QFO-AP-FI-MO02	اسم النموذج: Course Syllabus	جامعة فيلادلفيا
رقم الاصدار : 1 ( Revision)	الجهة المصدرة: كلية تكنولوجيا المعلومات	
المتاريخ :2017/11/05		Philadelphia University
عدد صفحات النموذج:	الجهة المدققة: عمادة التطوير والجودة	

Course Title: Software Project Management	Course code: 0721331
<b>Course Level: 4<sup>th</sup> year of study</b>	Course prerequisite (s): 0721386
Lecture Time: 11:10 – 12:00 STT	Credit hours: 3

Academic Staff Specifics
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Name	Rank	Office Number and Location	Office Hours	E-mail Address

# **Course module objectives:**

Software management is concerned with knowledge about the planning, organization, and monitoring of all software life-cycle phases. Management is critical to ensure that software development projects are appropriate to an organization, work in different organizational units is coordinated, software versions and configurations are maintained, resources are available when necessary, project work is divided appropriately, communication is facilitated, and progress is accurately charted.

# **Course/ module components**

- Robert Hughes and Mike Cotterell, Software Project Management, 4th Edition, 2006
- B. Hughes and M. Cotterell. Software Project management. Fifth edition, McGraw-Hill, 2009.

The course intends to cover the following main areas of project management:

- Part 0/ Software Process overview
- Part 1/ Management concepts
- Part I1/Project planning
- Part III/ Project personnel and organization
- Part IV/ Project control
- Part V/ Software configuration management

# **Teaching methods:**

Duration: 16 weeks, 60 hours in total. Lectures: 30 hours, 2 per week. Tutorial: 15, 1 per week. Laboratories: 15 hours in total, 1-hour per week (personal). The last week is reserved to practical works examination.

# Learning outcomes:

A student completing this module unit should be able to:

- Knowledge and understanding
  - 1. Understand A wide range of principles and tools available to the software engineer and software manager, such as planning, organization, and monitoring of all software life-cycle phases. All these direction informed by research. (C2, B5)
  - 2. Understand the professional and ethical responsibilities of the practicing computer professional including understanding the need for quality. (A6, B6)
  - 3. Understand the application of computing in a business context (A4)
- Cognitive skills (thinking and analysis).
  - 1. Solve a wide range of problems related to the software management (B3, D3)
  - 2. Management of small size software. (B5)
  - 3. Be able to design, write and debug software management tools in appropriate languages. (B3)
  - 4. Plan and undertake a major individual project, and prepare and deliver coherent and structured verbal and written technical report. (B3)
  - 5. Evaluate the quality attributes of a certain software project. (B6)
  - 6. Use and evaluate appropriate tools and techniques related to software project management. (C2)
  - 7. Critically evaluate proposed software projects. (B4)
  - 8. Prioritize the activities relating to a software project. (B6)
- Communication skills (personal and academic).
  - 1. Effectively participate in team-based activities. (D4)
  - 2. Structure and communicate ideas effectively, both orally and in writing. (D4)
  - 3. Manage learning and self-development, including the management and the development of organizational skills. (D7)
  - 4. Display personal responsibility by working to multiple deadlines in complex activities. (D3)
- Practical and subject specific skills (Transferable Skills).
  - 1. Be able to display an integrated approach to the deployment of communication skills, use IT skills and display mature computer literacy; strike the balance between self-reliance and seeking help when necessary in new situations, and display personal responsibility by working to multiple deadlines in complex activities. (D4)
  - 2. Identify some of the main risks in a certain software project. (B8)

# Assessment instruments

Allocation of Marks		
Assessment Instruments	Mark	
First examination	20	
Second examination	20	
Final examination:	60	
Reports, research projects, Quizzes, Home works, Projects	20	
Total	100	

# **Documentation and academic honesty**

- Documentation style: <u>University rules apply.</u>
- Protection by copyright

1. You must not make an unauthorized copy, in any form, of copyright software or data.

2. Note that this does not prevent your taking copies of your laboratory work home, or making copies of non-copyright material, but does prevent your taking random pieces of software away on a floppy. You should assume that all material is copyright unless it specifically states otherwise. If in doubt, ask.

