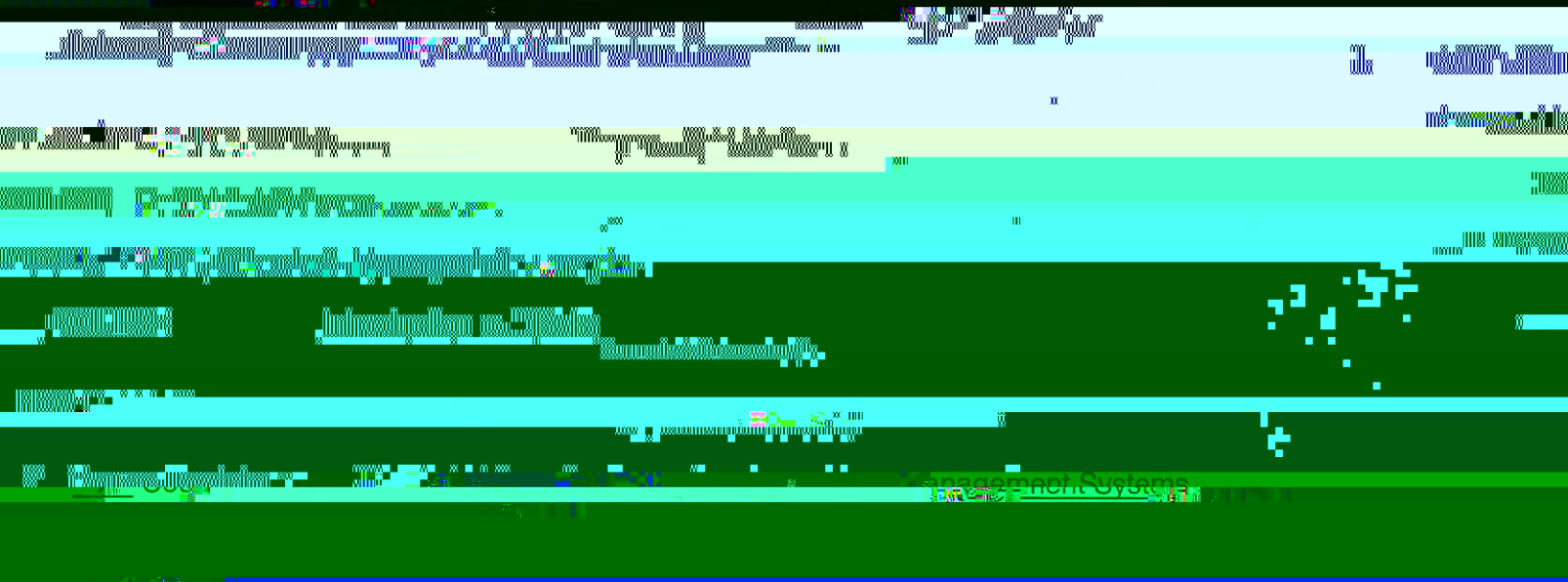


FEB - 8 2013

# LIBERAL STUDIES



Course Deletion

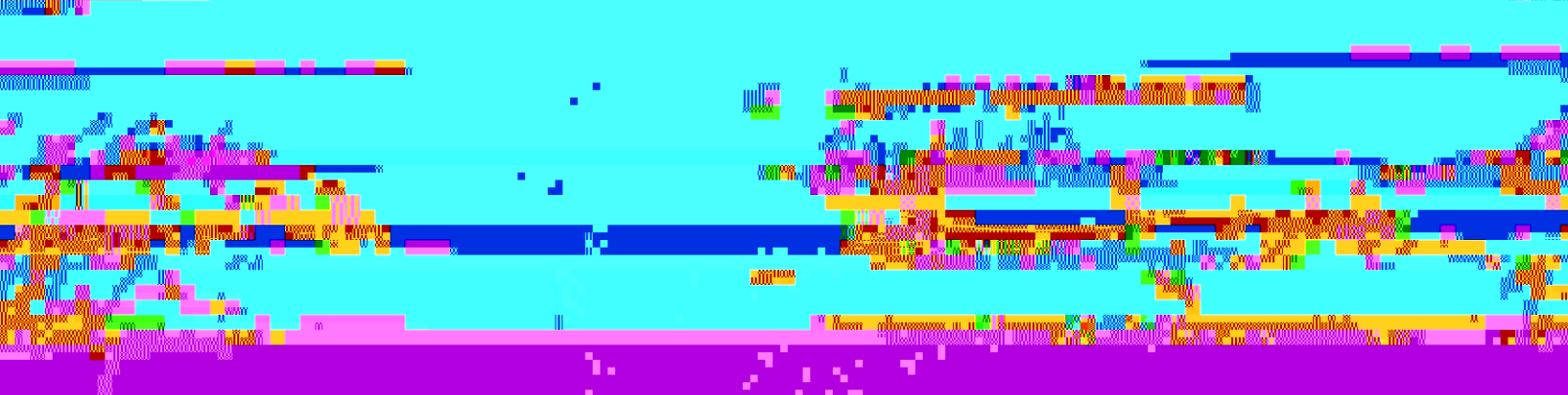
Course Number:

Minor  Track

PROGRAMS

New Program

Program



1. New Syllabus of Record

See Attachment A the new syllabus of record.

