IS 147
Fall 2012
Instructor: Henry H. Emurian
emurian@umbc.edu

If you spot a problem or error in the below postings, please notify the instructor.

The below schedule is always tentative. It will be adjusted as needed as the course progresses. You will be informed of any change, depending on our progress throughout the semester. TBA means To Be Announced.

It is understood that students will study carefully the coding examples presented in the textbook and posted slides. We will emphasize basic properties of Java in our classroom work, but as developing professionals, you need to get used to studying program listings to develop your skill.

Programming assignments must be available for verification with an exercises directory on the gl server. You will be taught how to create that directory. There will be an open lab for each programming assignment where you can get help from the instructor. You may also get help from the department Java tutors.

Assignments Log

8/30/2012

1. Orientation to the course
   a. The first two classes are designed to be intensive learning, practice, and assessment experiences. There is repetition designed into these initial classes, to include repeating questionnaires. Please approach and value the questionnaires as occasions to monitor your own learning progress and understanding of the material. These intensive introductory classes are intended to make subsequent learning of Java easier, and our experience in using these tactics in previous courses repeatedly confirms their value to students in this course.
   b. Overview of the course content on Blackboard
   c. Using Tera-Term to access the gl server.
      • In this course, most of the work will be done on the gl server. You can download Tera-Term by using the link posted in OIT. Tera-Term is available in all the IS labs.
• You may also use Putty, an open-source tool

2. **Pre-tutor questionnaire.**
   a. The questionnaires presented during the first few class periods are important in giving us feedback about the effectiveness of the instructional tactics. We very much appreciate your sincere and careful completion of these questionnaires. The assessments also inform you about the development of your Java skill and knowledge.
   b. Complete the questionnaire, and submit it to the instructor.

3. **Java Tutor.**
   a. You are welcome to use the tutor before the first class, but you will be required to repeat the online tutor in class for credit. Students who are new to Java or to computer programming are advantaged by repeating the tutor several times.
   b. This class will use the **IS 147 Java Tutor**. The link to the online tutor is on the below webpage:

   http://userpages.umbc.edu/~emurian/learnJava/swing/tutor/147/TutorLinks147.html

   c. The tutor will automatically progress from section (or "stage") 1 to section 6. Although it is best to complete the tutor on one learning occasion, you may stop at the end of a section, and come back later to the next section later by selecting a link on the above webpage. The tutor does not record where you stopped. You must use the links if you come back later to resume the tutor or if you want to repeat a section. It may take one hour to complete all sections in the tutor. You may take as much time as you need, and you may repeat the tutor or the individual sections later as often as you want. If you need to, you may complete the tutor after the class has ended.
   d. The multiple-choice questions in the tutor are eligible to appear on the quiz for Chapter 1.
   e. After you complete each section, let the transition finish so that your work will be documented. After each successful transition, which may take several seconds, you will see a browser window similar to the below image.
f. **Credit for completing the tutor (50 points) will be awarded only if you finish all sections before the next class.** After you complete each section of the tutor, a record is automatically produced that documents your completion of that section. There is no penalty for making mistakes during your use of the tutor, and you may take as much time as you need for your learning. Be sure to use your UMBC **username** so that the instructor can document your completion of the sections. **Do not use your SSN.**

g. If you experience a problem during your use of the tutor, please contact the instructor. You are welcome to repeat any section of the tutor as often as you want, after you have first completed the tutor.

h. **After you finish the last section in the tutor, you may stop at that point.** There is no need to write and compile the code. We will do that in the next class. If you don’t complete all sections of the tutor in class, you may complete it as homework.

i. **After you have completed the tutor, post a note on the Discussion Board and send the instructor an email notification. The log will be checked, and credit awarded.**

4. **Post-Tutor Questionnaire.** After you finish all sections of the tutor, complete the Post-Tutor questionnaire. Submit it to the instructor at the next class if you didn’t finish the tutor during class. The instructor will hand this out in class.

5. **At the end of class, Quiz 1 will be released on Blackboard. It will remain available until 11:30 PM, 9/10.** If you are working on a quiz past midnight, that attempt will not count. **You must submit a quiz before the**
deadline. Do not wait until the “last minute” to access the quizzes. Plan your schedules for effective learning.

a. You may repeat the quiz according to the posted instructions, and the grade recorded will be the grade obtained on the last attempt.
b. If you abort a quiz and have a problem restarting a quiz, see the information posted in the Quizzes folder.
c. If you start the quiz and do not submit it, that access will count as one of the repetitions, even if you abort the quiz by closing the browser. The recorded grade will be zero. If you start the quiz, you must complete it.

6. TO DO:

a. Introduce yourself on the Discussion Board. Do that before the next class.
b. Read the PowerPoint Slides for Chapter 1.
c. Read Chapter 1

d. Investigate the material on the Blackboard course site.
   • The use the pico text editor will be covered in the next class. We will develop Java programs using UMBC’s linux system during the first weeks of the course. Later, we will use JGRASP.
   • Look at the Blackboard notes for Chapter 1.

e. Look at the Java resources that are available to you, especially the instructional and tutorial resources and the free online books and notes. It is easy to become overwhelmed by the complexity of Java and by the amount of information that is available. Try not to worry about that. Use what you can understand at this point in your learning. You will be told exactly what material to study to satisfy the course requirements and to prepare for the quizzes as we progress through the semester.
f. For a brief introduction to the history of Java, see COURSE DOCUMENTS > MATERIAL POSTED AT SUN MICROSYSTEMS > The History of Java.

9/4/2012

1. During this class, we will write and discuss MyProgram.java. We will write and run the program on gl.umbc.edu using linux.

9/6/2012

1. Modification of MyProgram.java
2. Another program will be written to illustrate and discuss the basic principles presented in Chapter 1.
9/11/2012

1. Continuation of Chapter 1
2. Programming Assignment #1
   • The first programming assignment will be available on Blackboard.
   • Although you may seek help from the department tutors for the assignments in this course, the instructor cannot offer help between classes.
   • It will be due no later than 11:30 PM, 9/16. **NOTE: The deadline is extended to 11:30 PM, 9/17.**
     o Post your output on the Discussion Board. Your source code must be available for inspection. If your source code is not available for my inspection, credit will not be awarded.

9/13/2012

1. This class will be one of several open labs to assist students with the programming assignment. **Attendance is optional.** You may attend this class to get help with the programming assignment.
2. TO DO:
   a. Read Chapter 2.
   b. Read the PowerPoint Slides for Chapter 2.
   c. You should study this material carefully to prepare in advance for the quiz.
3. Quiz 2 will be available at the end of class today, and it will remain available until 11:30 PM 9/22/2012. You may repeat the quiz according to the instructions.

9/18/2012

1. Chapter 2
   • Sections 2.1 – 2.4
     o The material in these sections will be covered and discussed during hands-on exercises in class.
2. Programming assignment #2
   a. The second programming assignment will be available on Blackboard.
   b. It will be due no later than 11:30 PM, 9/26/2012.
     • Post your output on the Discussion Board. Your source code must be available for inspection in your exercises directory.
9/20/2012

1. Chapter 2, continued
   • Overview of the programming assignment.
   • Sections 2.5 – 2.6

9/25/2012

1. This class is an open lab to assist students with the programming assignment. Attendance is optional. You may attend this class to get help with the programming assignment.
2. **Programming assignment #2 is due by 11:30 PM, 9/26.**
   • Post your output on the Discussion Board, and send the instructor an email from your umbc address.
3. **TO DO:**
   • **Read Chapter 3.**
   • **Read the PowerPoint Slides for Chapter 3.**

9/27/2012

1. Chapter 3
   • Sections 3.1 – 3.3
   • **Quiz 3 will be available today at 1 pm and will remain available until 11:30 PM, 10/6/2012.**
   • Programming assignment #3 will be posted.
     o **Programming assignment #3 is due at 11:30 PM, 10/10/2012.**

10/2/2012

1. Chapter 3
   • Sections 3.4 – 3.5
   • Programming assignment #3 will be posted.

10/4/2012

1. Chapter 3
   • Sections 3.6 – 3.8

10/9/2012

1. This class is an open lab to assist students with the programming assignment. Attendance is optional. You may attend this class to get help with the programming assignment.
2. **Programming assignment #3 is due by 11:30 PM, 10/10/2012.**
   - Post your output on the Discussion Board, and send the instructor an email from your umbc address.
3. **TO DO:**
   - Read Chapter 4.
   - Read the PowerPoint Slides for Chapter 4.
   - Examine the supplemental material in the Chapter4 folder.

10/11/2012

1. **Chapter 4**
   - Introduction to jGRASP
   - The schedule will depend upon the pace of our work, but I expect to spend four class periods on this material. I will introduce exception handling although it is not covered in Chapter 4.
   - **Chapter 4 quiz will be posted until 11:30 pm, 10/22.**

2. **Programming assignment #4 will be posted**
   - **Due by 11:30 pm, 10/29.**
   - You should work on the programming assignment as relevant material is covered in class. You should not wait until the open lab to start to work on this assignment. Work on it continuously until you have completed it. Seek help as needed from the Java tutors and during the open lab.