#### • Avoiding plagiarism.

- 1. Coursework, laboratory exercises reports and essays submitted for assessment must be your own work, unless in the case of group projects a joint effort is expected and is indicated as such.
- 2. Unacknowledged direct copying from the work of another person, or the close paraphrasing of somebody else's work, is called plagiarism and is a serious offence, equated with cheating in examinations. This applies to copying both from other students' work and from published sources such as books, reports or journal articles.
- 3. Use of quotations or data from the work of others is entirely acceptable, and is often very valuable provided that the source of the quotation or data is given. Failure to provide a source or put quotation marks around material that is taken from elsewhere gives the appearance that the comments are ostensibly your own. When quoting word-for-word from the work of another person quotation marks or indenting (setting the quotation in from the margin) must be used and the source of the quoted material must be acknowledged.
- 4. Paraphrasing, when the original statement is still identifiable and has no acknowledgement, is plagiarism. A close paraphrase of another person's work must have an acknowledgement to the source. It is not acceptable for you to put together unacknowledged passages from the same or from different sources linking these together with a few words or sentences of your own and changing a few words from the original text: this is regarded as over-dependence on other sources, which is a form of plagiarism.
- 5. Direct quotations from an earlier piece of your own work, if not attributed, suggest that your work is original, when in fact it is not. The direct copying of one's own writings qualifies as plagiarism if the fact that the work has been or is to be presented elsewhere is not acknowledged.
- 6. Sources of quotations used should be listed in full in a bibliography at the end of your piece of work.
- 7. Plagiarism is a serious offence and will always result in imposition of a penalty. In deciding upon the penalty the Department will take into account factors such as the year of study, the extend and proportion of the work that has been plagiarized and the apparent intent of the student. The penalties that can be imposed range from a minimum of a zero mark for the work (without allowing resubmission) through caution to disciplinary measures (such as suspension or expulsion).

#### Course/module academic calendar

Week	Basic and support material to be covered	Homework/reports and their due dates
(1)	Part 0/ Software Process overview	

(2)	Dout 1/ Managamant concents	
(2)	Part 1/ Management concepts	
	<ul> <li>General project management, Classic management models</li> </ul>	
	<ul> <li>Project management roles,</li> </ul>	
	Enterprise/Organizational management	
	structure	
	<ul> <li>Software management types (e.g.</li> </ul>	
	acquisition, project, development,	
(2)	maintenance, risk, etc.)	
(3)	Part I1/Project planning	
	<ul> <li>Evaluation and planning</li> </ul>	
(4)	<ul> <li>Work breakdown structure</li> </ul>	
	<ul> <li>Task scheduling, Effort estimation</li> </ul>	
(5)	<ul> <li>Resource allocation</li> </ul>	
	<ul> <li>Risk management,</li> </ul>	
(6)	Part III/ Project personnel and	
	organization	
	<ul> <li>Organizational structures, positions,</li> </ul>	
	responsibilities, and authority	
	Formal/informal communication	
	<ul> <li>Project staffing, Personnel training,</li> </ul>	
	career development, and	
	evaluation	
	Meeting management, Building and	
	motivating teams, Conflict	
	resolution FIRST EXAM	
(7)	Part IV/ Project control	
(7)	Change control	
(0)	-	
(8)	Monitoring and reporting	
(0)	Measurement and analysis of results	
(9)	<ul> <li>Software Quality</li> </ul>	
(10)	Correction and recovery	Assignment 1
(11)	Part V/ Software configuration	
	management	
	Revision control	
(12)	SECOND EXAM	
(12)	Release management, Tool support	
(13)	Software configuration management	
	processes	
(14)	<ul> <li>Maintenance issues</li> </ul>	
	<ul> <li>Distribution and backup</li> </ul>	
(15)	Seminar	Assignment 2
(16)	Final Exam	

# **Expected workload:**

On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

# **Attendance policy:**

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

**Module references** 

Books

Pro Web Project management. Justin Emond and Chris Stenis, 2011, APress

# Journals

# Websites

- 1. http://www.engineering.wright.edu/~rrea/468.html
- www.mhhe..com/pressman
   http://highered.mcgraw-hill.com/sites/0077109899/information\_center\_view0/