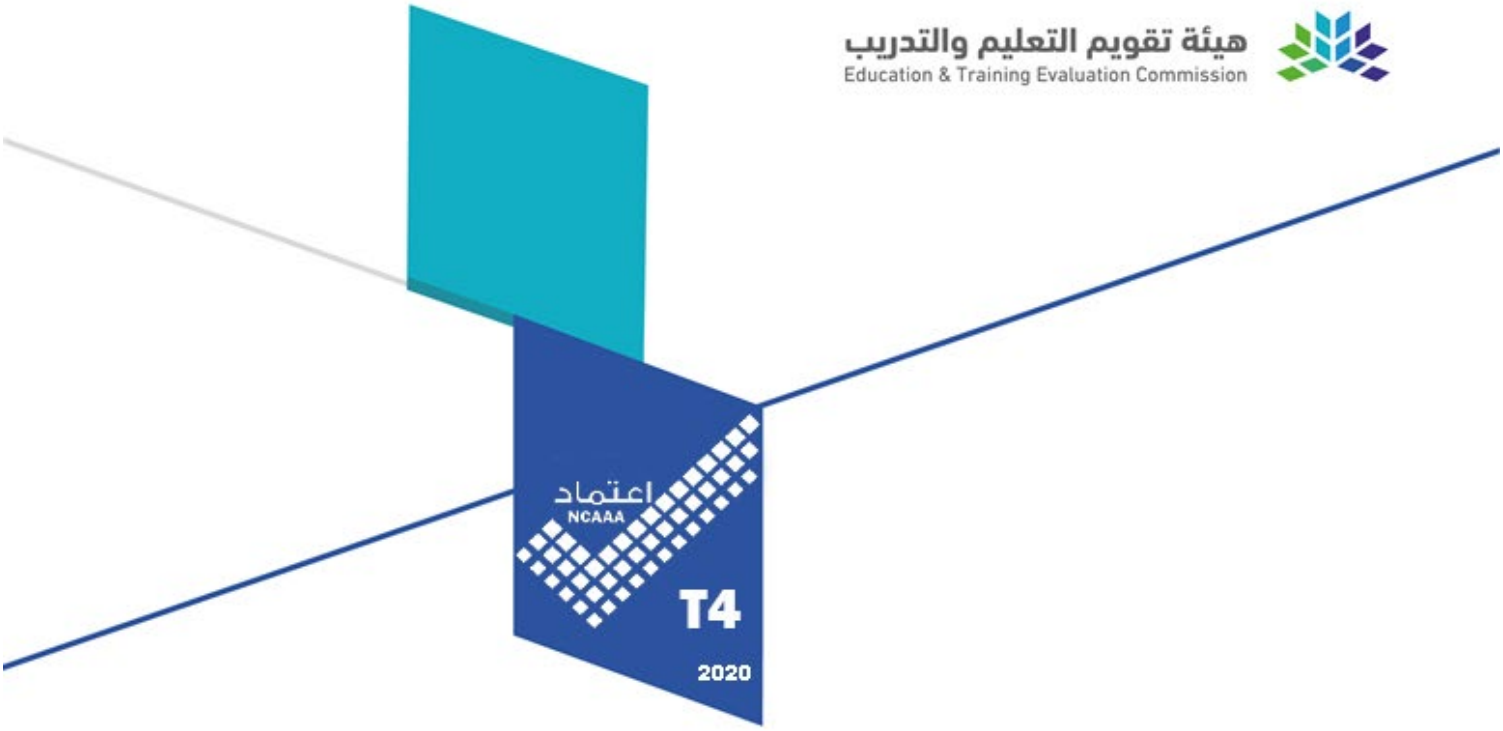

Course Specifications

Course Title:	**Database Lab**
Course Code:	**IT 323**
Program:	**Information Technology**
Department:	**Information Technology**
College:	**College of Computer and Information Sciences**
Institution:	**Majmaah University**

