# MIDDLE EAST TECHNICAL UNIVERSITY DEPARTMENT OF BUSINESS ADMINISTRATION

# BA 4104 - Managerial Skills Laboratory II Thursday 16.40-18.15 @G110

| Instructor:                         | Dr. H.Gonca BULUR             |  |  |  |
|-------------------------------------|-------------------------------|--|--|--|
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| Office Hours: Thursday: 13.15-14.15 |                               |  |  |  |
| Course Web Page:                    | https://odtuclass.metu.edu.tr |  |  |  |
|                                     |                               |  |  |  |

### **Course Description:**

A database management system (DBMS) is a software system that is used to create and manage databases. This course offers a basic exploration of DBMSs with a focus on designing, implementing and managing robust and efficient databases. Students will gain an understanding of the fundamental concepts of DBMSs and conduct different operations using MySQL. They will develop some skills to create a database containing information about the graduates of our department with MySQL. The database will be helpful for reaching the graduates and strengthening the bond between them. In business life, establishing a database of department graduates helps streamline recruitment and build a network of skilled professionals, enhancing talent acquisition and fostering industry connections.

# **Course Student Learning Objectives: (CSLOs)**

# Upon successful completion of this course, students should be able to:

# Course Specific Skills:

- 1. Understand the basic properties of a DBMS
- 2. Know how to design, implement and manage databases
- 3. Learn how to use MySQL
- 4. Develop skills in MySQL to build a database consisting of the acquired information from graduates
- 5. Comprehend how to establish a network

#### Discipline Specific Skills:

- 6. Recognize how databases are useful in our daily lives
- 7. Understand the importance of coordination for obtaining large amounts of information and entering them to the database created
- 8. Comprehend the significance of databases for networking in business life

#### Personal and Key Skills:

- 9. Develop communication and networking skills
- 10. Develop problem-solving skills
- 11. Develop programming skills
- 12. Prepare a database that consists of the application of the methods learned during the term

# **Learning and Teaching Methods:**

This course is going to make use of formal lectures in class/computer laboratory, discussions, applications in the computer environment, problem solving and exams.

#### **Required Reading:**

### **Suggested Reading:**

Fundamentals of Database Systems, 6<sup>th</sup> edition, R. Elmasri, S.B. Navathe, Addison-Wesley, 2011. MySQL Cookbook, 3<sup>rd</sup> edition, P. DuBois, O'Reilly Media Inc., 2014.

| Assignment and Grading (tentative):   |                   |  |                                       |                  |  |  |
|---------------------------------------|-------------------|--|---------------------------------------|------------------|--|--|
| Form of<br>Assessment                 | %<br>Contribution | Size of the Assessment                   | CSLOs Covered<br>by the<br>Assessment | Feedback Method  |  |  |
| Midterm 1                             | 20                | Individual                               | 1-4,6,7,9-11                          | Written          |  |  |
| Midterm 2                             | 20                | Individual                               | 1-4,6,7,9-11                          | Written          |  |  |
| In-class exercises, assignments, etc. | 50                | Homework problems, quizzes and exercises | 1-12                                  | Written and oral |  |  |
| Attendance                            | 10                | Attending lectures                       | 1-12                                  | Written and oral |  |  |

#### **Course Policies:**

**CLASS ATTENDANCE:** Attending regular lectures are expected for this course.

**STUDENT DISABILITIES:** Any student, who, because of a disabling condition, may require special arrangements in order to meet course requirements, should contact the instructor as soon as possible. Students should present the appropriate documentation from the university's Disability Support Office (Engelsiz ODTÜ Birimi, ODTÜ Kütüphanesi, Solmaz İzdemir Salonu, Tel: 210.7196; engelsiz@metu.edu.tr) verifying their disability, and outlining the special arrangements required. Please note that no accommodations will be provided to the disabled students prior to the completion of this approved University process.

**ACADEMIC DISHONESTY:** The Department of Business Administration has no tolerance for acts of academic dishonesty. Such acts damage the reputation of METU, the department and the BS degree and demean the honest efforts of the majority of the students. The minimum penalty for an act of academic dishonesty will be a zero for that assignment or exam.

