SULTAN QABOOS UNIVERSITY

COURSE OUTLINE

PROGRAM: BSC IN COMPUTER SCIENCE

1. Course Code	COMP5900	
2. Course Title	PROJECT IN COMPUTER SCIENCE	
3. Credits	4	
4. Pre-requisite Course(s)	• Completion of 90 credit hours • Other requirements specified in the project description	
5. Co-requisite Course(s)	-	
6. Equivalent Course(s)	-	
7. Incompatible Course(s)	-	
8. Course Category	Major Requirement	
9. Course Owner	College: Science	Department: Computer Science
10. Course Type	Internship	
11. Language of Instruction	English	

12. Course Description

This course provides students with opportunities to enhance skills that may not be easy to acquire in the traditional classroom setting, such as working in teams, interacting with users, collecting requirements, developing solutions and building software for real world applications. Students are also exposed to writing scientific reports and making oral presentations.

13. Teaching/Learning Strategies

The theory part is delivered during the lectures and student programming skills are developed during the lab sessions. All course materials are posted on Moodle.

14. Assessment Components and Weight [%]

Progress Report and Final Report (41%)	Poster and Logbook (18%)
Oral Presentation (9%)	Final Product Assessment (7%)
Level of Contribution (25%)	

15. Grading Method: A-F Scale

16. Textbook(s) and Supplemental Material:

- **Textbook:**
  - None
- **Supplemental Materials**
  - Weekly meeting with the project supervisor.
  - Guidelines to FYP

- Registration Procedure
- FYP Report Template
- Poster Guidelines File

MATCHING COURSE OBJECTIVES WITH PROGRAM OUTCOMES AND SQU GRADUATE ATTRIBUTES		
SQU Graduate Attributes		
A. SQU graduates should be able to:	**B. SQU graduates possess**	**C. SQU graduates should**
1. apply the knowledge and skills relevant to the specialization 2. communicate effectively and use information and communication technologies 3. critically analyze complex information and present it in simple clear manner	1. interpersonal communication skills and alignment with culture of international labour market to assist them in practical life and in living successfully 2. skills and motivation for independent learning and engagement in lifelong learning and research 3. work ethics and positive values, and intellectual independence and autonomy 4. teamwork skills and display potential leadership qualities	relish good citizenship qualities, be conscious of their national identity and be socially responsible, engage in community affairs and be mindful of contemporary issues.

#	Intended Student Learning Outcome / Course Learning Objective	Relevant Student Outcome(s)	Applicable Attribute(s)
1.	Acquire an understanding of the existing theoretical and technical knowledge related to the topic of their project.	SO1	A1
2.	Apply the knowledge, skills, and experience gained from their studies to analyze the project problem and identify and define the computing requirements of the solution.	SO1, SO2	A1, A3
3.	Apply the knowledge, skills, and experience gained from their studies to design, implement and evaluate their proposed solution to the project problem.	SO2, SO3, SO4	A1, A3
4.	Apply software and management principles in constructing, planning, and organizing their project.	SO9	A1, B1
5.	Justify their design choices by demonstrating an understanding of the tradeoffs related to the design and modeling of the proposed solution.	SO7	A3
6.	Select and utilize appropriate and current hardware and software tools, methods and techniques for development and implementation of their solution.	SO7, SO9	B2
7.	Present their work effectively by producing technical reports and defending their work in an oral presentation.	SO5	A2
8.	Collaborate with team members and effectively contribute to the accomplishment of the project goals.	SO8	B4
9.	Adhere to computing profession ethics related to issues such as intellectual property, privacy and security.	SO6	B3
10.	Identify the impact of their solution on individuals, organization or society.	SO7	C
11.	Recognize the need for and engage in continuing professional development.	SO6, SO9	B2

COURSE INFORMATION	
Course Code: COMP5900	**Course Title:** PROJECT IN COMPUTER SCIENCE
Semester/ Year: Fall 2022	**Section(s):** 10-40
Day, Time, and Place: Weekly meetings with the project supervisor	
Course Coordinator: Dr. Abdulrahman Aal Abdulsalam	
Office Location: Office No. 231, CS Dept.	**Office Hours: By Appointment**
Office Tel. Ext.: 2223	**Email:** : a.aalabdulsalam@squ.edu.om

16. Student Responsibilities

It is the student's responsibility to know and comply with all University Academic Regulations relevant to participation in this course. These regulations specifically include attendance requirement and students` academic code of conduct.

