



INT 2080 Fundamentals of Database Management

Fall 2025

Course Section Numbers: LE01

Instructor: Dr. Kunle Elebute, PhD
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Email: elebutks@pgcc.edu

Blackboard Site: <http://pgcconline.blackboard.com>

Office Location and Hours: Fri 8am-1pm

Blackboard Site: <http://pgcconline.blackboard.com>

TEC Department Office: Building/Room CAT #129

Phone: 301-546-0752

Course Description: 3 credits. Fundamentals of Database Management gives students a solid foundation in the fundamental concepts of relational database management. Students are introduced to database architecture, data migration and recovery, high availability techniques, database performance tuning, and basic database security tasks. Students will be able to install and configure relational database server and also run queries to retrieve data from the database. Upon completion of this course, students will be prepared to take Oracle's MySQL Database Professional exam.

Prerequisite: INT-1700 or INT-1111

Learning Outcomes:

Students passing this course will be able to accomplish all the outcomes listed below:

1. Describe relational database architecture
2. Perform basic database security tasks
3. Implement database performance tuning
4. Describe database high availability techniques
5. Install a relational database on Linux and Windows operating systems
6. Utilize metadata to diagnose performance problems
7. Perform data migration from one mysql database location to another
8. Perform data recovery database backup

Credit Hours Explanation:

At Prince George's Community College, for all credit courses, students are expected to spend a minimum of 37.5 combined hours of instructional time and related coursework time per credit

hour. This course is a 3 credit course. This course achieves the minimum of 112.5 hours of instructional time by requiring 50 hours of instructional time and 62.5 hours of student work outside of instructional time.

Required Materials:

There is no **REQUIRED** textbook for the class. This is an OER class.

Reading Materials:

The following free books will be used for class:

- Watt, Adrienne (2014). Database Design - 2nd Edition.
<https://open.umn.edu/opentextbooks/textbooks/database-design-2nd-edition>
- Michael Mendez (2014). The missing link: An introduction to web development and programming.
<https://milneopentextbooks.org/the-missing-link-an-introduction-to-web-development-and-programming/>

Recommended Software (Free Downloads):

All the software and tools listed below are recommended for completing labs and class assignments:

- MySQL 5.7 Community Edition <https://dev.mysql.com/downloads/mysql/>
- MySQL Workbench <https://dev.mysql.com/downloads/workbench/>
- HeidiSQL for MySQL Database <https://www.heidisql.com/download.php>
- Putty <https://www.putty.org/>
- WinSCP <https://winscp.net/eng/download.php>

*Ensure that you download software compatible with your Operating System (OS)

Assignments and Grading Instructions

You are responsible for your own learning; I will do whatever I can to facilitate your learning, but ultimately it is you who must learn. This is a 3-credit class and as such requires an average of 6-8 hours of time outside of class devoted to reading, study and assignment completion.

You will submit all assignments via the Assignments feature in Blackboard. All assignments will be due by Sunday @ 11:59 PM. Late electronic submissions in Blackboard are not possible so be aware of deadlines. **Please do not email assignments to me.**

Quizzes and Final Exams:

Both exams will consist of true/false and multiple choice questions from our reading and discussions. Both of these exams will be taken online via blackboard.

Grading Turnaround Times

Quizzes and Tests: You can expect to receive grades for the exams immediately once the exam is submitted online.

Assignment Submissions

Please submit all assignments via BlackBoard in the course. Use the navigation bar in the classroom to locate and select the course content tab. Once that is selected, navigate to the relevant week and submit your work in the assignment folder.

Communication: All credit students are required to use Owl Mail for all college communication.

Read the announcements every time you log into Blackboard!

If want you to do well and accomplish all the learning objectives for this course, good communication is essential. Email is a good way to get in touch with me, your-name@pgcc.edu. Please note that all PGCC students must use their Owl Mail accounts to communicate with faculty and staff. All emails must have your course name in the subject, INT 2080. You **must** also put your name into the body of all emails. After the first few weeks, I will begin to **delete** emails that are not properly addressed. If I do not seem to be responding to your email, I may not have received it. If email fails, you should try to get in touch with me by posting to the FAQ discussion board, by phone, or stopping by my office.

Blackboard will send you a copy of all email sent through the Communication link because it does not have a “sent mail,” folder. It actually uses your email system. Keep a copy of all class emails during the semester for your records.

If you are confused or have questions, post them to the Frequently Asked Questions (FAQ) discussion board. Chances are that you are not the only one confused. You will help yourself and your classmates by posting good questions. If you see a question posted by a fellow student and you know the answer, post the answer. I will try to check the board and answer questions as much as possible; but (like you) that will not be possible all the time. I will adjust student answers if necessary. Some of the best information comes from this discussion board! I learn something new every semester and this is usually where it happens.

Always keep a backup of what you submit and all emails.

Cheating will not be tolerated. Many electronic measures have been put into place. Read and know the Code of Conduct that can be found in the Student Handbook.

