Database Programming

ITSE-2309

Spring 2017   Section SECTION_378 CRN-24176   3 Credits   01/17/2017 to 05/11/2017   Modified 01/17/2017

🕐 Meeting Times

Lecture and Lab

Tuesday, Thursday, 2:00 PM to 3:50 PM, F241

👤 Contact Information

Program Coordinator: Major Robert Carl Nelson II

Email: rnelson@blinn.edu
Office: Student Center 232
Phone: 979-209-7430
Website: cit.blinn.edu

Office Hours 1000 - 1150 Monday - Thursday

🖥 Description

Database development using database programming techniques emphasizing database structures, modeling, and database access.

3 lecture hours and 1 lab hour per week; 64 total contact hours. Credit: 3 semester hours.

Requisites
    Prerequisites: A grade of "C" or better in ITNW 1325 and ITSC 1325 or approval by the Dean or designee

⭐ Core Curriculum Statement

This course is not a core curriculum course.

📊 Outcomes

Upon successful completion of this course, students will:

1. Develop database applications using a structured query language.
2. Create queries and reports from database tables.
3. Implement data integrity.
4. Optimize query performance.
5. Create and maintain indexes.
6. Create appropriate documentation.

📘 Materials

Murach's MySQL

Author: Joel Murach
Publisher: Murach
Edition: 2nd
ISBN: 9781890774820
Availability: Campus Bookstore and Online

Flash Drive

USB Flash Thumb Drive

☷ Course Requirements

Transfers to BAAS degree at SHSU.

Transfers to BAS-IT degree at UHCL.

✔ Evaluation

Criteria

Type	Weight	Topic	Notes
Exams	50%		Five major exams and a comprehensive final exam (10% of the total)
Course Project	20%		A small-team course project designing a small rental company database
Labs	20%		Numerous labs using DML, DDL, and DCL
Class Participation	10%		Daily contributions to discussion and labs

🏛 Blinn College Policies

All policies, guidelines, and procedures in the Blinn College Catalog (http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf), Blinn College Board Policies (http://pol.tasb.org/Home/Index/1204), and the Blinn College Administrative Procedures Manual (http://www.blinn.edu/admnpolicy/intro.htm) are applicable to this course.

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through the U.S. Postal Service, or electronically to the student's BlinnBuc e-mail account. Notice shall be deemed received upon actual receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for BlinnBuc e-mail accounts, whichever first occurs.

Civility Statement

Blinn College holds all members of the college community, which includes students, faculty, and staff accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that respects and demonstrates concern for the dignity, rights, and freedoms of others, including respect for the physical and intellectual property of all members of the college community.

Civility Notification Statement. If a student is asked to leave the classroom because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the instructor; it is the student's responsibility to arrange for this conference within two school days of being notified of the suspension from class. This statement reflects step one of three possible steps in the incivility process. The Incivility Protocol is detailed in the Blinn College Catalog (http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf) and in Blinn College Board Policy FLB (LOCAL) (http://pol.tasb.org/Policy/Download/1204?filename=FLB(LOCAL).pdf).

Attendance Policy

Class attendance is essential for student success; therefore, students are required to promptly and regularly attend all classes. A record of attendance is maintained from the first day of classes and/or the first day the student's name appears on the roster through final examinations. Students who accrue one week's worth of absences during the semester will be sent an e-mail through their Buc account requiring them to contact their instructor and immediately schedule a conference to discuss their attendance issues. Students who accumulate two weeks' worth of unexcused absences, may be administratively withdrawn from class. There are four forms of excused absences recognized by the institution:

1. Observance of religious holy days - Students should notify their instructor(s) no later than the 15th day of the semester concerning the specific date(s) for absences for any religious holy day(s);
2. Representing the College District at an official institutional function;
3. Dual credit students representing the high school or independent school district at an official institutional function; and
4. Military service.

Other circumstances may be considered an excused absence at the discretion of the faculty member with appropriate documentation. College District-mandated attendance policy applies to all coursework; including coursework in developmental/ non-credit courses. Failure to attend developmental classes will also result in removal from the course as defined by the College District.

   It is the student's responsibility to officially drop a class he or she is no longer attending. Students interested in dropping a course or withdrawing from school may do so by logging into myBlinn and clicking on the "My Records" tab, clicking on "add or drop classes" under registration tools, and then selecting the current registration term and "webdrop" from the action drop down menu. The final step is scrolling to the bottom of the page and clicking submit. Students should contact Enrollment Services at 979-830-4800 for assistance with webdrop or to drop due to: severe illness, care for a sick, injured, or needy person, death of a close relative/relation, military duty, military duty of a close relative/relation, or change in work schedule. The last day to drop a class with a Q is set according to the Academic Calendar (https://schedule.blinn.edu/Astra/Calendars/ActivityCalendar.aspx? calendarId=fcbee170-67bb-11e5-828c-4f3bd2cb6abf#filter=%7B).

