

Robbins College of Business and Entrepreneurship Course Syllabus

INF 652: Database Design and Programming



Instructor Name: Professor Walters

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Course Prerequisite: None

Course Description

In this class students learn the concepts of relational databases and the powerful SQL programming language. This course provides the essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, create database objects, and query meta data. In addition, the advanced features of

SQL in order to query and manipulate data within the database are taught.

Tiger Pact

I am a tiger. I belong to a strong unique family who strives for greatness and success. I instill integrity and confidence within others as well as myself. I incorporate honesty and responsibility in all that I do. I am the future.

Title IX Information

FHSU is committed to fostering a safe, productive learning environment. Title IX makes it clear that violence and harassment based on sex, gender and gender identity are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. This includes all types of gender and relationship violence: sexual violence or harassment, domestic and dating violence, and stalking.

If you wish to speak **confidentially** about an incident of gender and relationship violence, talk to someone at The Kelly Center, the Student Health Center, or the Options Sexual and Domestic Violence Campus Advocate who is housed in the Student Health Center.

If you wish to report an incident or have questions about school policies and procedures regarding Title IX issues, please contact Teresa Clouch Assistant Vice President for Student Affairs and the FHSU Title IX Coordinator. Or, you can report to Residential Life Staff or University Police, which are **non-confidential reporters**.

If you are unsure about the reporting status of an individual, ask them directly before disclosing sensitive information. If they are non-confidential, they can direct you to someone you can talk to in complete confidentiality, which does not have to be officially reported.

Course Materials

None

Learner Outcomes

- Identify entities, instances, relationships, and attributes
- Understand the process of data normalization
- Create an Entity Relations Diagram (ERD) based on organizational needs
- Explain the basics of relational databases
- Describe data/column types with regard to efficient database design
- View database design structure and content
- Create a database design by using an efficient structure
- Extract basic database information by using the SELECT command
- Troubleshoot and identify typical syntax warnings and errors
- Delete or modify a database and table row data
- Group query data with aggregation
- Connect data from multiple table rows by using JOIN
- Perform nested subqueries
- Use functions (String, Date, Numerical)
- Explain MySQL storage engines and transactions, and the features of common engines
- Export and import database data
- Obtain database metadata
- Monitor server database performance
- Perform database backup and recovery

Course Delivery and Structure

- Labs, individual projects, collaboration, skills practices, exams.

Grading and Evaluation

Your grade will be evaluated as follows:

Assignment	%	Due Date/Time
UNIT 1: Database Design: Part I		
Practice Activities #1	10%	9/8 NOON CST
Exam #1	5%	9/8 NOON CST
UNIT 2: Database Design: Part II		
Practice Activities #2	10%	9/30 NOON CST
Exam #2	10%	9/30 NOON CST
Database Design Quizzes (average of 11 quizzes)	5%	9/30 NOON CST

UNIT 3: Database Programming: Part I		
Practice Activities #3	10%	10/19 NOON CST
Exam #3	5%	10/19 NOON CST
UNIT 4: Database Programming: Part II		
Practice Activities #4	10%	11/20 NOON CST
Exam #4	10%	11/20 NOON CST
Database Programming Quizzes (average of 17 quizzes)	5%	11/20 NOON CST
Final Project		
*Final Project	20%	12/4 NOON CST

Late work is not accepted in this course.

*Additional requirements for Graduate Students

Grading Scale:

90 - 100%	A	High Honors
80 - 89%	B	Honors
70- 79%	C	Satisfactory
60- 69%	D	Low Level Passing
59% <	U	Failing

How are grades determined?

A. High Honors - Outstanding and distinguished meeting of course objectives. Excellent understanding and appreciation for the depth and breadth of the subject matter. Requirements completed with distinction in regard to quality uniqueness and clarity of presentation. Independently conceived projects or practices related to the field which enhance student's preparation for his professional objectives are developed and carried out in addition to assigned work.

B. Honors - Highly satisfactory and successful meeting of course objectives. Superior interest and understanding of the subject matter. Basic requirements usually completed in a superior manner in regard to the quality of work done, creativity of approach to the task, and general comprehension and knowledge of topic.

C. Satisfactory - Successful and respectable meeting of course objectives. Work is usually completed to meet minimum requirements of assignments; it is free of spelling and English

grammar errors, ready at the appropriate time with sources of information clearly indicated, and is presented in the neat, business-like format expected of an employed individual.

D. Low Level Passing - Work sometimes fails to meet minimum requirements of assignments and often is below the quality generally considered acceptable by an employer.

U. Failing - Failure to meet minimum course requirements. Work is often late, below acceptable standards for written or oral communication, and frequently indicates lack of understanding and/or interest in the subject matter.

Course Policies

- The Instructor reserves the right to make course changes if necessary, and will notify students of these changes through Blackboard announcements and student emails.
- Makeup work is not accepted unless **PRIOR** approval has been granted by the instructor.
- A grade of Incomplete is only granted in extreme cases which are beyond the control of the student.
- All course content is available on Blackboard (syllabus, rubrics, assignment descriptions). It is the responsibility of the student to access and save these files.

University Policies and Services

- **Academic Honesty:**
http://www.fhsu.edu/academic/provost/handbook/ch_2_academic_honesty/
- **Attendance:**
http://www.fhsu.edu/academic/provost/handbook/ch_2_instructional_procedures/
- **Withdrawal:**
<https://www.fhsu.edu/registrar/Semester-Course-Drop-and-Withdrawal-Policy/>
- **Notice of Accessibility and Services for Students with Disabilities:**
 - If you have a disability that may have an impact on your ability to carry out assigned course work and if you wish to seek any accommodations for this course, you must contact Services for Students with Disabilities (SSD). SSD is located in the Kelly Center, Picken Hall, Room 111, 785-628-4401. SSD will review your documentation and determine, with you, what academic accommodations are necessary and appropriate for you that can be accommodated in this course. All information and documentation of your disability is confidential and will not be released by SSD without your written permission.
<http://www.fhsu.edu/kellycenter/accessibility/get-access/index.html>
- **Career Services:** <http://www.fhsu.edu/career/>
- **Kelly Center:** <http://www.fhsu.edu/kellycenter/asp/Academic-Help/>
- **Writing Center:** <http://www.fhsu.edu/WritingCenter/>