2- Course Specification Advanced Project Management (2): (Quality, Resource & Communications Management)

I. Course Identification and General Information

1	Course Title:	Advanced Project Management (2): (Quality, Resource & Communications Management)			
2	Course Code & Number:	CE591			
3	Credit hours:	Credit Hours (CH)			Credit Hours
		Lecture	Laboratory	Seminars	
		4			4
4	Study semester at which this course is offered:	First Semester			
5	Pre –requisite (if any):	-			
6	Co –requisite (if any):	None			
7	Program (s) in which the course is offered:	MSc. in Engineering Project Management			
8	Language of teaching the course:	English			
9	Course type	Compulsory			
10	Location of teaching the course:	Faculty of Engineering, Master programs class rooms			
11	Prepared By:	Prof. Dr. Eng. Wael A. Alaghbari			
12	Date of Approval				

II. Course Description:

This course builds to cover the second section of The Project Management Body of Knowledge (PMBOK). This course is introducing coverage of advanced topics in project quality, resource, and communications management, as well as providing comprehensive knowledge of scheduling and other PM tools. It also introduces the topic of delivering complex projects. It draws topics from the following knowledge of project management:

- Project Quality Management : the processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken.
- Project Resource Management : the processes that organize, manage, and lead the project team. Resource management is the efficient and effective development of an organization's resources when they are needed. Such resources may include the financial resources, inventory, human skills, production resources, or information technology (IT) and natural resources.
- Project Communications Management : the processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information.

III. Course Intended Learning Outcomes (CILOs)		Referenced PILOs	I, E, A
a1	Provide the graduate students with holistic understanding of the principle components and concepts of project management.	A1	
a2	Demonstrate knowledge and understanding of the core quality processes and explain the role of each process in planning and managing projects.	A2	
a3	Distinguish between formal and informal communications methods and defend when each is applicable on a project.	A4	
b1	Manage, planning and execute the tough processes and usage of necessary tools in any project and effectively address the challenges faced during the project.	B1	
b2	Identify necessary human and material resources, including contracted resources, and estimate them that are required to meet stakeholder expectations.	B2	
c1	Apply appropriate quality-control tools and techniques to a given scenario where improvement is warranted as a result of the project's quality-control data.	C1	
c2	Evaluate and select appropriate communication tools and methods to communicate with identified stakeholders, including commonly used templates for communication activities such as status reporting, issues tracking, change control, and project reviews.	C2	
c3	Evaluate and select commonly accepted methods for project managers to acquire, develop, and manage resources that are appropriate in a specific project context and consistent with established policies.	C3	
d1	Write and explain technical reports, in addition to solving problems in the project and presenting them orally and in writing to persuade stakeholders.	D1	

(A) Alignment of Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:

Course Intended Learning Outcomes		Teaching strategies	Assessment Strategies
a1	Provide the graduate students with holistic understanding of the principle components and concepts of project management.	• Lectures • Discussions	Assignments, Quizzes, Exams
a2	Demonstrate knowledge and understanding of the core quality processes and explain the role of each process in planning and managing projects.		
a3	Distinguish between formal and informal communications methods and defend when each is applicable on a project.		

(B) Alignment of Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1	Manage, planning and execute the tough processes and usage of necessary tools in any project and effectively address the challenges faced during the project.	• Lectures • Interactive Sessions (Brainstorming Sessions, Discussions, etc.) • Team Working Sessions • Active Learning Approaches	Assignments, Presentations, Quizzes, Exams
b2	Identify necessary human and material resources, including contracted resources, and estimate them that are required to meet stakeholder expectations.		

(C) Alignment of Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
c1	Apply appropriate quality-control tools and techniques to a given scenario where improvement is warranted as a result of the project's quality-control data.	• Interactive Sessions (Brainstorming Sessions, Discussions, etc.) • Team Working Sessions • Active Learning Approaches • Lectures	Assignments, Presentations, Quizzes, Exams
c2	Evaluate and select appropriate communication tools and methods to communicate with identified stakeholders, including commonly used templates for communication activities such as status reporting, issues tracking, change control, and project reviews.		
c3	Evaluate and select commonly accepted methods for project managers to acquire, develop, and manage resources that are appropriate in a specific project context and consistent with established policies.		