Table of Contents

A. Course Identification

1. Credit hours:	**2(0,4,0)**
2. Course type	
a.	University ☐ College ☐ Department ☐ Others ☒
b.	Required ☒ Elective ☐
3. Level/year at which this course is offered:	**8th**
4. Pre-requisites for this course (if any): IS 213- Fundamental of Database	
5. Co-requisites for this course (if any): NA	

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	44	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	
2	**Laboratory/Studio**	44
3	**Tutorial**	
4	**Others** (specify)	
	Total	44

B. Course Objectives and Learning Outcomes

1. Course Description

The course deals with the advanced topics of database (i.e. oracle). This course covers the following topics: Selection of DBMS, Architecture of the chosen DBMS, DB creation, Indexing, Integrity Constraints triggers and assertions, Security management, Installation issues, Performance Management, Tuning, DB Backups, and Recovery issues. Other features of the DBMS: Integration with web technologies, DB connectivity tools, Data distribution, fragmentation, and replication issues, Management issues of the DBA activity

2. Course Main Objective

1. Identify the proper selection of a DBMS.
2. Understand the architecture of the chosen DBMS, DB creation, Indexing, Integrity Constraints triggers, and assertions.
3. Understand security management, Installation issues, performance management, Tuning, DB Backups, and Recovery issues.

4. Learn the features of the DBMS: Integration with web technologies, DB connectivity tools.
5. Identify data distribution, fragmentation, and replication issues, management issues of the DBA activity.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	CLO1: Knowledge of Oracle Database components and Architecture, Oracle instance and their sub components	S1
1.2	CLO2: Knowledge of User Management and Security Issues	S1
1.3		
1...		
2	**Skills :**	
2.1	CLO3: Implement Backup/Recovery options	S2
2.2	CLO4: Manage Web technologies	S4
2.3	CLO5: Manage Database Storage structures, Oracle Net Services and Server connectivity options	S4
2...		
3	**Values:**	
3.1		
3.2		
3.3		
3...		

C. Course Content

No	List of Topics	Contact Hours
1	Introduction	4
2	Selection of DBMS, Architecture of the chosen DBMS, DB creation, Indexing	4
3	Integrity Constraints triggers and assertions.	4
4	Security management, Installation issues	4
5	Performance Management	4
6	Tuning	4
7	Other features of the DBMS: Integration with web technologies	4
8	DB Backups, and Recovery issues	4
9	DB connectivity tools, Data distribution	4
10	Fragmentation, and replication issues	4
11	Management issues of the DBA activity	4
Total		44

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	CLO1: Knowledge of Oracle Database components and Architecture, Oracle instance and their sub components	Lab Delivery	Quiz1, Assignment1, Midterm Exam, Final Exam
1.2	CLO2: Knowledge of User Management and Security Issues	Lab Delivery	Quiz2, Assignment2, Final Exam
…			
2.0	**Skills**		
2.1	CLO3: Implement Backup/Recovery options	Lab Delivery	Quiz2, Assignment2, Mini Project, Final Exam
2.2	CLO4: Manage Web technologies	Lab Delivery	Quiz2, Assignment2, Final Exam
2.3	CLO5: Manage Database Storage structures, Oracle Net Services and Server connectivity options	Lab Delivery	Mini Project
3.0	**Values**		
3.1			
3.2			
…			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes	Week 3,8	20%
2	Assignments	Week 4,7	10%
3	Midterm Exam	Week 6	20%
4	Mini Project	Week 2	10%
5	Final Exam	Week 12	40%
6			
7			
8			

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

Students can meet the faculty during advising hours or whenever the faculty is in the office.
Office Hours: 4 Hours/Week

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	"OCA: Oracle Database11g Administration I", By John Watson, McGraw Hill, 2008 2008
Essential References Materials	OCP: Oracle Database11g Administration II", By **Bob Bryla**, McGraw Hill, 2008. Oracle® Database Backup and Recovery User's Guide 11*g*.
Electronic Materials	• Web References and downloads: http://lms.mu.edu.sa • https://apex.oracle.com/en/ • Oracle.com • College Computer Laboratory for Practical Implementation
Other Learning Materials	Oracle 11g

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Laboratory- Capacity for 20 students to be seated.
Technology Resources (AV, data show, Smart Board, software, etc.)	PC - Smart board - Computers in the Lab room, Oracle 11g
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Internet Connection

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Final Exam Evaluation	Peers	Verification of Marks
Course Report Verification	Quality Coordinator	Check List

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	

College of Computer and Information Sciences
كلية علوم الحاسب والمعلومات

جامعة المجمعة
Majmaah University

COURSE SYLLABUS

DEPARTMENT OF COMPUTER SCIENCE

SPRING 2022

Course Code	Course Title
IT332	Ethics & Professional Practice

Course Credit : 2 (2,0,0)
Pre-requisite :
Instructor : Dr. Badr Almutairi
Computer Science Department
College of Computer and Information Sciences
Majmaah University
Email: b.algoian@mu.edu.sa
Course Time(s) : Tue 10:00 AM- 11:50 AM
Location(s) : Room 6
Office Hours : Tue 11:45 AM- 12:10 PM,

Final Exam : As per schedule --- (Comprehensive)
Textbook(s) : Joseph M. Kizza: "Ethical and social issues in Information Age" 5th Edition Springer 2013.

Course Requirements and Grading Policy:

1-	Attendance and Participation in class discussion	10%
2-	Assignments	20%
3-	Midterm Examination: Week # 8	20%
4-	In Class Test: Week # 11	10%
5-	Final Examination: (as per schedule)	40% (COMPREHENSIVE)
	Total	**100%**

Grades:

A+	:	95 to 100 %
A	:	90 to < 95%
B+	:	85 to < 90%
B	:	80 to < 85%
C+	:	75 to < 80%
C	:	70 to < 75%
D+	:	65 to < 70%
D	:	60 to < 65%

F : Below 60 %

Tests: 30 %

- Midterm Exam	:	Week 8	20%
- In-class test / Exercise / Lab	:	Week 11	10%

Final Examination: 40 %

Final Exam: As per schedule (COMPREHENSIVE)

Course Description:

This course will develop the ethical foundations of good professional practice in information technology. It will provide the necessary background of ethical theories and practices, and discuss the role of professional organizations in maintaining such practice, specifically in the information technology industry. Also, It considers legislation that applies in the information technology industry, including major areas of ethical related in information technology, such as, software ownership, data privacy, and computer cracking

Course Learning Outcomes:

1. Understand ethical theories: authoritarian, intuitionist, egoist, utilitarian, and deontologist.
2. Understand origin and purpose of professions, internal regulation versus external regulation, dimensions of professional responsibility, professional organizations: ethics and codes of conduct.
3. Recognize computer hacking, computer cracking, and difficulties with traditional legal concepts.
4. Understand the meaning of privacy, computer data and human dignity, the problematic status of information stored on computers.
5. Understand the Theories of property and ownership: Patent, Copyright, and trade secrets, and Ownership of computer software

Course Outlines:

Week	Course Topics	Book's Chapter	Event Name	Week Due
1	Morality and the Law	Chapter 2 Textbook		
2	Ethics and Ethical Analysis	Chapter 3 Textbook		
3	Ethics and Professions	Chapter 4		

		Textbook		
4	Ethics and Professions	Chapter 4 Textbook		
5	Anonymity	Chapter 5 Textbook	Assignment	
6	Security and Privacy	Chapter 5 Textbook		
7	Intellectual Property Rights and Computer Technology	Chapter 6 Textbook		
8	**Midterm Exam**			
9	Computer Crimes	Chapter 9 Textbook		
10	Ethics in Cyperspace	Chapter 12 Textbook		
11	Ethics in Cyperspace	Chapter 12 Textbook		
12	Ethical, Privacy, and Security Issues in the Online Social Network Ecosystems	Chapter 13 Textbook	Quiz/test Assignment	
13	Mobile Systems and Their Intractable Social, Ethical and Security Issues	Chapter 14 Textbook		
14	Review Week			
15	Review Week			
16	**FINAL EXAMS**			

Attendance and Participation in Class Discussion:

