A. Course Information

Course Title:	IS499 : IS SENIOR PROJECT
Course Code:	IS 499
Credit and Contact. Hours	3 (0, 0, 0)
Program:	Information Systems
Department:	Information Systems
College:	College of Computers and Information Sciences
Institution:	Prince Sultan University
Semester and Year	241
Course Location	Bi-weekly meetings
Course Timing and Days	-
Prerequisites	Department's Approval
Corequisites	N.A.

B. Instructor Information

Course Instructor	Dr. Suliman Mohamed Fati & Dr. Bayan AlGhofaily
Scheduled Office Hours	Bi-weekly meetings
Office Location	On Appointment
Email:	sgaber@psu.edu.sa & bghofaily@psu.edu.sa

C. Book and Helping Material Information

Course Textbook	
Other Reference(s)	
Electronic Material(s)	
Learning Management System	Moodle available at https://lms.psu.edu.sa

D. Course Specifications:

Under the guidance of an academic supervisor, this course offers students a professionally oriented learning experience. Students collaborate in teams (minimum 3 and maximum 5) to analyze real-world problems, assess business needs and requirements, propose, and develop solutions. The course aims to allow the students to be familiar with principles and practices for developing inclusive and accessible computing solutions that address the needs of diverse user communities. The course places a strong emphasis on consolidating and integrating students' learning with real-world practices, while applying principles and concepts related to Information Systems. Throughout

the course, students will have the opportunity to refine and utilize their analytical, critical thinking, problem-solving, technical, and project management skills. Students will collaborate as a team to apply the knowledge and skills acquired throughout their degree program. Additionally, they will engage in research and the development of new skills while designing, developing, and delivering an information system solution. As they navigate the inherent ambiguity and complexity associated with creating an information system solution, students will receive support from the university environment and their academic supervisor. Upon completing the course, each group is expected to submit a final report documenting the process undertaken during project development and the key findings of the project. Furthermore, the project solution must be presented upon the conclusion of this course.

E. Course Main Objectives:

CLO1: Critically analyze contemporary business issues, real-world problems, and clearly articulate project requirements for developing Information Systems solutions.

CLO2: Select, justify, and apply various Information Systems methods, tools, and techniques to address identified problems.

CLO3: Evaluate the effectiveness and viability of an Information System solution from the perspective of organizational value and sustainability and apply project management methods to assess, plan, design, manage and execute project.

CLO4: Demonstrate effective teamwork, intellectual independence as critical and reflective learners.

CLO5: Communicate effectively in various ways with diverse audiences while upholding ethical and professional responsibilities.

CLO6: Develop professional skills and understand ethical, legal, security, and social issues and responsibilities associated with IS projects.

F. Student Outcomes:

SO 1: Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. **(CLO1, CLO2)**

SO 2: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline. **(CLO 3)**

SO 3: Communicate effectively in a variety of professional contexts. **(CLO4)**

SO 4 Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles. **(CLO 6)**

SO 5: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline. **(CLO5)**

SO 6: Support the delivery, use, and management of information systems within an information systems environment. **(CLO 2)**

G. Project Timeline:

Task	Task Description	Deliverables	Deadline
Project signup	Students are assigned team members and a project supervisor	Completed Form	Before registration
Project Definition and Problem Formulation	Project supervisor helps students choose a project. You must ensure that the project is discussed among all team members. You must brainstorm sessions in order to understand, define objectives, and properly size the scope of work.	D1. Project proposal	Before the semester starts ; latest by the end of Week 1
Work plan and budgeting	Include a detailed and updated schedule including the project implementation and assessment/testing plan for the next semester. Discuss the project's target and milestone dates. If you will be implementing your project in discrete stages, describe them and discuss how far you think you will be able to get in the execution of a project, an engineering approach must be adopted. Engineers try to come up with the best feasible solution to meet the particular needs of a problem. Therefore, students need to demonstrate explicitly that they have made sound judgments based on the knowledge they have gained about the problem from readings and experience (what	D2. A document that demonstrates a work plan and budgeting	Week 2-3

	you have found out for yourself, e.g. by experiment).		
Requirements Collection and Analysis		D3. Detailed software Requirements Specifications	Week 4-5
Design		D4. High-Level Design / Low-Level Design	Week 6-7
Midterm report submission composed of details presented in D1, D2, D3 and D4.			End of week 8
Implementation and Coding Iteration 1	30-40% of the development should be completed	Progress demonstrated to the supervisor	Week 9-10
Implementation and Coding Iteration 2	Most of the project should be completed	Progress demonstrated to the supervisor	Week 11-12
Testing		D5. Test case Specification Test Result	Week 13
Installation/Deployment		D6. Software User Guide	Week 13
Final Report Submission composed of refined content from Midterm report, implementation details and documents D5 and D6.			Week 14
Final Presentation and Examination			Week 15

