

**CIS 4301-115 Database Theory and Practices**  
Summer 2018  
Texas A&M University - Central Texas

**INSTRUCTOR AND CONTACT INFORMATION**

**Instructor:** Emmet Gray

**Office:** FH 323N

**Phone:** (254) 519-5784, COBA Admin - (254) 519-5437

**Email:** Canvas Inbox (preferred) or TAMUCT email (e.gray@tamuct.edu)

**Office Hours:**

Tue/Thr 1:45-2:45. Also, I can meet with students at the university by appointment.

**Mode of instruction and course access:**

This is a face-to-face course that makes extensive use of the TAMUCT Canvas Learning Management System (<https://tamuct.instructure.com>). The course syllabus, schedule, supplemental readings, class announcements, power point slides, learning modules, homework assignments, exams and other course related documents will be posted on Canvas. Each student is responsible for the posted material, and should check Canvas several times a week for updates.

**Student-instructor interaction:**

I typically respond to Canvas email within 24 hours except on weekends. I am available to meet with students at the university by appointment outside of the normal office hours.

**911 Cellular:**

Emergency Warning System for Texas A&M University – Central Texas

911Cellular is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in 911 Cellular through their myCT email account.

Connect at 911Cellular [<https://portal.publicsafetycloud.net/Texas-AM-Central/alert-management>] to change where you receive your alerts or to opt out. By staying enrolled in 911Cellular, university officials can quickly pass on safety-related information, regardless of your location.

## COURSE INFORMATION

### **Course Overview and description:**

Database concepts and structures. File and data management principles underlying database construction. Fundamental types of database models, with an emphasis on relational databases, as well as on major non-relational forms. Practice in analysis, design, development, and optimization of working database applications on a variety of problems. Small and large system databases are considered

### **Course Objective:**

This course covers the essential database concepts required for developing databases for business users. Particular emphasis is given to cover the increasing use of Internet, commonly available analysis tools, and big data.

### **Student Learning Outcomes:**

A student successfully completing this course will be able to:

- Explain the role of databases and database applications in business.
- Use data modeling to create relational databases.
- Describe and distinguish among normalized forms
- Design entity-relationship diagrams using standard notation
- Transform data models into database concept designs using referential integrity constraints
- Create SQL statements for constructing database components and for retrieving information from databases.
- Describe the special needs of multi-user databases and techniques to control data concurrency issues.
- Explain the difference between two and three-tier client/server architecture

### **Competency Goals Statements (certification or standards):**

Section not used

### **Required Reading and Textbook(s):**

Required:

*Database Processing: Fundamentals, Design, and Implementation, 14th Edition*  
David M. Kroenke, and David J. Auer  
Pearson Education  
ISBN: 978-0-13-387670-3

*Note: An electronic version of the book may be available.*

*Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.*

**Supplemental Material:** The course textbook will be supplemented with other materials including lecture notes, handouts, oral presentations, industry articles, research paper readings, case studies, Power Point presentations etc.

**Required Reading:** The student is expected to read and review all material presented in the assigned chapter prior to class.

# COURSE REQUIREMENTS

## Course Requirements

**Examinations:** There will be two exams, one midterm and one final exam. Each is worth 15 points. The midterm covers chapters 1-6 and the final covers chapters 7-12. Exams will be taken during class and will be timed.

**Quizzes:** There will be 6 take-home small quizzes. Each quiz is worth 5 points. The quizzes will be available via Canvas for a short period of time (typically 1 week), be completed in one session, and be will timed.

**Assignments:** There will be 6 take-home assignments. Each assignment will be worth 5 points. Assignments will typically be available on Canvas for 2 weeks. Multiple submissions are typically allowed. If an assignment has multiple files, you will be required to “zip” the files prior to submission via Canvas.

**Term Project:** There will be 1 group term project that will be worth 10 points. This will include a presentation by the group. There will be a peer evaluation for each group member.

Item	Quantity	Points	Total	Percent
Exams	2	15.00	30.000	30%
Quizzes	6	5.00	30.000	30%
Assignments	6	5.00	30.000	30%
Term Project	1	10.00	10.000	10%
Total			100.000	100%

## Grading Criteria Rubric and Conversion

**Exams & Quizzes:** Exams and quizzes will receive a numeric score (0-100) each. Scores will be converted to points and totaled as shown in the example below:

Quiz	Score	Percent	Max Points	Points
Quiz 1	95	95%	5.00	4.75
Quiz 2	100	100%	5.00	5.00
Quiz 3	80	80%	5.00	4.00
Quiz 4	85	85%	5.00	4.25
Quiz 5	86	86%	5.00	4.30
Quiz 6	88	88%	5.00	4.40

**Requirements for Assignments:** Assignments must follow the requirements as stated in the Canvas assignment system; demonstrate the concepts; get proper results; use best practices, and use proper English.

