Computer Programming for Business II Fall 2011

Course Number: M&IS 34033 section 001

CRN: 21533

Course Description

This course presently uses the Java programming language to emphasize problem solving, developing systems, structured programming, object-oriented programming and programming style conventions.

Location: BSA 108 **Meeting Day:** W

Meeting Time: 5:30 pm - 8:15 PM

Instructor Name: Professor Janet Formichelli, MS

E-mail: <u>iformich@kent.edu</u>
Office Location: A410 BSA

Office Hours: TR 2:00-3:30, T 5:00-6:00, W 4:15-5:15

Phone: 330-672-1159, during office hours (e-mail preferred)

Prerequisites:

M&IS 24060 Systems Analysis I (everyone)

M&IS 24065 Web Programming (if following new curriculum)

M&IS 34070 Programming Theory and Application (if following new curriculum)

M&IS 24070 Principles of System Development (if following old curriculum)

Students attending the course who do not have the proper prerequisites risk being deregistered from the class.

Enrollment:

Students have responsibility to ensure they are properly enrolled in classes. You are advised to review your official class schedule (using Student Tools/Flashfast) during the first two weeks of the semester to ensure you are properly enrolled in this class and section. Should you find an error in your class schedule, you have until Sunday, September 11, 2011 to correct the error with your advising office. If registration errors are not corrected by this date and you continue to attend and participate in classes for which you are not officially enrolled, you are advised now that you **will not** receive a grade at the conclusion of the semester for any class in which you are not properly registered.

Course Goals:

To solve problems and implement these solutions using the Java programming language.

Summary of Key Components of the Course:

Introduction to Applications

- Brief history of Java
- Java class libraries
- Memory concepts
- Inputting and outputting data, scanner, printf
- Operators--arithmetic, relational, assignment, increment, decrement and logical
- Primitive data types

Exception Handling

- try/catch blocks
- common exceptions

Introduction to Applets

- Compiling and executing Applets
- Viewing Applets with appletviewer
- · Incorporating Applets in an html file

Graphics

- Color control
- Font control
- Drawing lines, rectangles, ovals and arcs
- Drawing polygons and polylines

Control structures

- if
- if/else
- while
- do/while
- for
- switch

Methods

Method definitions

- Java API packages
- · Methods of class Math
- Methods of class JApplet
- Argument promotion
- · Duration of identifiers
- Scope rules
- Method overloading
- Enumerations

Arrays

- · Arrays--allocating, initializing and using
- Enhanced for
- References and reference parameters
- Passing arrays to methods
- Sorting and searching arrays

Programming with Objects and Classes

- Declaring and creating objects
- Differences between primitive types and objects
- Garbage collection
- Accessing an object's data and methods
- Constructors
- Passing objects to methods
- Visibility modifiers and accessor methods
- Class variables, constants and methods
- Instance variables and class variables
- Scope of class variables
- The keyword this

Inheritance

- Superclasses and subclasses
- The keyword super
- Calling superclass constructors and methods
- Overriding methods

Textbook:

Deitel and Deitel, <u>Java: How to Program, Seventh Edition</u>, Pearson Prentice Hall, 2007.

ISBN: 0-13-222220-5

This book is also available on Safari, to which, as a KSU student, you have access. You might want to have a reference copy for yourself, though, as it may be difficult to read online.

To access Safari and see what it looks like from your home computer, you first have to activate the KSU VPN. The general page for Kent Information Services may be useful to you now and in the future. Its address is: http://www.kent.edu/is/index.cfm Click on this link to begin finding the VPN software. If you've already installed the VPN, skip the following steps.

For Windows users:

Scroll down to Support for Students and click on Software. Click on Working Off Campus with a Windows Computer. Scroll down to Accessibility and choose Download and Install KSU Cisco VPN. Follow the instructions given.

For MAC users:

Scroll down to Support for Students and click on Software. Under Software, click on KSU Software for MAC OS X. Go to number 3, KSU-VPN Software for MAC. Click on instructions and follow them.

