



## 55. Course Specification of Engineering Project Management

I. Course Identification and General Information:						
1.	Course Title:	Engineering Project Management.				
2.	Course Code & Number:	FR404				
3.	Credit Hours:	C.H				TOTAL CR. HRS.
		Th.	Seminar/Tu.	Pr	Tr.	
		1	2	-	-	2
4.	Study level/ semester at which this course is offered:	Fourth Year-Second Semester.				
5.	Pre –requisite (if any):	None.				
6.	Co –requisite (if any):	None.				
7.	Program (s) in which the course is offered:	Mechanical Engineering Program.				
8.	Language of teaching the course:	English Language.				
9.	Location of teaching the course:	Mechanical Engineering Department.				
10.	Prepared By:	Asst. Prof. Dr. Thabet M. Al-Ghaberi and Assoc. Prof. Dr. Abdul-Malik Momin.				
11.	Date of Approval:					

II. Course Description:
<p>Engineering Project Management <b>has become</b> more important as technology companies compete in a worldwide market for customers desiring high quality and low-cost products. This course attempts to augment the basic project principles of scheduling, tracking and control of projects. It also attempts to focus on product life cycles, project management types, tools and techniques of quality cost.</p> <p>This course is required to teach students the standards of automated management in engineering production and industrial projects with its various administrative processes and phases.</p>

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III. Course Intended learning outcomes (CILOs) of the course		Referenced PILOs
a1	Describe knowledge of standards for engineering management production and industrial projects based on modern techniques.	A.3
a2	Explain skills to offer the optimal solutions problems of engineering management processes as maintenance systems, controlling, inspection, testing, quality control..etc.	A.4
b1	Explore acquired knowledge in developing and updating the old techniques, methods and systems of economical and industrial engineering projects.	B2
b2	Integrate the procedures, standards managements development of engineering projects management and its mechanical functions, processes aims to work professionally in mechanical engineering projects.	B.3
c1	Apply the knowledge of industrial safety requirements, procedures and its positive effect rules aims to minimize loses and injuries to zero in mechanical engineering projects.	C.3
c2	Choose the procedure for the feasibility studies such as: editing, financial, economical and marketing studies.	C.4
d1	Review effectively to manage time of mechanical engineering systems, programs, functions, processes, human and logistics resources.	D2
d2	Cooperate successfully to communicate both orally and in writing technical reports as standards methods.	D.5

(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
a1- Describe knowledge of standards for engineering management production and industrial projects based on modern techniques. interest with the quality standard level.	Lectures & Examples Tutorials and Problem Solving Class Attendance & Participation	Homework Quizzes Major Exams Presentation & Discussions Practical Assessment

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<p><b>a2-</b> Explain skills to offer the optimal solutions problems of engineering management processes as maintenance systems, controlling, inspection, testing, quality control..etc.</p>	<p>Homework                  Quizzes                  Major Exams                  Presentation &amp; Discussions                  Practical Assessment                  Class Attendance &amp; Participation</p>	<p>Homework                  Quizzes                  Major Exams                  Presentation &amp; Discussions                  Practical Assessment</p>
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**(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<p><b>b1-</b> Explore acquired knowledge in developing and updating the old techniques, methods and systems of economical and industrial engineering projects.</p>	<p>Lectures &amp; Class Activity                  Practical Work                  Problem-Based Learning</p>	<p>Homework                  Quizzes                  Major Exams                  Problem Sets (Exercises)                  Reports</p>
<p><b>b2-</b> Integrate the procedures, standards managements development of engineering projects management and its mechanical functions, processes aims to work professionally in mechanical engineering projects.</p>	<p>Lectures &amp; Class Activity                  Practical Work                  Problem-Based Learning</p>	<p>Homework                  Quizzes                  Major Exams                  Problem Sets (Exercises)                  Reports</p>

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

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<p><b>c1.</b> Apply the knowledge of industrial safety requirements, procedures and its positive effect rules aims to minimize loses and injuries to zero in mechanical engineering projects.</p>	<p>Lectures &amp; Class Activity                  Collaborative /Discovery Based on Practical Training</p>	<p>Homework                  Quizzes                  Major Exams                  Problem Sets (Exercises)                  Reports</p>