2. Summary of the proposed revision

The principal revision is to include subject matter presented in the COSC 315 course in the COSC 441 course. Adjustments in the description and syllabus are contained in Attachment A, the new syllabus of record.

3. Justification for the revision

This is a component in a series of changes necessitated by the receipt of state funding for the program.

I. Catalog Description

COSC 441

Prerequisites: COSC 220 (or equivalent) and 310 or permission of instructor

3 lecture hours  
0 lab hours  
(3c-0l-3sh)

III. Detailed Course Outline

1. Introduction to Database Concepts and Architecture. (3 hrs.)  
Characteristics, advantages and implications of the database approach to information systems as contrasted with traditional information systems.



Homework 2: Give the Cabal Source Code Description of the File `cabal.cabal` for the `cabal` package.

V. Required textbooks, supplemental books and readings

1. Codd, E. F., "Relational Database: A Practical Foundation for Productivity", Communications of the ACM, Vol. 25, No. 2, February, 1982, pp. 109- 117.
2. Elmasri, R., Navathe, S., Fundamentals of Database Systems, Third Edition, Addison-Wesley, 2000.
3. Kent William "A Simple Guide to Five Normal Forms in Relational Database Theory"

Communications of the ACM, Vol. 26, No. 1, February 1983, pp. 120-124.

VI. Special resource requirements

None.

VII. Bibliography

1. Castano S., Fugini M., Martella G., and Samarati P., *Database Security*, New York, N.Y.: ACM Press/reading, Mass.: Addison-Wesley (1995).
2. Celko, J., *SQL for Smarties: Advanced SQL Programming*, San Francisco, Calif.: Morgan Kaufmann (1995).
3. Codd, E.F., "Domains, Keys, and Referential Integrity in Relational Databases," *InfoDB* 3, No. 1 (Spring 1988).

Indiana University of Pennsylvania  
Computer Science Department

Dr. Shubra

COSC 441 - Data Base Management

Introduction

This three credit upper level course is being offered to provide interested motivated students with a fundamental knowledge of, and a practical experience with, the database concept. The course is a logical extension of the concepts taught in COSC 315 Large File Organization and Access, COSC 310 Data Structures and COSC 220 Applied Computer Programming.

The course texts are:

Required:

Elmasri, R., Narathe, S., Fundamentals of Database Systems, Third Edition, Addison-Wesley, 2000.

Codd, E. F., "Relational Database: A Practical Foundation for Productivity", Communications of the ACM, Vol. 25, No. 2, February, 1982, pp. 109- 117.

Kent, William, "A Simple Guide to Five Normal Forms in Relational Database Theory", Communications of the ACM, Vol. 26, No. 1, February, 1983, pp. 120-124.

Objectives:

1. Extend integrated file systems to the data base concept of data storage and retrieval

2. Define the terminology used in database systems and data base design



Tentative Course Schedule where:

E = Elmasri's Text  
 Codd = E. F. Codd paper  
 Kent = William Kent paper

Week	Topic	Reading
1-2	Introduction to DBMS	E1, E2, E3
3-4	ER Model Relational Data Model Relational Algebra	Codd, E7
5-6	Exam 1 SQL Standard	E1-3, Codd, E7 E8
7-8	VAX/RDB/SQL SQL Project (online)	Handouts
9	Exam 2 Embedded SQL Embedded SQL Project	E8, Vax/Rdb/SQL E10.5
10	Normalization & Data Base Design	E14, E15 Kent
11-12	Microcomputer DBMS Microsoft Access Project	E10.7-E10.9
13	Emerging Trends	E4, E10.1-E10.6, E17, E19, E20

Grading:

Exam 1 and 2	200 points
Final	100 points
Homework	50 points
SQL Project	50 points

At worst, I will draw the line for the course grades as follows:

**Total Possible Points**

100 - 90% - A  
89 - 80% - B  
79 - 70% - C  
69 - 60% - D  
59 - 0% - F

Because of the need to demonstrate software packages and to have hands-on exercises, the class will not always be held in the originally scheduled room. Room changes will be announced in class.