



Lincoln University

BA 353
Information Systems Database Management
COURSE SYLLABUS
Fall 2019

Instructor: Prof. Miron Yoffe
Lecture Schedule: Saturday, 12:30 PM – 3:15 PM
Credits: 3 units (45 lecture hours)
Level: Mastery 2 (M2)
Office Hours: Saturday 15:30 PM – 16:15 PM
For additional office hours by appointment
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Textbook: *Modern Database Management*,
Jeffrey A. Hoffer, and V. Ramesh Heikki Topi, 12th Edition,
2016.
ISBN 13: 978-0-13-354461-9 | ISBN 10: 0-13-354461-3
PEARSON
*** Previous editions of this book are okay too ***

Last Revision: August, 2019

REQUIRED MATERIALS

[Companion website for the textbook](#)

[Video Lectures](#)

[Teradata University Database](#)

[Diagramming Software Lucidchart](#)

The study material in the textbook will be supplemented by content posted in the class web site (CANVAS).

COURSE DESCRIPTION

Explanation and comparison of the techniques and methodologies of database management systems in a business environment. Limitation and application of various DBMS; costs and benefits in selecting DBMS. (3 units) **Prerequisites:** BA 160 or BA 350.

COURSE LEARNING OUTCOMES¹

	Course LO	Program LO	Institutional LO	Assessment
1	Ability to analyze organizational data and develop its conceptual data model in form of ERD (Entity Relationship Diagram)	PLO 1	ILO 1b, ILO 2b	In-class discussions, in-class and home assignments.
2	Ability to map conceptual data model into logical data model	PLO 1	ILO 1b, ILO 2b	In-class discussions, in-class and home assignments
3	Ability to map logical data model to physical data model using SQL DDL (Data Definition Language)	PLO 1	ILO 1b, ILO 2b	In-class discussions, in-class and home assignments. Mid-Term Exam.
4	Ability to populate, modify and delete data from database using SQL DML (Data Manipulation Language)	PLO 1	ILO 1b, ILO 2b	In-class discussions, in-class and home assignments. Mid-Term Exam.
5	Ability to implement data queries using SELECT SQL statement	PLO 1	ILO 1b, ILO 2b	In-class discussions, in-class and home assignments. Final Exam.
6	Use theoretical knowledge and advanced problem-solving skills to formulate solutions	PLO 2	ILO 1b, ILO 2b, ILO 4b	Course project
7	Demonstrate autonomy, creativity, and responsibility in developing project MIS	PLO 4	ILO 4b, ILO 5b, ILO 6b	Course project
8	Demonstrate leadership and set strategic objectives for team performance	PLO 5	ILO 4b, ILO 5b	Course project

COURSE OBJECTIVES

To introduce students to database management systems and methods, database context management, the database environment, and the database development process. Students will learn methods of database analysis, data modeling, logical and physical database design and implementation, and the use of SQL.

PROCEDURES AND METHODOLOGY

This is a direct classroom instruction course.

Lecture method is used in combination with a supervised business case study. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Assignments and projects require students to actively use resources of the library. A detailed guide to business resources of the library as well as the description of Lincoln University approach to

¹ Detailed description of learning outcomes and information about the assessment procedure are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

information literacy are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

The course will be delivered through lectures, lab exercises, discussions, homework assignments, quizzes, and projects. Each class usually consists of a lecture session followed by a lab exercise session. All class exercises require Wi-Fi enabled laptops with Internet Explorer or other Web Browsers.

For designing entity relationship diagrams (ERD) we will be using [Diagramming Software Lucidchart](#). For SQL exercises and projects we will be using [Teradata University Database website](#). Every student must register to the Canvas based Course Website. We are using it for providing course materials, monitoring attendance and participation, homework assignments, quizzes, projects, controlling submission time and grading. The homework files are submitted *only* through the Course Website. All homework assignments are due by 1 AM next class. If you are late, you still may use an automatic extension of 8 hours and submit your assignment by 9 AM next class. The Course Website has a built in time cut off function and would not allow submission past the deadline or the deadline extension. No further extension would be provided. Hence, any homework passed the due date extension deadline would not be accepted for grading.

Students are expected to utilize their personal laptop computers, the computer lab, and resources available in the school library.

TIME SPENT ON OUT-OF-CLASS WORK

The estimated time which a student should spend on out-of-class work/assignments in this course is 6 hours every week (about 90 hours for the course).