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<p><b>c2.</b> Choose the procedure for the feasibility studies such as: editing, financial, economical and marketing studies.</p>	<p>Lectures &amp; Class Activity                  Collaborative /Discovery Based on Practical Training</p>	<p>Homework                  Quizzes                  Major Exams                  Problem Sets (Exercises)                  Reports</p>
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<b>(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:</b>		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
<p><b>d1-</b> Review effectively to manage time of mechanical engineering systems, programs, functions, processes, human and logistics resources.</p>	<p>Lectures &amp; Class Activity                  Practical Training</p>	<p>Reports                  Assigned Practical Problems</p>
<p><b>d2-</b> Cooperate successfully to communicate both orally and in writing technical reports as standards methods.</p>	<p>Lectures &amp; Class Activity                  Practical Training</p>	<p>Reports                  Assigned Practical Problems</p>

<b>IV. Course Content:</b>					
<b>A – Theoretical Aspect:</b>					
Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1.	Introduction and Overview to the Course.	a1, a2, b1, b2, c1, c2. d1, d2	<ul style="list-style-type: none"> <li>- Project Definition.</li> <li>- Organization Structures.</li> <li>- The Overall Product Life Cycle Model.</li> <li>- Project Life Cycles.</li> <li>- Project Management Plan.</li> <li>- Risk Management.</li> <li>- Quality Management.</li> <li>- Progress Reporting.</li> </ul>	1	2

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2.	Managing Engineering Project Team.	d1, d2	<ul style="list-style-type: none"> <li>- Team Development Stages.</li> <li>- Team Leadership and Interactions with Team Members.</li> <li>- Team Motivation and Compensation Policies.</li> </ul>	1	2
3.	Engineering Project and Product Costing.	a1, a2, b1,b2	<ul style="list-style-type: none"> <li>- The Start Up Stage.</li> <li>- The Growth Stage.</li> <li>- The Maturity Stage.</li> <li>- The Final Stage.</li> </ul>	1	2
4.	Engineering Project Planning and Execution.	a1, a2, b1, b2, c1, c2. d1, d2	<ul style="list-style-type: none"> <li>- Initial Project Planning Steps and Project Statement.</li> <li>- Project Planning Methodology.</li> <li>- Methods of Techniques for Reducing Project Duration and Cost.</li> <li>- Project Cost Management.</li> </ul>	2	4
5.	Establishment and Implementation Phases Life Cycles and Cash Flow Diagrams.	a1,a2,b2,c1	<ul style="list-style-type: none"> <li>- Management Methods.</li> <li>- Management Engineering Projects Establishment and Implementation</li> <li>- Cash Flow Diagrams.</li> </ul>	1	2
6.	Preparing, Editing Specifications Tenders.	a1,a2,b1,c1	<ul style="list-style-type: none"> <li>- Specifications and Preparing Tenders.</li> <li>- Layout Editing.</li> </ul>	1	2
7.	Mid-Term Exam.	a1, a2, b1, b2, c1, c2	The First 6 Chapters.	1	2
8.	The Techniques of Modern	a2,b2,c1,c2	<ul style="list-style-type: none"> <li>- Planning, Scheduling and Quality Control.</li> <li>- Investigation and Auditing.</li> </ul>	2	4

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	Management of Engineering Projects.		<ul style="list-style-type: none"> <li>- Project Handovers.</li> <li>- Project Deliveries.</li> <li>- Risks.</li> <li>- Crisis.</li> <li>- Project Cost Measurement.</li> </ul>		
9.	Reliability Programs, changing and development.	a1,a2,c1	<ul style="list-style-type: none"> <li>- Industrial and Environmental Safety Regulations.</li> <li>- Safety Oversight.</li> <li>- Finishing and Closing of Engineering Projects.</li> </ul>	1	2
10.	Economics of Engineering Projects and Technical Organizations.	b2,c1,c2	<ul style="list-style-type: none"> <li>- Accounting and Estimating Costs.</li> <li>- Economic Analysis of Projects.</li> <li>- Minimizing Financial Outputs.</li> <li>- Concepts of Replacement &amp; Depreciation and Income taxes.</li> </ul>	1	2
11.	Engineering Decision Making Process for Selection the Optimal Solutions.	a1,a2,c1,c2	<ul style="list-style-type: none"> <li>- Engineering Decision.</li> <li>- Selection of the Optimal Engineering Solutions.</li> <li>- Engineering Applications in Engineering Applications and Industrial Projects.</li> <li>- Success and Development of Engineering Projects.</li> </ul>	1	2
12.	Engineering Project Justification, Financial Aspect, and	a1,a2,b2,c1	<ul style="list-style-type: none"> <li>- The Business Plan for New Products and its Potential on the Company's Strategy.</li> <li>- Key Processes to Enhance the Project Management.</li> </ul>	2	4

