# COURSE SYLLABUS COM420: Fundamentals of Project Planning and Management

# **Course Description**

Project management plays a crucial role in the efficient execution and completion software projects. This course introduces the project management process as it applies to software development. Working from a set of software requirements, students will create software development project plans.

#### **General Course Information**

Number of Units/Weeks	04/10
#Hours Lecture/#Hours Laboratory/#Hours Homework	40/00/80
Prerequisite(s)	None
Co-requisites (s)	None
Course Developer(s)	Leticia Rabor, M.S.
Date Approved / Last Review	August 2017 / August 2017

### **Learning Outcomes**

- (CLO1) Evaluate organizational needs in support of selecting the most effective software development model
- (CLO2) Plan and manage projects at each stage of the software development life cycle (SDLC)
- (CLO3) Create project plans that address real-world management challenges
- (CLO4) Demonstrate skillful tracking and the control of software deliverables
- (CLO5) Discuss project risks and how they affect monitoring and tracking project deadlines.
- (CLO6) Apply schedule and cost techniques to determine a Basis of Estimate

# Instructional Methods Employed in this Course

- Lecture and reading assignments
- Hands-on exercises and labs
- Research
- Student presentations
- Practical application of theory and skills in authentic projects
- Build on prior knowledge and experience of students to enhance richness of class activities

#### Information Resources for this Course

# Textbook

A. Murray (2016). The Complete Software Project Manager. John Wiley & Sons, Inc, Hoboken, NJ. ISBN-13: 978-1-119-15183-7.



# Recommended Readings

L. Constantine (2001). Beyond Chaos. The Expert Edge in Managing Software Development. Boston, MA: Addison-Wesley. ISBN: 0-201-71960-6.

J. Hallows (1998). Information Systems Project Management. New York, NY: AMACOM. ISBN: 0-8144-0368-9.

Global Standard (2004). A Guide to the Project Management Body of Knowledge 3<sup>rd</sup> Ed (PMBOK Guide). Newtown Square, PA: Project Management Institute. ISBN: 0-201-71960-6.



#### **Web Site Readings**

Software Project Management YouTube https://www.youtube.com/watch?v=TYBVAvWkG6M

Software Project Management Methodologies https://www.youtube.com/watch?v=4TKxwkt4r-A

**Project Management Software** https://www.pcmag.com/article2/0,2817,2380448,00.asp

# **Table/Topics & Assignments**

### **Types of Assignments:**

Lecture -

**Considered Lecture Hours** 

**Classroom Discussion -**

**Considered Lecture Hours** 

In Class Critique -

Considered Lecture Hours

**Delivering Oral Presentations -**

Considered Lecture Hours

In Class (IC) Exercise -

**Considered Lecture Hours** 

Reading - +-

Considered Homework (HW), work done outside of class

# WebClass lesson (non-online courses) -

Considered HW, work done outside of class

### Quiz, Midterm or Final -

Considered Lecture Hours

Week 1						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 1A	Introduction to Class, Software Development Explained: Creativity Meets Complexity, Agile, Waterfall, and the Key to Modern Project Management	3				
IC EX 1A	In-Class Exercise	1				
HW 1A	Read Chapters 1 - 2 (14 pages). Evaluated by HW 1B.			1.4		
HW 1B	Review Questions			1.5	10	Due Week 2
HW 1C	Project 1			5	60	Due Week 2
Total Week 1		4	0	7.9	70	
Week 2						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 2A	Project Approaches; Off-the-shelf and custom development; One Comprehensive Tool and Specialized Tools; Phased Launches and Pilots, Teams and Team Roles and Responsibilities Defined	3				
IC EX 2A	In-Class Exercise	1				
HW 2A	Read Chapters 3 - 4 (36 pages). Evaluation by HW 2B Look Ahead: Read Ch. 11 pgs. 325-335 (10 pages)			3.6		

HW 2B	Review Questions			1.5	10	Due Week 3
HW 2C	Project 2			5	60	Due Week 3
Total Week 2		4	0	10.1	70	
Week 3	Topic/Description	LEC Hou	LAB Hours	HW Hours	Point Value	Due
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LEC 3A	Project Research and Technology Choice; Conflicts at the Start of Projects; Four Additional Project Delays; Initial Pitfalls, Final Discovery; Project Definition, Scope and Documentation	3				
IC EX 3A	In-Class Exercise	1				
HW 3A	Read Chapters 5 - 6 (44 pages). Evaluation by HW 3B.			4.4		
HW 3B	Review Questions			1.5	10	Due Week 4
HW 3C	Project 3			6	60	Due Week 4
Total Week 3		4	0	11.9	70	
Week 4						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 4A	Budgeting: The budgeting methods; Comparative, bottom-up, top-down, and blends; Accurate Estimating	3				
IC EX 4A	In-Class Exercise	1				
HW 4A	Read Chapter 7 (11 pages). Evaluation by HW 4B			1.1		
HW 4B	Review Questions			1.5	10	Due Week 5
HW 4C	Project 4			6	60	Due Week 5
Total Week 4		4	0	8.6	70	