The following grading rubric is used for assignments:

Criterion	% of Grade	Excellent (100%)	Adequate (80%)	Poor (60%)	Not Met (0%)
Assignment Requirements	20%	Meets all of the requirements of the assignment	Minor details of the requirements are missing	Significant details of the requirements are missing	Significant portions of the requirements are missing
Chapter Specific Objectives	35%	Fully demonstrates the concepts of the chapter	Applies major and minor concepts of the chapter	Applies only major concepts of the chapter	Chapter concepts not in evidence
Gets proper results	25%	No Errors, Gets Proper Results	Minor errors, Gets Proper Results	Minor errors, does not produce proper results	Does not produce proper results
Best Practices	15%	Database uses best practices at every opportunity	Minor issues with best practices	Large portions have best practices issues	No best practices in evidence
Spelling / Grammar	5%	No more than 1 issue	Between 2-5 issues	Between 5-10 issues	>10 issues

**Conversion:** Numeric scores are converted to letter grades as follows:

*Note: I do not round up numeric scores*

Grade	Points	Percent
A	90 - 100 points	90 - 100%
B	80 - 89 points	80 - 89%
C	70 - 79 points	70 - 79%
D	60 - 69 points	60 - 69%
F	0 - 59 points	0 - 59%

**File Naming Convention:** Submit your assignments via Canvas using file names with the following format:

CIS4301 [AssignmentID] [LastName.FirstName].[extension]

Example:

CIS4301 Assignment1 Doe.John.zip

**Late Policy:** Exams, Quizzes, and Assignments are due by midnight on the date assigned in Canvas. Typically, this is 11:59 PM on either Tuesday or Thursday. A 5-point penalty will be assessed for each day a requirement is late.

**Posting of Grades**

All student grades will be posted on the Canvas Grade Book and students should monitor their grading status through this tool. Grades will be posted within 7 days after of the due date.

## COURSE OUTLINE AND CALENDAR

### Complete Course Calendar

Class	Date	DOW	Class Activity	What's Due	Notes
1	06/05/2018	Tue	Intro & Chapter 1	Syllabus Quiz	
2	06/07/2018	Thr	Chapter 2	Assignment 1	
3	06/12/2018	Tue	Chapter 3	Quiz 1	
4	06/14/2018	Thr	Chapter 3	Assignment 2	
5	06/19/2018	Tue	Chapter 4	Quiz 2	
6	06/21/2018	Thr	Chapter 5	Assignment 3	
7	06/26/2018	Tue	Chapter 6, Review	Quiz 3	
8	06/28/2018	Thr	Midterm	Midterm	
9	07/03/2018	Tue	Chapter 7	Assignment 4	
10	07/05/2018	Thr	Chapter 8	Quiz 4	
11	07/10/2018	Tue	Chapter 9	Assignment 5	
12	07/12/2018	Thr	Chapter 10A	Quiz 5	
13	07/17/2018	Tue	Chapter 10A	Term Project	Group
14	07/19/2018	Thr	Chapter 11	Quiz 6	
15	07/24/2018	Tue	Chapter 12, Review	Assignment 6	
16	07/26/2018	Thr	Final	Final	

## Important University Dates

Date	Activity
06/01/2018	Priority Deadline to Submit Graduation Application
06/01/2018	Tuition and Fee Payment Deadline
06/04/2018	Class begins (1st 5 week, 10 week and 8 week)
06/04/2018	ADD/DROP/LATE REGISTRATION BEGINS
06/07/2018	Last day to drop 1st 5-week classes with no record
06/11/2018	Last day to drop 8-week classes with no record
06/12/2018	Last day to drop 10-week classes with no record
06/22/2018	Last day to drop a 1st 5-week class with a Q or withdraw with a W
06/22/2018	Student End of Course Survey Opens ( 1st 5-Week Classes)
06/29/2018	Deadline for Admissions applications
06/29/2018	Deadline for submission of final theses to Office of Graduate Studies
06/28/2018	Last day to drop a 8-week class with a Q or withdraw with a W
07/02/2018	Finals Week First 5 week session
07/02/2018	Deadline to submit application to Teacher Education Program
07/04/2018	Independence Day
07/05/2018	Last day to withdraw from the university (1st 5- week session students)
07/06/2018	1st 5 week classes end
07/06/2018	Deadline to Submit Graduation Application for Ceremony Participation
07/08/2018	Student End of Course Survey Opens (1st 5-Week Classes)
07/09/2018	2nd 5 week classes begin
07/09/2018	Grades due from faculty by 3pm (1st 5 week classes)
07/09/2018	ADD/DROP/LATE REGISTRATION (2nd 5-week sessions)
07/12/2018	Last day to drop 2nd 5-week classes with no record
07/13/2018	Student End of Course Survey Open ( 8-Week Classes)
07/20/2018	Last day to drop a 10-week class with a Q or withdraw with a W
07/23/2018	Finals Week - Summer 8 week session
07/27/2018	Last day to drop a 2nd 5-week class with a Q or withdraw with a W
07/27/2018	Last day to withdraw from the University (8 weeks session students)
07/27/2018	8 week classes end
07/29/2018	Student End of Course Survey Close (8-Week Classes)
07/29/2018	Student End of Course Survey Opens (10-Week and 2nd 5-Week Classes)
07/30/2018	Grades due from faculty by 3pm (8 week classes)



