COURSE SYLLABUS
Principles of DBMS
COP-5725

GENERAL INFORMATION

PROFESSOR INFORMATION

Instructor: Naphtali Rishe    Phone: (305) 348-1706
Office: ECS 243 (MMC)
Office Hours: By appointment    Email: cop5725fiu@gmail.com
Website: http://cake.fiu.edu/Rishe

Instructor: Liangdong Deng    Phone: (786) 553-9645
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Website: http://hpdrac.fiu.edu/

COURSE DESCRIPTION AND PURPOSE

This course covers principles of database management systems. The course presents an insider's perspective on how database systems are built and how they function, as well as the application developer’s perspective, with emphasis on methodology of high-quality database design. Since the course is intended to serve students with a background in Computer Science, computer programming skills are expected. These include C or C++ programming and background of Computer Architecture. Topics covered include Semantic Data Modeling, Relational Data Modeling, Basic SQL, Advanced SQL, Disk Storage and Basic File Structures, Indexing and Transactions. This course consists of 12 modules and one project. Projects will be completed individually and will be due one week before the final exam. Projects will be evaluated within two weeks of submission. Communications will take place primarily via email and professor announcements. At the end of the course you will have learned the how database systems work and how to design/build a database.

COURSE OBJECTIVES
Students will be able to:
- Understand the fundamental elements of database systems
- Construct conceptual semantic schemas modeling database applications
- Construct relational schemas for database applications
- Specify database layout
- Formulate SQL queries
- Understand how data are stored and organized on disks
- Know the basic database indexing methods
- Understand basic concepts of database transactions

MAJOR & CURRICULUM OBJECTIVES TARGETED

There are no listed Major & Curriculum Objectives targeted by this particular course. Should you have any questions, please contact the professor.

TEACHING METHODOLOGY

This is a fully online course, in which all of the instructional materials and activities are delivered through Canvas, and/or other internet-based media. Some exams may require the use of an approved proctoring center. Should you have any questions, please contact the professor.

IMPORTANT INFORMATION

POLICIES

Please review FIU's Policies webpage. The policies webpage contains essential information regarding guidelines relevant to all courses at FIU, as well as additional information about acceptable netiquette for online courses.

TECHNICAL REQUIREMENTS/SKILLS

Computer literacy is required.

ACCESSIBILITY AND ACCOMMODATION

Please visit our ADA Compliance webpage for information about accessibility involving the tools used in this course. Please visit Canvas's Commitment to Accessibility webpage for more information.

For additional assistance please contact FIU's Disability Resource Center.

COURSE PREREQUISITES
There are no prerequisites for this course.

**PROCTORED EXAM POLICY**

Both the mid-term exam and the final exam will be proctored online. Please visit our [Proctored Exam Resources](#) webpage for important information concerning proctored exams, proctoring centers, and important forms.

**TEXTBOOK**

*Fundamentals of Database Systems (7th Edition)*

by Ramez Elmasri; Shamkant B. Navathe

Pearson (2016)

ISBN: 978-0133970777

You may purchase your textbook online at the [FIU Bookstore](#).

**EXPECTATIONS OF THIS COURSE**

This is an online course, which means most (if not all) of the course work will be conducted online. Expectations for performance in an online course are the same as for a traditional course. In fact, online courses require a degree of self-motivation, self-discipline, and technology skills which can make these courses more demanding for some students.

Students are expected to:

- Review the “how to get started” section located in the course content
- Introduce yourself to the class during the first week by posting a self-introduction in the appropriate discussion forum
- Take the practice quiz to ensure that your computer is compatible with Blackboard
- Interact online with instructor/s and peers
- Review and follow the course calendar
- Log in to the course twice per week
- Respond to discussion boards, blogs, and journal postings with 3 days
- Respond to emails and canvas messages within 1 day
- Submit assignments by the corresponding deadline

The instructor will:

- Log in to the course twice per week
- Respond to discussion boards, blogs, and journal postings within 1 day
- Respond to emails within 1 day
- Grade assignments within one week of the assignment deadline

**COURSE DETAILS**
COURSE COMMUNICATION

Communication in this course will take place primarily via emails and Canvas Inbox.