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	Return on Investment.		- Capital Equipment Planning and Acquisition Decision Based on Economic Analysis.		
13.	Final Exam.	a1,a2,b1,b2, c1,c2	All the Chapters.	1	2
<b>Number of Weeks /and Units Per Semester</b>				<b>16</b>	<b>32</b>

### V. Teaching strategies of the course:

1. Lectures & Examples.
2. Tutorials and Problem Solving.
3. Class Attendance & Participation.
4. Class Activity
5. Practical Work at Class.
6. Collaborative /Discovery Based on Practical Training.
7. Problem-Based Learning.
8. Reports.

### VI. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1.	Homework 1	a1,a2,b1,b2, c1,c2,d1,d2	2	0.5
2.	Homework 2	a1,a2,b1,b2, c1,c2,d1,d2	3	0.5
3.	Homework 3	a1,a2,b1,b2, c1,c2,d1,d2	4	0.5
4.	Homework 4	a1,a2,b1,b2, c1,c2,d1,d2	5	0.5
5.	Homework 5	a1,a2,b1,b2, c1,c2,d1,d2	6	0.5
6.	Homework 6	a1,a2,b1,b2, c1,c2,d1,d2	7	0.5
7.	Homework 7	a1,a2,b1,b2, c1,c2,d1,d2	8	0.5
8.	Homework 8	a1,a2,b1,b2, c1,c2,d1,d2	9	0.5
9.	Homework 9	a1,a2,b1,b2, c1,c2,d1,d2	10	0.5
10.	Homework 10	a1,a2,b1,b2, c1,c2,d1,d2	11	0.5
<b>Total</b>				<b>5</b>

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<b>VII. Schedule of Assessment Tasks for Students During the Semester:</b>					
No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1.	Quizzes.	Weekly.	5	5%	a1,a2,b1,b2,c1, c2
2.	Assignments & Homework, Tasks & Presentation.	Weekly.	5	5%	a1,a2,b1,b2,c1, c2
3.	Mid-Term Exam.	8	20	20 %	a1,a2,b1,b2,c1, c2
4.	Scientific Research Work.	13	5	5 %	a1,a2,b1,b2,c1, c2, d1, d2
5.	Projects.	13,14	5	5%	a1,a2,b1,b2,c1, c2, d1, d2
6.	Final Exam.	14	60	60 %	a1,a2,b1,b2,c1,c2
7.	<b>Total:</b>		<b>100</b>	<b>100 %</b>	

<b>VIII. Learning Resources:</b>	
<ul style="list-style-type: none"> <li>Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).</li> </ul>	
<b>1- Required Textbook(s) (maximum two ).</b>	
	<ol style="list-style-type: none"> <li>Sammy G. Shina, 2014, "Engineering Project Management for the Global High Technology Industry", McGraw Hill Education.</li> <li>Albert Lester, 2003, "Project Planning and Control", Fourth Edition, Elsevier.</li> </ol>
<b>2- Essential References.</b>	
	<ol style="list-style-type: none"> <li>Parviz F. Rad, 2002, "Project Estimating and Cost Management".</li> <li>O'Brien and Plotnick – 2006 – CPM in Construction Management – 6<sup>th</sup> Edition, McGraw Hill.</li> </ol>
<b>3- Electronic Materials and Web Sites etc.</b>	
	<ol style="list-style-type: none"> <li><a href="http://www.EngineeringEBookspdf.com">www.EngineeringEBookspdf.com</a>.</li> <li><a href="http://www.managementconcepts.com">www.managementconcepts.com</a></li> <li>CDs &amp; Videos Tapes.</li> </ol>
<b>I. Course Policies:</b>	
<b>1</b>	<b>Class Attendance:</b>

