



Undergraduate Course Syllabus

IT 330: Database Design and Management

Center: Online

Course Prerequisites

IT 145

Course Description

This course covers the design and implementation of information systems within a database management system environment. Students will demonstrate their mastery of the design process acquired in earlier courses by designing and constructing a physical system using database software to implement logical design. Topics include data models and modeling tools and techniques; approaches to structural and object design; models for databases (relational, hierarchical, networked and object-oriented designs), CASE tools, data dictionaries, repositories, and warehouses, Windows/GUI coding and/or implementation, code and application generation, client-server planning, testing and installation, system conversion, end-user training, and integration and post-implementation review.

Course Outcomes

- Differentiate between database systems and file systems by comparing features and functions to determine benefits in data management
- Analyze business information storage problems for depicting suitable information model solutions using entity relation diagrams
- Apply database normalization theory to relational data models for defining relationships and minimizing redundancy
- Develop solutions to query and data update problems using a Structured Query Language interface to create, populate, maintain, and query databases

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, [MBS Direct](#), rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

Coursemate for Database Systems

Cengage Custom Publishing

11th Edition

MBS Direct SKU #: 1762298

Software Requirement

This course requires use of SNHU's virtual desktop (VDI) environment. Directions to access the VDI are available here: [VDI Instructions](#).

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions forum in Blackboard so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Labs	6	70	420
Discussions	4	25	100
Quizzes	2	50	100
Final Project			
Milestones	2	40	80
Database and Report	1	300	300
		Total Course Points:	1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Undergraduate

<u>Grade</u>	<u>Numerical Equivalent</u>	<i>Total Points. 1,000</i>		
		<u>Points</u>	<u>Points Equivalent</u>	
			<i>Lower</i>	<i>Upper</i>
A	93-100	4	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
B	83-86	3	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
C	73-76	2	730	769
C-	70-72	1.67	700	729
D+	67-69	1.33	670	699
D	60-66	1	600	669
F	0-59	0	0	599
I	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

*Please refer to the [policy page](#) for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. Assignments and discussion board posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Database Systems and Models <i>Database Systems: Design, Implementation, and Management</i> , Chapters 1 and 2 1-1 Discussion: Why Databases? 1-2 Lab 1
2	Relational Database Modeling <i>Database Systems: Design, Implementation, and Management</i> , Chapters 3 and 4 and Appendix A 2-1 Lab 2 2-2 Final Project Milestone One: Project Proposal 2-2

3	<p>Normalization</p> <p><i>Database Systems: Design, Implementation, and Management</i>, Chapter 6</p> <p>3-1 Lab 3</p> <p>3-2 Discussion: Project Stakeholders</p>
4	<p>Structured Query Language</p> <p><i>Database Systems: Design, Implementation, and Management</i>, Chapters 7 and 8</p> <p>4-1 Lab 4</p> <p>4-2 Final Project Milestone Two: Systems Analysis</p>
5	<p>Database Design</p> <p><i>Database Systems: Design, Implementation, and Management</i>, Chapter 9 and Appendix D</p> <p>5-1 Lab 5</p> <p>5-2 Module Five Quiz</p>
6	<p>Database Performance and Optimization; DDBMS</p> <p><i>Database Systems: Design, Implementation, and Management</i>, Chapters 11 and 12</p> <p>6-1 Lab 6</p> <p>6-2 Discussion: Cloud and Distributed Databases</p>
7	<p>Database Connectivity</p> <p><i>Database Systems: Design, Implementation, and Management</i>, Chapter 14</p> <p>7-1 Final Project Submission: Database and Report</p>
8	<p>Database Administration</p> <p><i>Database Systems: Design, Implementation, and Management</i>, Chapter 15</p> <p>8-1 Module Eight Quiz</p> <p>8-2 Discussion: Final Reflection</p>

Attendance Policy

Online students are required to submit a graded assignment/discussion to Blackboard during the first week of class. If a student does not submit a posting to the graded assignment/discussion during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the [full attendance policy](#).

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the [full late assignment policy](#).

SNHU College of Online and Continuing Education Student Handbook

Review the [student handbook](#).

ADA/504 Compliance Statement

Southern New Hampshire University is dedicated to providing equal access to individuals with disabilities, including intellectual disabilities, in accordance with Section 504 of the Rehabilitation Act of 1973, Title III of the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act of 2008. The university prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities.

As soon as you become aware of a disability, we encourage you to contact the Online Accessibility Center (OAC) to discuss accommodations for which you may be qualified. Reasonable accommodations are established through an interactive process between the student and the OAC. Note that accommodations are not retroactive and that disability accommodations are not provided until an accommodation letter has been processed.

Contact Information:

Online Accessibility Center

Phone: 866-305-9430

Email: oad@snhu.edu

For questions concerning support services, documentation guidelines, or general disability issues, visit the [Online Accessibility Center](#) website.

If you feel you have been denied appropriate disability-related accommodations, including appropriate auxiliary aids and services, you may file a grievance as described in the ADA/504 Grievance Policy found on the [Disability Services](#) webpage.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the [full academic honesty policy](#).

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the [full copyright policy](#).

SNHU College of Online and Continuing Education Withdrawal Policy

Review the [full withdrawal policy](#).

Southern New Hampshire University Policies

More information about SNHU policies can be found on the [policy page](#).

Assessment Calibration and Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University's College of Online and Continuing Education may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you have any questions or concerns, contact your advisor. If you would like to withdraw permission for use of your work, please contact the assessment calibration administrator at assessmentcalibration@snhu.edu. See [this document](#) for more information.