COURSE PROJECT

Every student must complete and submit an assigned course project no later than two weeks before the end of the semester.

OTHER REQUIREMENTS

All students are required to attend the class. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Students must complete all assignments and take all quizzes, mid-term exam and final exam ON THE DATES DUE. Talking in class, using cell phones, coming late, leaving the room at times other than at break time is not allowed. Plagiarism/cheating will result in the grade “F” and a report to the administration.

TESTING

Your grade will be assigned based on your participation in class, performance on homework assignments, quizzes, project, and exams, as follows:

Activity	%	Notes
Classroom activities	10%	Weekly
Homework Assignments	10%	Weekly
Midterm Exam 1	20%	As Scheduled
Midterm Exam 2	20%	As Scheduled
Final Exam	20%	As Scheduled
Database Project	20%	One term project, to be completed in stages. The project will involve designing and implementing a database system for an organization.
Total	100%	

There will be no make-up for a missed quiz or participation in a classroom activity. No make-up exams will be given unless you have the instructor's prior approval obtained in person before the exam date, except for an extreme emergency. Late assignments will get reduced credit.

EXAMINATION POLICY

The exams are open books exams. No breaks are allowed during the midterm and of the final exams. (I will make alternative testing opportunities where the need for break is medically required and professionally supported by a letter from a medical doctor).

No exchange of pencils, pens, erasers, and any other material between students is allowed. No electronic instrument capable of copying material in any form is allowed in the exam. In particular, cell phones, tape recorders, cameras, etc. must be closed and stored inside a closed bag. Students violating these requirements should expect an F grade, as well as further disciplinary hearing.

GRADING

The final grade will be computed by combining the score of each item in the above table. The conversion from a score grade (S) to a letter grade (L), which is what will be reported to the university, will follow the rules listed below:

100-85	84-80	79-75	74-70	69-65	64-61	60-55	54-50	49-45	44-42	41-0
A	A-	B+	B	B-	C+	C	C-	D+	D	F

If all grades for the midterm and final exams are "F" the term grade for the course is "F" regardless of the grades for the classroom activities, homework assignments and project

COURSE SCHEDULE

Session	Date	Topics	Chapters
1	24-Aug	The Introduction to Databases	1, Video
2	31-Aug	The Database Environment and Development Process	1
3	7-Sep	Modeling Data in the Organization, P1	2
4	14-Sep	Modeling Data in the Organization, P2	2
5	21-Sep	Midterm Exam 1	1, 2
6	28-Sep	Logical Database Design and the Relational Model, P1	4
7	5-Oct	Logical Database Design and the Relational Model, P2	4
8	12-Oct	Introduction to SQL, P1 (DDL)	6
9	19-Oct	Introduction to SQL, P2 (DML but SELECT)	6
10	26-Oct	Midterm Exam 2	4, 6
11	2-Nov	Introduction to SQL, P3 (SELECT)	6
12	9-Nov	Introduction to SQL, P4 (SELECT)	6
13	16-Nov	Advanced SQL (JOINS)	7
14	23-Nov	Final Exam	6, 7
	30-Nov	Fall recess	
15	7-Dec	Projects Presentations	

OTHER COMMENTS

- Please participate. What you put into the class will determine what you get out of it – and what others get out of it.
- Please come **on time**. Late arrivals disturb everyone else. Plan to stay during the whole class period. Attendance will be taken at least one time of each class. In the case where more than one attendance is taken, only students participating in all attendances would be considered as present.
- Students may not read other materials (newspapers, magazines) during class, and no multitasking is allowed.
- Students are not allowed to come and go during class sessions.
- There will be no make-up for a missed participation in a classroom activity.
- If you miss a class, you are responsible for getting notes/slide printouts or the material covered from a classmate.
- To avoid distracting noise in class, cellular phones **must** be turned off or the ringing mode silenced.

ACADEMIC INTEGRITY

I encourage you to collaborate on assignments and learn from your fellow students. However, there is a fine line between collaboration and cheating. Collaboration means discussing problems and solution approaches with other students and independently writing your own answers; cheating means copying solutions from someone else or giving someone else your solutions. If you have questions about what is acceptable, please bring them to me *before* submitting your work.

Cheating, plagiarism and helping others commit these acts are all forms of academic dishonesty, and will not be tolerated. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal.

MODIFICATION OF THE SYLLABUS

The instructor reserves the right to modify this syllabus at any time during the semester. Announcements of any changes will be made in a classroom.