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	- The student should be attending not less than 75% of total contact hours of the subject, otherwise he will not able to take exam and <b>be considered</b> as an exam failure. If the student is absent due to illness, he/she should bring <b>an approved</b> statement from university Clinic.
2	<b>Tardy:</b> - For <b>lateness</b> in attending the class, the student will be initially <b>notified</b> . If he <b>repeats</b> late in attending class <b>he will be considered absent</b> .
3	<b>Exam Attendance/Punctuality:</b> - The student should attend the exam on time. He is <b>permitted</b> to attend the exam half one hour from exam beginning, after that he/she will not <b>be</b> permitted to take exam and he/she <b>is considered</b> absent in <b>the</b> exam.
4	<b>Assignments &amp; Projects:</b> - In general one assignment is given after each chapter of a course. The student should submit the assignment on time, mostly one week after <b>giving</b> the assignment
5	<b>Cheating:</b> - For cheating in exam, the student <b>is</b> considered as <b>failure</b> . <b>In case</b> the cheating <b>is</b> repeated three times during study the student will <b>be disengaged</b> from the Faculty
6	<b>Plagiarism:</b> Plagiarism is the attending of the student the exam of a course instead of other student. If the examination committee <b>proved</b> a plagiarism of a student, he will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student <b>Affair Council</b> of the university.
7	<b>Other policies:</b> - The mobile phone is not allowable <b>to be used</b> during class lecture. It must <b>be switched off</b> , otherwise the student will <b>be ordered</b> to leave the lecture room. - The mobile phone is not allowed <b>to be taken during the examination time</b> . - Lecture notes and assignments <b>may be</b> given directly to students using soft or hard copy.

Reviewed By	<b><u>Vice Dean for Academic Affairs and Post Graduate Studies: Asst. Prof. Dr. Tarek A. Barakat</u></b> <b><u>President of Quality Assurance Unit: Assoc. Prof. Dr. Mohammed Algorafi</u></b> <b><u>Name of Reviewer from the Department: Assoc. Prof. Dr. Abdul-Malik Momin</u></b>
	<b><u>Deputy Rector for Academic Affairs Asst. Prof. Dr. Ibrahim AlMutaa</u></b> <b><u>Assoc. Prof. Dr. Ahmed Mujahed</u></b> <b><u>Asst. Prof. Dr. Munasar Alsubri</u></b>

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**Sana'a University**  
**Faculty of Engineering**  
**Mechanical Engineering Department**  
**Mechanical Engineering Program**



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## 55. Template for Course Plan of Engineering Project Management

I. Information about Faculty Member Responsible for the Course:								
Name of Faculty Member	Asst. Prof. Dr. Thabet M. Al-ghaberi		Office Hours					
Location & Telephone No.			SAT	SUN	MON	TUE	WED	THU
E-mail	Dr.ghaberythabit@gmail.com							

II. Course Identification and General Information:						
1.	Course Title:	Engineering Project Management.				
2.	Course Number & Code:	FR404				
3.	Credit Hours:	C.H				Total Cr. Hrs.
		Th.	Seminar/Tu.	Pr	Tr.	
		1	2	-	-	2
4.	Study level/year at which this course is offered:	Fourth Year - Second Semester.				
5.	Pre –requisite (if any):	None.				
6.	Co –requisite (if any):	None.				
7.	Program (s) in which the course is offered	Mechanical Engineering Program.				
8.	Language of teaching the course:	English Language.				
9.	System of Study:	Semesters.				
10.	Mode of delivery:	Lectures.				
11.	Location of teaching the course:	Mechanical Engineering Department.				

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### III. Course Description:

Engineering Project Management **has become** more important as technology companies compete in a worldwide market for customers desiring high quality and low-cost products. This course attempts to augment the basic project principles of scheduling, tracking and control of projects. It also attempts to focus on product life cycles, project management types, tools and techniques of quality cost. This course is required to teach students the standards of automated management in engineering production and industrial projects with its various administrative processes and phases.

### IV. Course Intended learning outcomes (CILOs) of the course

1.	Describe knowledge of standards for engineering management production and industrial projects based on modern techniques.
2.	Explain skills to offer the optimal solutions problems of engineering management processes as maintenance systems, controlling, inspection, testing, quality control..etc.
3.	Explore acquired knowledge in developing and updating the old techniques, methods and systems of economical and industrial engineering projects.
4.	Integrate the procedures, standards managements development of engineering projects management and its mechanical functions, processes aim to work professionally in mechanical engineering projects.
5.	Apply the knowledge of industrial safety requirements, procedures and its positive effect rules aims to minimize loses and injuries to zero in mechanical engineering projects.
6.	Choose the procedure for the feasibility studies such as: editing, financial, economic and marketing studies.
7.	Review effectively to manage time of mechanical engineering systems, programs, functions, processes, human and logistics resources.
8.	Cooperate successfully to communicate both orally and in writing technical reports as standards methods.

