**Heartland Community College**

**Technology Division**

**Course Syllabus for students**

**Course prefix and number: CSCI 233**

**Course title: Enterprise Application Programming in Java I**

**Credit hours: 3.0**

**Contact hours: 3.5 Lecture: 2.0 Lab: 1.5**

**Days and times the course meets:** Thursdays from 5:00pm – 8:50pm

**Introduction:**

This course will focus on the JEE6 spec on creating web tier applications. My goal is to equip each of you to develop web applications that would connect to back-end systems. Upon successful completion of this course you will be able to quickly develop efficient and quality web tier applications for deployment on any application server that supports the JEE6 spec. We will spend the entire time working in the View and Controller layers of web applications.

**Catalog Description:**

Prerequisite: CSCI 131 with a grade of C or better or CSCI 224 with a grade of C or better or equivalent.  This course introduces Enterprise Application Programming's web tier using the Java 2 Enterprise Edition (J2EE) platform.  The topics covered include: Servlets, Servlet containers, Java Server Pages (JSP), tag libraries, and web frameworks.  Basic and advanced web techniques, event handling, security, server programming, and distributed programming issues will be covered.  Programming assignments will provide practical experience with enterprise application concepts.

**Instructor Information:**

**Instructor name:** Steven Mask

**Phone number to contact instructor:** Leave message withTechnology Division secretary at 268-8863

**Instructor e-mail address:** Steve.Mask@heartland.edu

**Location of instructor’s office:** N/A

**Hours and days of instructor’s office hours:** N/A

**Textbooks:**

**Required:**Hall & Brown. Core Servlets and JavaServer Pages, Volume 1: Core Technologies. Prentice Hall

**Relationship to Academic Development Programs and Transfer:**

CSCI 233 fulfills 3 semester hours of elective credit for the A.A. and A.S. degrees. It should transfer to most colleges and universities as an elective course. However, since this course is not part of either the General Education Core Curriculum or a baccalaureate major program described in the Illinois Articulation Initiative, students should check with an academic advisor for information about its transferability to other institutions.

**Course Objectives (Learning Ou****tcomes):**

|  |
| --- |
| At the completion of this course, the student should be able to: |
| 1. Explain and demonstrate how the specifications of an enterprise system design can be converted to an implementation. |
| 2. Properly segment and deploy enterprise application components for a given situation. |
| 3. Select and implement the proper J2EE technology for a variety of enterprise application components. |
| 4. Select and implement proper methods for establishing communications between client-side and server-side components. |
| 5. Select and implement an appropriate web framework for a given situation. |

**Course/Lab Outline:**

1. Enterprise Application Development Overview
2. The Web Tier
3. Servlets
4. Servlet Containters
5. Filters and Listeners
6. Packaging and Deployment
7. Java Server Pages
8. Tag Libraries
9. Web Frameworks

**Methods of Instruction:**

I will be teaching this class through 20 minute lectures combined with code examples. During lab time I will be available for one-on-one instruction. I will also be conducting code reviews of your code as a learning tool for others but also to prepare you for code reviews when you are working as a developer for an organization. I tailor my method of instruction based on what works for everyone.

**Course Policies:**

**Method of Evaluation (Tests/Exams, Grading System):**

Exams/Assignments:  
Students will be evaluated by examinations, quizzes, and assignments.

|  |  |
| --- | --- |
|  | **%** |
| Homework | **10** |
| Quizes / Tests | 30 |
| Comprehensive Final | 60 |
| **Total** | **100** |
|  |  |

ASSIGNMENTS:  Each student will be expected to complete graded programming assignments during the semester. These assignments allow the student to demonstrate both their knowledge of the subject matter and the integration of the problem solving strategies necessary for programming. The assignments will also assist students in preparing for the exams. Each assignment must include proper documentation and program code.

EXAMS: The Computer Science Department believes that the demonstration of programming is absolutely necessary in order to assess a student’s progress.   Therefore the exams will require students to write code.  The problems used in exams will be representative of the problems presented in the assignments and labs.

Grading Scale:

|  |  |
| --- | --- |
| A | 90% - 100% |
| B | 80% - 89% |
| C | 70% - 79% |
| D | 60% - 69% |
| F | Below 60% |

**Participation (or Attendance)**

If you’re not here most of the time, your chances of passing the final exam will be slim.

**Incompletes**

An incomplete grade may be given to a student who, by the withdrawal date, can reasonably be expected to pass the course. Incompletes may be granted only when justified by extreme circumstances (e.g., serious illness, accident, death or serious illness in the immediate family). Incomplete grades are not given for such reasons as unjustified failure to appear for the final examination. A written agreement, outline the requirements to be met, must be signed by the instructor and the student. The agreed upon requirements must be completed no later than the end of the following semester (spring semester for incompletes granted during the fall, and the following fall for incompletes given during the spring and summer semesters). By the agreed upon date, the instructor will assign a grade or the incomplete will be changed to an ‘F’ if the requirements are not completed.

**Missing an exam and assignments policy**

If I am notified of your absence then I will accept late homework and allow quiz, test or midterm retakes.