Visit our Writing Resources webpage for more information on professional writing and technical communication skills.

DISCUSSION FORUMS

Keep in mind that your discussion forum postings will likely be seen by other students in the course. Care should be taken when determining what to post.

Discussion Forum Expectations:
• Students can post any general questions regarding the course and classes to the discussion forum.

ASSESSMENTS

In order to mitigate any issues with your computer and online assessments, it is very important that you take the “Practice Quiz” from each computer you will be using to take your graded quizzes and exams. It is your responsibility to make sure your computer meets the minimum hardware requirements.

Assessments in this course are not compatible with mobile devices and should not be taken through a mobile phone or tablet. If you need further assistance please contact FIU Online Support Services.

There is no quiz for this class.

Exam Expectations:
• Mid-term Exam
  ■ Date: 10/26/2019 9:00 AM to 11:00 AM (Saturday)
  ■ Duration: 2 hours
  ■ Scores will be available one week after the exam.
  ■ Exam answers will be available one week after the exam.
• Final Exam
  ■ Date: 12/07/2019 2:00 PM to 4:00 PM (Saturday)
  ■ Duration: 2 hours
  ■ Scores will be available one week after the exam.
  ■ Exam answers will NOT be available to students.

ASSIGNMENTS

Assignment Expectations:
• Students are expected to work on the assignments independently.
• Assignments shall be submitted electronically via the assignment drop box.
• Late assignments will suffer a penalty.
• Scores will be given within one week of the assignment due date.
## GRADING

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Number of Items</th>
<th>Points for Each</th>
<th>Total Points Available</th>
<th>Weight</th>
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<td>Exams</td>
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<tr>
<td>Course Project</td>
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<td>30%</td>
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<tr>
<td>Assignments</td>
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<td>30</td>
<td>150</td>
<td>30%</td>
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<th>Letter Grade</th>
<th>Range</th>
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<tr>
<td>A</td>
<td>93 or above</td>
<td>B-</td>
<td>80 - 82</td>
<td>F</td>
<td>59 or less</td>
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<tr>
<td>A-</td>
<td>90 - 92</td>
<td>C+</td>
<td>77 - 79</td>
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<tr>
<td>B+</td>
<td>87 – 89</td>
<td>C</td>
<td>70 - 76</td>
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<td></td>
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<tr>
<td>B</td>
<td>83 – 86</td>
<td>D</td>
<td>60 - 69</td>
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### WEEKLY SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>08/26 to 09/01</td>
<td>Introduction to DBMS</td>
</tr>
<tr>
<td>09/02 to 09/08</td>
<td>Semantic Data Modeling</td>
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<tr>
<td>09/09 to 09/15</td>
<td>Semantic Data Modeling</td>
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<td>09/16 to 09/22</td>
<td>Semantic Data Modeling</td>
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<tr>
<td>09/23 to 09/29</td>
<td>Semantic Data Modeling</td>
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<tr>
<td>09/30 to 10/06</td>
<td>Relational Data Modeling</td>
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<tr>
<td>10/07 to 10/13</td>
<td>Basic SQL</td>
</tr>
<tr>
<td>10/14 to 10/20</td>
<td>Advanced SQL / SQL Practice Class</td>
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<tr>
<td>10/21 to 10/27</td>
<td>Mid-term Exam</td>
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<tr>
<td>10/28 to 11/03</td>
<td>Disk Storage and Basic File Structures</td>
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<td>11/04 to 11/10</td>
<td>Indexing</td>
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<td>11/11 to 11/17</td>
<td>Transactions</td>
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<td>11/18 to 11/24</td>
<td>Review for the final exam</td>
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<td>11/25 to 12/01</td>
<td>Thanksgiving (no classes)</td>
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<tr>
<td>12/02 to 12/08</td>
<td>Final Exam</td>
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