

# The University of Jordan

## School of Engineering

1<sup>st</sup> Semester 2024/2025

<b>Course Title:</b>	<b>Project Management &amp; Network Analysis</b>
<b>Learning/Teaching Methods:</b>	<ul style="list-style-type: none"><li>• Interactive Power Point Presentation.</li><li>• Lecture/Problem solving sessions.</li><li>• Blended Education.</li><li>• Projects, Cases, Homework &amp; quizzes.</li><li>• MS Project</li></ul>
<b>Assessment Methods:</b>	Homework, Participation, Midterm Exam, Final Exam & Project
<b>Providing Department:</b>	Industrial Engineering
<b>Instructors:</b>	Prof. Ghaleb Y. Abbasi
<b>Phone:</b>	5355000 Ext. 22920
<b>Email:</b>	<a href="mailto:abbasi@ju.edu.jo">abbasi@ju.edu.jo</a>
<b>Class time:</b>	Monday 3:00 – 4:30 PM Wednesday 3:00 – 4:30 PM
<b>Classroom:</b>	IE 001
<b>Office Hours:</b>	Monday 1:00 – 3:00 PM & By Appointment

### Course Description:

3 Credit hours (3 h lectures). This course is designed to introduce the project management Knowledge Areas and Process Groups. The Project Management Institute (PMI<sup>®</sup>) approach to the concept of integrated project management will be addressed. Integration management, scope management, time management, cost management, quality management, human resource management, communications management, risk management, and stakeholders' management will be addressed. Cases and projects are a basic pillar of the “**Blended Teaching**” approach. Computer applications using the “Microsoft Project Management” will add a special flavor to the course.

### Course Prerequisite:

knowledge and experience in the project management field is a plus.

## Course Objectives:

The main objective of this course is to represent the different aspects of a integrated project as a system. Project management concepts and system approach and the different tools for project planning, scheduling and control will be discussed. The ten areas covered by the PMI's<sup>©</sup> Project Management Book of Knowledge (PMBOK5<sup>©</sup>) will be discussed. Important deterministic and probabilistic networks addressed. Computer applications using MS Project will be addressed.

## Expected Outcomes:

Students will be expected to develop the following skills/understanding upon the successful completion of the course:

1. Understand the dynamic environment of project management.
2. Manage projects from initiation to termination.
3. Learn how to use the different project management tools in the work environment.

Develop project management skills essential for today's organization survival

## Textbooks & References:

- Project Management Institute. (2021). *A Guide to the Project Management Body of Knowledge (PMBOK<sup>©</sup> Guide)*, 7<sup>th</sup> Edition. Newton Square, Pennsylvania, USA.
- Project Management Institute. (2017). *A Guide to the Project Management Body of Knowledge (PMBOK<sup>©</sup> Guide)*, 6<sup>th</sup> Edition. Newton Square, Pennsylvania, USA.
- Pinto, Jeffrey K. (2010). *"Project Management; Achieving Competitive Advantage"*, 2<sup>nd</sup> Edition. Pearson Education Inc. New jersey, USA.
- عباسي، غالب يوسف. (2024)، الطبعة الثالثة. أساسيات إدارة المشاريع المتكاملة. المطابع المركزية، عمان، الأردن.

## Additional Readings:

- Forsberg, Kevin; Mooz, Hal; PMP; Cotterman, Howard. (2000). *Visualizing Project Management*. John Wiley & Sons, Inc. USA.
- Kerzner, Harold. (2001). *Project Management, A Systems Approach to Planning, Scheduling, and Control*, 7<sup>th</sup> Edition. John Wiley & Sons Inc., USA.
- Lewis, James P. (2007). *Fundamentals of Project Management*. 3<sup>rd</sup> Edition. AMACOM, NY, USA.
- Meredith, Jack R. and Mantel, Jr. Samuel J. (2006). *"Project Management: A Managerial Approach"*. 6<sup>th</sup> Edition, John Wiley & Sons Inc., USA.