- Attendance is necessary but not sufficient which means that you must attend mentally as well as physically.
- Regular classroom attendance and regular participation in the class discussion and solving in class problems are essential.
- Successful learning requires good communication between students and instructors.
- This is a Course Name course, covered in 15 weeks, to be successful in this class, you should plan to arrive on time and participate in class discussion, ask questions, make use of the resources available in the library, and complete all homework.
- You should expect to spend several hours a week outside of class time for practice problems, homework, etc.
- Your contribution is to participate in the class activities within the frame work established in the class syllabus.
- You are responsible for your own attendance. If you miss a class, you are responsible for finding the notes and assignments from a classmate.
- If a student is absent for a class due to an acceptable excuse (like death in first family member, accident, hospitalization) or any other strong reason which makes it impossible to attend class, his excuse will be considered under the condition that the

student submits the supportive documents within Maximum a Week after his absence.

Homework, Quizzes and Chapter Tests:

- The homework assignments are problems from each section in the text book.
- Take time to include all the steps when working your homework problems.
- Doing so will organize your thinking and avoid computational errors.
- It will also give you complete step-by-step solutions of the exercises that can be used to study for exams.
- Writing down all the steps and keeping your work organized may also give you a better chance to receive partial credit
- Solution in the exam is the mirror image of your homework.
- NO ACCEPTENCE FOR UNORGANIZED & UNNEAT ASSIGNEMETS.
- Before each class, please complete the homework assigned in the previous class and it is important to study the previous class material to be able to follow and understand the present class.
- Be ready any time for a Quiz as a problem from the Homework.

General Notes:

- PLEASE TURN CELL PHONES OFF DURING CLASS!!! Cell phones, blackberries, iPods, etc. may not be accessed during class.
- The Final Exam will be comprehensive, covering all the material presented in the course
- NO MAKE UP EXAMS (except for what is stated under the "Regulations for Accepting Excuses for Not Attending Exams" section).
- Last day to drop: **()**
- Last day to withdraw without grade penalty: **()**
- Please note fire exits.
- The syllabus is subject to change.
- For any questions, please email me through my MU Email.

Regulations for Accepting Excuses for Not Attending Exams:

1. If Student is absent for Final Exam, Midterm Exam or Class Test due to a strong (like death in first family member, Accident, Hospitalization) or any other strong reason which makes impossible to attend Exam will be considered and student should submit the supportive documents to Vice Dean office within Maximum a Week after completion of the Examination.
2. If a Student is absent in Class Test the Instructor take decision to accept or reject the Excuse submitted by the Student.
3. For Midterm Exam, the decision will be taken by the Vice-Dean for Academic Affair.
4. For Final Exam College Council approval is required.

Learning Environment: MU is a place for learning and growing. You should feel safe and comfortable anywhere on campus. To meet this objective, you should:

1. let your Instructor, Vice-Dean or Dean know if any unsafe, unwelcome or uncomfortable situation arises that interferes with the learning process;
2. inform the instructor within the first two weeks of classes if you have special needs that may affect your performance in this course.

Academic Dishonesty: When College officials award credit, degrees, and certificates, they must assume the absolute integrity of the work you have done; therefore, it is important that you maintain the highest standard of honor in your scholastic work. The College does not tolerate academic dishonesty. Students who are not honest in their academic work will face disciplinary action along with any grade penalty the instructor imposes. Procedures for disciplinary measures and appeals are outlined in the Student Handbook. In extreme cases, academic dishonesty may result in dismissal from the College. Academic dishonesty, in general, involves one of the following acts:

1. Cheating on an examination or quiz, including the giving, receiving, or soliciting of information and the unauthorized use of notes or other materials during the examination or quiz.
2. Buying, selling, stealing, or soliciting any material purported to be the unreleased contents of a forthcoming examination, or the use of such material.
3. Substituting for another person during an examination or allowing another person to take your place.
4. Plagiarizing means taking credits for another person's work or ideas. This includes copying another person's work either word for word or in a substance without acknowledging the source.
5. Accepting help from or giving help to another person to complete an assignment, unless the instructor has approved such collaboration in advance.
6. Knowingly furnishing false information to the college; forgery and alteration or use of College documents or instruments of identification with the intent to defraud.