Course Syllabus
ARTI 521 - Project Implementation
Academic Year (2025-26) – Second Term

Instructor:

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Course Information:

Name: Project Implementation
Course ID: 929476
Catalog number: ARTI 521
Cr. hours: 3 hours. This is a core (required) course.
Contact hours: 9 hours a week

Course Prerequisites: ARTI 511 Project Proposal

Classroom Location and Time:

Class No.	Lecture

Textbooks:

No prescribed textbook. However, templates and handouts will be given in class.

References:

1. Ian Sommerville “Software Engineering” 10th edition 2015 ISBN-13: 978-0133943030.
2. Kathy Schwalbe, “Managing Information Technology Projects, Revised, International Edition (7th edition)”, 2013, ISBN-13: 978-1133627227.
3. IEEE 829 Standard for Test Plan
4. IEEE 1063 Standard for Software User Documentation

Course Description:

Project implementation course offers students an opportunity to assemble their knowledge acquired throughout their BS-AI curriculum to realize a final project. This would require them to gather information about the proposed subject and realize a final report as well as to develop an AI system practically. At this stage, students must carry on all phases system development of the subject already defined in the precedent course (Project Proposal), and under the supervision of the same supervisor (as possible). At the end of the semester, grading will be obtained based on Final Report, Project Demo, and an Oral Presentation of the project to be held by a committee from faculty members.

Course Learning Outcome:

1. List courses from the curriculum used to solve the problem (SO:0; PI:0.1)
2. List methods/techniques from other disciplines used to solve the problem (SO:0; PI:0.2)
3. Create appropriate components to effectively manage a project (SO:1; PI:1.1)
4. Write requirement specifications addressing the needs of a problem (SO:1; PI:1.2)
5. Estimate required resources for successful completion of the task (SO:1; PI:1.3)
6. Assess mathematical tools to evaluate the performance of algorithms (SO:6; PI:6.1a)
7. Develop different computer algorithms in building alternative computer-based solutions (SO:6; PI:6.1b)
8. Formulate appropriate algorithmic techniques to solve the given problem (SO:6; PI:6.2a)
9. Devise comprehension of the tradeoffs involved in design choices (SO:6; PI:6.2b)
10. Assess the ability to apply computer science theory in the modeling and design of computer-based systems (SO:6; PI:6.3)
11. Develop intelligent computer-based solutions (SO:7; PI:7.1)
12. Design computer-based systems demonstrating intelligence (SO:7; PI:7.2)
13. Analyze a complex or multidisciplinary problem and apply AI principles to identify solution (SO:7; PI:7.3)
14. Compose a design strategy to meet the desired needs of the problem (SO:2; PI:2.1)
15. Construct a computer-based solution addressing design specifications (SO:2; PI:2.2)
16. Design testcases to measure the effectiveness of the solution (SO:2; PI:2.3)
17. Demonstrate the abilities to participate in team activities (SO:5; PI:5.1)
18. Formulate appropriate team structure to timely achieve common goals (SO:5; PI:5.2)
19. Demonstrate the ability to acquire new skills and practice them in realizing a solution (SO:4; PI:4.1)
20. Categorize professional, ethical, legal, and social implications related to a proposed system (SO:4; PI:4.2)
21. Write technical reports to document project activities (SO:3; PI:3.1)
22. Demonstrate oral presentation skills using critical and reflective thinking (SO:3; PI:3.2)

E-Mail

All students are requested to obtain an e-mail account. If you have any questions about the course or need assistance, please contact me in person, by telephone during office hours, or by e-mail at any time.

Grading and Evaluation Criteria

Your course grade will be calculated as follows:

Continuous Progress (Biweekly)	30%
Mid-term report	10%
Final Report	30%
Project Presentation & Demo	30%
Total	100%

Weekly Course Outline *~ May Be Subject to Minor Changes ~*

Week	Dates	Topics	Deliverables
1	18-01-2026	Documentation of the examiners feedback	
2	25-01-2026		Report # 1
3	1-02-2026	Implementation phase of the Project	
4	8-02-2026		Report # 2
5	15-02-2026		
6	22-02-2026		Report # 3
7	1-3-2026		
	8-03-2026	Eid Al-Fitr Vacation	Eid Al-Fitr Vacation
	15-3-2026		
	22-3-2026		
8	29/03/2026	Implementation phase of the Project	Report # 4 Midterm Report Submission: 29th Mar 2026
9	5-04-2026		
10	12-04-2026	Testing phase of the Project	Report # 5
11	19-4-2026		
12	26-04-2026		Report # 6
13	3-05-2026	End user deployment, preparing user manual and installation	Showcase * from 3/05/2026
14	10-05-2026		Report # 7
15	17-05-2026	Final Report	Final Report: 17th May 2026 Showcase * until 18/05/2026 Presentation Season * from 19/05/2026
	24-05-2026	Eid Al-Adha Vacation	Eid Al-Adha Vacation
	31-05-2026		
16	2-06-2026	Final Presentation	Presentation Season *
17	7-06-2026		Presentation Season *
18	14-06-2026		Presentation Season *
19	21-6-2026		Presentation Season * until 23/06/2026

