Detailed Course Description - Course Plan Development and Updating Procedures/ Department of Software Engineering	QF01/0408-3.0E

Faculty	Faculty Of Science & IT	Department	**Software Engineering**
Course number	0114486	Course title	**Software Configuration Management**
Number of credit hours	3	Pre-requisite/co-requisite	0114343

Software Configuration Management (SCM) is required to control evolving and changing software systems. This course will introduces the basic concepts of software configuration management, the importance of SCM in software development, the different SCM phases and activities, branching, release management, configuration management roles, CASE tools used in SCM industry

	Course goals and learning outcomes
Goal 1	Introduce students to the concepts and principles of software configuration management
Learning outcomes	1.1 Know the difference between software configuration management activities and other software development activities.(SCMA1) 2) 1.2 Know the theory of SCM. (SCMA2)
Goal 2	Introduce the relation between SCM and the software development
Learning outcomes	2.1Will be able to apply SCM activities to manage the changes of evolving systems.(SCMB1) 2.2 Will be able to Apply branching. (SCMB2)
Goal 3	Understand how SCM is applied during the software development process
Learning outcomes	3.1 Use software SCM CASE tools to control the changes of evolving systems. (SCMC1) 3.2 Present work both in written and oral forms.(SCMD1)
Textbook	[R1] Jessica Keyes, Software Configuration Management, Auerbach Publications, 2004
Supplementary references	Anne Hass , Configuration Management Principles and Practice, Addison Wesley, 2002

Course timeline				
Week	**Number of hours**	**Course topics**	**Pages (textbook)**	**Notes**
01	**3**	Overview of the software configuration management and history of SCM Software development vs. software configuration management.	Chap.1,2,3	
02,03	**3**	Why SCM is needed Benefits of SCM The basics concepts of SCM Implementation of SCM	Chap.4,5,6	
04	**3**	System decomposition Identification Introduction to baselines	Chap.7	
05,06	**3**	Implementation of configuration control	Chap.8	

	3	EXERSICES - Project discussion Review of previous chapters First Exam (20 %)		
07,08	**3**	Introduce branches Application of branches in an industrial context Branching strategies	Chap.8	
09	**3**	The purpose/benefits of status accounting Industry implementation	Chap.9 R1	
10	**3**	Definition of configuration verification and audit Activities of configuration verification and audit	Chap.9 R1	
12	**3**	**EXERSICES** **Review of previous chapters** **Second Exam (20 %)**		
13	**3**	Learn about Release Management (theory and practice).	Chap.12	
14	**3**	CM-based project plan components	Chap.12	
15	**3**	Practices performed to achieve quality	Chap.12	
16	**3**	Final Exam 50%		

Theoretical course evaluation methods and weight	Participation = 10% First exam 20% Second exam 20% Final exam 50%	**Practical (clinical) course evaluation methods**	Semester students' work = 50% (Reports, research, quizzes, etc.) Final exam = 50%

Approved by head of department		**Date of approval**	

Extra information (to be updated every semester by corresponding faculty member)

Name of teacher		Office Number	
Phone number (extension)		Email	_____@zug.edu.jo
Office hours			