IT 240 Introduction to Databases

2019-2020 Fall
> **Class Time: Tuesday/Thursday @ 3:10 PM- 4:40 PM**
> **Class Location: CDM Center 220**

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> **Office Hours:**
> - **Tuesday 4:40-5:10 PM CDM 220 (please make an appointment via email)**
> - **Thursday 4:40-5:30 PM CDM 220 (please make an appointment via email)**
> - **Skype/Hangouts (please make an appointment via email)**

Course Description

This course will introduce students to the design, implementation and use of databases. Major topics include modeling using ER diagrams, creating and maintaining a database using a PC based application, compose and use queries in Structured Query Language, create and customize forms and reports, and integrate databases with other sources of data and applications.
This is a lecture-based class. This is not a self-paced class. There are weekly deadlines for readings, video lecture viewings, assignments and quizzes. PREREQUISITE(S): None.

Prerequisite Courses and Knowledge

IT 240 does not have any prerequisite courses. However, basic familiarity with computers is assumed. You should be able to create, delete, and move folders (directories) on your computer. You should be comfortable using the World Wide Web. You should know how to install basic software on your computer. If you are not able to meet any of these requirements, please see the instructor to discuss whether or not you are equipped to take this course.

Grading Breakdown

Attendance/Participation/Online Discussion	10%
Homework Assignments	**40%**
Midterm	20%
Final Project	30%

Grading Scale			
>= 92 and < 100 A	>= 88 and < 90 B+	>= 78 and < 80 C+	>= 68 and < 70 D+
>= 90 and < 92 A-	>= 82 and < 88 B	>= 72 and < 78 C	>= 60 and < 68 D
	>= 80 and < 82 B-	>= 70 and < 72 C-	
Below 60 = F			

Course Policies
Attendance/Participation

There are three keys to success in this class:
1. Attend class and participate in lectures
2. Read the assigned pages (textbooks are online)
3. Do the assignments (Quizzes/Assignments/Final Project)

To encourage you to attend class, your attendance and participation is part of your grade – these are free points as long as you attend and participate! We will cover attendance details in the Course Policies section below.

Also be aware all lectures may be recorded in this classroom regardless you are still expected to attend all class lectures.

Assignments

ALL assignments **MUST** be submitted on time. If you miss the deadline a ***zero*** will be recorded for that assignment. **NO** late assignments will be accepted. However, things do happen, so for this reason, the lowest assignment score will be dropped in the calculation of your final grade.

Do **not** rely on DePaul to retain any files you save on a lab computer. Lab computers are rebuilt even during an academic quarter. You must either use an USB memory stick or an HTML based cloud storage solution (e.g. Dropbox).

All assignments are open book, open notes, and you may use the Internet but there is no collaboration – assignments are to be done individually.

Make sure that you submit the correct assignment! It is up to the student to ensure that their attachment is not empty, contains the appropriate files, and it actually works as intended. Accidentally submitting, say, the previous week's assignment will be graded as a *zero* (wrong assignment) and late assignments are not accepted.

Exams

A midterm exam will be held in class during the quarter (check the lesson plan). A final exam will be on finals week – time to be announced.

*You **need to be present** for these two exams. **No makeup exams** will be provided.* If a catastrophic event occurs, please work through the Dean of Students.

Exams will be held in the same room as lectures (online students will proctor the exams). All computers/phones will need to be either off or logged out. If you are caught using a computer/phone during either exam you will receive a *zero* for that exam.

How to Contact Me

My contact information is on page one of this syllabus. I try to check emails regularly throughout the day. Sometimes I can reply to emails within an hour or two, sometimes it does take several hours before I get to them. However, I do make every attempt to answer all emails within 24 hours. In the event that this does not happen, please feel free to resend the email. You don't have to "apologize for disturbing" me as the fault is mine! I never ignore emails, so if you do not receive a response from me, you may assume that the email got lost in the pile somewhere or ended up in my spam folder.

When e-mailing me, it is *very* important that you include your name and course number in the subject. I have a pretty stringent spam-filter on my e-mail, so if you don't do this, your e-mail may well end up in my spam folder. You should use the following example:

Subject: {insert your full name here}, IT 240, question about inline styles

Please only use my phone in an emergency or if we have a confirmed appointment and I am not there.

