Study programme(s): Information Technologies

Level: Bachelor

Course title: Software Project Management

Lecturer: Mirjana Ivanović

Status: elective

ECTS: 6

Requirements: none

Learning objectives:

The main objective of the course is to prepare students for creative and successful work individually but also in interdisciplinary teams. Make them ready and skilled to successfully participate in complex software projects which include some additional financial, time and knowledge constraints.

Learning outcomes

Minimum: Successful students should be able to recognize project goals and as a member of team to participate in analyzing and performing these particular goals. During that activity student has to cope with different kinds of compromises within existing constraints.

Desirable: At the end of the course it is expected that successful students are able to recognize, analyze and incorporate in functional product complex and conflict project goals. (S)he has to be ready to make compromises within different kinds of constraints like financial, time, limitations connected to changes in existing systems and organizations.

Syllabus

Theoretical instruction: Introduction to project management in general and software project management in particular. Essential components of each software project:

- Project organizations, project stakeholders (members). Project planning.
- Project performance, project follow up, project analysis.
- CMM – Capability Maturity Model
- Cost estimation.
- Software quality, laws, ethical principals.
- Gathering and guiding the teams through the entire software project. Team's workload estimation. Team conflict resolution and techniques for comunication and moderating.

For some specific topic adequate tools and their functionalities will be presented.

Practical instruction: During their practical work students will learn how to use appropriate tools in processes as project planning, cost estimation, building a schedule and some elements of risk management. They will use gained knowledge to realise a simple project.

Literature

Recommended:

1. Z. Budimac, M. Ivanovic, Z. Putnik: Upravljanje softverskim projektina, Univerzitet u Novom Sadu, Novi Sad, 2007.
2. Software Project Management: Readings and Cases, (ed.) ISBN 0-256-18545-X, Richard D. Irwin/McGraw-Hill, Boston, MA, 1997.
3. Scott Berkun, Making Things Happen: Mastering Project Management (Theory in Practice) Revised Edition, O'REILLY, March 2007. Pg.373
4. Tom DeMarco, Tim Lister, Peopleware: Productive Projects and Teams (3rd Edition), Addison-Wesley, 2014, pg. 239

Weekly teaching load				
Lectures: 2	Exercises:	Practical Exercises: 2	Student research:	Other:

Teaching methodology

Theoretical classes are based on the classical teaching model involving a .ppt presentations. All teaching material is available through MOODLE LMS. At theoretical exercises, principles of project planning using appropriate project management tool. Second part of the theoretical exercises is oriented to discussion on ethical, moral issues that appear during software project realization . Student's knowledge is checked through three written tests, project planning for a practical problem and preparation of seminar paper connected to the practical project

Grading method (maximal number of points 100)

Pre-exam oblications	**points**	**Final exam**	**points**
Three test	10,10,10	Oral exam	40
Practical work, small project realization.	30		