**Passaic County Community College**

**CIS 290 M01 – Professor Cameron**

**ACADEMIC YEAR:\_\_2016-2017\_\_\_\_\_\_\_**

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**Course Code: Course Title:**

CIS 290 Database Fundamentals

**Department/Program: Semesters Offered:**

CIS Fall and Spring

**Catalog Course Description:**

This course studies relational database design concepts using the entity-relationship model and database management using MySQL. Students are exposed to the major objects such as tables, indexes, views and database design topics such as data normalization. Students will learn how to create and maintain a database as well as perform simple queries using Structured Query Language (SQL). Students will use an appropriate database management software package to complete several database projects.

**Prerequisites:**

CIS 125 Microcomputer Software I OR CIS 160 Fundamentals of Computer Science I

**Credits:** 3

**Lecture Hours:** 3 **Lab/Studio Hours:** N/A **Clinical/Fieldwork Hours:** N/A

**REQUIRED TEXTBOOK/MATERIALS**:

Database Concepts, 7th Edition – Kroenke/Auer, 2014. ISBN 0133544621.

**ADDITIONAL TIME REQUIREMENTS**:

Students are expected to spend 6 hours per week preparing for the course, including reading the chapters, reviewing the objectives, and doing projects and homework.

**COURSE LEARNING OUTCOMES**:

Upon completion of this course, students will be able to:

* Define the basic terminology of database applications
* Describe the advantages and disadvantages of database processing
* Manipulate a database using SQL
* Use database management software to manage a database
* Apply normalization rules to create tables

**General Education Outcomes (if applicable**)

None

**GRADING STANDARD**:

|  |  |  |
| --- | --- | --- |
| **Activity** | **Contribution** | **Other Notes** |
| Tests | 40% | Makeups only in case of documented emergency. |
| Projects | 35% |  |
| Final Exam | 20% | Cumulative |
| Attendance | 5% |  |

**COURSE CONTENT:**

|  |  |  |
| --- | --- | --- |
| WEEK | TOPIC | Chapter |
| 1. | Syllabus Review  Getting Started | 1 |
| 2. | Getting Started | 1 |
| 3. | The Relational Model | 2 |
| 4. | The Relational Model | 2 |
| 5. | Structured Query Language | 3 |
| 6. | Structured Query Language | 3 |
| 7. | Data Modeling and the Entity-Relationship Model | 4 |
| 8. | Data Modeling and the Entity-Relationship Model | 4 |
| 9. | Database Design | 5 |
| 10. | Database Design  Crystal Reports | 5  \*Notes |
| 11. | Database Administration | 6 |
| 12. | Database Administration | 6 |
| 13. | Database Processing Applications | 7 |
| 14. | Big Data, Data Warehouses, and Business Intelligence Systems | 8 |
| 15. | Final Exam |  |

**ACADEMIC REGULATIONS AND POLICIES**:

For Information regarding any of the following, please refer to the PCCC student Handbook and the PCCC Academic Bulletin:

* PCCC’s Academic Integrity Code
* Student Conduct Code
* Student Grade Appeal Process
* Writing Intensive Requirements
* Information Literacy Requirements
* Panther Alert: The College will announce delayed openings, closings, and other emergency situations through the Panther Alert System. Students are encouraged to sign up for the Panther Alert Notification. Students can sign up once they log into their Campus Cruiser Portal account through the PCCC website at www.pccc.edu.
* Cell Phone Policy: Use of cellular telephones, audible pagers, or other forms of audible electronic devices is prohibited in all academic learning environments (including but not limited to, laboratories, testing centers, classroom, library, learning centers, theater, and so forth) unless previously approved by the instructor or other authorized administrator.

**DEPARTMENT POLICIES**:

* If you are unable to take an exam, it is always better to contact the professor **before** the exam, rather than after the exam.
* Unless otherwise specified by your instructor, all homework assignments and projects are to be done on your own. Handing in an assignment you worked on with someone else is considered cheating if they are the same file(s) or if they are the same words/ideas. In the case of identical work, all students involved can receive academic sanctions, up to and including course failure.
* Plagiarism in any form is unacceptable. All work that is not yours must be cited properly. Plagiarism on any part of an assignment is still plagiarism. Plagiarism will result in academic sanctions, up to and including course failure.
* Tests/quizzes may include work that was not covered in class. It is expected that you are reading the textbooks, even if it is not explicitly assigned. Likewise, you are expected to take notes.
* The CIS department computer lab has the software you need for assignments, even if you do not. The CIS lab is open and staffed over 70 hours a week. If you need help with the material covered in the class, you can get assistance there. Likewise, if your home computer will not allow you to complete assignments, plan on doing your work on campus. The CIS has a department lab in Paterson in room H311. Labs are also available at other campuses or at other locations in Paterson, but the CIS lab is your best resource due to the presence of lab tutors and the software for this course being installed.

