

CIT365: Database Management

Course Syllabus – Fall 2018, TR 8:00 AM – 9:15 AM, ML 119

Instructor : Brian M. Morgan

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Office Phone Number : (304) 696-6469

Office Hours : MWF: 8:30a – 10:30a

Other times by appointment ONLY please. My schedule is very busy during the semester, so please try to schedule appointments as far in advance as possible. It is often very difficult to set up appointments less than 24 hours in advance.

You can always search the hash tag #CIT365 on Twitter as I will update what we cover each day in class this semester: <http://twitter.com/brianmmorgan/>

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Text : (304) 634-6736 (include who you are first text)

University Policies : By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to <http://www.marshall.edu/academic-affairs/policies/> Academic Dishonesty / Excused Absence Policy for Undergraduates / Computing Services Acceptable Use / Inclement Weather / Dead Week / Students with Disabilities / Academic Forgiveness / Academic Probation and Suspension / Academic Rights and Responsibilities of Students / Affirmative Action / Sexual Harassment
E-mail Info: <http://www.marshall.edu/it/office365/>

Textbook:

The following textbooks/readings are required for the course:

Database Systems Design, Implementation and Management (13th ed.), by Coronel and Morris; Cengage Learning; ISBN: 978-1-337-62790-0, 2019.

Computer Requirements:

Supplemental materials can be found contained within the Blackboard Learn environment

(<http://www.marshall.edu/muonline/>). I will send class announcements, updates, etc. using your Marshall email. Access to a web browser is required, as is Adobe Acrobat Reader (<http://get.adobe.com/reader/>), and Visio 2016 Professional (or LucidChart - <https://www.lucidchart.com/pages/usecase/education>). Visio is available for free to students enrolled in this course (see <http://www.marshall.edu/cos/software/> for specifics).

Course Description:

Covers the logical and physical structures of data stored and retrieved from a relational database. Exposure to distributed databases, database administration and structured query language will also be provided.

Credit:

The course is three (3) credit hours. It includes lectures, exams, homework assignments, and a semester project. Students will participate in various forms of assessments that illustrate the implementation of concepts in general applications.

Pre/co-requisites:

N/A

Desired Objectives/Outcomes:

By the end of this course, you should be able to:

Course Student Learning Outcomes	How Practiced in this Course	How Assessed in this Course
Students will Identify problems for which database solutions are suitable	In-class examples, discussions, Chapter 1 review questions	Exam 1; Project Deliverable 1
Students will construct conceptual and logical data models based upon a set of information requirements	In-class examples, discussions, Chapters 2, 3, 4, and 6 review questions	Homework 1, 2, and 3; Exams 1 and 2; Project Deliverable 2
Students will translate data model specifications for a relational database	In-class examples, discussions, Chapters 3, 4, and 6 review questions	Homework 3 and 4; Exams 1 and 2; Project Deliverable 2;
Students will discuss and show and understanding of the fundamentals of SQL	In-class examples, discussions, Chapters 7 and 8 review questions	Homework 5; Exam 3; Project Deliverable 3
Students will discuss the significance of database security and integrity	In-class examples, discussions, Chapters 9, 10, 12, 13, and 16 review questions	Exam 4
Students will implement a database application using MySQL	In-class examples, discussions	Project Deliverable 3
Students will identify requirements for & analyze a problem, implement a solution for the problem, & verify the solution, using DBs	In-class examples, discussions, Chapters 1 through 16 (minus chapters 5, 11, 14, and 15) examples	Project Deliverable 1, 2, and 3

Instruction method:

There will be 3 contact hours of classroom lecture per week. Projects covering major topics are part of the course. Students may work on their assignments/projects in University computing facilities or from their place of residence with an Internet connection.

Evaluation method:

Evaluation of student's performance will be based on the quality of your performance on projects, homework assignments, and exams.

Grading Policy:

4 in-class Exams (Exam 1–120pts, Exam 2–120pts, Exam 3–100pts, Exam 4-110pts)	450 points
Homework Assignments (30 points each)	150 points
Semester Project (Deliverable 1 – 100pts, Deliverable 2 – 150pts, Deliverable 3 – 150pts)	400 points
Attendance	0

Assessment of Projects:

The grading of all homework assignments and projects will take into account:

1. Although the most important attribute of an assignment is correctness, grading will take into consideration efficiency, **documentation**, etc.
2. Although interactions with other students are encouraged, you must compose your own answers, unless otherwise noted.

Individuals who utilize other people's thoughts or ideas must provide appropriate references to said resources, including any and all web resources consulted. Failure to provide such documentation will result in a failing grade for the assignment and may result in a failing grade for the course.

