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| | | STUDY MODULE D | ES | CRIPTION FORM | | | | |
|---|--|---|---|---|-----------------------------|--|--|--|
| Name of the module/subject Software project management | | | | <u> </u> | Code 1010332421010337154 | | | |
| Field of | · · · | ingomon. | | Profile of study (general academic, practical) | | Year /Semester | | |
| Com | puter Science | | | (brak) | | 1/2 | | |
| Elective path/specialty | | | | Subject offered in: polish | | Course (compulsory, elective) obligatory | | |
| Cycle of study: | | | For | Form of study (full-time,part-time) | | | | |
| Second-cycle studies full-time | | | | e | | | | |
| No. of h | ours | | | | | No. of credits | | |
| Lectur | e: 1 Classes | s: - Laboratory: - | | Project/seminars: | 1 | 3 | | |
| Status o | of the course in the study | program (Basic, major, other) | (| university-wide, from another f | field) | | | |
| | | (brak) | | | (br | ak) | | |
| Education | on areas and fields of sci | ence and art | | | | ECTS distribution (number and %) | | |
| techr | nical sciences | | | | | 3 100% | | |
| Poon | oncible for cubic | oot / looturor: | | | | | | |
| - | onsible for subj | | | | | | | |
| dr hab. inż. Barbara Begier email: Barbara.Begier@put.poznan.pl tel. (61) 665-3724 | | | | | | | | |
| - | dział Elektryczny Piotrowo 3A 60-965 Po | ารทลท์ | | | | | | |
| | | s of knowledge, skills an | d s | ocial competencies: | 1 | | | |
| 1 | Knowledge | Knowledge in the field of softwar | vare engineering (subjects learnt during first-cycle studies) | | | | | |
| 2 | Skills | Student can write requirements | Student is able to find information from professional literature, databases and other sources. Student can write requirements concerning software product and then to plan its tests. | | | | | |
| | | Student understands a need to learn constantly. | | | | | | |
| 3 | Social competencies | Social competencies gained dur | ing t | he first-cycle studies. | | | | |
| Assu | mptions and obj | ectives of the course: | | | | | | |
| The aim of the course is to discuss problems concerning management of software projects. In particular, the course is oriented to teach and popularize project management in agile methodologies. Subjects are related to management of human | | | | | | | | |
| resources including required human competencies, customer relationships management, and risk management. Study outcomes and reference to the educational results for a field of study | | | | | | | | |
| Know | vledge: | | - | | | 10.00 0.0000 | | |
| | | ssional knowledge of the software | nroi | ect management, including | n tos | am work - [K W13] | | |
| Skills | • | ssional knowledge of the software | proj | eet management, moldding | j ice | an work [K_WTO] | | |
| Student is able to work out the required documentation of a software project undertaken in an agile methodology [K_U04] | | | | | | | | |
| Student can analyze an existing software solution and to substantiate its improvements [K_U12] | | | | | | | | |
| Social competencies: | | | | | | | | |
| 1. Student is aware of his/her social role in the future - he/she understands the need to transfer information concerning development in computing in a comprehensive form which enables the cooperation with software users [K_K02] | | | | | | | | |
| 2. Student is aware of an importance of ethical aspects of computing. The last include a respect of different opinions and cultures. In particular, he/she has knowledge about multi-cultural teams and different cultures in general [-\K_K03] | | | | | | | | |

Assessment methods of study outcomes

The final test (an open test) and student's activity in the class are the base to receive a credit for a course in software project management.

The final mark for the project is an average of partial marks assigned to several required artefacts developed by a student.

Course description

Lectures. Management of a software project in a chosen agile methodology (Scrum in the academic year 2012/13). Required artefacts. User stories (specification of requirements) and setting them out. Technical acceptance of results of every finished iteration. Impact of human factors on a software process. Management of human resources, required professional profiles in a software development organization, competency management. Risk management in a software process. Cooperation with a software product purchaser, customer relationships management. Software product assessment by its real users. Ethical aspects in a software process.

Project. Students work in four-person teams to develop a software project using the Scrum methodology. Student work out all required artefacts in 3 sprints.

Basic bibliography:

- 1. Phillips J., Zarządzanie projektami IT, 3rd edition, Helion, Gliiwce 2011.
- 2. Schwaber K., Sutherland J., Software in 30 days, John Wiley & Sons, Hoboken NJ 2012.
- 3. Highsmith J., Agile project management, Addison-Wesley, Boston 2004.

Additional bibliography:

- 1. Boehm B., Turner R., Balancing Agility and Discipline, Addison-Wesley, Boston 2004.
- 2. Burnett K., The Project Management Paradigm, Springer, London 1998.
- 3. Dyché J., CRM. Relacje z klientami, Helion, Gliwice 2002.
- 4. Hnatkowska B., Huzar Z., Inżynieria oprogramowania. Metody wytwarzania i wybrane zagadnienia, PWN, Warszawa 2008.
- 5. Pollice G., Augustine L., Lowe Ch., Madhur J., Software Development for Small Teams, Addison-Wesley, Boston 2004.
- 6. Subieta K., Wprowadzenie do inżynierii oprogramowania, Wydawnictwo PJWSTK, Warszawa 2002.

Result of average student's workload

| Activity | Time (working hours) |
|---|----------------------|
| 1. Participation in lectures | 15 |
| 2. Participation in project labs | 15 |
| 3. Project development including all required artefacts | 25 |
| 4. Study for a test, consultations | 20 |

Student's workload

| Source of workload | hours | ECTS | |
|----------------------|--------|------|--|
| Journal of Workload | 110410 | 2010 | |
| Total workload | 75 | 3 | |
| Contact hours | 30 | 1 | |
| Practical activities | 45 | 2 | |