Form: Course Syllabus		
	Form Number	EXC-01-02-02A
	Issue Number and Date	2/3/24/2022/2963 05/12/2022
	Number and Date of Revision or Modification	
	Deans Council Approval Decision Number	2/3/24/2023
	The Date of the Deans Council Approval Decision	23/01/2023
	Number of Pages	06

1.	**Course Title**	Specifications & Quantities
2.	**Course Number**	0902482
3.	**Credit Hours (Theory, Practical)**	3 Credit hours
	Contact Hours (Theory, Practical)	3 theory hours per week
4.	**Prerequisites/ Corequisites**	None
5.	**Program Title**	Bachelor of Architecture Engineering
6.	**Program Code**	0902
7.	**School/ Center**	School of Engineering
8.	**Department**	Department of Architecture Engineering
9.	**Course Level**	Undergraduate, 4 th -year Students
10.	**Year of Study and Semester (s)**	Second semester
11.	**Other Department(s) Involved in Teaching the Course**	None
12.	**Main Learning Language**	English & Arabic
13.	**Learning Types**	☒Face to face learning ☐Blended ☐Fully online
14.	**Online Platforms(s)**	☐Moodle ☒Microsoft Teams
15.	**Issuing Date**	25/2/2025
16.	**Revision Date**	-

17. Course Coordinator:

Name: Qusai Tarawneh

Contact hours: Monday and Wednesday 01:00 – 02:00

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18. Other Instructors:

Name:
Office number:
Phone number:
Email:
Contact hours:
Name:
Office number:
Phone number:
Email:
Contact hours:

19. Course Description:

A detailed description of all architectural works and specifications, preparing a bill of quantities according to general specifications and conditions.

20. Program Intended Learning Outcomes: (To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

1. Develop an intellectual base of knowledge in architecture's historical, theoretical, practical, and technological aspects and understand the interaction with allied disciplines such as engineering, mathematics, and arts.

2. Identify and analyze architectural problems using critical thinking skills, and synthesize innovative, sustainable, and contextually appropriate architectural solutions that incorporate skills developed from core to advanced design coursework.

3. Design sustainable and user-centered solutions to meet specified public health, safety, and welfare requirements, while considering and responding to cultural, social, environmental, and technological factors across various scales and complexity levels.

4. Demonstrate proficiency in applying and developing architectural skills, techniques, tools, and technological advancements necessary for effective and innovative architectural practice.

5. Communicate and collaborate effectively with a wide range of audiences to carefully receive and eloquently deliver ideas through various communication methods.

6. Adhere to ethical, legal, and professional standards and responsibilities in architectural practice, and demonstrate an understanding of the architect's role in society.

7. Employ architectural research methods and critical thinking skills to assess and propose sustainable built environment solutions, and demonstrate commitment to lifelong learning and continuous development.

21. Course Intended Learning Outcomes: (Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

1. **Identify different types of construction contracts and their use in architectural and engineering projects.**
2. **Evaluate and recommend appropriate contract types based on the project's nature, risks, scope, and timeline.**
3. **Understand legal, contractual, and ethical considerations in specifications and quantity surveying.**
4. **Understand the role and importance of specifications and quantity surveying in architectural projects.**
5. **Measure and calculate quantities from architectural and structural drawings.**
6. **Apply knowledge of building materials and methods to develop realistic quantity take-offs.**
7. **Create a simple construction contract integrated with a Bill of Quantities (BOQ)**

Course ILOs	The learning levels to be achieved					
	Remembering	Understanding	Applying	Analysing	evaluating	Creating
1	✓	✓		✓		
2				✓		
3		✓				
4		✓	✓			
5		✓	✓			
6	✓	✓				
7		✓				✓

22. The matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program:

Program ILOs / Course ILOs	ILO (1)	ILO (2)	ILO (3)	ILO (4)	ILO (5)
1	✓	✓	✓		✓
2	✓	✓	✓		✓
3		✓			
4			✓	✓	
5	✓				
6			✓	✓	
7	✓	✓	✓		✓
8					

23. NAAB Student Performance Criteria (SPC)

This course contributes to the following NAAB learnings outcomes:

B.10 Financial Considerations: Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

D.3 Business Practices: Understanding of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.

D.4 Legal Responsibilities: Understanding of the architect's responsibility to the public and the client as determined by local regulations and legal considerations involving the practice of architecture and professional service contracts.

24. Topic Outline and Schedule:

Week	Lecture	Topic	ILO/s Linked to the Topic	Learning Types (Face to Face/ Blended/ Fully Online)	Platform Used	Synchronous / Asynchronous Lecturing	Evaluation Methods	Learning Resources
1	1.1	Contract introduction	1/6	Face to			3	
	1.2	Contract types	1/6	face			3	
2	2.1	Contract types	1/6	Face to			3	
	2.2	Unite price contract	1/6	face			3	
3	3.1	Lum-sum contract	1/6	Face to			3	
	3.2	Turnkey and design and built contract	1/6	face			3	
4	4.1	B.O.T ,PPP, M&O contracts	1/6	Face to			3	
	4.2	Contract agreements Legal systems in Jordan	1/6	face			3	
5	5.1	The nature of contracts Joint venture+ classification of contractors	1/6	Face to			3	
	5.2	Bidding for contracts (Tenders)	1/6	face			3	
6	6.1	Tendering procedure	1/6	Face to			3	
	6.2	Construction contracts1	1/6	face			3	
7	7.1	General specifications	1/6	Face to			3	
	7.2	Special specifications	1/6	face			3	
8	8.1	Analyzing BOQ	1/6	Face to			3	
	8.2	Analyzing BOQ	1/6	face			3	
9	9.1	Midterm Exam	1/6	Face to			1	
	9.2	Type of contracts	1/6	face			3	
10	10.1	Masonry Quantities	1/6	Face to			3	
	10.2	Masonry Works Specifications	1/6	face			3	
11	11.1	Concrete Specifications	1/6	Face to			3	
	11.2	Water, Fresh Concrete,	1/6	face			3	