For attendance, it is the student's responsibility to be punctual and to **attend all classes remotely**.

Students are expected to perform their work with honesty and avoid any academic misconduct, which is defined as the use of any dishonest or deceitful means to gain some academic advantage or benefit. This can take many forms, including but not limited to, the following: copying, plagiarism, collusion and forging documents. For full details, please refer to the Undergraduate Academic Regulations and to the Student Academic Misconduct Policy.

TENTATIVE SCHEDULE		
Weeks	**Topic/Material to be covered**	**Assessment**
1 - 14	1. Problem Statement and Definition 2. Project Management 3. Literature Review and Background Reading 4. Requirement Specification 5. System Design 6. Progress Report 7. Implementation 8. Testing and Evaluation	Progress report, Logbook and Level of Contribution
15	9. Final Report, Poster and Oral Presentation	Final Report, Poster, Oral Presentation, Final Product Assessment

APPENDIX: ADDITIONAL INFORMATION

COURSE ASSESSMENT

- Internship offer letter: Students, who are securing the internship by themselves, are required to submit an offer letter from an industry or a professional organization outlining the duties and expectations during the course of the internship. The letter must also include start date, end date, hours to be worked, and name, email, phone of the on-site supervisor. (*due before starting the internship*)
- Completion of an approved internship experience in a company/organization for at least 6 weeks
- Summary report: Upon the completion of the internship, the student will produce a report of internship activity; this should include the tasks performed, problems investigated, significant results and any follow-up projects stemming from the effort. The report must clearly describe the company/organization at which the student completed the

internship, the tasks/project assigned, the scope of the tasks/project, what was accomplished, the advantages and disadvantages of the internship, and recommendations. (*due one week after internship experience is completed*) Additionally, the report must highlight the following:

- What theoretical and applied knowledge was mastered that could not have been mastered at Sultan Qaboos University?
- What was the significance of the work accomplished by the student to the hosting company/institution?

- Supervisor assessment report: This is an evaluation report submitted by student's immediate internship supervisor reporting on their performance and fulfillment of duties as outlined in the Internship Offer Letter. (*due one week after internship experience is completed*)

Course Assessment

Assessment	Supervisor	Examiner	Coordinator	Total
Progress report	-	10	-	10
Poster	-	2	3	5
Final Report	-	25	-	25
Final Product Assessment	-	7	-	7
Oral Presentation	3	6	-	9
Logbook	12	-	1	13
Level of Contribution	25	-	-	25
Final Report submission Assessment		-	6	6
Total	40	50	10	100

Standard Grading Scale

Scale	100-90	>=87	>=84	>=80	>=77	>=74	>=70	>=67	>=60	>=50	>0
Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	F

Code of ethics

Based on the originality report generated by turnitin.com marks will be deducted as follows[1]:

- 15 - 24.5 % plagiarized – 20% of assigned mark
- 25 - 34.5 % plagiarized – 35% of assigned mark
- 35 - 49.5 % plagiarized – 50% of assigned mark
- More than 50% plagiarized – zero

Department's Late Submission Policy:

(a) 1-24 hours: 25% of the mark will be deducted.
(b) > 24 hours: Not accepted.

[1] This policy is adopted with permission from the Language Center of SQU.

Department's Policy for Dealing with Cheating:

It is essential that each student solves all programming assignments, lab tests and exams individually unless instructed otherwise, e.g., for group projects. Copying, plagiarism, collusion, switching, and falsification are violations of the university academic regulations. Students involved in such acts will be severely penalized. The department has adopted a firm policy on this issue. A zero mark will be assigned the first time a student is caught involved in copying and his/her name will be added to a watch list maintained by the Head of Department. Further repeated involvements in copying will cause the student to get an F grade in that course. This is in line with the university academic regulations. Copy Policy is strictly applied in all assessments**; F grade will be given immediately**.

List of Program Student Outcomes (SOs) Enabled in this Course

SO1: Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify possible solutions.

SO2: Design a computing-based solution to meet a given set of requirements.

SO3: Implement a computing based solution for a given design.

SO4: Evaluate a computing-based solution against a given set of computing requirements.

SO5: Communicate effectively orally and in writing in a variety of professional contexts.

SO6: Recognize professional responsibilities and understand legal and ethical principles.

SO7: Make informed judgments in computing practice based on legal and ethical principles.

SO8: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

SO9: Apply computer science theory and software development fundamentals to produce computing-based solutions.