Scholastic Integrity

The Scholastic Integrity Policy is located in the Blinn College Catalog (http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf), in Blinn College Board Policy FLDB (LOCAL) (http://pol.tasb.org/Policy/Download/1204? filename=FLDB(LOCAL).pdf), and the Blinn College Administrative Procedures Manual (http://www.blinn.edu/admnpolicy/Scholastic-Integrity.pdf). A student accused of scholastic dishonesty is entitled to due process as outlined in these documents.

It is the responsibility of students and faculty members to maintain scholastic integrity at the College District by refusing to tolerate any form of scholastic dishonesty, including cheating, plagiarism, or any other act of dishonesty. If there is compelling evidence that a student is involved in cheating or plagiarism, the instructor will address the infraction.

Final Grade Appeal

If a student wishes to appeal a final course grade, the guidelines and timeline for a three-step appeal process are detailed in the Blinn College Catalog (http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf), in Blinn College Board Policy FLDB (LOCAL) (http://pol.tasb.org/Policy/Download/1204?filename=FLDB(LOCAL).pdf), and the Blinn College Administrative Procedures Manual (http://www.blinn.edu/admnpolicy/Final-Course-Grade-Appeal.pdf).

Students with Disabilities

Non-Discrimination Statement

Blinn College does not discriminate against qualified individuals with disabilities in the recruitment and admission of students, the recruitment and employment of faculty and staff, or the operation of any of its programs and activities, as specified by applicable federal laws and regulations. The designated coordinator for Blinn College's compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 (ADA), and the Americans with Disabilities Act Amendment Act (ADAAA) is Patricia E. Moran, M.Ed., 902 College Avenue, Brenham, TX 77833, (979) 830-4157. Students should make arrangements for disability service directly with each campus on which they attend classes. Students enrolled on the Brenham, Schulenburg, and Sealy campuses should contact (979) 830-4157 for more information. Students on the Bryan Campus should contact (979) 209-

7264.

Services for Students with Documented Disabilities

Students with documented disabilities must self-identify and provide current, appropriate documentation of the disability to the Office of Disability Services (ODS) prior to receiving services. Students are encouraged to contact this office as early as possible to initiate services. Direct services to students with disabilities are provided in the following areas:

- Assessment of needs and appropriate services
- Provision of classroom and testing accommodations
- Assistance in orientation and registration procedures
- Counseling on disability related issues

Information, education, referrals, and consultation about specific disabilities are available to interested parties on request. For answers to specific questions or to request an information packet, contact the [Office of Disability Services (http://www.blinn.edu/Disability/index.html)](http://www.blinn.edu/Disability/index.html) on the specific campus you will be attending.

Bryan Campus: (979) 209-7251; Brenham, Sealy, Schulenburg Campuses: (979) 830-4157

✱ Course Policies

Student Email

Blinn students are issued email addresses by Blinn College. Your Blinn email account is the **OFFICIAL** means of communication between the instructor and the student.

Exam Review Procedures

Regular exams will be administered online. Students are encouraged to question exam answers via research and study. Opinions are nice but will not override facts. If there is an error in the questions or answers as posted, please notify me via email so the class may receive credit and the exam may be improved.

Deadlines for Assignments and Labs

Assignment Zero (Asg0), found in each course on eCampus, **MUST** be completed before a student will be allowed to take a regular exam.

Students will submit their assignments and labs **before the beginning of class** on the date the assignment is due. Credit for late submissions is at the discretion of the Instructor.

Reading and Research

In order to be successful in the computer field one must build an extensive personal library. Different authors and imprints have varied approaches as to how they present information. Books used in the program were selected based on extensive research by the instructors; however, the approach may not be a style which you find comfortable. To fully understand content and concepts you may need to acquire additional references or visit additional sources. You are encouraged to do research on the Web, visit the Blinn Library or purchase additional texts to aid in your education.

Information Technology Lab Hours and Decorum

The Program maintains a laboratory of computers that have all required application programs required by all IT courses. Use of the laboratory is not required if you have access to alternate resources. Feel free to use them. The normal hours of operation of this lab are 0800 to 2100. The lab is closed on weekends and College holidays.

Because the laboratory and the classroom are the same room, please guard your behavior while classes are in session. Your dress and behavior should reflect your training for a professional position. Hats will be removed while in the lab. Food and tobacco products are not permitted. Recycle bins are stationed at both ladder wells for metal and plastic containers; use them instead of the lab trash cans for recyclable materials.

