جامعة الملك سعود

كلية الدراسات التطبيقية وخدمة المجتمع

الفصل الدراسي الثاني 1439 / 1440هـخطة مقرر311 تقن

**CT311Database Concept**

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| **أستاذة المقرر** | **أوقات المحاضرات** | **المكتب** | **البريد الإلكتروني** | **الموقع الإلكتروني** |
| منيرة العوض | الأثنين، الأربعاء10–12(محاضرة) الأربعاء 8-10 (عملي) | مبنى 26مكتب36الدور1 | malawadh1@ksu.edu.sa | [هنا](http://fac.ksu.edu.sa/malawadh1) |

**Reference**:

* + - * Handouts & lecture notes.
* “**Database Systems: A Practical Approach to Design, Implementation and Management**.”

Thomas Connolly, Carolyn Begg. *5th Edition, Addison-Wesley, 2009.*

**Course Description:**

Effective using of Database software tools is one of the fundamental goals of Database system implementation. Training on different Database tools leads to provide students with solid knowledge and required practice on well known tools. Students will be able to access to tools and experiences that will increase their success at developing effective skills in designing and developing Database applications.

* Characteristics of the database approach.
* Database concepts and architecture; Data models, schemas and instances; Program data independence, Database languages and interfaces.
* Data models for database systems; The E-R DM, Relational DM and Relational Algebra.
* Relational model constraints; Domain, key, and integrity constraints.
* SQL-relational DB language; Data definition, queries, update statements, and views in SQL.
* Database design; functional dependencies, Normal forms.

**Course Syllabus:**

* Introduction to Databases and Database Environment
* Entity Relationship and Enhanced Entity Relationship Modeling
* Relational Model
* Relational Algebra
* SQL: Data Manipulation Language
* SQL: Data Definition Language
* Normalization
* Methodology – Conceptual Database Design
* Methodology – Logical Database Design
* Methodology – Physical Database Design
* Object Oriented DBMSs
* Object Relational DBMSs

**Grading Policy:**

* First Mid 20% - 13 Feb. on Wednesday
* Second Mid 20%- 20 Mar. on Wednesday
* Two Quizzes 10%- POP or As Agreed
* Lab Work 10%- weekly
* Final Exam 40%

**Class Rules:**

* Please check the instructor’s website for course material and announcements.
* Attendance is very important if you miss class more than 25% you will be forbidden to enter the final.
* If you’re late you may attend but you will be considered absent after 3lates.
* If you miss one of the major exams, you will be not excused unless the you have medical report.
* Lab work requires your attendance. It is not a group work therefore you need to study before the lab time to be able to finish the required assignments. Please keep a flash memory, to save your work.
* This course requires constant studying. If you have any questions, please do not hesitate to contact me.