## Curriculum Committee

FLORIDA SOUTHWESTERN STATE COLLEGE

**New Course Proposal**

| | |
|---|---|
| **School or Division** | School of Business and Technology |
| **Program or Certificate** | Information Systems Technology |
| **Proposed by (faculty only)** | George Kodsey & Mary Myers |
| **Presenter (faculty only)** | George Kodsey |
| Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and must be submitted for a later date. | |
| **Submission date** | 3/19/2020 |
| **Course prefix, number, and title** | CEN4333 – Advanced Database Development |

All Curriculum proposals require approval of the Curriculum Committee and the Provost. Final approval or denial of a proposal is reflected on the completed and signed proposal.

☒ Approve ☐ Do Not Approve

Mary R. Myers — *Curriculum Committee Chair Signature*

4/8/2020 — *Date*

☑ Approve ☐ Do Not Approve

Helen Richter — *Provost Signature*

5.21.2020 — *Date*

All Curriculum proposals require review by the Office of Accountability & Effectiveness.

☐ Reviewed

Simon Bahl — *Office of Accountability & Effectiveness Signature*

5/21/2020 — *Date*

## Section I, Important Dates and Endorsements Required

**NOTE:** Course and Program changes must be submitted by the dates listed on the published Curriculum Committee Calendar. Exceptions to the published submission deadlines must receive prior approval from the Provost' Office.

| **Term in which approved action will take place** | Fall 2021 |
|---|---|
| **Provide an explanation below for the requested exception to the** effective **date.** | |
| | |

| **Any exceptions to the term start date requires the signatures of the Academic Dean and Provost prior to submission to the Dropbox.** | | |
|---|---|---|
| **Dean** | **Signature** | **Date** |
| | | |
| **Provost** | **Signature** | **Date** |
| | | |

| **Required Endorsements** | **Type in Name** | **Select Date** |
|---|---|---|
| **Department Chair or Program Coordinator/Director** | Dr. Mary Myers | 3/17/2020 |
| **Academic Dean or Provost** | Dr. Debbie Psihountas | 3/17/2020 |

| **List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).** |
|---|
| Prof Melinda Lyles, Dr. Mary Myers, Dr. George Kodsey, Dr. Roger Webster |

| Has the Libraries' Collection Manager been contacted about the new course and discussed potential impacts to the libraries' collections? |
|---|
| No |

## Section II, New Course Information (must complete all items)

| | |
|---|---|
| **List course prerequisite(s) and minimum grade(s) (must include minimum grade if higher than a "D").** | COP2700 with a grade of "C" or better. |
| **Provide justification for the proposed prerequisite(s).** | COP2700 provides the introduction to relational database design and SQL. |
| **Will students be taking any of the prerequisites listed for this course in different parts of the same term (ex. Term A and Term B)?** | No |
| **List course co-requisites.** | |
| **Provide justification for the proposed co-requisite(s).** | |
| **Is any co-requisite for this course listed as a co-requisite on its paired course?** (Ex. CHM 2032 is a co-requisite for CHM 2032L, and CHM 2032L is a co-requisite for CHM 2032) | |
| **Course credits or clock hours** | 3 course credits<br>Must pass with a "C" or better. |
| **Contact hours (faculty load)** | 3 |
| **Are the Contact hours different from the credit/lecture/lab hours?** | No |
| **Select grade mode** | Standard Grading (A, B, C, D, F) |
| **Credit type** | College Credit |
| **Possible Delivery Types (Online, Blended, On Campus)** | Online, Blended, On Campus |
| **Course description** (provide below) | |
| This course explores various topics in database management systems (DBMS), using a typical commercial DBMS (e.g., MySQL, SQL server). Administration, security, stored procedures, triggers, transactions, functions, data mining, data warehousing, and remote access to databases are some of the topics covered. The student is expected to demonstrate an understanding of these database concepts through creating, deploying, and utilizing various relational database designs. | |

| **General topic outline** (type in outline below) |
|---|
| • Understanding of the relational data model.<br>• Proficiency with conceptual modelling of databases using Entity-Relationship (ER) Diagrams. |