**CLASS POLICIES:**

**Expectations and Policies on Classroom Distractions**

My classroom is one where I expect you to respect both me and your peers. As such, please avoid being a distraction.

* + Class will start on time, and meet for the entire class period. As class starts on time, showing up two minutes late provides just as much of a distraction as showing up fifteen minutes late. Plan on being in class for the entire length of class; leaving early also is a distraction.
  + Attendance is taken via sign-in sheet. It is your responsibility to sign the sheet during class. If you do not sign in, you will be marked as not attending.
  + Avoid side conversations. If you have a question, please raise your hand. If you need to talk about non-class related matters, please do not do so during class.
  + Shut off or switch off the ringers on cell phones. Do not text or use your cell phone for any purpose during class time. If there is an emergency that requires you to keep your phone on during class, please let me know beforehand.
  + Turn off electronic devices such as laptops or tablets unless you have prior permission from me.
  + Make every effort to leave children at home; children are a distraction for the parent and the class.
  + In the case of distractions, I reserve the right to assign seats or remove you from the class.

**Expectations and Policies on Cheating and Academic Infidelity**

Any form of cheating or academic infidelity can result in the student earning a grade of "F" for the course and being reported to college officials. Refer to the College Catalog for a full list of college policies. I list a few clarifications and highlights here for your reference.

* Communicating the contents of tests to other students is forbidden.
* If an online or take-home test is given, this must be done completely on your own.
* Unless otherwise stated, all tests are closed book, closed notes, and no using the Internet to find answers.
* There will be no bathroom breaks, taking phone calls, or use of electronic devices during tests.

**Expectations and Policies on Student Responsibility**

* + Tests will be given through the College’s Learning Management System (Blackboard). It is your responsibility to have your username and password. If you do not have this information, you will be considered unprepared and receive a zero on the test.
  + Tests must be taken as assigned, when assigned. Tests cannot be taken outside of the classroom or at another time without permission.
  + Missing class is not an excuse for missing assignments. Assignments and due dates will be posted in the learning management system.
    - Makeup exams are not available in all classes. In some classes, I will drop the lowest test grade, but offer no makeup exams. Therefore, if you miss an exam, for any reason, that will count as your drop grade. In other classes, I may provide make-up exams to students who, due to a documented emergency, cannot take the exam at the regular hour. Making arrangements beforehand is always better than informing me afterwards. See the **Grading Standard** section of this document to find out which policy applies to this specific class.
  + Assignments may be posted ahead of time in the course learning management system. You are free to hand work in early, but it will typically not be graded until after the due date.
  + Assignments not handed in within two weeks of the due date will receive a zero. Late assignments will be accepted up until two weeks after the due date, however, they will be penalized 10 percent per week unless otherwise stated.
  + Assignments are due at the **start** of the class on the listed due date unless otherwise stated.
  + All assignments must be handed in before our last class meeting of the semester.
  + You are responsible for checking your school email. My expectation is that you are checking your email frequently.
  + Traditional turn-around time for e-mail in a business environment is 48 to 72 hours. Please do not expect an immediate response. If it is during my office hours, a phone call or visit might be quicker since you can talk to me directly.
  + When emailing me, please be as detailed as possible. Be sure to include your course and a detailed description of your problem. An email that says "I am having trouble with the assignment" is not specific enough and will delay you getting an answer to your question, as I will have to reply and ask you for your course and which assignment you are having problems with.

**Other Expectations and Policies**

* The grade you earn is based on class performance, as calculated by the formula in the **Grading Standard** section of this document. The grade you earn will not be adjusted due to visa issues, graduation issues, financial aid status, athletic eligibility, or any other issue.
* The College recognizes grades of A, A-, B+, B, B-, C+, C, D, and F. The grade ranges are as follows:
  + - A 94.0 and above
    - A- 90.0 to 94.0
    - B+ 87.0 to 90.0
    - B 83.0 to 87.0
    - B- 80.0 to 83.0
    - C+ 77.0 to 80.0
    - C 70.0 to 77.0
    - D 60.0 to 70.0
    - F under 60.0
* Please address me as “Professor” or “Professor Cameron”. This is traditional at the college level.

**Changes to the Syllabus:**

* The instructor reserves the right to make changes to this syllabus. In the event that changes become necessary, students will be notified during the following scheduled class.

**NOTIFICATION FOR STUDENTS WITH DISABILITIES:**

If you have a disability, and believe you need accommodations in this class, please contact Disability Services staff at 973-684-6395, or email ods@pccc.edu, to make an appointment. You should do so as soon as possible at the start of each semester. If you require testing accommodations, you must remind me (the instructor) one week in advance of each test. More information @ pccc.edu/ods.