Grading Distribution:

Course Outline:

Weeks	Topics	Reading
1	Database Architecture	Quiz 1 & 2 Lab 1
2	Operating Systems Installing Database Software	Quiz 3 & 4 Lab 2
3	Storage Engines and Data-types Running SQL queries from client tools	Quiz 5 & 6 Lab 3
4	Database normalization and Duplicate handling Managing MySQL instance from command-line	Quiz 7 & 8 Lab 4
5	Managing database users Monitoring database sessions	Quiz 9 Lab 5
6	Data migration (import and export of data) Backup and recovery	Quiz 10 Lab 6
7	Database metadata Optimization and database diagnostic	Final Project
8	Database security Database High Availability concepts	Final Exam

Graded Item	Possible Points	Percentage
Final Exam	100	10
Final Project	200	20
Quizzes (10 @ 10 points each)	100	10
Labs (6 @ 100 points each)	600	60
TOTAL	1,000	100%

* All due dates are on the course Detailed Schedule and are subject to change with prior notice from instructor. Your grades will be calculated out of 1000 points.

Grades are calculated as follows:

Credit Students:

900 and above =**A**, 800-899=**B**, 700-799=**C**, 600-699=**D**, below 600=**F**

EVALUATION OF STUDENT PERFORMANCE

When grades are calculated, I must choose from the above or assign one of the following:

- I** Incomplete
- H** audit; students pays for and attends class but does not receive a grade or earn credit.
- W** student officially withdrew from course
- NA** Never attended
- FX** Failed to participate

I Grades: The grade of “I” is seldom applied. This grade is reserved for extraordinary circumstances and in general this means that a student attended and was passing the course, but after the deadline for withdrawal, the student, due to circumstances beyond his or her control, such as accident or serious illness, was unable to finish the course by the end of the semester. A student must have at least 75% of the course completed at a grade of 70% or better to apply for an incomplete grade. The grade of “I” involves paperwork forwarded to the Dean and must contain student’s signature. Students who receive a grade of “I” must complete the course work by the end of the following semester (or by the date specified on the form), and then their grade is changed to the one they earned. If the work is not completed by this time, then the grade changes to F.

W Grades: As the semester continues, I hope to see all of you staying in my course and doing well. However, if you are considering withdrawing from this course your withdrawal may result in Financial Aid and academic standing implications. So, if you are considering withdrawing at any point, please speak with me before making a final decision. I may be able to offer or direct you to help. If I am unavailable, please contact the Chair of this department, Michael Smith via email at smithmw@pgcc.edu or telephone at 301-546-0770.

NA GRADES: The NA GRADE may be assigned by the faculty member to any student on the roster who never attends or academically participates in the class during the first three weeks of class (or equivalent of 20 percent in short courses).

FX GRADES: The instructor may assign the FX grade to any student on the roster who did not officially withdraw from the course but who failed to participate in course activities through the end of the period. It is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible.

Faculty are required to report the date of last attendance for each student receiving FX or F grade(s) for the college to report this date to a variety of federal agencies as mandated. The date of last attendance is considered the date of the student’s termination from the course, regardless of the date of grade submission. Early termination from a course may result in reduction in student loans and financial aid (e.g., Pell, VA benefits) and may require the student to reimburse

funds to the funding agency.

WITHDRAWAL STATEMENT: As the semester continues, I hope to see all of you staying in my course and doing well. However, if you are considering withdrawing from this course, your withdrawal may result in financial aid and /or academic standing implications. Therefore, if you are considering withdrawing at any point, please speak with me before making a final decision. I may be able to offer to direct you to help. If I am unavailable, please contact the Information and Engineering Technology Department Chair, Mr. Smith via email at smithmw@pgcc.edu or telephone at 301-546-0752.

General Considerations: We will create a business-like environment at all times. Any student not abiding by the general considerations will be dealt with as explained in the Student Handbook. The Prince George's Community College Student Handbook contains official policies and procedures regarding student conduct, academic integrity, and related matters. You are responsible for conducting yourself in accordance with those policies. The Student Handbook also contains a wealth of information designed to help students achieve success. Please pick up your free copy from the College Life Office in the Largo Student Center (near the bookstore).

Students taking this course should:

- Treat others the way that you would like to be treated
- Read the Student Handbook
- Create a business-like learning environment at all times
- Adhere to the Code of Conduct on academic honesty at all times
- Ask me for information as soon as possible if extra help is needed
- Address email with the course name, reference number, and topic of email in the Subject on all email: INT2080 LE01: Question on Quiz 2
- Include your full name in the body of all email messages
- Respond to email within 24 hours except on weekends
- Check your answers against the posted solutions if available
- Proper netiquette will be observed at all times

Netiquette Rules: Rules for interacting with others online include but are not limited to:

- You should write email and discussion board postings in standard written English (the kind of language you would expect to find in a workplace). Messages should be short and to the point.
- Make sure that you use a meaningful subject line so that your readers will have a clear idea of who sent the message and what the message contains. Many instructors and students are either teaching or taking more than one online class; make the specific class clear from the subject line.
 - Good example – INT2080, J Smith, Feedback on Taylor article
 - Poor example – Help on Homework

