



**Application for Offering a Course Using a  
Distance Education Format**

APR 22 2004

1. Course Prefix and Number: **CIS 170**  
Course Title: **Introduction to Database Design**

Course Description: This course introduces the standards for designing relational databases. Design criteria include first, second, and third normal forms to eliminate modification anomalies. Discussions review the capabilities of three major types of data models—hierarchical, network, and relational – as they apply to hypothetical sets of data objects. Experiences include the creation of a logical design, and translation into a physical database using the relational model. Queries will be performed using both a host language interface and Structured Query Language.

Course Objectives/Competencies:

Upon successful completion of this course, the student can:

- Differentiate between traditional files and databases.  
Define a database management system (DBMS) and describe the services a DBMS provides to users.
- Identify and describe the main features of three primary types of models upon which databases are built: hierarchical, network, and relational.  
Demonstrate an understanding of the difference between logical and physical design.  
Define and be able to use normalization in the logical design of a database.
- Define and be able to use data definition language, data manipulation language, and instructions that apply relational algebra.
- Design a realistic business application using a technology-independent data model with emphasis on data integrity and security.  
Demonstrate an understanding of the database administration function.
- Demonstrate an understanding of distributed databases.

2. Effective date (semester and year): First Summer Session, 2004
3. Describe the type of distance learning delivery method to be used.  
This course will be taught via the Internet.

4. Describe how the course will achieve, in new ways, the same learning outcomes as when the course is taught by traditional delivery methods.

This course will be taught as a web-based distance course, using an online course management system. Traditional features such as homework assignments and exams will be supplemented with online chats, threaded discussions, and web-based content delivery. Attendance at an orientation session and other “live” events may be required and will be listed in the course syllabus. Submission of assignments via email or a course management system drop box may also be required. If the course has a lab component, completion of lab assignments may require attendance onsite at LCC or other facilities.

5. Describe the availability of related services such as labs, library, research, and supplemental information.

Students have access to library research materials via the web, including Kentucky Virtual Library databases and other library databases. Students have access to traditional print research materials in local public libraries and via interlibrary loan.

6. For web courses: Describe how ADA compliance has been assessed to ensure accessibility of course content for students with disabilities.

The course will be screened for ADA compliance using the accessibility guidelines and/or tools at LCC’s Wider World Web site. Screening will take place before the course is listed in the printed or online schedule of classes.

7. Describe how appropriate levels of faculty-student and student-student interaction will be achieved.

Students may interact with the instructor via e-mail, telephone, fax, and student-faculty threaded discussions. Students may interact with each other via e-mail, telephone, fax, threaded discussions and web-based chat. Participation in threaded discussions may be required.

8. Describe any technical requirements for remote sites (ITV, computer hardware/software, and special equipment).

Technical requirements for web server space and the course management system are met. Specific technical requirements for students accessing the Kentucky Virtual University may be found at their web site. If needed, requirements for completion of lab assignments will be listed in the course syllabus.

9. Within the department, who should be contacted for further information about the proposed course:

Name: James Kolasa

Phone: 859.257.4872x4013



Signatures of Approval  
for  
Internal LCC Proposals

Program/Area:

Computer Information Systems

Program/Area Coordinator:

Thomas Pyzdek

Date: 03/11/04

Division:

Behavioral Sciences and Information Systems Technologies

Division Program Development Committee Chair:

Anthony Ron

Date: 2/20/04

Division Chair:

Debbie Holt

Date: 3/11/04

Academic Council for Lexington Community College Chair

Jan Kelly

Date: 4-21-04

This form is applicable for proposals that do not have to be submitted to the UK Senate.  
Examples include but are not limited to the following:

- Application for Removal from General Education List
- Application for Inclusion on General Education List
- Addition to, Change in, or Deletion from *Lexington Community College Credit for External Experiences Manual*
- Application for Offering a Course Using a Distance Education Format



ACADEMIC COUNCIL FOR LEXINGTON COMMUNITY COLLEGE

PROPOSAL CHECKLIST

Initial Date

Handwritten initials: FRAC

Faculty Member

- Prepares proposal
Obtains approval from program/area faculty and signature of program/area coordinator
Submits form to Academic Affairs and division Program Development Committee
Forwards proposal to appropriate KCTCS program development contact

Handwritten initials: AD

Handwritten dates: 2/13/04, 2/20/04, 2/26/04

Division Program Development Committee Chair

- Calls meeting of committee
Conducts vote on approval of proposal
Signs proposal form and forwards proposal to Division Chair if committee approves proposal, or sends proposal back to faculty member with suggestions if committee does not approve proposal

Handwritten initials: DH

Handwritten dates: 2/20/04, 2/27/04, 3/11/04

Division Chair

- Places proposal on division meeting agenda
Conducts vote on approval of proposal
Signs proposal form and forwards proposal to Academic Council Chair if division approves proposal, or sends proposal back to faculty member with suggestions if division does not approve proposal

Academic Council Chair

- Places proposal on Academic Council meeting agenda when required materials are received by deadline
Circulates proposal to College faculty
Assigns primary reviewer for proposal
Invites faculty member responsible for proposal to Academic Council meeting
Sends proposal to Academic Council members
Conducts vote on approval of proposal
Signs proposal form if approved
Forwards proposal to the UK Senate Council and UK Registrar if Academic Council approves proposal, or sends proposal back to faculty member with suggestions if Academic Council does not approve proposal

Notes:

- This checklist is applicable for all program and curriculum proposals.
After Academic Council approval, the faculty member submitting proposal is responsible for making any requested changes and submitting revised form to the Academic Council recording secretary within one week.
To ensure implementation for the following Summer session and Fall semester, proposals should be approved by Academic Council no later than the December meeting.
To ensure implementation for the following Spring semester, proposals should be approved by Academic Council no later than the May meeting.
Agenda items for Academic Council meetings are due by the 15th of the preceding month in order to be considered.
For more information, consult the Academic Council web page at http://www.uky.edu/LCC/PRES/Academiccouncil/academiccouncil.html.