
USF Sarasota-Manatee - Substantive Undergraduate Course Proposal Form

1. College/School Contact Information

<u>Tracking Number</u> 33	<u>Date & Time Submitted</u> 2014-01-21 10:57:42.0	
<u>Discipline</u> Information Technology	<u>College/School</u>	<u>Budget Account Number</u> 380700004
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2. Course Information

<u>Prefix</u> CIS	<u>Number</u> 4368	<u>Full Title</u> Database Security and Audits	
Is the course title variable?			N
Is a permit required for registration?			N
Are the credit hours variable?			N
<u>Credit Hours</u> 3	<u>Section Type</u> Class Lecture (Primarily)	<u>Grading Option</u> Regular	

Abbreviated Title (30 characters maximum)
Database Security and Audits

5. Prerequisites

Database course.

6. Corequisites

7. Co-Prerequisites

8. Course Description

An in-depth look at database security concepts and auditing techniques. Hands-on approach when examining security techniques. Examines different security strategies and advancements in implementation as well as problem solving.

9. New Course Information

<u>New Prefix</u> N/A	<u>New Number</u> N/A	<u>New Full Title</u> N/A
Is the course title variable?		N
Is a permit required for registration?		N
Are the credit hours variable?		N
<u>New Credit Hours</u> N/A	<u>New Section Type</u> Class Lecture (Primarily)	<u>New Grading Option</u> Regular

New Abbreviated Title (30 characters maximum)
N/A

12. New Prerequisites

COP 3718

13. New Corequisites

N/A

14. New Co-Prerequisites

N/A

15. New Course Description

N/A

16. **Justification**

A. Nature of change(s)

The change is to switch the prereq from generic "database course" to specific course COP 3718, Intermediate Database Systems. Currently, students are self-advising and circumventing taking a database course first. The result is students flounder in the course and end up having to drop it or get a poor grade. Explicitly stating the pre-reqs will make them enforceable in Banner and therefore ensure students take them in the correct sequence.

B. Indicate how this course will strengthen the Undergraduate Program.

This will ensure students take the courses in the correct order. This will allow them to gain a greater knowledge by correctly sequencing their courses.

C. What specific area of knowledge is covered by this change that is not covered by courses currently listed.

n/a

D. What is the need or demand for this course? {Here you must indicate if this course is part of a required sequence in the major} What other programs would this course?

Attendance for this course has been in 20s.

E. What qualifications for training and/or experience are necessary to teach this course?

A master's degree is required with 18 graduate credit hours in the discipline.

F. What will be the effect of this change on the program and on the students? Do you plan to drop a course if this change is made? (If dropping/deleting a course please complete the nonsubstantive course change form.)

n/a

17. **Other Course Information**

A. Objectives

Upon completion of this course, students will be familiar with numerous threats used to attack database systems. Additionally, the student will acquire a general knowledge of methods and techniques used to detect security vulnerabilities and protect against threats to database security. The student will also understand the basic tradeoff between costs of protective methods and the values of assets, and understand how this tradeoff affects many aspects of security design.

B. Learning Outcomes

This course provides an introduction to various database security topics. Although these areas will not be covered in complete depth, students will learn and have a good understanding of what happens "under the hood" of database systems, in areas normally "out of sight" of computer users. Students will also learn to appreciate that all security disciplines are inherently practical. There is no "best" organization or architecture for system defense. Instead, the process of planning and designing secure database systems is a series of "trade-off" decisions, usually between effectiveness and cost. This will be illustrated in this course when appropriate.

C. Major Topics

Specific topic coverage includes: ^a Security Architecture ^a Operating System Security Fundamentals ^a Administration of Users ^a Profiles, Password Policies, Privileges, and Roles ^a Database Applications Security Models ^a Virtual Private Databases ^a Database Auditing Models ^a Application and Data Auditing ^a Auditing Database Activities ^a Security and Auditing Cases Project Security

D. Textbooks

Required Texts: Database Security and Auditing: Protecting Data Integrity and Accessibility (Paperback) by Hassan A. Afyouni Published by Course Technology; 1 edition (April 6, 2005) ISBN-10: 0619215593 ISBN-13: 978-0619215590 Recommended: Recommended for CIS 4368 Special Topics: Database Security and Audits Implementing Database Security and Auditing: Includes Examples for Oracle, SQL Server, DB2 UDB, Sybase (Paperback) by Ron Ben Natan Published by Digital Press (April 18, 2005) ISBN-10: 1555583342 ISBN-13: 978-1555583347 Or The Database Hacker's Handbook