Removable Hard Drives

The Program maintains a large number of removable hard drives (rhd) for use in the Dell Precision T1700 tower workstations. When the instructor determines need, a student or team will be issued a rhd for a course, which is recorded on the deconfliction sheets posted on the blue doors to the front right side of the lab. Ensure proper insertion and locking of the rhd before powering the tower, and stopping of the tower before unlocking and removing the rhd from its cradle. Keys for the cradles stay in the lab. Deconfliction sheets may also indicate statically assigned IP addresses, in addition to the name of the student. Do not use a hard drive you have not been authorized. Store your rhd with the other rhds of its series on the shelves at the front of the lab. Maintain order and cleanliness of all lab spaces.

Professional Disclaimer

Working with computers in any area provides a very challenging career. Changes in the computer industry are very rapid. The computer industry has created a 7/24 existence and service requirements are almost always an emergency. If you know anything about a computer, most users expect you to know everything. As a computer professional you are expected to keep up with the technology in almost every area. Your training and education as a Network Administrator only begins at Blinn College. To keep up with the rapid changes and the expanding environment you must continue learning every day.

The Information Technology Program at Blinn College expects students to perform in class the same way they would on the job. As a student of Information Technology you must read assignments in advance, research topics outside of class, and submit professional quality assignments. In short, you work your way through the program as if you were employed by the program. The instructors of the Information Technology Program view your time at Blinn College as on-the-job training.

The Information Technology Program is small enough that we take a serious interest in all our students. Your academic and professional development is important to us because your success is our success. You are encouraged to communicate openly with your instructors; you are also encouraged to communicate with the program coordinator for any reason.

Learning Activities

Course information will be presented and described using a wide variety of methods. These methods may include but are not limited to, any of the following: Lecture, videos, slides, projects, web searches, student research resulting in written or oral reports, guest instructors, discussion of examinations, etc.

Instructors will bring information to class from a variety of sources and will generally expand on information contained in the required readings.

📅 Schedule

The instructor reserves the right to make adjustments as necessary to enhance achievement of Student Learning Outcomes.

Week One	Meeting Details	Weekly
Tuesday, January 17, 2017	**Orientation**	4
Thursday, January 19, 2017	**Introducing Relational Databases**	
Week Two		**Weekly**
Tuesday, January 24, 2017	**MySQL Workbench**	4
Thursday, January 26, 2017	**MySQL Monitor**	
Week Three		**Weekly**

Tuesday, January 31, 2017	**SELECT Clause**	4
Thursday, February 02, 2017	**WHERE and Other Clauses**	
Week Four		Weekly
Tuesday, February 07, 2017	**Inner and Outer Joins**	4
Thursday, February 09, 2017	**Other Joins**	
Week Five		Weekly
Tuesday, February 14, 2017	**Summary Queries; Exam One (Chapters 1-4)**	4
Thursday, February 16, 2017	**Subqueries**	
Week Six		Weekly
Tuesday, February 21, 2017	**More DML**	4
Thursday, February 23, 2017	**String and Numeric Data Types**	
Week Seven		Weekly
Tuesday, February 28, 2017	**Other Data Types**	4
Thursday, March 02, 2017	**String Functions**	
Week Eight		Weekly
Tuesday, March 07, 2017	**Numeric Functions**	4
Thursday, March 09, 2017	**Database Design; Exam Two (Chapters 5-9)**	
SPRING BREAK	**MONDAY, MAR 13 - FRIDAY, MAR 17**	
Week Nine		Weekly
Tuesday, March 21, 2017	**Database Structures**	4
Thursday, March 23, 2017	**Views**	
Week Ten		Weekly
Tuesday, March 28, 2017	**Stored Programs; Exam Three (Chapters 10-12)**	4

Thursday, March 30, 2017	**Transactions**	
Week Eleven		**Weekly**
Tuesday, April 04, 2017	**Stored Procedures**	**4**
Thursday, April 06, 2017	**Stored Functions**	
Week Twelve		**Weekly**
Tuesday, April 11, 2017	**Triggers and Events**	**4**
Thursday, April 13, 2017	**Database Administration; Exam Four (Chapters 13-16)**	
Week Thirteen	**Last Day for Q Drop**	**Weekly**
Tuesday, April 18, 2017	**GRANT Tables**	**4**
Thursday, April 20, 2017	**Users and Privileges**	
Friday, April 21, 2017	**Last Day to Drop Classes with a "Q"**	
Week Fourteen		**Weekly**
Tuesday, April 25, 2017	**Backup and Restore Databases**	**4**
Thursday, April 27, 2017	**Import and Export Data**	
Week Fifteen		**Weekly**
Tuesday, May 02, 2017	**Presentation Rehearsal; Exam Five (Chapters 17-19)**	**5**
Thursday, May 04, 2017	**Course Project Presentation**	
Week Sixteen - Finals Week		**Weekly**
Tuesday, May 09, 2017	**Comprehensive Final Exam**	**3**
Friday, May 12, 2017	**GRADUATION**	
	Total Contact Hours	**64**