Week 5						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 5A	Project Risks: The five most common project hazards and what to do about them; budgeting and risk	2				
HW 5A	Read Chapter 8 (12 pages). Evaluated by HW 5B			1.2		
EXAM 5A	Midterm Exam Chapters 1-7	1			150	Due Week 5
EXAM 5B	Midterm Case Study	1			80	Due Week 5
HW 5B	Review Questions			1.5	10	Due Week 6
HW 5C	Project 5			6	60	Due Week 6
Total Week 5		4	0	8.7	300	
Week 6						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 6A	Communication; project communication strategy: from project kickoff to daily meetings	3				
IC EX 6A	In-Class Exercise	1				
HW 6A	Read Chapter 9 (14 pages). Evaluated by HW 6B.			1.4		
HW 6B	Review Questions			1.5	10	Due Week 7
HW 6C	Project 6			5	60	Due Week 7
Total Week 6		4	0	7.9	70	
Week 7						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 7A	The project execution phase: diagnosing project health; scope compromises	3				
IC EX 7A	In-Class Exercise	1				

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HW 7A	Read Chapter 10 (12 pages). Evaluated by HW 7B.			1.2		
HW 7B	Review Questions			1.5	10	Due Week 8
HW 7C	Project 7			5	60	Due Week 8
Total Week 7		4	0	7.7	70	
Week 8						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 8A	First deliverables; testing, QA, and project health continued, Problems: identifying and troubleshooting the three most serious project problems, criteria for cancellation	3				
IC EX 8A	In-Class Exercise	1				
HW 8A	Read Chapters 11 - 12 (22 pages). Evaluated by HW 8B			2.2		
HW 8B	Review Questions			1.5	10	Due Week 9
HW 8C	Project 8			8	60	Week 9
Total Week 8		4	0	11.7	70	
Week 9						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
LEC 9A	Launch and Post- launch; UAT, Security testing, performance testing, go live, rollback criteria, and support mode	3				
IC EX 9A	In-Class Exercise	1				
HW 9A	Read Chapter 13 (16 pages). Evaluated by HW 9B.			1.6		
HW 9B	Review Questions			1,5	10	Due Week 10
HW 9C	Project 9			5	60	Due Week 10
Total Week 9		4	0	7.1	70	

Week 10						
Туре	Topic/Description	LEC Hou rs	LAB Hours	HW Hours	Point Value	Due
EXAM 10A	Final Exam	1			150	
HW 10A	Presentation	1			50	
Total Week 10		4	0	0	200	

**Course Hours Summary** 

Week	Topic	LEC LEC	LAB LAB	HW HW Hours
1	Overview of Systems Analysis & Design, The Role of the Systems Analysis	4	0	7.9
2	Investigating System Requirements	4	0	10.1
3	Identifying User Stories and Use Cases	4	0	11.9
4	Domain Modeling, The Traditional Approach to	4	0	8.6
	Requirements			
5	Foundations for Systems Design	4	0	8.7
6	Designing the User Interface	4	0	7.9
7	Designing the Database	4	0	7.7
8	Approaches to System Development	4	0	11.7
9	Project Planning and Project Management	4	0	7.1
10	Deploying the New System	4	0	0
Total		40	0	81.6

# **Table/Point Breakdown**

Week	Assignment	Possible	Percent
		Points	of Grade
1	Project 1	50	5%
2	Project 2	50	5%
3	Project 3	50	5%
4	Project 4	50	5%
5	Project 5	50	5%
5	Midterm Examination	150	15%
5	Midterm Case Study	100	10%
6	Project 6	50	5%
7	Project 7	50	5%
8	Project 8	50	5%
9	Project 9	50	5%
9	Review Questions (9 total at 10 points	90	9%
10	Final Examination	150	15%
10	Presentation	60	6%

#### **Your Grades for this Course**

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.

Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows:

### **Coleman University Grade Assignment Policy:**

Percent	Letter Grade	Grade Points
94-100	А	4
90-93	A-	3.67
87-89	B+	3.33
84-86	В	3
80-83	B-	2.67
77-79	C+	2.33
74-76	С	2
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1
60-63	D-	0.67
N/A	INC	0
N/A	W	0
60 or above	CR	0
59 or below	NC	0
N/A	ĺ	0
N/A	W	0
N/A	AU	0
N/A	TR	0
N/A	WV	0

Legend				
CR = Credit	NC = No Credit			
	W = Course			
I = Incomplete	Withdrawal			
AU = Audit	TR = Transfer Credit			

WV = Waiver	

# **Academic Accommodation / Adjustment Policy:**

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.