(D) Alignment of Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1	Write and explain technical reports, in addition to solving problems in the project and presenting them orally and in writing to persuade stakeholders.	• Interactive Sessions (Brainstorming Sessions, Discussions, etc.) • Team Working Sessions • Active Learning Approaches	Assignments, Presentations, Quizzes, Exams

IV.	Course Content				

A – Lecture Aspects

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1.	**Introduction**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	• Definition of the course plan • Definition of the course topics: - Project Quality Management - Project Resources Management - Project Communications Management	1	4
2.	**1- Project Quality Management:** **a) Plan Quality Management**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	a) Plan Quality Management: - Plan Quality Management: Inputs - Plan Quality Management: Tools and Techniques - Plan Quality Management: Outputs	1	4
3.	**b) Manage Quality**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	b) Manage Quality: - Manage Quality: Inputs - Manage Quality: Tools and Techniques - Manage Quality: Outputs	1	4
4.	**c) Control Quality**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	c) Control Quality: - Control Quality: Inputs - Control Quality: Tools and Techniques - Control Quality: Outputs	1	4
5.	**2- Project Resources Management** **a) Plan Resource Management**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	a) Plan Resource Management: - Plan Resource Management: Inputs - Plan Resource Management: Tools and Techniques - Plan Resource Management: Outputs	1	4
6.	**b) Estimate Activity Resources:**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	b) Estimate Activity Resources: - Estimate Activity Resources: Inputs - Estimate Activity Resources: Tools and Techniques - Estimate Activity Resources: Outputs	1	4
7.	**c) Acquire**	a1, a2,	c) Acquire Resources:	1	4

	Resources:	a3, b1, b2, c1, c2, c3, d1,	- Acquire Resources: Inputs - Acquire Resources: Tools and Techniques - Acquire Resources: Outputs		
8.	**Midterm Exam**			1	4
9.	**Project Resources Management (continued):** **d) Develop Team**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	d) Develop Team - Develop Team: Inputs - Develop Team: Tools and Techniques - Develop Team: Outputs	1	4
10.	**e) Manage Team**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	e) Manage Team - Manage Team: Inputs - Manage Team: Tools and Techniques - Manage Team: Outputs	1	4
11.	**f) Control Resources**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	f) Control Resources - Control Resources: Inputs - Control Resources: Tools and Techniques - Control Resources: Outputs	1	4
12.	**Project Communications Management:** **a) Plan Communications Management:**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	a) Plan Communications Management: - Plan Communications Management: Inputs - Plan Communications Management: Tools and Techniques - Plan Communications Management: Outputs	1	4
13.	**b) Manage Communications:**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	b) Manage Communications: - Manage Communications: Inputs - Manage Communications: Tools and Techniques - Manage Communications: Outputs	1	4
14.	**c) Monitor Communications**	a1, a2, a3, b1, b2, c1, c2, c3, d1,	c) Monitor Communications - Monitor Communications: Inputs - Monitor Communications: Tools and Techniques - Monitor Communications: Outputs	1	4
15.	**Revision Week**			1	4
16.	**Final Exam**			1	4
Number of Weeks /and Units Per Semester				**16**	**64**

B – Seminar	NA			
Order	Tasks	Number of Weeks	Contact Hours	Learning Outcomes
Number of Weeks /and Units Per Semester				

V. Teaching Strategies of the Course

- Lectures
- Interactive Sessions (Brainstorming Sessions, Discussions, etc.)
- Team Working Sessions
- Active Learning Approaches (Searching, case studies, ...)

