

# **Undergraduate Course Syllabus**

IT 349: Database Administration

Center: Online

### **Course Prerequisites**

None

#### **Course Description**

Identify the range of tasks a database administrator performs, including disaster recovery, performance analysis and tuning, data dictionary maintenance, data modeling and optimization, and database and user management and monitoring. Assess the techniques, features, and best practices used in managing a relational database. Gain practical experience through applying concepts presented in the course to real-world scenarios involving installation, management, performance monitoring, creation of users and user privileges, backup, and recovery.

#### **Course Outcomes**

- Configure relational database environments to align to a defined set of business requirements
- Perform common database maintenance and administration tasks on various database management systems that improve functionality
- Optimize databases for scalability and performance based on the business environment and in accordance with business needs
- Perform database backups and successfully restore data operations in accordance with best practices in database administration
- Manage secure database by performing common security administration and access procedures

#### **Required Materials**

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, <u>MBS Direct</u>, 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.

Database Administration: The Complete Guide to DBA Practices and Procedures

Craig S. Mullins

Addison-Wesley Professional

Second Edition

2012

ISBN: 978-0-321-82294-9

#### **Software Requirement**

This course requires use of SNHU's virtual desktop (VDI) environment. Directions to access the VDI are available here: <u>VDI Instructions.</u>

#### **Instructor Availability and Response Time**

Your class interaction with the instructor and your classmates will take place 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 discussion topic 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
Discussions	8	25	200
Final Project			
Milestones	5	100	500
Recommendations	1	150	150
Job Aid	1	150	150
		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.

		Total Points.	1,000	
<u>Grade</u>	Numerical Equivalent	<u>Points</u>	Points Equivalent	
			Lower	Upper
Α	93-100	4	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
В	83-86	3	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
С	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
1	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end			
w	of term) Withdrawn			

<sup>\*</sup> Please refer to the <u>policy page</u> for information on the incomplete grade process.

## **Grading Guides**

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

# **Weekly Assignment Schedule**

All reading and assignment information can be found within each module of the course. Assignments and discussion 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.

Module	Topics and Assignments
1	Introduction to Databases
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 1
	1-1 Discussion: Introduction to Databases
	1-2 Final Project Review
2	Understanding the Database Environment
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 2
	2-1 Discussion: Understanding the Database Environment
	2-2 Final Project Milestone One: Database Optimization Recommendations, Part I
	2-3 Final Project: Continue Work

3	Data Modeling
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 3
	3-1 Discussion: Data Modeling and Normalization
	3-2 Final Project Milestone Two: Database Optimization Recommendations, Part II
	3-3 Final Project: Continue Work
4	Managing Database Growth
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 4
	4-1 Discussion: Managing Database Growth
	4-2 Final Project Milestone Three: Job Aid, Part I
5	Application Design
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 5
	5-1 Discussion: Designing Database Applications
	5-2 Final Project Milestone Four: Job Aid, Part II
6	Design Review
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 6
	6-1 Discussion: Design Reviews
	6-2 Final Project Milestone Five: Job Aid, Part III
7	Database Change Management
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 7
	7-1 Discussion: How to Deal With Change
	7-2 Final Project Submission: Configuration and Optimization Recommendation
	7-3 Final Project Submission: Job Aid
8	Data Availability
	Database Administration: The Complete Guide to DBA Practices and Procedures, Chapter 8
	8-1 Discussion: When to Run Database Updates

#### **Attendance Policy**

Online students are required to submit a graded assignment/discussion 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 <u>full attendance policy</u>.

# **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 <u>full late assignment policy</u>.

## **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: oac@snhu.edu

For questions concerning support services, documentation guidelines, or general disability issues, visit the <u>Online Accessibility Center</u> 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 <u>Disability Services</u> 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 <u>full academic honesty policy</u>.

#### **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 <u>full copyright policy</u>.

#### **SNHU College of Online and Continuing Education Withdrawal Policy**

Review the <u>full withdrawal policy</u>.

#### **Southern New Hampshire University Policies**

More information about SNHU policies can be found on the policy page.

# **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 email <a href="mailto:assessmentcalibration@snhu.edu">assessmentcalibration@snhu.edu</a>.