**Deadlines**

The deadline for all assignments are before the next class period unless otherwise specified.

**Required Writing and Reading:**

There are no research or writing assignments in this course. However, documentation is an important part of computer programming. Therefore, students will be expected to turn in complete, well-written documentation with each of their programs. All programs are to include descriptive comments within the source code unless you are very familiar with executable documentation.  In addition, certain other documentation methods taught during the course of the semester will be required.

**Student Conduct**

Please turn your phones to vibrate before coming to class.

**Academic Integrity and Plagiarism**

**Academic Integrity**

Academic integrity is a fundamental principle of collegial life at Heartland Community College and is essential to the credibility of the College’s educational programs. Moreover, because grading may be competitive, students who misrepresent their academic work violate the right of their fellow students. The College, therefore, views any act of academic dishonest as a serious offense requiring disciplinary measures, including course failure, suspension, and even expulsion from the College. In addition, an act of academic dishonesty may have unforeseen effects far beyond any officially imposed penalties.

Violations of academic integrity include, but are not limited to cheating, aiding or suborning cheating or other acts of academic dishonesty, plagiarism, misrepresentation of data, falsification of academic records or documents and unauthorized access to computerized academic or administrative records or systems. Definitions of these violations may be found in the college catalog.

**Plagiarism**

Plagiarism is the presenting of others’ ideas as if they were your own. When you write a paper, create a project, do a presentation or create anything original, it is assumed that all the work, except for that which is attributed to another author or creator, is your own. Plagiarism is considered a serious academic offense and may take the following forms:

Copying word-for-word from another source and not giving that source credit.

Paraphrasing the work of another and not giving that source credit.

Adopting a particularly apt phrase as your own.

Using an image or a copy of an image without crediting its source.

Paraphrasing someone else’s line of thinking in the development of a topic as if it were your own.

Receiving excessive help from a friend or elsewhere, or using another project as if it were your own.

[Adapted from the Modern Language Association’s MLA Handbook for Writers of Research Papers. New York: MLA, 1995: 26]

Note that word-for-word copying is not the only form of plagiarism. The penalties for plagiarism may be severe, ranging from failure on the particular piece of work, failure in the course or expulsion from school in extreme cases.

**Support Services:**

**Academic Support Center Services:**

**Library**

The Library, located in the Student Commons Buildings at the Raab Road campus, provides Heartland students with a full range of resources including books, online journal databases, videos, newspapers, periodicals, reserves, and interlibrary loan. Librarians are available to assist in locating information. For more information, please call the Library (309) 268-8200 or (309) 268-8292

**Tutoring Services**

Heartland Community College offers tutoring in various forms at no cost to Heartland students at the Tutoring and Testing Center in Normal and at the Pontiac and Lincoln Centers. Tutors are available at convenient times throughout the week. Study groups are also available by request. For more information about services available at each location, please call the Tutoring and Testing Center in Normal (309) at 268-8231, the Pontiac Center at (815) 842-6777, or the Lincoln Center at (217) 735-1731.

**Testing Services**

The Tutoring and Testing Center provides a secure testing environment for students who are enrolled in online, hybrid, and other distance learning courses; have a documented disability; or need to take a make-up exam. Testing accommodations for students having documented disabilities must be arranged by the student through the Office of Disability Services, and Testing Services will only administer make-up exams at the request of the instructor. Contact Testing Services at (309) 268-8231 for more information.

**Open Computing Lab**

The Open Computing Lab provides free computing for HCC students at convenient times throughout the week. The computer lab is staffed by trained Lab Assistants and offers the use of approximately 70 computers, a scanner, a laser printer, and an electric typewriter.

**Syllabi disclaimer**

This syllabus is subject to change. I will notify you of any changes verbally, and if requested, will print you a new copy.

**Course Calendar:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Topic** | **Readings** | **Labs** |  |
| August 23 | GitHub / CodePen /HTML |  |  |  |
| August 30 | CSS / JavaScript |  |  |  |
| September 6 | Advanced JavaScript /Web Applications |  |  |  |
| September 13 | Servlets – Part 1 |  |  |  |
| September 20 | Servlets – Part 2 |  |  |  |
| September 27 | Cookies / Session |  |  |  |
| October 4 | Java Beans |  |  |  |
| October 11 | **Midterm** |  |  |  |
| October 18 | Object-oriented Development / MVC Paradigm |  |  |  |
| October 25 | Unit Testing / Performance Testing |  |  |  |
| November 1 | JSF / Spring MVC |  |  |  |
| November 8 | Tiles / Templating |  |  |  |
| November 15 | Final Project |  |  |  |
| **November 22** | **Thanksgiving** |  |  |  |
| November 29 | Final Project |  |  |  |
| December 6 | Review/Final Project |  |  |  |
| December 13 | Final Exam Week | Final Exam Week | Final Exam Week |  |

Adapted by the Curriculum and Academic Standards Committee June 1998.

Revised by the Curriculum and Academic Standards Committee Spring 2001.

Revised 08/15/11.