		& Reinforcing Steel						
12	12.1	Concrete Lab Concrete Mixtures Hardened Concrete Tests	1/6	Face to			3	
	12.2	Concrete quantities Pre-stressed concrete	1/6	face			3	
13	13.1	Reinforcement steel quantities	1/6	Face to			3	
	13.2	Plaster brick works quantities	1/6	face			3	
14	14.1	Quantities take off criteria	1/6	Face to			3	
	14.2	Quantities take off criteria	1/6	face			3	
15	15.1	Creating a contract and BOQ	1/6	Face to			3	
	15.2	Final exam	1/6	face			4	

25. Evaluation Methods:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	ILO/s Linked to the Evaluation activity	Period (Week)	Platform
Midterm exam	30	1.1-8.1	1-6	9	Face to face
Project	15	TBA	1-6	13-14	Face to face
In-Class Discussion, Quizzes	5	1.1-15.1	1-6	1-14	Face to face
Final exam	50	1.1-15.1	1-6	15	Face to face

26. Course Requirements:

Students must have a reliable computer with internet access, equipped with Microsoft Office for document creation, editing, and collaboration. Additionally, a PDF reader is essential for accessing course materials. Adequate storage space for digital files, access to online platforms, and an active email account are essential components for seamless participation in course-related activities

27. Course Policies:

A- Attendance policies:

Regular attendance is essential for active participation and success in this course. In accordance with university regulations, students are allowed a specific percentage of absences. Exceeding the permitted absence limit may result in students being ineligible to take the final exam. It is the responsibility of students to monitor their attendance and ensure compliance with the stipulated limit. If an absence is unavoidable, students must communicate in advance and make arrangements to catch up on missed material. This policy underscores the importance of consistent attendance throughout the course.

B- Absences from exams and submitting assignments on time:

Timely submission of assignments is imperative. In the event of unforeseen circumstances resulting in an absence from exams or challenges in meeting assignment deadlines, students must promptly notify the instructor and provide appropriate documentation. Please note that make-up midterm exam or alternate submissions arrangements will not be considered under any circumstances. It is crucial for students to communicate proactively and adhere to the specified deadlines outlined in the course syllabus.

C- Health and safety procedures:

The health and safety of all participants are paramount. Students must adhere to university guidelines and any additional safety protocols outlined by the instructor, whether engaging in oncampus or virtual activities. Any health concerns affecting participation should be communicated promptly

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Academic integrity is strictly enforced. Any form of cheating, plagiarism, or misbehavior is unacceptable and will result in severe consequences, including but not limited to academic penalties. Students are expected to familiarize themselves with the university's academic honesty policies.

E- Grading policy:

The grading criteria, encompassing assignments, exams, and participation, are clearly outlined in the course syllabus. Final grades for this course will be determined by active participation in seminars, performance in exams, the quality of research assignments, and verbal and visual presentations. It's essential to understand that participation transcends mere presence; it involves active and substantive contributions to seminar discussions.

F- Available university services that support achievement in the course:

The university library is a valuable resource that students are encouraged to utilize for research and academic support. With a wealth of materials, online databases, and expert assistance, the library provides essential resources to enhance learning and academic success in the course. Students are advised to familiarize themselves with the library's offerings and leverage these services to strengthen their understanding of course content and improve overall achievement

28. References:

A- Required book(s), assigned reading and audio-visuals: (1R)

-خلف، داو د.)2016(العقود واملواصفات وحساب الكميات، الطبعة اخلامسة، عمان) 2R)

-جبجي، داود، وآخرون.)1996(املواصفات الفنية العامة لألبنية، اجمللد االول، االعمال املدنية واملعمارية، وزارة االشغال العامة واإلسكان، الطبعة الثانية، عمان .

https://drive.google.com/drive/folders/0B6XfWypUaMhnQ29jRkJONGpJU00

B- Recommended books, materials, and media:

- The FIDIC contracts guide, 2000, FIDIC, Lausanne.

-وزارة االشغال العامة واإلسكان.)2013(عقد املقاولة املوحد للمشـاريع اإلنشائية، الطبعة الثانية املعدلة، عمان .

-أبو دية، أيوب.)1986(عيوب االلبنية، الطبعة االو ىل، عمان.

29. Additional information:

Name of the Instructor or the Course Coordinator: ……	Signature: ……..……	Date: ……..……
Name of the Head of Quality Assurance Committee/ Department ……	Signature: ……..……	Date: ……..……
Name of the Head of Department ……	Signature: ……..……	Date: ……..……
Name of the Head of Quality Assurance Committee/ School or Center ……	Signature: ……..……	Date: ……..……
Name of the Dean or the Director ……	Signature: ……..……	Date: ……..……