Mississippi Valley State University Mathematics, Computer & Information Sciences Itta Bena, Mississippi 38941

Course Syllabus - Fall 2018

Course Number: CS 351 Class Hours: 1:00 – 2:15pm Course Title: Database Management Credit Hours: 3 Credit Hours

Instructor: Christopher I. G. Lanclos Coordinator: Christopher I. G. Lanclos

Email: christopher.lanclos@mvsu.edu **Website:** bluebird.mvsu.edu

Office Hours:

Monday & Wednesday: 12:00PM – 2:00PM 3:30PM – 4:30PM Tuesday & Thursday: 10:45AM – 11:45AM 2:30PM – 4:00PM

Wednesday (Tutoring Hours): 4:30PM – 5:30PM

Catalog Description:

This course examines the logical organization of databases; the hierarchical, network and primarily relational data models and their languages. Functional dependencies, normal forms, issues of database planning, design and implementation; examination of some commercially available database management systems.

Course Prerequisites: CS204 - Computer Programming II

Textbook(s) and other required materials:

Database Systems: Design, Implementation, & Management 13th Ed., Carlos Coronel &

Steven Morris, ISBN: 1337627909, ISBN-13: 978-1337627900

Major Topics Covered in Course	45 Hours Total
File Systems and Databases	4
The Relational Database Model	4
Entity Relationship (E_R) Modeling	4
Normalization & dependencies of Database	4
Tables	
Structured Query Language (SQL)	4
Database Design	4
Transaction Management & Concurrency	4
Control	
Client/Server Systems	4
Databases and the Internet	1.5
*Assessments of Topics	7.5 hours

Certification: CompTIA Security+- Student Learning Outcomes:

By the time of graduation, students will be able to:

- 1.0 Threats, Attacks, and Vulnerabilities
- 2.0 Technologies and Tools
- 3.0 Architecture and Design

- 4.0 Identity and Access Management
- 5.0 Risk Management
- 6.0 Cryptography and Public Key Infrastructure

Program Objective and Outcomes:

- 1. Graduates will be successful in computer science related fields.
 - 1.1. An ability to use current techniques, skills, and tools necessary for computing practice. (i)
 - 1.2. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices. (j)
 - 1.3. An ability to apply design and development principles in the construction of software systems of varying complexity. (k)
- 2. Graduates will apply knowledge in computer science and related fields to solve problems.
 - 2.1. An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline. (a)
 - 2.2. An ability to analyze a problem and identify and define the computing requirements appropriate to its solution. (b)
 - 2.3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. (c)
- 3. Graduates may obtain advance degrees.
 - 3.1. An ability to function effectively on teams to accomplish a common goal. (d)
 - 3.2. An understanding of professional, ethical, legal, security and social issues and responsibilities. (e)
 - 3.3. An ability to communicate effectively with a range of audiences (f)
 - 3.4. An ability to analyze the local and global impact of computing on individuals, organizations, and society (g)
 - 3.5. Recognition of the need for and an ability to engage in continuing professional development. (h)

Laboratory Projects:

Students enrolled in the course will be required to complete database management projects which involve popular database software such as Access and Oracle to develop Web-based projects using Cold Fusion and PhP.

Oral and Written Communication:

Students will be required to give mini-recitations regarding the development of their database projects and to read and deliver reports on current topics in database design.

Social and Ethical Issues:

Database SEcurity

Attendance Policy:

Students are required to keep regular attendance to classes. Students are allowed to miss three (3) days of class. Days that have been approved by the university are not included in the three days. Any greater number of absences will result in the student failing the course.

Late/Missed Assignments:

Late assignments that are accompanied by a valid university excuse will be accepted with no late penalty. The late penalty is 10% of the grade for each class period, up to 3 class periods. After 3 days the assignment will not be accepted.

Students will be able to earn points back on quizzes, exams and in class work through attending office hours. The following are the points and time required for each. Quizzes = 30 minutes for 50% of missed points, exams = 2 hours for 50% of missed points, in class work = until assignment is done = 50% of missed points. Students are only allowed to put in 2-hour worth of office hours per day that go towards earning points back on the above listed work.

Grading Scale		Course Evaluation	
Α	100-90	Attendance	5%
В	89-80	Quizzes	20%
С	79-70	Homework	20%
D	69-60	Exams	15%
F	59-Below	In Class Assign.	20%
		Project	20%

Cheating, Plagiarism/Academic Integrity and Penalties:

Academic Integrity is the avoidance of gaining an unfair advantage in academic work, such as cheating, falsification of information, fraud, plagiarism, and unauthorized access to academic records or computer systems. The instructor ordinarily has final authority over the grades assigned to students and the authority to lower grades if cheating or plagiarism occurs. If a student violates the Academic Integrity Policy, the following steps will take place:

- 1. Ordinarily, the instructor will take appropriate disciplinary action, which may include the awarding of "F" on the particular assignment or in the course.
- 2. The instructor will make a report of the incident and of action taken, if any, to his/her department Chairperson, the Vice President for Student Affairs, and the student.
- 3. The Judicial Board may review the incident and impose conduct discipline in accordance with the standard of conduct.

If a student is caught cheating, the first violation will be an "F" on that assignment. The second will follow the above process with an automatic "F" in the class.

Student with Special Needs:

Mississippi Valley State University is committed to providing reasonable accommodations for students with a documented disability. If you feel you are eligible to receive accommodations for a covered disability (medical, physical, psychiatric, learning, vision, hearing, etc.) and would like to request it for this course, you must be registered with the Services for Students with Disabilities (SSD) program administered by University College. It is recommended that you visit the Disabilities Office located inside the EMAP Computer Lab in the Technical Education (IT) Building to register for the program at the beginning of each semester.

For more information or to schedule an appointment, please contact Mr. Billy Benson, Jr. via phone or email at 662-254-3005 or billy.benson@mvsu.edu.

I reserve the right to make changes on this syllabus as needed. This document does not constitute a contract with the University. It contains guidelines.