V. Schedule of Assessment Tasks for Students During the Semester

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Assignments and Quizzes	3 - 14	30	30%	a1, a2, a3, b1, b2, c1, c2, c3, d1,
2	Mid-Term Exam	8	20	20%	
3	Final Exam	16	50	50%	
Total			100	100%	

VI. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark

1	• Readings: Each week readings will be available on Program Website. Based on each reading/topic, a written assignment will be issued. Students will be asked to write synthetic essays and/or complete analyses pertaining to the reading materials. These will be short (>4, <5 pages double spaced) pieces. • Each work assigned for reading will have 1 or 2 presenters assigned to it from the class. • In general students will be asked to describe the main points of the paper and to offer a critique of the contents. • Students are expected to prepare for class by reading the assigned reading prior to the class for which they are listed, and to participate in class sessions/group discussions.	a1, a2, a3, b1, b2, c1, c2, c3, d1,	3 - 14	20

VII.	Report	Included Above		
No	**Assignments**	**Aligned CILOs(symbols)**	**Week Due**	**Mark**
1				
2				
3				
4				
5				
6				

VIII Learning Resources and Facilities
1- Required Textbook(s)
• PMI (2017). A Guide to the Project Management Body of Knowledge - PMBOK: (6th ed.). Project Management Institute, Newtown Square, PA, USA
2- Essential References
• Heerkens, G.R. (2002). Project Management. The McGraw-Hill Companies, Inc., NY: USA • Kenneth, R. (2005). Project Quality Management: Why, What and How. J. Ross Publishing, Inc., USA. • Juran, J.M. and Godfrey, A.B. (1998). Juran's Quality Control Handbook - 5th Edition. The McGraw-Hill Companies, Inc., NY: USA. • Verzuh, E. (2003). The Portable MBA in Project Management, John Wiley & Sons, Inc., Hoboken, NJ: USA.
3- Electronic Materials and Websites *etc.*

• Course Power Point.
• Video clips.
• Links to information resources.

Educational and research Facilities and Equipment Required

Technology Resources
(AV, data show, Smart Board, software, etc.)

Other Resources
(Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)

I. Course Policies

Unless otherwise stated, the normal course administration policies and rules of the Faculty of Engineering apply. For the policy, see: -----------------------------------

1	**• Class Attendance** A student should attend not less than 75 % of total hours of the course; otherwise, he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic.
2	**• Tardy** For being late in attending the class, the student will be initially notified. If he/she repeated lateness in attending class he will be considered as absent.
3	**• Exam Attendance/Punctuality** A student should attend the exam on time. He is permitted to attend an exam half an hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.
4	**• Assignments and Projects** Assignments are given to the students after each chapter; students have to submit all assignments for checking on time.
5	**• Cheating** For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study, the student will be dismissed from the Faculty.
6	**• Plagiarism** Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed a plagiarism of a student, he will be dismissed from the Faculty. The final dismissal of the student from the Faculty should be confirmed by the Student Council Affairs of the university.
7	**• Other policies** - Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room. - Mobile phones are not allowed in class during the examination. - Lecture notes and assignments may be given directly to students using soft and/or hard copy.

II. - Information about Faculty Member Responsible for the Course

Name of Faculty Member	Prof. Dr. Eng. Wael Alaghbari	**Office Hours**					
Location& Telephone No.	Faculty of Engineering Mobile: 777869168	SAT	SUN	MON	TUE	WED	THU
E-mail	wael.aghbari@gmail.com		08:00 -1:00				

III. Course Identification and General Information

1-	Course Title:	**Advanced Project Management (2): (Quality, Resource & Communications Management)**				
2-	Course Number & Code:	CE591				
3-	Credit hours:	C.H				Total
		Th.	Seminar	Pr.	F. Tr.	
		4	-	-	-	4
4-	Study level/year at which this course is offered:	First Semester				
5-	Pre –requisite:	-				
6-	Co –requisite (if any):	None				
7-	Program (s) in which the course is offered	MSc. in Engineering Project Management				
8-	Language of teaching the course:	English				
9-	Course type	Compulsory				
10-	Location of teaching the course:	Faculty of Engineering, Master programs class rooms				

IV.   Course Description

This course builds to cover the second section of The Project Management Body of Knowledge (PMBOK). This course is introducing coverage of advanced topics in project quality, resource, and communications management, as well as providing comprehensive knowledge of scheduling and other PM tools. It also introduces the topic of delivering complex projects. It draws topics from the following knowledge of project management:

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resources when they are needed. Such resources may include the financial resources, inventory, human skills, production resources, or information technology (IT) and natural resources.
- Project Communications Management : the processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information.

