



Application for Offering a Course Using a Distance Education Format

1. Course Prefix and Number: **CS 115**
Course Title: **Introduction to Computer Programming**

Course Description: This course teaches introductory skills in computer programming using an object-oriented computer programming language. There is an emphasis on both the principles and practice of computer programming. Covers principles of problem solving by computer and requires completion of a number of programming assignments.

Course Objectives/Competencies:

The students will learn the basic techniques and tools for programming in a high-level, object-oriented computer language.

Upon completion of this course students will be proficient in:

- Solving simple problems using top down design, writing the corresponding algorithm and desk-checking it for accuracy.
- Using elementary data types, arithmetic operators, and logical expressions (using relational and logical operators) in order to code suitable solutions to programming problems.
- Programming selection using if, if - else, nested if, and switch statements.
- Programming iteration using while, for, do - while, and nested loops.
- Working with predefined functions.
- Type casting.
- Implementing user defined functions using both call by value and call by reference parameter passing.
- Working with basic filestream input/output methods such as open, close, fail, and eof.
- Programming solutions using arrays to solve problems like finding the maximum, searching, and sorting using selection and bubble sort.
- Working with structures to implement user defined data types and functions for manipulating them.

Students will become familiar with

- Several ways to format program output.

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- Internal representation of integers using two's complement.
- Programming solutions using multi-dimensional arrays such as matrix multiplication.
- Using the string class.
- Recursion by tracing examples.
- The concept of object oriented programming with a simple class that contains private member data and both public and private member methods.

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.

Revised 10/02

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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

Email: jkolasa@uky.edu

**Signatures of Approval
for
Internal LCC Proposals**

Program/Area:

Computer Information Systems

Program/Area Coordinator:

Thomas P. [Signature]

Date: 3/11/04

Division:

Behavioral Sciences and Information Systems Technologies

Division Program Development Committee Chair:

Anthony Rose

Date: 2/20/04

Division Chair:

Debbie Holt

Date: 3/11/04

Academic Council for Lexington Community College Chair:

[Signature]

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

<u>Initial</u>	<u>Date</u>
JFK	_____

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

D	2/13/04
D	2/20/04
D	2/20/04

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

DK	2/20/04
DK	2/27/04
DK	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

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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>.