H. Grading and Assessment:

Student work shall be graded as follows:

Project supervisor shall report 60% of a student work as follows

Individual traits evaluation (PECPT)

Criterion/Indicator for Individual contribution evaluation	Weight
Professionalism: Attendance, punctuality, submisson on time, adherence to standards	7
Engagement: Communications skills (written and oral), attitude, curiosity, willingliness to learn	2
Creativity: Research, explore and learn: Tools, techniques & standards, problem solving skills	2
Teamwork: Professional behaviour towards team members and supervisor	2
Productivity: Quality of work, productivity, and originality (No plagiarism)	2
Total	15 points

Group work evaluation

Criterion/Indicator for Individual contribution evaluation	Weight
Project Proposal / Description: Problem definition, Objectives, Goals etc Work plan: Tasks definition, weekly task breakdown, milestones mapped to objectives?	5
Requirements: Requirements collection, Detailed Functional and non-Functional requirements, mapping of requirements	8
Design Definition: Description of Processes, systems, sub-systems, components, architecture, data-base design, UI design etc	8
Implementation details: Use of tools/software and standards	12
Testing, Quality: Testcase specifications, QA process and techniques, Test results	4
Ethical issues: Project constraints, limitations, ethical and social issues, user manual and guide	4
Quality of report (organization, format, language etc)	4

Total	45 points

The Project-exam committee shall evaluate 40% (two evaluators, 20% each) of students work as follows

Criterion/Indicator for Individual contribution evaluation		Rubric Score
Content	Presentation has good structure, Introduction, body and conclusion	3
	Consistency / Relevancy to the performed SDLC activities	3
Presentation	Visual aids are well prepared, informative, effective, and not distracting.	3
	Clarity of the talk	3
Knowledge	Answers reflect student understanding of his work	3
	Weight	5 points

Criterion/Indicator for Individual contribution evaluation	Weight
Requirements: Requirements collection, Detailed Functional and non-Functional requirements, mapping of requirements	3
Design Definition: Description of Processes, systems, sub-systems, components, architecture, data-base design, UI design etc	3
Implementation details: Use of tools/software and standards	3
Testing, Quality: Testcase specifications, QA process and techniques, Test results	3
Quality of report (organization, format, language etc)	3
Total	15 points

I. Additional Information:

Plagiarism and Academic Dishonesty:

"Plagiarism can be defined as unintentionally or deliberately using another person's writing or ideas as though they are one's own. Plagiarism includes, but is not limited to, copying another individual's work, and taking credit for it, paraphrasing information from a source without proper documentation, and mixing one's own words with those of another author without attribution. In addition, buying a paper or project, or downloading a paper from the Internet, and submitting them as your own are also plagiarism. The penalty for academic dishonesty will bring course expulsion and failure, or even suspension" (Academic Integrity and Syllabus Acknowledgement Form).

Attendance Policies:

The University attendance policy will be strictly followed.

Students that are regularly absent will be given DN warnings.

Students are expected to attend all class sessions and be in class on-time. Attendance is taken during the first 5 minutes of the class. Missing a class session is a student's responsibility. Missed classes will not be repeated. It is the student's responsibility to periodically check course website for course content, projects assignments, updates, and notifications.

Exam Policies:

It is not possible to reschedule a major exam. If any student missed an assessment, the makeup will be at the end of the semester and all the materials are included (comprehensive assessment). Makeup exams will only be approved in limited cases as stipulated in the university bylaws. Generally, the final exam includes all material covered during the semester (comprehensive).

Assignment/Project Policies:

Students are expected to actively participate in class discussion, activities, and online Forums. Students are expected to complete the class assignment and submit the answers during the concerned tutorial session. Late assignments are not accepted.