Introduction to Computer Programming in Java

CSE 1223

Description / Conditions

Transcript Abbreviation:
Programming Java

Course Description:
Introduction to computer programming and to problem solving techniques using computer programs; programming lab experience.

Course Levels:
Undergraduate (1000-5000 level)

Designation:
Elective

General Education Course:
(N/A)

Cross-Listings:
(N/A)

Course Detail

Credit Hours (Minimum if “Range” selected):
3.00

Max Credit Hours:
(N/A)

Select if Repeatable:
Off
Maximum Repeatable Credits:  
(N/A)

Total Completions Allowed:  
(N/A)

Allow Multiple Enrollments in Term:  
No

Course Length:  
14 weeks (autumn or spring)  
12 weeks (summer only)

Off Campus:  
Never

Campus Location:  
Columbus  
Lima  
Mansfield  
Newark

Instruction Modes:  
In Person (75-100% campus; 0-24% online)

Prerequisites and Co-requisites:  
Prereq: Math 1130, 1140, 1149, 1150, or 1151, or Math Placement Level L.

Electronically Enforced:  
No

Exclusions:  
(N/A)

Course Goals and Learning Objectives
Course Goals / Objectives:
Be competent with using basic coding features provided by high-level imperative programming languages
Be competent with writing computer programs to implement given simple algorithms
Be familiar with analyzing simple real-life problems and choosing appropriate algorithms for their solution
Be familiar with using basic data structures such as arrays in simple programs
Be familiar with using methods and classes to help produce well-structured programs
Be familiar with reading and programming for API?s
Be familiar with designing simple text-oriented user interfaces
Be familiar with working in a window-based computing environment
Be exposed to the services provided by an operating system
Be exposed to the virtual machine model of modern computer systems
Be exposed to data abstraction concepts and other more advanced programming ideas

Check if concurrence sought:
No

Contact Hours

Contact Hours:

<table>
<thead>
<tr>
<th>Topic</th>
<th>LEC</th>
<th>REC out-of-class</th>
<th>REC in-class</th>
<th>Weekly LAB out-of-class</th>
<th>Weekly LAB in-class</th>
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</thead>
<tbody>
<tr>
<td>Basic concepts</td>
<td>2.5</td>
<td>0.0</td>
<td>0</td>
<td>1.0</td>
<td>0</td>
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<tr>
<td>Primitive types and expressions; String; basic I/O</td>
<td>2.5</td>
<td>0.0</td>
<td>0</td>
<td>1.5</td>
<td>0</td>
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<tr>
<td>Flow of control and Boolean expressions</td>
<td>4.0</td>
<td>0.0</td>
<td>0</td>
<td>2.0</td>
<td>0</td>
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<tr>
<td>Defining methods</td>
<td>4.0</td>
<td>0.0</td>
<td>0</td>
<td>2.0</td>
<td>0</td>
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<tr>
<td>Arrays</td>
<td>3.0</td>
<td>0.0</td>
<td>0</td>
<td>1.5</td>
<td>0</td>
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<tr>
<td>Basic exception handling and standard Java I/O</td>
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<td>1.5</td>
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<tr>
<td>Classes and objects</td>
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Grading and Texts
Grading Plan:
Letter Grade

Course Components:
Lecture
Lab

Grade Roster Component:
Lecture

Credit by Exam (EM):
Yes

Grades Breakdown:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Midterm</td>
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<tr>
<td>Final exam</td>
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<tr>
<td>Homeworks</td>
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<tr>
<td>Labs</td>
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<td>Class participation</td>
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Representative Textbooks and Other Course Materials:

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
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<tbody>
<tr>
<td>Java: An Introduction to Computer Science &amp; Programming (3rd Edition)</td>
<td>Savitch, W.</td>
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ABET Student Learning Outcomes
### ABET-CAC Criterion 3 Outcomes:

<table>
<thead>
<tr>
<th>Level of Contribution</th>
<th>Outcomes</th>
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</thead>
<tbody>
<tr>
<td>Some contribution (1-2 hours)</td>
<td>1</td>
</tr>
<tr>
<td>Substantial contribution (3-6 hours)</td>
<td>2</td>
</tr>
<tr>
<td>Some contribution (1-2 hours)</td>
<td>4</td>
</tr>
<tr>
<td>Some contribution (1-2 hours)</td>
<td>5</td>
</tr>
<tr>
<td>Significant contribution (7+ hours)</td>
<td>6</td>
</tr>
</tbody>
</table>

### ABET-ETAC Criterion 3 Outcomes:

(N/A)

### ABET-EAC Criterion 3 Outcomes:

<table>
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<tr>
<th>Level of Contribution</th>
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</tr>
<tr>
<td>Some contribution (1-2 hours)</td>
<td>5</td>
</tr>
</tbody>
</table>

### Embedded Literacies (UG courses only)

### Embedded Literacies Info:

### Attachments / Additional Notes or Comments