Once you have the VPN, you have to activate it when you wish to use it. Click on the icon, give your password when prompted for it and hit continue. So with the VPN activated, go to Flashline, http://flashline.kent.edu, and choose the Student Tools & Courses tab. Scroll down and on the right at the bottom under Academic Resources and Tools you will see Online Books. Click on it and if you've got the VPN activated, it will be available for you. Right now you get a warning first. Just change the https in the address to http and it will be ok. Put in the name of the textbook in the search text box and you can read the entire text online. Again, see how this goes for you, or if you might want a physical copy of the text.

Vista 8.0

The Vista8 (formerly WebCT) site, http://vista8.kent.edu, will basically manage the course. The syllabus, assignments, Power Point slides, and other course information will be found there. If you need help with Vista 8, there should be some training material on the site after you log on.

Software Go to Vista8 and read "Instructions for Obtaining the Java Software Development Kit", found on the homepage. This contains complete information about installing the Java 2 SDK. It is available free from Oracle (which purchased Sun, the

developer of Java). Several IDE's are also available for free. Again, go to "Instructions for Obtaining the Java Software Development Kit" on Vista8 for more information.

Course Requirements

6 Java programming assignments:

(Assignment 1: 25 points; Assignments 2-6: 35 points each) 200 points

3 course exams:

(50 points each) 150 points

Grading Scale

This scale is followed closely.

All grades are rounded up at .5. There is no other rounding up if you are close.

There is no extra credit.

A (4.0) 93-100

A- (3.7) 90-92

B+ (3.3) 87-89

B (3.0) 83-86

B- (2.7) 80-82

C+ (2.3) 77-79

C (2.0) 73-76

C- (1.7) 70-72

D+ (1.3) 67-69

D (1.0) 60-66

F (0.0) 0-59

Pair Programming

Pair programming is the practice of two people working together on a program. This practice has been implemented in industry in many projects using agile methods of systems analysis. Pair programming has also been successfully implemented in many university programming courses. We will use it for this course.

You will be paired with a different partner three times within the semester. Also, if we have an odd number of students, you may find yourself working alone for one of these periods. Partners will work on homework assignments together and will receive the same grade for these. Exams, however, will be taken individually.

Labs

Labs are generally scheduled a week before an assignment is due. See the schedule below. We will have other labs as time allows. Labs will be used to work on the assignment with your partner and receive help if necessary. You and your partner will need to schedule other times to work on the assignment as well. NetBeans and jGRASP are available on the BSA lab computers. If you and your partner elect not to attend labs, please do not expect me to help you during office hours. If you do go to labs and need more help, feel free to come to my office. But I have many students and I am making time for you during class, so please use this time if you need it.

E-mail

When there are schedule changes or other announcements, the instructor will e-mail you using your KSU e-mail address. Check this frequently. If you commonly use another address, forward your Kent e-mail to that address. In your Google e-mail, go to Settings and then Forwarding and POP/IMAP.

To e-mail the instructor use: jformich@kent.edu. Do not e-mail the instructor on Vista8.

Attendance

Missing class is not an excuse for failure to understand material or complete assignments. Material covered in class will not be covered again outside of class. It is up to you to read the material and get notes from another student if you miss class. Do not expect any help during office hours if you do not attend class regularly. Studies have shown that students who attend class perform better in their courses.

Homework Assignments

Programming assignments are to be submitted to Vista8. Both students will need to submit to Vista, so that comments can be returned and the assignment graded there. However, only one student needs to attach the code.

Absence from class is not an excuse for not having submitted the assignment. You may re-submit assignments up to the time the assignment is due with no penalty. After that, late assignments will be penalized 10% per day (not per class session). Assignments can not be submitted after one week beyond the due date.

Make-up Exams

Make-up exams are given only under extraordinary circumstances. Inform the instructor as soon as possible (ideally before the exam). Some form of written excuse for absence from an exam is required.