**CHEATING:** All university, faculty/institute, and department principles on academic honesty will be strictly enforced. The usual consequence for academic dishonesty is failure of the course and referral of the case to the Dean of the Faculty/Institute for additional disciplinary action. Examinations are individual and are to be completed without outside assistance of any sort. Persons observed cheating during examinations will receive a failing grade in the course. Homework assignments are individual, unless otherwise specified by the instructor, and are to be completed without outside assistance of any sort, as well. Persons observed cheating in their homework assignments will receive a score of zero for the portion of the semester grade that is allocated to such assignments. Persons observed to plagiarize while preparing assignments will be referred to the Dean of the Faculty for additional disciplinary action and also they will receive a score of zero for the portion of the semester grade that is allocated to such assignments.

**PLAGIARISM:** The instructor assumes that students will do their own work. By placing their names on assignments (individual or team), students are affirming that the contents are their original work. Any previous work available from files or past students, as well as materials available on the internet may be used only as a suggestive model. Violation of this provision will be considered as unethical behavior, subject to disciplinary action. If you have any doubt about the use of a specific material, see the instructor ahead of time. Any material used from outside sources should be referenced appropriately.

#### **METU HONOR CODE**

Every member of METU community adopts the following honor code as one of the core principles of academic life and strives to develop an academic environment where continuous adherence to this code is promoted.

"The members of the METU community are reliable, responsible and honorable people who embrace only the success and recognition they deserve, and act with integrity in their use, evaluation and presentation of facts, data and documents."

**CIVILITY IN THE CLASSROOM:** Students are expected to assist in maintaining a classroom environment which is conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from using laptop computers and cellular phones, making offensive 4 remarks, reading newspapers, sleeping, or engaging in any other form of distraction. Inappropriate behavior in classroom shall result, minimally, in a request to leave class.

Past observations showed that the METU classroom experience is improved when the following are true:

**Students arrive on time.** Timely arrival ensures that classes are able to start and finish at the scheduled times. Timely arrival shows respect for both fellow students and faculty and it helps to create a better learning environment by reducing avoidable distractions.

**Students are fully prepared for each class.** Much of the learning in this course takes place during classroom discussions. When students are not prepared, they cannot contribute to the learning process. This affects not only the individual but also the classmates who count on them.

**Students respect the views and opinions of their colleagues.** Disagreement and debate are encouraged; however, intolerance for the views of others is unacceptable.

Laptops, phones and wireless devices are turned off.

**STUDENT EXCUSES FOR EXAMS AND ASSIGNMENTS:** In case you cannot attend one of the examinations, if and only if you can present an official (dean's or president's office approved) **excuse** or **METU Medical Center certified Health Report**, you will be eligible to take a make-up examination. Late submission of assignments will not be accepted.

ACADEMIC REGULATIONS: http://oidb.metu.edu.tr/en/academicrules-and-regulations

ACADEMIC CALENDAR: <a href="http://oidb.metu.edu.tr/en/academic-calendar">http://oidb.metu.edu.tr/en/academic-calendar</a>

The instructor assumes that students who attend the next class have understood and accepted to agree with all the requirements and rules of this course.

The following table gives the tentative schedule for the semester. The lectures will stress the most important and/or most difficult material.