Final letter grades are determined based on the following grading scale:

895 – 1000 points	A
795 – 894 points	B
695 – 794 points	C
595 – 694 points	D
Less than 595 points	F

The instructor reserves the right to change these values depending on the overall class performance and/or extenuating circumstances. Incompletes are rarely given and only in the case of a true emergency. I am unwilling to assign an Incomplete grade for students who find they have fallen behind on assignments, missed a test, or taken on too much in terms of schooling or work responsibilities. For these situations, if you are still within the university deadlines, dropping the course may be more appropriate.

Additional Policy Statements:

My Academic Dishonesty Policy

Academic Dishonesty is defined as any act of a dishonorable nature which gives the student engaged in it an unfair advantage over others engaged in the same or similar course of study and which, if known to the classroom instructor in such course of study, would be prohibited. Academic Dishonesty will not be tolerated as these actions are fundamentally opposed to "assuring the integrity of the curriculum through the maintenance of rigorous standards and high expectations for student learning and performance" as described in Marshall University's Statement of Philosophy.

If you are found cheating on projects or plagiarizing answers from the Internet or other sources (among other things), **there will be no second chance**. Your penalty is that you will receive a failing grade for the course. In cases in which the offense is particularly flagrant or where there are other aggravating circumstances, additional, non-academic, sanctions may be pursued through the Office of Judicial Affairs. Notice of an act of academic dishonesty will be reported to the Department Chair, Dean of the College of Science, and to the Office of Academic Affairs. Please refer to the Marshall University Undergraduate Catalog for a full definition of academic dishonesty.

Assignments/Projects: The course includes several assessments in the form of homework and projects. All assessments are due **BY THE BEGINNING OF CLASS** on their due date and must be submitted through the Blackboard Assignments Tool. **NO LATE ASSIGNMENTS WILL BE ACCEPTED**. Homework deadlines will not be extended because you waited too late to start or because you did not allocate enough time before the deadline to work on it; likewise, they will not be extended

because of hardware or network failure. If you wish to receive any credit for an assignment, you must submit whatever you have done, even if it is incomplete, by the deadline. Partial credit is usually preferable to no credit.

Please do not procrastinate in working on your assignments or trying to submit through Blackboard as many others have done in the past. If you wait until the night before a project is due to start on the project or the last minute to submit, chances are, you will fail. If you leave an assignment for the last minute and there are technical problems, you still must turn in whatever you have by the deadline.

You may submit multiple versions of assignments before the deadline as I will grade the latest pre-deadline submission. This is to encourage you to turn assignments in early (since you will know that you can always turn in an improved version if further inspiration arises).

Exams: There are FOUR exams worth 45% of your overall grade. The first will come after Chapter 3, the second after Chapter 6, the third after Chapter 8, and the fourth after Chapter 16. Exact dates and times of these exams will be announced in class.

Make-up Exams and Late Penalty: Make-up exams will not be given except under unusual circumstances and satisfactory written justification. Any student who misses an exam due to an unexcused absence will receive a grade of zero for that exam with no opportunity for make-up or substitution. University excused absences or those occurring with a good reason (and that reason must be given prior to missing the exam – call and leave a message if you have to) will be excused. Make up exams must be taken within one week of the original scheduled date. The decision whether to give a make-up exam rests with the instructor.

Attendance Statement:

Regular attendance is expected. If you miss class, it is your responsibility to catch up on material missed, and it will not be my responsibility to catch you up on material missed during office hours, or re-lecture to you. "I wasn't there that time" is never an acceptable excuse. Please attempt to come to class on time, with your headphones put away and your cell phones turned off. If you must arrive late or leave early, please do so with the least possible distraction to other students.

Policy for Students with Disabilities

Marshall University is committed to equal opportunity education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disability Services (ODS) in Prichard Hall 117 (304.696.2467) to provide documentation of their disability. Following this, the ODS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experiences, outside assignment, testing, and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, access the website for the Office of Disabled Student Services: <http://www.marshall.edu/disabled>

Withdrawal Policy:

The University withdrawal policy is followed in this course. The last day to drop an individual course for the Fall Semester is October 26, 2018.

University Holidays:

The class is officially dismissed on the following dates:

Fall Break/Thanksgiving	November 20, 2018
	November 22, 2018

Topics and Methodology:

The following outline delineates the tentative class schedule with topics to be addressed during the course. Please note this is a tentative schedule and it may change upon class progress:

August 21	Overview of Course and Syllabus, Introduction to Blackboard (if needed). Overview of how to access course mySQL server. Introduction of Semester Project
August 23	Chapter 1
August 28	Chapter 2
August 30	Chapter 2
September 4	Chapter 3
September 6	Chapter 3 Homework #1 Due (Chapter 2 Problems (not review questions), #'s 13, 14, 15 and 16)
September 11	Chapter 4 Review for Exam 1
September 13	Exam 1
September 18	Chapter 4 Homework #2 Due (Chapter 3 Problems (not review questions), #'s 17, 18, 19, 20, 21 and 25 (25 uses Fig 3.24 as its basis))
September 20	Chapter 4
September 25	Chapter 4
September 27	Chapter 6
October 2	Chapter 6 Review for Exam 2 Homework #3 Due (Chapter 4 Problems (not review questions), #'s 3, 6 and 8). For each problem, substitute the written requirements for what you must submit with a complete Crow's Foot ERD. At a minimum, you must include all relationships of proper type, PKs, and FKs.
October 4	Exam 2
October 9	Chapter 7
October 11	Chapter 7 Homework #4 Due (Chapter 6 Problems (not review questions), #'s 4, 6, and 9. NOTE: the last professor should have an EMP_NUM. It is NOT null.
October 16	Chapter 7
October 18	Chapter 8
October 23	Chapter 8
October 25	Chapter 8