10/16/2012

1. Chapter 4, continued.

10/18/2012

1. Chapter 4, continued.

10/23/2012

1. Chapter 4, continued.

10/25/2012

1. This class is an open lab to assist students with the programming assignment. Attendance is optional. You may attend this class to get help with the programming assignment.
2. **Programming assignment #4 is due by 11:30 pm, 10/29.**
• Post your output on the Discussion Board, and send the instructor an email from your umbc address.
• You may develop this program with jGRASP or another IDE. However, your source code must be available on the gl server for verification.

3. TO DO:
• Read Chapter 5.
• Read the PowerPoint Slides for Chapter 5.
• Examine the supplemental material in the Chapter5 folder.

10/30/2012 (CANCELLED: UMBC CLOSED)

11/1/2012

1. Chapter 5
   • It is understood that students will study carefully the coding examples presented in this chapter. We will emphasize basic properties of Java in our classroom work, but as developing professionals, you need to get used to studying program listings to develop your skill.

2. Chapter 5 quiz will be posted from 1 pm 10/30/2012 until 11:30 PM, 11/11.

3. Programming Assignment #5 will be posted.
   a. Due 11:30 PM, 11/14.

11/6/2012

1. Chapter 5, continued.

11/8/2012

1. Chapter 5, continued.
11/13/2012

1. This class is an open lab to assist students with the programming assignment. Attendance is optional. You may attend this class to get help with the programming assignment.

2. **Programming assignment #5 is due by 11:30 PM, 11/14.**
   - Post your output on the Discussion Board, and send the instructor an email from your umbc address.
   - You may develop this program with jGRASP or another IDE. However, your source code must be available on gl for verification.

3. **TO DO:**
   - Read Chapter 7.
   - Read the PowerPoint Slides for Chapter 7.

11/15/2012

1. Chapter 7
   - There will be no programming assignment for Chapter 7 with the possible exception of an in-class modification of Flight and Admin.

2. Chapter 7 quiz will be available at 1 pm.
   - The quiz will be available from 1 PM until 11:30 PM on 11/26.

11/20/2012

1. Chapter 7
   - Continuation of Chapter 7
     - Tentative in class or homework assignment based on modifications to the Flight and Admin programs.
     - To complete this assignment, you must have an operational version of Programming Assignment #5.

2. **TO DO:**
   - Read Chapter 6
   - Read PowerPoint slides for Chapter 6.

11/22/2012

- Thanksgiving Break
11/27/2012

1. Plan
   a. We will begin to investigate graphical user interfaces using Java Swing. We will study both applets, which run on the web in a browser, and applications, which don’t need a browser. The class labs may not cover all of the material in Chapter 6. You should use the textbook as a reference to answer the questions on the quiz.
   b. The online Java Tutor: JApplet may be completed for extra credit: 50 points.
      o Java Tutor: JApplet
         o The link is also available in the Assignments folder on Blackboard.
         o To earn the extra credit, all eight sections of the tutor must be completed, including the two parts in the Item Learning section.
         o For extra credit, the tutor must be completed by 12/2/2012. Credit will only be awarded if completion of all sections is validated and you complete the tutor by the deadline.
            ➢ For the extra credit, 50 points will be added to the first Java tutor points.
            ➢ When you complete the tutor, post a note on the Discussion Board and send the instructor an email.
   c. We will first cover the techniques represented in the following applets, which run in a browser. The programs have been tested with Firefox and Chrome.
      o MyProgram.html
      o MyJApplet.html
   d. An attempt will be made to cover at least some of the techniques represented in the following application and applet.
      o Application
      o Project.html

2. The questions embedded in Part 1 and Part 2 of the Item Learning section of the Java Tutor: JApplet are eligible to appear on the quiz.
   • The explanations of the program in the tutor are available directly in the below link.
      ▪ Explanations.html

3. Chapter 6 quiz will be available at 1 pm.
   • The quiz will be available until 11:30 PM, 12/9.

4. Project development will be cumulative over the next several class periods. Therefore, class attendance, as always, is mandatory, and you must arrive on time to receive credit. You will be asked to show your interfaces at the end of class for lab credit, which will be 20 points per lab. Students who arrive late will not receive lab credit. That policy will be enforced. Plan your schedules to arrive on time.
12/11/2012

1. This is the last class of the semester.
   - **Attendance is optional**

2. During this class, students may retake up to **two quizzes with the lowest scores** among the seven quizzes. **These quizzes may only be retaken once, and you may not use a printout of the quiz.** You may, however, use the textbook and other notes.

3. As indicated on Blackboard, final grades will be based upon standard percentages of the total points earned in the course.
   - **Grades are NOT negotiable.** Be advised that the instructor will not discuss grade issues. The instructions on Blackboard make it clear that any error in the gradebook must have been reported within a week of posting. There is no extra credit beyond the 50 points available for completing the JApplet GUI tutor. Students will be advised to read the information on Blackboard in response to any question about grade policies. **Everything is and has always been there.**