|          | Tentative Course Schedule |     |                             |                                   |              |
|----------|---------------------------|-----|-----------------------------|-----------------------------------|--------------|
|          | Reading/                  |     |                             |                                   |              |
| Week     | Month                     | Day | Topic                       | Assignment                        | CSLO         |
| 1        | OCTOBER                   | 2   | Introduction                |                                   |              |
| _        |                           | _   |                             |                                   |              |
| 2        |                           | 9   | Theoretical foundations-    | Week 2 slides (in                 | 1-2,5,8-11   |
|          |                           |     | Introduction to database    | ODTU Class) and                   |              |
|          |                           |     | systems (data and           | relevant textbook                 |              |
|          |                           |     | database concepts,          | sections                          |              |
|          |                           |     | database management         |                                   |              |
|          |                           | 4.0 | systems (DBMS))             | )                                 | 105011       |
| 3        |                           | 16  | Theoretical foundations-    | Week 3 slides (in                 | 1-2,5,8-11   |
|          |                           |     | Fundamentals of database    | ODTU Class) and                   |              |
|          |                           |     | systems (data models,       | relevant textbook                 |              |
|          |                           |     | categories and start        | sections                          |              |
|          |                           |     | collecting the data for the |                                   |              |
|          |                           |     | department graduates)       | > + 1                             | 4 2 5 0 44   |
| 4        |                           | 23  | Theoretical foundations-    | Week 4 slides (in                 | 1-2,5,8-11   |
|          |                           |     | Fundamentals of database    | ODTU Class) and                   |              |
|          |                           |     | systems (data models,       | relevant textbook                 |              |
|          |                           |     | categories and database     | sections                          |              |
| -        |                           | 20  | design process)             | Manta Falidas /is                 | 2 6 0 11     |
| 5        |                           | 30  | Theoretical foundations-    | Week 5 slides (in                 | 3-6,9-11     |
|          |                           |     | Fundamentals of database    | ODTU Class) and relevant textbook |              |
|          |                           |     | systems & Introduction to   |                                   |              |
| 6        | NOVEMBER                  | 6   | MySQL Introduction to MySQL | sections                          | 2 6 0 11     |
| В        | NOVEIVIBER                | В   | introduction to MySQL       | Week 6 slides (in                 | 3-6,9-11     |
|          |                           |     |                             | ODTU Class) and relevant textbook |              |
|          |                           |     |                             |                                   |              |
| 7        |                           | ТВА | Midterm 1                   | sections                          | 1 4 6 7 0 11 |
| <b>'</b> |                           | IDA | Midterm 1                   |                                   | 1-4,6,7,9-11 |
| 7        |                           | 13  | Practical applications with | Week 7 slides (in                 | 1-12         |
| <b>'</b> |                           | 13  | MySQL- Advanced MySQL       | ODTU Class) and                   | 1-12         |
|          |                           |     | queries and start creating  | relevant textbook                 |              |
|          |                           |     | the database for the        | sections                          |              |
|          |                           |     | department graduates        | 30000013                          |              |
|          |                           |     | acparament graduates        |                                   |              |
| 8        |                           | 20  | Practical applications with | Week 8 slides (in                 | 1-12         |
|          |                           |     | MySQL- Data manipulation    | ODTU Class) and                   |              |
|          |                           |     | and transactions            | relevant textbook                 |              |
|          |                           |     |                             | sections                          |              |
|          |                           |     |                             |                                   |              |
|          | 1                         | 1   |                             |                                   |              |

| 9  |          | 27  | Practical applications with MySQL- Creating and modifying database structures  | Week 9 slides (in<br>ODTU Class) and<br>relevant textbook<br>sections  | 1-12         |
|----|----------|-----|--|--|--------------|
| 10 | DECEMBER | 4   | Practical applications with MySQL- Views and stored procedures, data import and export   | Week 10 slides (in<br>ODTU Class) and<br>relevant textbook<br>sections | 1-12         |
| 11 |          | 11  | Practical applications with MySQL- Protection, DBMS, planning of database design, creating relational tables for our database and data entries to the established database | Week 11 slides (in<br>ODTU Class) and<br>relevant textbook<br>sections | 1-12         |
| 12 |          | ТВА | Midterm 2  |  | 1-4,6,7,9-11 |
| 12 |          | 18  | Practical applications with MySQL- Create relational tables for our database and data entries to the established database  | Week 12 slides (in<br>ODTU Class) and<br>relevant textbook<br>sections | 1-12         |
| 13 |          | 25  | Practical Applications with MySQL- Additional queries, usage of functions and finalization of the database   | Week 13 slides (in<br>ODTU Class) and<br>relevant textbook<br>sections | 1-12         |
| 14 | JANUARY  | 1   | New Year's Day   | Holiday  |              |