# TECHNOLOGY REQUIREMENTS AND SUPPORT

## Technology Requirements.

This course will require that you produce Microsoft Word and Visio documents. Students may be able to obtain copies of Microsoft Office products through the University (see: <https://tamuct.onecampus.com/task/all/office365-software>)

In addition, you will need to acquire the free Microsoft SQL Server 2017 Express Edition and the Microsoft SQL Server Management Studio for use at home.

This course will use the TAMUCT Instructure Canvas learning management system.

Logon to TAMUCT Canvas [<https://tamuct.instructure.com>]

Username: Your MyCT username

(xx123 or everything before the "@" in your MyCT e-mail address)

Password: Your MyCT password

## Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

## Other Technology Support.

For log-in problems, students should contact Help Desk Central.

24 hours a day, 7 days a week:

Email: [helpdesk@tamu.edu](mailto:helpdesk@tamu.edu)

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [<http://hdc.tamu.edu>]

*Please let the support technician know you are an A&M-Central Texas student.*

Technology issues are not an excuse for missing a course requirement – make sure your computer is configured correctly and address issues well in advance of deadlines.

## **COURSE AND UNIVERSITY RESOURCES, PROCEDURES, AND POLICIES**

### **Drop Policy.**

If you discover that you need to drop this class, you must complete a Drop Request Form [[https://www.tamuct.edu/registrar/docs/Drop\\_Request\\_Form.pdf](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf)].

Professors cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed, signed and returned. Once you return the signed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

### **Academic Integrity.**

Texas A&M University -Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student's academic performance and includes, but is not limited to, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be reported to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

### **Academic Accommodations.**

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier free education. The Department of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the University's programs, services and activities. If you believe you have a disability requiring reasonable accommodations please contact the Department of Access and Inclusion at (254) 501-5831. Any information you provide is private and confidential and will be treated as such.

For more information please visit our Access & Inclusion webpage [<https://www.tamuct.edu/student-affairs/access-inclusion.html>].

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant

and/or parenting in seeking accommodations related to pregnancy and/or parenting. For more information, please visit <https://www.tamuct.departments/index.php>. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these requirements and guidelines online, please visit the website [<http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf>].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender – including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Division of Student Affairs at 254-501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

### **Tutoring.**

Tutoring is available to all A&M-Central Texas students, both on-campus and online. On-campus subjects tutored include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111. If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, or any other question, contact Academic Support Programs at 254-519-5796, or by emailing Dr. DeEadra Albert-Green at [deadra.albertgreen@tamuct.edu](mailto:deadra.albertgreen@tamuct.edu).

Chat live with a tutor 24/7 for almost any subject on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log-in and receive FREE online tutoring and writing support. This tool provides tutoring in over forty subject areas. Access Tutor.com through Canvas.

### **University Writing Center**

Located in 416 Warrior Hall, the University Writing Center (UWC) at Texas A&M University-Central Texas is a free workspace open to all TAMUCT students from 10am-5pm Monday-Thursday with satellite hours in the University Library Monday-Thursday from 6:00-9:00pm. Students may arrange a one-on-one session with a trained and experienced writing tutor by visiting the UWC during normal operating hours (both half-hour and hour sessions are available) or by making an appointment via WOnline at [<https://tamuct.mywconline.com/>]. In addition, you can email Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu) to schedule an online tutoring session. Tutors are prepared to help writers of all levels and abilities at any stage of the writing process.

While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading,

understanding proper citation practices, or just want a quiet place to work, the University Writing Center is here to help!

If you have any questions about the University Writing Center, please do not hesitate to contact Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu).

### **University Library.**

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 72,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On-campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available twenty-four hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place on Skype or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our Library website [<https://tamuct.libguides.com/>].

## **INSTRUCTOR POLICIES**

### **Policies related to absence, grading, etc.**

- You are responsible for all class material presented during an absence.
- All work is submitted through Canvas and due on the specified due date/time.
- A penalty of 5 points per day is applied to late Exams, Quizzes, and Assignments.
- Most assignments can be submitted multiple times, even after grading
- Missed exams, quizzes, and assignments will receive a grade of zero.

### **My Personal Statement**

- You will receive feedback in the form of graded assignments within 7 days after the due date.
- I want you to read the feedback that I provide to you (your personal grading notes, Canvas emails, and Canvas discussion forums).
- I am almost always available via email and typically respond within 24 hours except on weekends.
- I prefer email over phone conversations

### **Copyright Notice.**

Section Not Used