## Grading System:

Description	%	Day	Date & Time
Midterm Exam	30%	Wednesday	04/12/2024
Term paper	20%	Wednesday	<ul style="list-style-type: none"><li>• Proposal by mid-November</li><li>• Presentation on January 8<sup>th</sup> 2025</li></ul>
Final Exam	40%	Thursday	January 16, 2025 @ 4:30 PM
Quizzes, HW & Participation	10%	On going	

## Tentative Course Outline:

The following topics will be covered:

WEEK	START DATE	TOPIC
1&2	06-13/10/2024	Introduction
3	20/10/2025	Project Integration Management Project Life Cycle & Organization
4	27/10/2024	Project Time Management
5&6	04-11/11/2024	Project Cost Management
7	18/11/2024	Resource Management
8	25/11/2024	Term Paper Discussion
9	02/12/2025	<b>Mid Term Exam</b>
10	09/12/2024	Earned Value Management
11	16/12/2024	Project Quality Management
12	23/12/2024	Assignments & Homework
13	30/12/2024	Project Risk Management
14	06/01/2025	Project Closeout
15	13/01/2025	Term Paper Presentation
16	16/01/2025	<b>Final Exam</b>

## The Term Paper:

Each student is expected to submit a “Term Paper” applying the methods, tools & techniques learned during the course, along with their current and previous knowledge and experience, (if any). Each Project should contain:

1. The report should be arranged in the following general organization as a minimum: Table of contents, Abstract, Introduction, Literature Review, Paper Body, Discussion, and Conclusions & Recommendations.
2. At least five recent references in the area, with complete reference & Bibliography.
3. Typed, 1.5 space with all figures, tables, charts,.... done in an organized professional manner (no scans).
4. A PPP for each paper with about 10 minutes for presentation, which should be done in a professional manner with the proper visual aids.

### **Following is a List of Some Previous Papers:**

1. Conditions affecting projects in Jordan, or Conditions affecting projects in less Developed Countries.
2. Applying systems theory to project management problems.
3. Risk Analysis in project management.
4. Organizing project control systems.
5. Development of project management in Jordan.
6. The application of project management techniques to construction & research and development projects.
7. Matrix approach to project planning design & management.
8. Project management: the promise for developing countries.
9. Network application in industry & Government (in Jordan).
10. The use of Microcomputers in project management in Jordan - A survey.
11. An algorithm for project cost-duration analysis problem cost functions
12. Decision support system for multi project scheduling of resources.
13. Economic optimization of project scheduling
14. Scheduling with limited resources:
15. A heuristic model for scheduling large projects with limited resources.
16. Some properties of schedules for large projects with limited resources.
17. Planning and control of repetitive projects.
18. The construction Industry in Jordan.

### **Notes:**

1. Do not hesitate to ask questions on any material you do not fully understand.
2. Students are required to bring a notebook and take notes in all classes.
3. Students are expected to attend every class session, and they are responsible for all material, announcements, schedule changes, etc., discussed in class.
4. Discuss the assignments among yourselves. This is helpful to the learning process.
5. Don't Cheat; direct copying of others' work will NOT be allowed or tolerated and will result in a reduction of grade. If you are found to be cheating in any way, on an exam or assignment, even signing the roll sheet for another student, you will be given an "F" for the course. There will be no exceptions.
6. All cases of academic dishonesty will be handled in accordance with university policies and regulations. JU policy requires the faculty member to assign ZERO grade (F) if a student misses 15% of the classes that are not excused, and 20% of the classes that are excused.
7. There will be several homework assignments and unannounced quizzes during the semester. Students are expected to be ready to take a quiz any time they have a class. There will be no make-up quizzes or homework.
8. Any student with disabilities who need accommodation on this course are encouraged to speak with the instructor as soon as possible to make appropriate arrangements for this accommodation.