Real-Time Communication

I understand that sometimes instant communication is better for some questions. If you cannot make it to my office hours, I am more than happy to speak with students by phone or by Skype. If you wish to schedule an appointment, please email me with at least 2-3 possible times that are good for you, and I will email you back with a confirmed appointment time. **You should use the following example** *(these are not my office hours)*:

Subject: {insert your full name here}, IT 240 – Online Meeting Request

Body: I would like to meet with you to discuss {insert topic here}. My available times are:

1. Wednesday 2:00 PM – 5:00 PM
2. Friday 4:00 PM – 9:00 PM
3. All day/night Saturday

Asking for Help

There are **many** options here:

Discussion Forum: If everyone participates the discussion forum is a great resource to post questions and help each other out. While it is always great to help out fellow students, please do not simply fix other people's problems – help them find the solution. A major part of learning is struggling through the tricky parts, reviewing concepts, and looking things up until the light bulb comes on. Still, there is nothing wrong with giving hints to point people in the right direction.

When making a forum post, **PLEASE** put a clear description of your topic you are posting about in the subject line! It will help you get better responses.

Instructor: I am always a resource for you. However, I do prefer that you exhaust your other options first. One learns by overcoming the question not by given the answers. By speaking with your classmates via discussion group or in person you both will learn. Also, other students can benefit from questions you may have. If you have questions of a personal nature such as a dispute on the grade assigned by the course grader, then by all means bring it to my attention. If you cannot get the answers you need follow the instructions in the "How to Contact Me" section above.

Asking Classmates - Come to Class Early! The goal of assignments is to practice the concepts taught in class. You are expected to do your own assignments. However, some collaboration with other students is allowed and even encouraged. The following types of collaboration are allowed:

- Discussing strategies for solving a problem
- Reviewing and testing someone else's network design (e.g. *"I think your subnet calculation is wrong."*)

The following types of collaboration are **NOT** allowed:

- *Copying someone else's design, work, or answer (this includes students and tutors)*
- *Literally telling someone what to write for an assignment or lab*

Engaging in these last types of collaboration will be considered a violation of the university's policy on academic integrity. Violators will receive a **zero** for the corresponding assignment and will be reported as required by the policy.

Tutoring Center: There is a tutoring center at CDM. You can find out [more information here](#). Also be aware that the Tutor is expected to follow the same guidelines as your fellow students when assisting you.

Textbooks and Printed Resources

Database Concepts
8th Edition
David M. Kroenke (Author), David J. Auer (Author), Scott L. Vandenberg (Author), Robert C. Yoder (Author)
Pearson Education, Inc.
ISBN-10: 013460153X
ISBN-13: 978-0134601533

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L, and this document will be updated with a new version number and revision notes.

Week-by-week Assignments/Readings

See D2L for assignments and readings. A weekly lesson plan is also posted on D2L and will be revised if assignments change.

Getting Started

Course Management System

Desire 2 Learn (D2L) https://d2l.depaul.edu will contain all the course content, assignments, and grades. It is your responsibility to keep up with all class materials through this website. You will also be required to submit your work through D2L.

To get started, navigate to Desire 2 Learn (D2L) at https://d2l.depaul.edu. This is your one-stop-shop for the entire course. Be sure to bookmark it in your browser.

Once you have the course page bookmarked, you will have easy access to all of the lectures, lecture notes, quizzes, assignments, etc. that you will need for the course. While there may be a slight learning curve the first few times you navigate to the site, it should not take long before you develop some comfort with it.

It is strongly suggested you enable notifications in D2L so you get emails when items are posted or changed.

College Policies

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to providing you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in CampusConnect.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. Please note that while I do not object to students working side-by-side on an assignment, each student is responsible for their own work. It is okay to ask a colleague to help you work out a bug or similar, but it is not acceptable for them to simply solve a problem for you. Similarly, it is not acceptable for two students to submit essentially an identical assignment with only cosmetic changes between the two. Each student must complete a unique assignment.

More information can be found at http://academicintegrity.depaul.edu/. If you have any questions, please see the previous Assignment section or consult with the instructor.

Incomplete

An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final, and approved by the Dean of the College of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request. Incompletes are only granted when the large majority of the course work has already been completed.

Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at: cdm.depaul.edu.

Important Dates (always refer to the authoritative links above for the current date):
- Last day to drop without a penalty (100% tuition refund) is Tuesday, September 14th, 2019.
- Last day to withdraw (no refund) is Tuesday, October 29th, 2019.

Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential to the extent possible. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at:

Loop Campus - Lewis Center #1420 - (312) 362-8002 Fax: (312)362-6544 TTY: (773)325.7296
Lincoln Park Campus - Student Center #370 - (773) 325-1677
csd@depaul.edu

Any student that feels they will need assistance in the event an evacuation is necessary should notify DePaul's Office of Public Safety (312-362-8400).

Other

Attendance: For in-class sections, students are expected to attend each class and to remain for the duration. Coming 15 minutes late or leaving 15 minutes early constitutes an absence for the student. The overall grade for participation drops one-third after any absence. Three absences for any reason, whether excused or not, may constitute failure for the course. Attendance will be factored into your final grade.

Class Discussion: Whether in-class or online, student participation in class discussions will be measured in two ways. First, students are highly encouraged to ask questions and offer comments relevant to the day's topic. Participation allows the instructor to "hear" the student's voice when grading papers. Secondly, students will be called upon by the instructor to offer comments related to the reading assignments. Students must keep up with any assigned readings to participate in class discussion.

Attitude: A professional and academic attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others when the instructor is speaking, mocking another's opinion, cell phones ringing, emailing, texting or using the Internet whether on a phone or computer. If any issues arise a student may be asked to leave the classroom. The professor will work with the Dean of Students Office to navigate such student issues.

Civil Discourse: DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be Socially Responsible Leaders. It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student. Any instances of disrespect or hostility can jeopardize a student's ability to be successful in the course. The professor will partner with the Dean of Students Office to assist in managing such issues.

Cell Phones/On Call: If you bring a cell phone to class, it must be off or set to a silent mode. Should you need to answer a call during class, students must leave the room in an undisruptive manner. Out of respect to fellow students and the professor, texting is never allowable in class. If you are required to be on call as part of your job, please advise me at the start of the course.

Student responsibilities: Each student is responsible for their time management and for meeting the expectations in the syllabus. The instructor is not responsible for reminding students of assignment deadlines in class. In the event of an absence, it is the student's responsibility to contact the instructor regarding the absence and the topics covered in class. If an assignment is

listed on the syllabus, you are still responsible for completing the assignment on time.

Learning Outcomes

Learning Domain Description

IT 240 Introduction to Databases is included in the Liberal Studies program as a course with credit in the Scientific Inquiry domain. Courses in the Scientific Inquiry domain are designed to provide students with an opportunity to learn the methods of modern science and its impact on the world around us. Courses are designed to help students develop a more complete perspective about science and the scientific process, including: an understanding of the major principles guiding modern scientific thought; a comprehension of the varying approaches and aspects of science; an appreciation of the connection among the sciences; the fundamental role of mathematics in practicing science; an awareness of the roles and limitations of theories and models in interpreting, understanding, and predicting natural phenomena; and a realization of how these theories and models change or are supplanted as our knowledge increases.

Learning Outcomes

After completing this course, students will be able to:

- Understand foundational database topics and concepts
- Create databases with Data Definition Language (DDL)
- Insert, Update, and Delete data with Data Manipulation Language (DML)
- Write and execute Query (SQL)

Learning Outcomes for Scientific Inquiry-Elective (SI-Elective) courses

1. Students will be able to apply appropriate concepts, tools, and techniques of scientific inquiry.
2. Students will be able to describe how natural scientific, mathematical, and/or computational methodologies function as mechanisms for inquiry.
3. Students will be able to explain the interaction between the content of their SI-Elective course and other scientific disciplines or the broader society.

How Learning Outcomes Will Be Met

These learning outcomes will be met through homework and lab assignments that will include: short answer questions that will require the application of networking concepts covered in class, labs in which the student will observe and analyze how traffic passes through a network, situational problem-solving, and researching recent security hacks and vulnerabilities.

Writing Expectations

Writing is integral for communicating ideas and progress in science, mathematics and technology. The form of writing in these disciplines is different from most other fields and includes, for example, mathematical equations, computer code, figures and graphs, lab reports and journals. Courses in the SI domain must include a writing component where that component takes on the

form appropriate for that course (e.g., *lab reports, technical reports, etc.).* In this course, students will be given a writing assignment in the form of a Technology Report, where they will be expected to research a recent security breach or hack and discuss how this attack was performed and how it could be mitigated*.*

How Writing Expectations Will Be Met

In the course students will be required at times to provide clearly written summaries explaining a database management system. The student will also be required to explain their own reasoning accompanied by specific examples from the text and lecture.

Revision History

1.0 Initial Version