an awareness of ethical and moral codes of practice.

The main objectives of the course are to:
- Provide the opportunity for individual study in depth of some specialized area of computing of suitable scale and complexity
- Support students in making self-determined decisions concerning the applicability of their study to their personal career goals and aspirations
- Provide an opportunity to develop a range of skills associated with research including analysis, interpretation, written expression, formal report writing and self-disciplined study
- Provide a showcase for students to demonstrate their ability to apply the knowledge and

skills they have acquired throughout the course to a significant and specialized task
- Encourage reflection upon the relationship of design decisions to the appropriateness of the finished task

Learning Outcomes:

After completion of the course students are expected to be able to:
- Apply methodologies, theories, skills and tools learning during the course and incorporate, where appropriate, best practice in terms of professional, technical and ethical issues.
- Make self-determined choices about their own learning agenda in relation to their career aspirations.
- Time-manage a substantial task through the creation of milestones and self-managed study.
- Understand the role of deliverables at various stages of a project's development.
- Critically evaluate the results of the project in relation to the goals that they have set.
- Organize and present documentation in a professional manner.
- Have developed a final profile (the new graduate's CV) of personal/professional attributes within the context of qualities and transferable skills, including self-evaluation, necessary for employment and further study or professional development, articulated through the personal development plan.

Course Content:

The Final Year Project will normally be in an area of work that emphasizes the software infrastructure associated with computer systems.

Possible topic areas include, but are not limited to:

- development of existing systems;
- new algorithmic developments;
- program correctness, complexity;
- software implementation on limited resource devices;
- multi-processor systems, e.g. grid architecture;
- development of secure systems;
- reliability issues;
- integration of new hardware via software development;
- applied AI techniques;
- distributed computing paradigms;
- mobile computing system integration;
- wireless networking protocols;
- HCI and mobile devices;
- enterprise system development - strategies and techniques;

- enterprise/Industry API exploration e.g. Facebook/Amazon Internet and Web applications.

Other areas of work may be included as subject area develops.

The major topics of study on this module include:

- types of project and research methods
- methodologies and project planning
- software testing and usability evaluation techniques
- report structure and presentation
- interpreting project assessment criteria for different project types
- oral presentation skills
- personal planning for career goals.

Learning Activities and Teaching Methods:

Student self-directed study. An induction seminar is organized at the beginning of the semester. Feedback is continuously provided at regular student-supervisor meetings.

Delivery:

At the beginning of each academic semester, students will be notified of the deadlines for the following project milestones and deliverables:

- Students must select a project and a supervisor (the process followed is described on the projects' website).
- Students must hold regular meetings (8 hrs/student/semester/supervisor for project supervision).
- Students shall submit an intermediate project report at the end of first semester and the final project report at the end of second semester.
- Upon submission of the final project report, students shall present their work in a 20 minute presentation in front of a Presentation Panel comprised of the project supervisor and two other faculty members of the department.
- The completeness and quality of their project report and presentation will be marked by the supervisor with contribution of the other members of the presentation panel.

Assessment Methods:

Coursework 100% (includes Project Report and Viva Presentation)

Required Textbooks / Readings:

Topic-specific research papers and texts, along with research/development project management and software engineering texts.

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Projects in Computing and Information Systems: A Student's Guide, 3/E	Dawson C.	Pearson	2015	9781292073460