- Familiarity with the database design and normalization theory.
- Proficiency with relational algebra and Structured Query Language (SQL).
- Familiarity with database implementation issues.
- Understanding of the basics of query processing and query optimization.
- Familiarity with database tuning techniques.
- Proficiency with the administration and development.
- Proficiency with database application development.
- Empirical evaluation of database systems.
- Implement cloud-hosted databases

Revised: 11/11, 6/12, 6/13, 7/14, 8/15, 8/16, 8/17, 5/18, 6/18;10/18;7/19

**Learning Outcomes:** For information purposes only.

## IV. Course Competencies, Learning Outcomes and Objectives

### A. General Education Competencies and Course Outcomes

1. Integral *General Education Competency or competencies*:
General Education Competency: **Evaluate**

Course Outcomes or Objectives Supporting the General Education Competency Selected:

- Proficiency with conceptual modelling of databases using Entity-Relationship (ER) Diagrams.
- Familiarity with the database design and normalization theory.

2. Supplemental *General Education Competency or competencies*:

**B. In accordance with Florida Statute 1007.25 concerning the state's general education core course requirements, this course meets the general education competencies for ....**
Part B would only be included in the course outlines of those courses are included in the FSW Catalog as a General Education Core Course. If this is not a core course, then outline letter C would become B.

**C. Other Course Objectives/Standards**

**Copy and Paste the SCNS Course Profile Description below (http://scns.fldoe.org/scns/public/pb_index.jsp).**

PROFESSIONAL-LEVEL DATABASE ACCESS FROM OBJECT-ORIENTED SYSTEMS, INCLUDING COMPLEX SQL QUERIES AND STORED PROCEDURES. USE OF OBJECT-RELATIONAL FRAMEWORKS. HANDS-ON EXERCISES WITH CURRENT RDBMS SOFTWARE.

Revised: 11/11, 6/12, 6/13, 7/14, 8/15, 8/16, 8/17, 5/18, 6/18;10/18;7/19

Revised: 11/11, 6/12, 6/13, 7/14, 8/15, 8/16, 8/17, 5/18, 6/18;10/18;7/19

| | |
|---|---|
| **ICS code for this course** | ADVANCED AND PROFESSIONAL - 1.16.07 - COMPUTER & INFO SCIENCE |
| **Institutional Reporting Code** | 11607 COMPUTER AND INFOR SCIENCE |
| **Degree Attributes** | BAS - BAS COURSE |
| **Degree Attributes (if needed)** | Choose an item. |
| **Degree Attributes (if needed)** | Choose an item. |
| **Degree Attributes (if needed)** | Choose an item. |
| **Should any major restriction(s) be listed on this course? If so, select "yes" and list the appropriate major restriction code(s) or select "no".** | BAS - IST |
| **Is the course an "International or Diversity Focus" course?** | No, not International or Diversity Focus |
| **Is the course a General Education course?** | No |
| **Is the course a Writing Intensive course?** | No |
| **If Replacing a course, combining a Lecture/Lab or splitting a C course – Is there a course equivalency?** | |
| **Is the course repeatable*?**<br>(A repeatable course may be taken more than one time for additional credits. For example, MUT 2641, a 3 credit hour course can be repeated 1 time and a student can earn a maximum of 6 credits).<br>*Not the same as Multiple Attempts or Grade Forgiveness | No |
| **Do you expect to offer this course three times or less (experimental)?** | No |

| **Impact of Course Proposal** | |
|---|---|
| **Will this new course proposal impact other courses, programs, departments, or budgets?** | No |
| **If the answer to the question above is "yes", list the impact on other courses, programs, or budgets?** | |
| **Have you discussed this proposal with anyone (from other departments, programs, or institutions) regarding the impact? Were any agreements made? Provide detail information below.** | |

Revised: 11/11, 6/12, 6/13, 7/14, 8/15, 8/16, 8/17, 5/18, 6/18;10/18;7/19

## Section III, Justification for proposal

| Provide justification (below) for this proposed curriculum action. |
| --- |
| This course is being proposed as an update to the curriculum in the BAS- Information Technology Systems degree. Student must have in-depth experience with database systems. |