Academic Honesty

College of Business Policy: Academic Honesty: Cheating means to misrepresent the source, nature, or other conditions of your academic work (e.g., tests, papers, projects, assignments) so as to get undeserved credit. The use of the intellectual property of others without giving them appropriate credit is a serious academic offense. It is the University's policy that cheating or plagiarism result in receiving a failing grade (0 points) for the work or course. Repeat offenses may result in dismissal from the University.

Course Policy: Academic honesty is expected and required. Of course, you and your partner will be allowed to collaborate completely on the assignment. HELPING other students with debugging and questions is acceptable. COPYING is NOT acceptable, and will result in loss of credit for the assignment, and possibly failure of the course for all students involved. You may help them to debug the program, but you may not give them code. DO NOT GIVE OTHERS YOUR CODE. If they ask you for it, ask to see theirs instead and help them debug.

Students with Disabilities

University policy 3342-3-18 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through the Student Accessibility Services (contact 330-672-3391 or visit www.kent.edu/sas for more information on registration procedures).

Graduation

It is your responsibility to apply for graduation before the set deadline. If you apply after the deadline <u>you will be assessed a \$200 late fee</u>. Please see your academic advisor as soon as possible if you are uncertain as to your progress toward graduation. The graduation application deadlines are follows:

Graduation Application Deadlines:

May Graduation: Apply before September 15th August Graduation: Apply before December 15th December Graduation: Apply before March 15th

To apply for graduation complete the following steps:

- 1. Log onto your Flashline account
- Click on the Student Tools tab.

- 3. Look in the Graduation Planning Tool Box
- 4. Click on Application for Graduation

See course schedule below.

| | | Tentative Schedul | | |
|-----------|-----------|-----------------------|------------|----------------------|
| | | | | |
| Week 1 | Wednesday | Aug. 31 | Chp. 1, 2 | Lab |
| Week 2 | Wednesday | Sept. 7 | Chp. 2, 13 | Lab |
| Week 3 | Wednesday | Sept. 14 | Chp. 20 | Lab |
| | Saturday | Sept. 17, 11:59 PM | | Assignment 1 |
| | | | | |
| Week 4 | Wednesday | Sept. 21 | Chp. 12 | |
| Week 5 | Wednesday | Sept. 28 | | Exam 1: |
| | | | | Chp.1, 2, 12, 13, 20 |
| | | | | Lab |
| | | | | |
| Week 6 | Wednesday | Oct. 5 | Chp. 3, 4 | |
| | Saturday | Oct. 8, 11:59 PM | | Assignment 2 |
| Week 7 | Wednesday | Oct. 12 | Chp. 4, 5 | |
| Week 8 | Wednesday | Oct. 19 | Chp. 6 | Lab |
| Week 9 | Wednesday | Oct. 26 | Chp. 6 | |
| | Saturday | Oct. 29, 11:59 PM | | Assignment 3 |
| | | | | |

^{**}If an error message appears, you must contact your advisor.

| Week 10 | Wednesday | Nov. 2 | | Exam 2: Chp. 3, 4, 5, 6 | |
|------------|-----------|--------------------|-------------------------|-------------------------|--|
| | | | | Lab | |
| | Sunday | Nov. 6 | Last Day to Withdraw | | |
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| Week 11 | Wednesday | Nov. 9 | Chp. 7 | | |
| Week 12 | Wednesday | Nov. 16 | Chp. 7 | | |
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| Week 13 | Wednesday | Nov. 23 | NO CLASSTHANF | O CLASSTHANKSGIVING | |
| | Saturday | Nov. 26, 11:59 PM | | Assignment 4 | |
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| Week 14 | Wednesday | Nov. 30 | Chp. 8 | Lab | |
| | Saturday | Dec. 3 | | Assignment 5 | |
| Week 15 | Wednesday | Dec. 7 | Chp. 9 | Course Evaluation | |
| | | | | Lab | |
| | | | | | |
| | Saturday | Dec. 10, 11:59 PM | | Assignment 6 | |
| Week 16 | Wednesday | Dec. 14, 5:45-8:00 | | Exam 3: Chp. 7, 8, 9 | |