* Showcase will be on any day between 3/05/2026 to 18/05/2026 – (Week 13 to mid-Week 15) based on University Administration Arrangements.
* Final Presentation can be scheduled from 19/05/2026 to 23/06/2026 (mid-Week 15 to mid-Week 19)

Notes:

1. Demo in the showcase and/or Career Day will be approved by the department. One of the requirements for approval is the readiness of the project.
2. There can be flexibility of tasks finished in Weeks 1-12 between the supervisor and students and due to nature of the project.

Bi-Weekly Report

All reports must be completed and handed in on time at the ***beginning*** of the scheduled class. Work must be ***complete***. I will not accept a partially completed report. Late work will be accepted on a case-by-case basis only. Your work ***must*** be your ***own.*** Cheating will result in a grade of 0 for the applicable assignment; further disciplinary action, including assigning a failing grade (F) for the entire course, may also be taken. Missed work will result in a grade of 0 for the assignment. Exceptional circumstances should be discussed with the instructor in advance.

Reports must be printed (when appropriate) and ***properly identified***. Each printout must include:

- Your ***Name***
- The ***Project title*** and/or ***File Name***

Instructor's Policy and academic integrity:

- Students are required to attend every class. Please check attendance policy at the end of this syllabus.
- Students are expected to treat the classroom as a professional environment and treat students and faculty with respect. At a minimum, I expect you to treat each other (and your instructor) politely and with respect. This includes turning off all cell phones (or muting them), participating in class, and arriving in a timely manner. Please remember that personal conversations during lecture are distracting to your fellow students. Collaboration on a project is an exception, of course.
- Students are expected to observe academic integrity. Cheating of any type will not be tolerated. Students will submit their own work, if other people words are used, proper bibliographic citation is required.
- Students will not take part in any unethical activity to improve or maintain their academic standing. This includes but not limited to; cheating, copying, and plagiarizing (presenting the work of others as your own). These unethical activates will lead to a grade of "F" in this course.
- Copying an assignment from another student in this class will lead to an automatic failure for this course and to a disciplinary action. Allowing another student to copy one's work will be treated as an act of academic dishonesty, leading to the same penalty as copying.

Attendance Policy

The following policy should replace all the previous announced rules.

- According to the university regulations, any student who fails to attend 85% of the total lectures and labs cannot be admitted to the final exam of a given course.

- Regular students must attend at least 85% of all lectures, labs, and tutorials. Any student with less than 85% attendance (15% or more absent) in a course will result of being barred from entering the final exam.
    a. Any student barred from entering a final exam for failure to meet the attendance policy will automatically fail the course. Class work grades will be recorded, and the student will receive an overall grade of barred (DN).
    b. Attendance will be taken for all regular weeks as shown in the University academic calendar
- A student absent from a lecture, or a tutorial due to medical excuse or any other emergencies must submit an official excused document to the office of Vice Dean for Academic Affairs within one week of the absent day.
    a. This applies to any midterm exam, or a final exam that the student missed during the absent date.
    b. Once the Office of Vice Dean for Academic Affairs receives the excused document, it will evaluate it and notify the instructor of the decision whether it is accepted or not.
    c. A submitted medical document must be an official stamped medical record from governmental or respectful hospitals.
- Students must be prompt attending the class per the time specified in the class schedule.
    a. Being late is equivalent to ½ absent. Being late twice from the start of the class is considered one absent.
    b. Being late ½ hour and more from the start of the class is considered one absent.
- It is the student's responsibility to keep track of his/her attendance and count his/her percentage of being absent.
- The lists of barred students will be announced after the last official day of regular lectures.

- To calculate the attendance percentage using the following formula:
    - **Total Number of Lectures** = Number of Weeks (According to the university's calendar or the course syllabus) × (Number of Lectures + Labs in every week).
    - **The minimum attendance rate allowed** = Total Number of Lectures × 0.75
    - Example: Total Lectures for CS – 211 would be:
        16 Academic Weeks × (2 Lectures + 1 Lab) = 48 Lecture/Lab
        The minimum attendance would be: 48 × 0.75 = 36 Lectures/Labs

Note: When a student submits any excuses for absence in any course, the accepted excuse of absence is counted as 'an absence with excuse' and is deducted from the total attendance for any given student. In the case of student receiving barred status, the total amount of absence excuses is considered by the Vice Dean of Academic Affairs at the College of Computer Science and Technology.