Clackamas Community College

Online Course/Outline Submission System

☑ Show changes since last approval in red | Print | | Edit | | Delete | | Back |

| Reject | | Publish |

Section #1 General Course Information

Department: Business & Computer Science: Computer Science

Submitter

First Name: Richard
Last Name: Albers
Phone: 3166
Email: richa@clackamas.edu

Course Prefix and Number: CS - 162

 # Credits: 4

Contact hours

Lecture (# of hours): 44
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 44

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Computer Science II

Course Description:

Introduces fundamental concepts of object oriented programming and dynamic memory management. Covers objects, classes, pointers, dynamic memory allocation, linked lists, and program correctness, verification, and testing.

Type of Course: Lower Division Collegiate

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Computer Science AAS & Certificate

Are there prerequisites to this course?

Yes

Pre-reqs: CS-161

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Computation

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. implement multidimensional arrays;
2. implement File I/O;
3. explain the benefits of Object Oriented Design and Programming, and OO concepts such as encapsulation and abstraction;
4. design and Implement classes;
5. build projects consisting of multiple source files;
6. explain how pointers work and use them effectively in a program;
7. explain how dynamic memory works and implement it in a program;
8. explain and implement linked list;
9. explain and implement recursion.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Multidimensional Arrays
2. File I/O
3. Classes
4. Multifile compilation
5. Pointers
6. Dynamic Memory management
7. Linked Lists
8. Recursion

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency   **No**
2. Produce renewable energy   **No**
3. Prevent environmental degradation   **No**
4. Clean up natural environment   **No**
5. Supports green services   **No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ PSU (Portland State University)

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ required or support for major

:

First term to be offered:

Next available term after approval
: