TENTATIVE – SUBJECT TO CHANGE

CRN: 16835 Location: BSA 210 Meeting Day: Monday only Meeting Time: 5:30 – 8:15 PM Instructor: Mr. Jeff Hill E-mail: ghill11@kent.edu Office Location: BSA A417 Office Hours: TBD

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.

Prerequisites

M&IS 24053 Introduction to Computer Applications (minimum grade C) M&IS 24065 Web Programming (minimum grade D) M&IS 34070 Programming Theory and Application (previously, M&IS 24070) (minimum grade D) 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 on Flashline) 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 8, 2013 to correct the error. 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.

Withdrawal

The course withdrawal deadline is Sunday, November 3, 2013.

Learning Objectives

- > To utilize programming principles in structured programming.
- > To demonstrate mastery of programming conventions.
- To understand and implement object-oriented program (OOP) concepts including classes, methods, and inheritance.
- To understand proper utilization of advanced OOP concepts such as threading, generics/collections, and polymorphism.
- > To understand how to scope, specify, and program system(s) to solve problems.
- To understand and implement systems and programming concepts to develop an N-Tier architecture solution in a team programming environment.

Summary of Key Components of the Course

- Introduction to Applications
 - ✓ Java's history

 - OOP basic concepts
 Java primitive data types and operators
 - ✓ Java basic I/O
- Introduction to Applets
 - ✓ Basic applet concepts✓ Appletviewer

 - ✓ Using applets in HTML
- Exception Handling
 - ✓ Java exception types
 - ✓ Try/catch/finally blocks
 - ✓ Custom exception types
- GUI \triangleright
 - ✓ Nimbus, JOptionPane, Swing
 - ✓ Displaying text & images
 - ✓ Text fields
 - ✓ Events
 - ✓ Event handling
 - ✓ Layout managers & panels
- OOP Concepts
 - ✓ Classes
 - ✓ Instantiations
 - ✓ Methods
 - ✓ Constructors
 - ✓ Primitive/reference data types
- \triangleright Control Structures
 - ✓ If/then/else
 - ✓ Do/while
 - ✓ For
 - ✓ Switch
 - ✓ Break/continue
 - ✓ Logical operators
 - ✓ Algorithms
- \triangleright Methods
 - Method definitions
 - ✓ Java API packages
 - ✓ Methods of class Math
 - ✓ Argument promotion & casting
 - ✓ Duration and scopes
 - ✓ Method overloading
 - ✓ Enumerations

- > Arrays
 - ✓ Arrays--allocating, initializing and using
 - ✓ Enhanced for
 - ✓ References and reference parameters
 - ✓ Passing arrays to methods
 - ✓ Sorting and searching arrays
 - ✓ ArrayList
- Programming with Objects and Classes \geq
 - Member access to methods & \checkmark parameters
 - ✓ Keyword this
 - ✓ Default and no-argument constructors
 - ✓ Garbage collection
 - ✓ Class variables, constants and methods
 - ✓ Instance variables and class variables
 - \checkmark Scope of class variables
- \geq Inheritance
 - ✓ Super/Sub classes
 - \checkmark Protected members
- Polymorphism \succ
 - ✓ Abstract classes and methods
 - \checkmark Final methods and classes
- Generics
 - ✓ Collections
 - ✓ Lists
 - ✓ Synchronization
 - ✓ Methods
 - ✓ Compile-time translation
 - ✓ Overloading
 - ✓ Classes
- ➢ File I/O
 - ✓ Sequential access
 - \checkmark **Object serialization**
 - ✓ JFileChooser
- \triangleright Networking
 - ✓ Manipulating URLs
 - ✓ Files on a web server
 - ✓ Streams
 - ✓ Datagrams
- \geq **Database Connectivity** ✓ SQL

 - ✓ RowSet interface
 - ✓ Stored procedures
 - Transactions

Textbook

Deitel and Deitel, Java: How to Program (early objects), Ninth Edition, Pearson Prentice Hall, 2011. ISBN: 0-13-257566-3

This book is also available electronically on Safari via Flashline. You may wish to have a reference copy for yourself, as it may be difficult to read online and *you will not have it as a reference during exams.* It should be relatively inexpensive if you shop around.

See the document "Safari Access to the eBook" available on Blackboard for instructions on how to be able to get to the ebook through Safari.

Blackboard Learn

Blackboard Learn (https://learn.kent.edu) will manage the course. The syllabus, assignments, any notes provided from lecture, and other course information will be found there. If you need help with Blackboard Learn, training material is available on the site after you log on.

Software

This course requires the Java Developers Kit (JDK) version 7.x and NetBeans 7.x See the document "Required Software" available on Blackboard for instructions on how to download and install both required components as a single package.

Course Requirements

5 Java programming assignments:

- 20 points each
- 3 course exams:

100 points each

1 Team Project:

100 points

Grading Scale

This scale is followed closely. All grades are rounded up at .5. *There will be no other rounding.* Extra credit is *ONLY* available through the final team project.

Once I have completed grading for the semester I will enter grades on Flashline. University policy states "once grades are submitted, they are final and will not be changed except in the cases of administrative error". There are **NO EXCEPTIONS** to this policy.

А	4.0	93 –100	С	2.0	73 – 76
A-	3.7	90 – 92	C-	1.7	70 – 72
B+	3.3	87 – 89	D+	1.3	67 – 69
В	3.0	83 – 86	D	1.0	60 – 66
B-	2.7	80 – 82	F	0.0	0 – 59
C+	2.3	77 – 79			

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. KSU e-mail is the only method to contact me, see my

address in the syllabus header. See the document "Professor's E-mail Rules" available on Blackboard for e-mail message requirements and expected response times. Messages not conforming to these posted rules will not be responded to.

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. Attendance will be recorded but is not a part of the grade; I don't give points for just "showing up".

Homework Assignments

Programming assignments are to be submitted to Blackboard Learn. Team assignments require all team members to submit the assignment to Blackboard Learn so that individual comments and grades can be returned there. 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. *I will not grade or provide feedback until after the due date.* After that, late assignments will be penalized 20% per day (not per class session). Assignments cannot be submitted after 5 days beyond the due date and will be given a grade of 0%.

Exams

Three exams will be given throughout the semester with questions related to the materials covered in that section of the course. They are not comprehensive, but exam questions from one section may refer to or build upon knowledge from a prior section of the course. The textbook and all pen/paper notes may be utilized on the exam. NO ELECTRONIC DEVICE USAGE OF ANY KIND WILL BE PERMITTED DURING THE EXAMS – this means no eBook usage during the exam. Anything in the text and anything covered in class may be seen as an exam question. Just because something isn't specifically covered in class does NOT mean it won't be on the exam.

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 will be required.

Peer Evaluations for Team Assignments

The evaluation form can be accessed and printed via Blackboard. See the document "Peer Evaluation for Team Assignment" available on Blackboard. Evaluations are to be handed to me (completed and signed) at the beginning of the first class following the assignment deadline. Failure to turn in an evaluation form will result in a 50% penalty deducted from your grade for that assignment. *Evaluation forms cannot be handed in late.* If you need to miss class, you must personally delivery your evaluation form to me BEFORE the deadline (schedule an appointment with me).

Team Assignments

You and your partner(s) will need to schedule times outside of class to work on the assignments. Team assignments will include a portion of the grade based upon peer evaluation(s) from all team members. The evaluation should *NOT* be the first time I hear of

a team problem. If you wait until the evaluation to complain about the effort and/or quality of work of your peer(s), it will be disregarded. Properly documented poor/incomplete/missing work by one member will *NOT* affect the grade of the other team member(s). Every line of code must include a trailing in-line comment with student identifier (last name) of the person who wrote that line (no in-line comment = no credit for that line of code). If you collaborated on one or more specific lines of code then put multiple names on the in-line comment, but know that the name(s) identified in the comment will be the responsible party for that line of code. For good or bad.

Discrepancies in the code submitted between team members will result in each team member being assigned the grade for the code that they submitted. I will not give credit to a team member based upon the code from another member. Check the code you submit to make sure it is your team's latest version.

Discrepancies in the in-line student identifier comment(s) submitted between team members will result in no grade being assigned for that assignment. I will notify all team members by e-mail of the discrepancy. All team members will have 24 hours to submit a finalized version (no code changes will be accepted, only in-line identifiers can be reconciled). Failure to submit a completely reconciled follow-up to me via e-mail within 24 hours will result in a grade of 0% for all team members.

Team Project & Presentation

See the document "Team Project Description" available on Blackboard for a brief description of the team project we will undertake at the end of the semester. This will include a description of expectations, general parameters of the project & presentation, and extra credit. More specific information and the actual assignment directions will be made available at the appropriate point in the course. The extra credit value will be solely at my discretion.

Date	Chapter	Торіс
8/26	Chpt 1, 2 & 23	Introductions to: Course, Java, Java Applications,
		Applets & Java Web Start
9/2	No Class	Labor Day
9/9	Chpt 11 & 14	Exception Handling
		GUI
9/13		Homework 1
9/16	Exam 1	Chapters 1,2,11,14,23
9/23	Chpt 3 & 4	Classes, Objects, Methods, & Strings
		Control Statements Pt. 1
9/27		Homework 2
9/30	Chpt 5, 6 & 7	Control Statements Pt. 2
		Methods
		Arrays & ArrayLists
10/4		Homework 3
10/7	Exam 2	Chapters 3,4,5,6,7
10/14	Chpt 8, 9 & 10	Classes & Objects
		Inheritance
		Polymorphism
10/18		Homework 4

Course Schedule

10/21	Chpt 20 & 21	Generic Collections
		Generic Methods
10/25		Homework 5
10/28	Exam 3	Chapters 8,9,10,20,21
11/4	Chpt 17, 27 & 28	Files, Streams & Object Serialization
		Networking
		Database Connectivity
11/11	No Class	Veteran's Day
11/18	Lab	Team Project
11/25	Lab	Team Project
12/2	Lab	Team Project
12/9 5:45pm – 8:00pm	Presentations	Project Presentations

Course Rules

Polite, courteous, and professional interactions between all students and myself at all times are a requirement. Cell phone usage is not permitted in class at any time for any reason. Recording of classes is prohibited. Infractions will be referred to the Dean of the College of Business and/or Office of Student Conduct.

Course 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. In addition, it is considered to be cheating when one cooperates with someone else in any such misrepresentation. 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 for the work or course. Repeat offenses result in dismissal from the University.

Academic honesty is expected and required. Of course for team assignments, you and your partner(s) 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 3342-3-01.3 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 Student Accessibility Services (contact 330-672-3391 or visit <u>http://www.registrars.kent.edu/sas</u> for more information on registration procedures).

Graduation

If you are eligible to graduate, it is your responsibility to apply for graduation before the set deadline (**May Graduation**: Apply before September 15th **August Graduation**: Apply before December 15th **December Graduation**: Apply before March 15th) 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. To apply for graduation complete the following steps: Log onto your Flashline account 1. Click on the Student Tools tab, 2. Look in the Graduation Planning Tool Box, 3. Click on Application for Graduation. If an error message appears, you must contact your advisor.