### V. Course Content:

#### A – Theoretical Aspect:

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Order	Units/Topics List	Learning Outcomes	Sub Topics List	Week Due	Contact Hours
1.	Introduction and Overview to the Course.	a1, a2, b1, b2, c1, c2. d1, d2	<ul style="list-style-type: none"> <li>- Project Definition.</li> <li>- Organization Structures.</li> <li>- The Overall Product Life Cycle Model.</li> <li>- Project Life Cycles.</li> <li>- Project Management Plan.</li> <li>- Risk Management.</li> <li>- Quality Management.</li> <li>- Progress Reporting.</li> </ul>	1 <sup>st</sup>	2
2.	Managing Engineering Project Team.	d1, d2	<ul style="list-style-type: none"> <li>- Team Development Stages.</li> <li>- Team Leadership and Interactions with Team Members.</li> <li>- Team Motivation and Compensation Policies.</li> </ul>	2 <sup>nd</sup>	2
3.	Engineering Project and Product Costing.	a1, a2, b1, b2	<ul style="list-style-type: none"> <li>- The Start Up Stage.</li> <li>- The Growth Stage.</li> <li>- The Maturity Stage.</li> <li>- The Final Stage.</li> </ul>	3 <sup>rd</sup>	2
4.	Engineering Project Planning and Execution.	a1, a2, b1, b2, c1, c2. d1, d2	<ul style="list-style-type: none"> <li>- Initial Project Planning Steps and Project Statement.</li> <li>- Project Planning Methodology.</li> <li>- Methods of Techniques for Reducing Project Duration and Cost.</li> <li>- Project Cost Management.</li> </ul>	4 <sup>th</sup> , 5 <sup>th</sup>	4
5.	Establishment and Implementation Phases	a1, a2, b2, c1	<ul style="list-style-type: none"> <li>- Management Methods.</li> <li>- Management Engineering Projects Establishment and Implementation</li> <li>- Cash Flow Diagrams.</li> </ul>	6 <sup>th</sup>	2

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	Life Cycles and Cash Flow Diagrams.				
6.	Preparing, Editing Specifications Tenders.	a1,a2,b1,c1	- Specifications and Preparing Tenders. - Layout Editing.	7 <sup>th</sup>	2
7.	Mid-Term Exam.	a1, a2, b1, b2, c1, c2	The First 6 Chapters.	8 <sup>th</sup>	2
8.	The Techniques of Modern Management of Engineering Projects.	a2,b2,c1,c2	- -Planning, Scheduling and Quality Control. - Investigation and Auditing. - Project Handovers. - Project Deliveries. - Risks. - Crisis. - Project Cost Measurement.	9 <sup>th</sup> , 10 <sup>th</sup>	4
9.	Reliability Programs, changing and development.	a1,a2,c1	- Industrial and Environmental Safety Regulations. - Safety Oversight. - Finishing and Closing of Engineering Projects.	11 <sup>th</sup>	2
10.	Economics of Engineering Projects and Technical Organizations.	b2,c1,c2	- Accounting and Estimating Costs. - Economic Analysis of Projects. - Minimizing Financial Outputs. - Concepts of Replacement & Depreciation and Income taxes.	12 <sup>th</sup>	2
11.	Engineering Decision Making Process for Selection the Optimal Solutions.	a1,a2,c1,c2	- Engineering Decision. - Selection of the Optimal Engineering Solutions. - Engineering Applications in Engineering Applications and Industrial Projects.	13 <sup>th</sup>	2

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			- Success and Development of Engineering Projects.		
12.	Engineering Project Justification, Financial Aspect, and Return on Investment.	a1,a2,b2,c1	- The Business Plan for New Products and its Potential on the Company's Strategy. - Key Processes to Enhance the Project Management. - Capital Equipment Planning and Acquisition Decision Based on Economic Analysis.	14 <sup>th</sup> , 15 <sup>th</sup>	4
13.	Final Exam.	a1,a2,b1,b2, c1,c2	All the Chapters.	16 <sup>th</sup>	2
<b>Number of Weeks /and Units Per Semester</b>				<b>16</b>	<b>32</b>

### VI. Teaching strategies of the course:

- Lectures & Examples.
- Tutorials and Problem Solving.
- Class Attendance & Participation.
- Class Activity
- Practical Work at Class.
- Collaborative /Discovery Based on Practical Training.
- Problem-Based Learning.
- Reports.

### VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1.	Homework 1	a1,a2,b1,b2, c1,c2,d1,d2	2	0.5
2.	Homework 2	a1,a2,b1,b2, c1,c2,d1,d2	3	0.5
3.	Homework 3	a1,a2,b1,b2, c1,c2,d1,d2	4	0.5
4.	Homework 4	a1,a2,b1,b2, c1,c2,d1,d2	5	0.5
5.	Homework 5	a1,a2,b1,b2, c1,c2,d1,d2	6	0.5
6.	Homework 6	a1,a2,b1,b2, c1,c2,d1,d2	7	0.5

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7.	Homework 7	a1,a2,b1,b2, c1,c2,d1,d2	8	0.5
8.	Homework 8	a1,a2,b1,b2, c1,c2,d1,d2	9	0.5
9.	Homework 9	a1,a2,b1,b2, c1,c2,d1,d2	10	0.5
10.	Homework 10	a1,a2,b1,b2, c1,c2,d1,d2	11	0.5
<b>Total</b>				<b>5</b>

### VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1.	Quizzes.	Weekly.	5	5%	a1,a2,b1,b2,c1, c2
2.	Assignments & Homework, Tasks & Presentation.	Weekly.	5	5%	a1,a2,b1,b2,c1, c2
3.	Mid-Term Exam.	8	20	20 %	a1,a2,b1,b2,c1, c2
4.	Scientific Research Work.	13	5	5 %	a1,a2,b1,b2,c1, c2, d1, d2
5.	Projects.	13,14	5	5%	a1,a2,b1,b2,c1, c2, d1, d2
6.	Final Exam.	14	60	60 %	a1,a2,b1,b2,c1,c2
<b>Total</b>			<b>100</b>	<b>100 %</b>	

### IX. Learning Resources:

- *Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).*

#### 1- Required Textbook(s) (maximum two ).

1. Sammy G. Shina, 2014, "Engineering Project Management for the Global Technology Industry", McGraw Hill Education.
2. Albert Lester, 2003, "Project Planning and Control", Fourth Edition, Elsevier.

#### 2- Essential References.

1. Parviz F. Rad, 2002, "Project Estimating and Cost Management".
2. O'Brien and Plotnick – 2006 – CPM in Construction Management – 6<sup>th</sup> Edit McGraw Hill.

#### 3- Electronic Materials and Web Sites etc.

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	<ol style="list-style-type: none"> <li>1. <a href="http://www.EngineeringEBooksPdf.com">www.EngineeringEBooksPdf.com</a>.</li> <li>2. <a href="http://www.managementconcepts.com">www.managementconcepts.com</a></li> <li>3. CDs &amp; Videos Tapes.</li> </ol>
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II. Course Policies:	
1	<p><b>Class Attendance:</b></p> <p>- The student should be attending not less than 75% of total contact hours of the subject, otherwise he will not able to take exam and <b>be considered</b> as an exam failure. If the student is absent due to illness, he/she should bring <b>an approved</b> statement from university Clinic.</p>
2	<p><b>Tardy:</b></p> <p>- For <b>lateness</b> in attending the class, the student will be initially <b>notified</b>. If he <b>repeats</b> late in attending class <b>he will be considered absent</b>.</p>
3	<p><b>Exam Attendance/Punctuality:</b></p> <p>- The student should attend the exam on time. He is <b>permitted</b> to attend the exam half one hour from exam beginning, after that he/she will not <b>be</b> permitted to take exam and he/she <b>is considered</b> absent in <b>the</b> exam.</p>
4	<p><b>Assignments &amp; Projects:</b></p> <p>- In general one assignment is given after each chapter of a course. The student should submit the assignment on time, mostly one week after <b>giving</b> the assignment</p>
5	<p><b>Cheating:</b></p> <p>- For cheating in exam, the student <b>is</b> considered as <b>failure</b>. <b>In case</b> the cheating <b>is</b> repeated three times during study the student will <b>be disengaged</b> from the Faculty</p>
6	<p><b>Plagiarism:</b></p> <p>Plagiarism is the attending of the student the exam of a course instead of other student. If the examination committee <b>proved</b> a plagiarism of a student, he will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student <b>Affair Council</b> of the university.</p>
7	<p><b>Other policies:</b></p> <ul style="list-style-type: none"> <li>- The mobile phone is not allowable <b>to be used</b> during class lecture. It must <b>be switched off</b>, otherwise the student will <b>be ordered</b> to leave the lecture room.</li> <li>- The mobile phone is not allowed <b>to be taken during the examination time</b>.</li> <li>- Lecture notes and assignments <b>may be</b> given directly to students using soft or hard copy.</li> </ul>

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