- Use all capital letters sparingly. Capitalize words only to highlight an important point or to distinguish a title or heading. Capitalizing whole words that are not titles is generally seen as SHOUTING and is often offensive to the reader.
- Be courteous about what you say about others in an electronic format. Never say anything in an email or on a discussion board that you would not want to see printed in the newspaper.
- When reacting to someone else's message, address the ideas, not the person.
- Be careful when using sarcasm and humor. Without face-to-face communications your joke may be viewed as criticism.
- Be careful not to get too personal too fast.
- Be respectful of other, diverse opinions. Don't assume that everyone shares the same views or background.
- Be aware of potential compatibility problems when sharing electronic files. Even though you may be able to "attach" a file to an electronic message, your recipient(s) may not be successful in opening your file on the other end.
- Don't share copyrighted materials. Most things on the Internet are NOT "fair use." Instead of copying a relevant article or web page, provide a link to the material along with a short description of its significance.

(Netiquette rules based on materials developed by World Campus, Penn State)

Delayed College Openings and College Information:

When the college announces a delayed opening, all classes with at least 45 minutes of class time remaining at the time of the opening will be held. For example, in the event of a 10 a.m. opening, a 9:30-10:45 a.m. class will be held. This procedure applies to all credit classes. To sign up for text alerts such as school closings and delays, go to www.pgcc.edu, click Services & Support, and then click the Owl Alert icon. Owl Alert is the college's instant messaging and email notification system.

DISABILITY SUPPORT SERVICES

Students requesting academic accommodations are required to contact the Disability Support Services Office (LH101A) or call (301) 546-0838 (voice) or (301) 546-0122 (TTY) to establish eligibility for services and accommodations. Students with documented disabilities should discuss the matter privately with their instructor at the beginning of the semester and provide them with a copy of their Student/Faculty Accommodation Form. Faculty and staff must engage students in an interactive process when determining necessary and appropriate modifications and/or auxiliary services.

COMMUNITY IN UNITY CIVILITY PLEDGE

As a member of Prince George's Community College, I agree to promote a community of scholarship, civility, accountability and respect. I understand that expressions of hate or bias against a particular group or towards an individual, threaten the safety of our campus community. Therefore, I pledge to be aware of my words and actions and how they impact others. I will show

respect for myself, respect for others and respect for the college and its values. I will honor this commitment to promote unity and a culture of civility both inside and outside the classroom.

Civility is a college-wide commitment and in order to identify PGCC students, students are required to enter classrooms with their college IDs visible. ALL students must have their IDs visible while AT ANY COLLEGE SITE, WHETHER THEY ARE ON THE LARGO CAMPUS OR ANY EXTENSION SITE.

TITLE IX: CONFIDENTIALITY AND RESPONSIBLE EMPLOYEE STATEMENT

Prince George's Community College faculty are committed to helping create a safe and open learning environment for all students. Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced any form of gender discrimination or sexual misconduct, know that help and support are available. The College strongly encourages all members of the community to take action, seek support and report incidents of sexual misconduct to the Title IX Office, Director of Compliance, Kent Hall Room 133 (WATSONSV@PGCC.EDU; 301-546-7011) or with the Deputy Title IX Coordinator, Vice President for Student Affairs, Kent Hall Room 119 (CAMPCL@PGCC.EDU; 301-546-0412).

Please be aware that under Title IX, faculty are required to disclose information about such misconduct to the Title IX Office. The purpose of these reporting requirements is for the College to inform you of options, supports and resources. You will not be forced to file a report with the police.

If you wish to speak to a confidential or limited confidential employee who does not have this reporting responsibility, you can contact the Violence Prevention Center, Lanham Hall Room 101A (vpc@pgcc.edu; 301-546-5281) or Counseling Services, Lanham Hall Room 101A (counselingservices@pgcc.edu; 301-546-0149).

For more information about reporting options and resources at Prince George's Community College and the community, please visit <https://www.pgcc.edu/about-pgcc/institutional-information--policies/title-ix/>

CODE OF CONDUCT

The Prince George's Community College Code of Conduct defines the rights and responsibilities of students and establishes a system of procedures for dealing with students charged with violations of the code and other rules and regulations of the college. A student enrolling in the college assumes an obligation to conduct himself/herself in a manner compatible with the college's function as an educational institution. Refer to the 2019-2020 Student Handbook for a complete explanation of the Code of Conduct, including the Code of Academic Integrity and the procedure for dealing with disruptive student behavior.

CODE OF ACADEMIC INTEGRITY *(use text provided below)*

The college is an institution of higher learning that holds academic integrity as its highest principle. In the pursuit of knowledge, the college community expects that all students, faculty, and staff will share responsibility for adhering to the values of honesty and unquestionable integrity. To support a community committed to academic achievement and scholarship, the Code of Academic Integrity advances the principle of honest representation in the work that is produced by students seeking to engage fully in the learning process. The complete text of the Code of Academic Integrity is in the 2019-2020 Student Handbook and posted on the college's website.