Never underestimate the power of the syllabus! It is your guide for how to excel in this class. Read it carefully and review it every time you have a question about the course requirements, policies, and assessment. It's a living story I keep writing every semester from my students' stories about learning, college experience, and how the academic time fits into our lives, students and instructors alike.

Please email me if you notice any inconsistency or ambiguity. The syllabus is a shared contract among all of us in this class, and has the purpose of implementing the class teaching and learning goals.

**Course Information**

Name: CS181A Programming II  
Semester: Spring 2007  
Time and Location: Tuesday and Thursday 9:30 to 10:45 AM in STH135 Computer Lab  
Instructor: Mihaela Sabin, Ph.D.  
Associate Professor of Computer Science  
Office: Regis 305  
Office hours:  
- Regis Annex, Room 305 and Conference Room  
  - Tuesday: 1:00 to 2:00 PM  
  - Thursday: 1:00 to 3:00 PM  
  - Monday and Wednesday by appointment  
- STH135 Computer Lab  
  - Tuesday and Thursday: 10:45 to 11:45 AM, and 7:30 to 8:30 PM

**Course Description**

An introduction to solution development from problem solving description to documented implementation using object-oriented programming. Topics include class design and encapsulation, inheritance, and polymorphism. Emphasis on design patterns, application programming interfaces (APIs), and API environments. Introduction to event-driven programming and graphical user interfaces.

Prerequisites: CS180 Programming I or equivalent.

Objectives: Upon completion of this course, students should be able to:  
- Understand the principles of object-orientation to design problem solutions.  
- Master advanced programming skills.  
- Practice design, development, testing, and documentation of a software solution

Course Overview: The course will cover
· Design and implementation of Java applications
· Debugging and testing techniques
· Java collection framework
· Design patterns
· Graphical user interfaces


Supplements: At www.bluej.org web site.

Schedule Outline
The class schedule lists class activities, assigned homework and readings, in-class examinations, and portfolio submissions:

· Assigned reading (R<class ID>) and assigned homework (H<class ID>)
· In class labs (L<class ID>)
· Tests - InClassT# (IC-T#), TakeHomeT# (TH-T#), and FE (final exam)
· Portfolio submissions (P#)

<class ID> is a class ID that
· Stands for the week number and day of the week (T for Tuesday and R for Thursday, and
· Corresponds to the course material covered or class activity conducted or scheduled that particular class.

For example:
· L2R is a lab activity that takes place in the second week of school on Thursday.
· H10T is a homework that covers class material discussed in the 10th week, the Tuesday class, and h is assigned on that day and due next class.
· R6T covers material to be discussed in the 6th week, Tuesday class, and assigned the class before (5R -5th week on Thursday).

# is a test and portfolio submission number. For example:
· P2 is the 2nd submission of the course portfolio assigned the class where it is listed, and due next class.
· T3 is the 3rd test given in the course.

The schedule web page on the Blackboard course web site is organized by weeks. Weekly postings include class agendas for each class (A<class ID>). A class agenda lists the reading and homework due that class, feedback to graded assignments, class topics and lab assignments, and reading and homework assignments due next class.

Check the class schedule, announcements, and discussion board in Blackboard and your Rivier email prior to each class.

Check your own class notes for additional information regarding next class. There are occasions when the web site might not be accessible or might not have the latest updates announced in class. If you have questions, email me at msabin@rivier.edu. I'm always one email away.

A copy of the schedule is included at the end of this document.
Course Requirements and Policies

1. Participation
2. Reading Assignments
3. Homework Assignments
4. Laboratory Projects
5. Examinations
6. Portfolio
7. Academic Honesty and Collaboration
8. Attendance
9. Late Assignments, Make-Up Exams, Missed Classes

This course emphasizes participation and learning through direct engagement, in and outside the class, with your peers and the course instructor.

This course has a very strong practical component that requires daily practice of programming skills and application of concepts. Reading and homework assignments are assigned every class and are due next class. Homework assignments cover the material discuss in the class when they are assigned. Reading assignments cover the new material that will be discussed the class following the class when they are assigned.

Students work on lab projects that are assigned and conducted in class. You are expected to finish these projects in class or before next class.

There are three in-class tests and one final exam.

