CSC143 - Computer Programming II

Document Type: Master Course Outline
Proposal Type: Revision
Requester(s): Daniel J Jinguji
College: North
Origination Approved: 12/09/2015 - 1:25 PM

BASIC INFORMATION
- Requester(s): Daniel J Jinguji
- College: North Seattle College
- Division/Dept: Math / Science
- Dean: Alissa D Agnello
- Peer Reviewer(s): Lori Whitish

COURSE INFORMATION

Proposed Course Number:
- Prefix: CSC
- Number: 143

- [ ] Request a new Prefix
- [ ] This will be a common course

Full Title: Computer Programming II
Abbreviated Title: Computer Programming II

Catalog Course Description:
Advanced concepts of modern programming that continue the ideas introduced in CSC 142. Topics include classes and interfaces, inheritance, graphics, exceptions, stream I/O, recursion, analysis of algorithms, and some dynamic structures (lists, stacks, trees). Uses the Java programming language. Prerequisite: CSC 142.

Course Length: 11 Weeks
- [ ] Request an Exception

Topical Outline:
- Inheritance and Class Relationships
- Swing and Graphical User Interface (GUI) Design and Implementation
- Structured Exception Handling
- Dynamic Data Structures
  - Linked Lists
  - Other linear collections: Sets, Stacks, Queues
  - Non-linear collections: binary trees, binary search trees, hash tables
- Recursion
- Analysis of Algorithms (Big-O notation)
- Additional topics as determined by instructor. May include:
  - Stream I/O
  - Java packages and namespace
Computer Programming II (MCO)

- Unit testing and JUnit
- Java server pages

COURSE CODING

<table>
<thead>
<tr>
<th>Funding Source:</th>
<th>1..................State</th>
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<tr>
<td>Institutional Intent:</td>
<td>11..................Academic Transfer</td>
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Select the Distribution Area of the AA Degree that this course will satisfy, if applicable:

**Distribution Areas**

- Q/SR Quantitative Symbolic Reasoning

**Will this course transfer to a 4-year university?**

- Yes

Please Describe:

- Transfers to UW as CSE 143

**Is this course designed for Limited English Proficiency?**

- No

**Is this course designed for Academic Disadvantaged?**

- No

**Does this course have a Workplace Training component?**

- No

**CIP Code:**

- 11.0101

**Credits:**

- Will this course be offered as Variable Credit? **No**

**List Course Contact Hours**

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<tr>
<th>Contact Hours</th>
<th>Credit</th>
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<tr>
<td>Lecture (11)</td>
<td>1</td>
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<tr>
<td>Lab (22)</td>
<td>1</td>
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<tr>
<td>Clinical Work (33)</td>
<td>1</td>
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<td>Other (55)</td>
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- Total Contact Hours: 55
- Total Credits: 5

Request Specific CIP Code
This is to certify that the above criteria have all been met and all statements are accurate to the best of my knowledge.

Faculty involved in originating this program:

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Dean:

<table>
<thead>
<tr>
<th>Alissa D Agnello</th>
<th>Alissa D Agnello</th>
<th>10/1/2015</th>
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Results of NSCC Curriculum and Academic Standards Committee Findings

Participating Faculty Response and Remarks

- [X] Recommended for approval
- [ ] Not recommended for approval

Chairman, Curriculum and Academic Standards Committee:

<table>
<thead>
<tr>
<th>Brian Palmer</th>
<th>Brian Palmer</th>
<th>12/9/2015</th>
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Vice President for Instruction:

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<th>Kristen A Jones</th>
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