October 30	Homework #5 Due (Chapter 7 Problems (not review questions), #'s 1, 2, 3, 4, 5, 6, 7, 8, 21 and 23. Use the appropriate figures to view the database structures for the questions) Review for Exam 3
November 1	Exam 3 Project Deliverable #1 (Data Dictionary) Due
November 6	Chapter 9
November 8	Chapter 10
November 13	Chapter 12
November 15	Chapter 13 Project Deliverable #2 (Crow's Foot ERD) Due
November 27	Chapter 16 Review for Exam 4
November 29	Exam 4
December 4	Dead Week – Tomato Day
December 6	Dead Week – Tomato Day Project Deliverable #3 (Implemented Database) Due

For each topic discussed in the textbook, specific experience of other students and the instructor will be discussed to enhance the characteristics involved. Hands-on projects for the course will be based on creating databases for either real-world or fictitious needs. Additional material may also be covered in the class.

Every student is responsible for all material presented in class, including lectures, notes, and handouts. In the case you are not present for a class session, it is your responsibility to contact the instructor and receive information about the material presented in that class. Class attendance is very important.

Effort Required:

As a 300-level course, a considerable amount of work and research effort is required of the student, especially since the technologies/practices used in the course build upon each other. With programming, you cannot start learning the different languages we will be using at different tiers without practice. This means you may have to play around with in-class examples, experimenting to see if something you are curious about really works like you think, doing further research on topics of interest, and so on. Programming courses can be notorious time eaters. Occasionally, a problem with code will take large amounts of time to locate and fix.

For every one hour in class, the student is expected to put in an effort of at least 2-3 hours outside the class for studying and completing assignments and projects. Upon background and preparedness, some students may have to put in additional effort. PLEASE DO NOT PROCRASTINATE. Procrastination and the placing of blame on other factors than yourself have become very large problems in college classes and is often a bad approach to life. Prioritize, schedule, and take responsibility for your actions and you should do very well in this class. Starting early enough so that you have time to ask me questions when you run into problems can help with this (why spend 4 hours struggling with a frustrating roadblock the night before the assignment is due, when you can spend 10 minutes composing an e-mail early in the week, work on other problems while waiting for the answer, and then get a reply that makes everything clearer as soon as you read it?)

A Successful Student will:

- Attend every lecture
- Participate in class (asking questions, paying attention, taking notes, being attentive)
- Complete reading assignments in a timely fashion.
- Practice and "play" with posted examples.
- Ask specific questions -- in class, in lab, in office-hours, and in e-mail
- Read through each homework assignment as soon as it is posted
- Start working on each homework assignment early
- E-mail me with specific homework-related questions starting early in the week both to clarify what a question is asking for and when hitting roadblocks (being sure to include both the code involved and any error messages or descriptions of odd behavior)
- Always submit SOMETHING for an assignment, even if it is not complete
- Study with others for exams, practice explaining concepts to one another.
- Attempt every exam problem, and carefully study exams when they are returned.
- Practice programming at the different levels as much as possible

You are encouraged to ask me questions in class, during office hours, and by e-mail. The most successful students are those who are not afraid to ask questions early and often, who do the assigned reading, who attend lecture regularly, who start homework promptly after the required topics are covered in lecture, and who practice course concepts as much as possible.

It is better to ask a question sooner than later -- for example, it is better to send an e-mail with a specific question as soon as you think of it than it is to wait a day or two until the next class meeting or office hour. If you wait to ask such questions, you may not have time to complete an assignment. It is not a problem if you end up sending me several questions in separate e-mails (as you work on different parts of a project while awaiting earlier answers). That being said, I expect you to ask specific questions as overly vague or broad questions are very problematic. An example of an overly vague or broad question is: "Here's my assignment. Is it right?" I will not simply tell you if something is right. Be specific.

Communication:

The Discussion Tool within Blackboard and your MU E-mail account will be used to make any general announcements, last minute changes, etc. It is **advised** that you monitor your e-mail and Blackboard course discussions posts and E-mails at least once a day.

Note about cell phones in class:

In compliance with Marshall University's cell phone policy, please set your cell phone ringer to "Vibrate Only" mode (or turn it off) before you enter the classroom. If I hear it ring in class, or vibrate excessively on your desktop, I get to answer it -> no exceptions.