V.	Intended Learning Outcomes (ILOs) of the Course

- Provide the graduate students with holistic understanding of the principle components and concepts of project management.
- Demonstrate knowledge and understanding of the core quality processes and explain the role of each process in planning and managing projects.
- Distinguish between formal and informal communications methods and defend when each is applicable on a project.
- Manage, planning and execute the tough processes and usage of necessary tools in any project and effectively address the challenges faced during the project.
- Identify necessary human and material resources, including contracted resources, and estimate them that are required to meet stakeholder expectations.
- Apply appropriate quality-control tools and techniques to a given scenario where improvement is warranted as a result of the project's quality-control data.
- Evaluate and select appropriate communication tools and methods to communicate with identified stakeholders, including commonly used templates for communication activities such as status reporting, issues tracking, change control, and project reviews.
- Evaluate and select commonly accepted methods for project managers to acquire, develop, and manage resources that are appropriate in a specific project context and consistent with established policies.
- Write and explain technical reports, in addition to solving problems in the project and presenting them orally and in writing to persuade stakeholders.

VI. Course Contents
A – Theoretical Aspects

Order	Topics List	Week Due	Contact Hours
1	Introduction	Week 1	4
2	1- Project Quality Management: a) Plan Quality Management	Week 2	4
3	1- Project Quality Management: b) Manage Quality	Week 3	4
4	1- Project Quality Management: c) Control Quality	Week 4	4
5	2- Project Resources Management: a) Plan Resource Management	Week 5	4
6	2- Project Resources Management: b) Estimate Activity Resources	Week 6	4
7	2- Project Resources Management: c) Acquire Resources	Week 7	4

VI.Course Contents			
A – Theoretical Aspects			
8	Midterm Exam	Week 8	4
9	2- Project Resources Management: d) Develop Team	Week 9	4
10	2- Project Resources Management: e) Manage Team	Week 10	4
11	2- Project Resources Management: f) Control Resources	Week 11	4
12	3- Project Communications Management: a) Plan Communications Management	Week 12	4
13	3- Project Communications Management: b) Manage Communications	Week 13	4
14	3- Project Communications Management: c) Monitor Communications	Week 14	4
15	Revision Week	Week 15	4
16	Final Exam	Week 16	4
Number of Weeks and Units Per Semester		**16**	**64**

B – Seminar	NA			
Order	**Tasks/ Experiments**	**Number of Weeks**	**Contact Hours**	**Learning Outcomes**
1.				
2.				
3.				
Number of Weeks /and Units Per Semester				

VII. Teaching Strategies of the Course

- Lectures
- Interactive Sessions (Brainstorming Sessions, Discussions, etc.)
- Team Working Sessions
- Active Learning Approaches (Searching, case studies, ...)

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1.	Assignments	3 - 14	20	20%
2.	Mid-Term Exam	8	20	20%
2.	Final Exam	16	60	60%

Total	100	100%

VIII. Learning Resources

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2- Essential References

- Heerkens, G.R. (2002). Project Management. The McGraw-Hill Companies, Inc., NY: USA
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- Juran, J.M. and Godfrey, A.B. (1998). Juran's Quality Control Handbook - 5th Edition. The McGraw-Hill Companies, Inc., NY: USA.
- Verzuh, E. (2003). The Portable MBA in Project Management, John Wiley & Sons, Inc., Hoboken, NJ: USA.

3- Electronic Materials and Web Sites *etc*.

- Course Power Point.
- Video clips.
- Links to information resources.

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