Participation in class becomes tangible, sharable, and transferable through the course portfolio. Students develop and maintain course portfolios that collect all the work produced by students and instructor in this course. There are four submissions of the course portfolio, prior to the class when an examination is scheduled.

Missed classes contradict the strong participatory character of the class. Therefore, class attendance is not optional.

The policy for late assignments, missed labs, and make-up exams is very strict and applies only in exceptional cases of student illness, accident, or emergencies that are properly and PROMPTLY documented.

1. Participation [priceless]
Participation is essential to this course. Students participate in class discussions that are conducted both in and outside the classroom.

The Blackboard communication tools are designed to monitor and reflect all dialog generated by the course material presented in class, and reading and homework assignments. These tools are:

- Announcements
- Discussion Board
- Drop box
- Email
You are required to check your Rivier email daily, and necessarily PRIOR TO each class. Course emails should be managed in your Rivier email account.

Create a subfolder called CS181 in your Rivier email Inbox. Save all course-related emails in it. You can use your Rivier email to email yourself work you finished at home. This way you'll have it available in the lab when you come to class. Another efficient way to transfer and synchronize work that you have in your Rivier computer account and home computer is to use a USB memory key. Check regularly that all the work you do on your machine gets saved to the network drive.

Install the VPN client on your home machine to have direct access to your Rivier network drive, then map the Rivier network drive to a logical drive on your machine. Make sure you know the path of your Rivier network drive. It's usually \pds\students\ followed by the first initial of your login name, followed by \ (backslash), and followed by your login name: \pds\students\<first-initial-of-first-name>\<login-name>

The VPN client works only if you have a broadband Internet connection (cable or DSL). Download the VPN client from the IT web site. Note that your user name when prompted to login is RIVNET/username.

2. Reading Assignments [priceless]

Are essential to:
- Understand and learn the material presented in class
- Complete the class projects
- Work on the class lab projects
- Do well on tests.

Reading assignments are assigned every class and cover the material to be presented in the next class. Details on each class reading assignment are in the class agenda in the corresponding Week # folders on the Schedule web page.

3. Homework Assignments [39 points]

There is a total of 23 homework assignments. They are graded as follows:
- 19 assignments are 1 point each,and
- 4 assignments (marked with an * after the class-ID) are 5 points each.

The scheduling of the homework assignments over the entire semester is in the course schedule document on the Schedule web page. Details on homework assignments are in the class agendas in the corresponding Week # folders on the Schedule web page.

IMPORTANT! Always check your personal class notes and Rivier email to make sure that you have the latest information about homework. This is absolutely necessary when the course web site is temporarily down or you don’t have access to it.

Although collaboration is allowed to discuss assignment specifications, language constructs, test data, Java library features, and conceptual aspects of the solution design, the Java programs and program documentation you submit must be entirely your own work.
**Deadline for Homework Assignments**

Homework assignments are given every class and are due the following class. **No late submissions are accepted**, unless you comply with the “Late Assignment, Make-Up Exams, and Missed Classes” policy.

If you want to receive prompt feedback, start early on writing the program, participate in class and online communication, and always submit your assignment on time. If your program does not compile, list the compilation errors in the documentation file.

For each homework assignment you have to submit a homework write-up or report in the Blackboard digital drop box. The reports are submitted PRIOR to the beginning of the class. See homework submission Guidelines for more information on the Guidelines web page.

4. **Laboratory Assignments [priceless]**

All classes include lab activities that are designed and implemented individually or by teams.

Lab projects are not graded. They do contribute though to the credit students earn for the portfolios they develop during the semester. They are also essential to student performance on tests and homework assignments.

5. **Examinations [54 points]**

There are **three tests (10 points each)** and a **final examination (24 points)**.

All course examinations are open texts, notes, and Web courseware. No collaboration is allowed while taking these examinations, that includes email or other Internet-enabled exchanges among students. Questions are addressed to the instructor and will be answered for the benefit of the entire class.

T1, T2, and T3 have two parts:
- An in-class test, which is taken in class and due at the end of the class
- A take-home, which involves programming and requires that a take-home report is prepared and submitted prior to the next class.

The examinations schedule is in the course schedule document on the Schedule web page.

The tests are in electronic format and are ready for download from the digital drop box at scheduled times. Tests are graded electronically and dropped in each student's drop box.

6. **Portfolio [7 points]**

You are expected to maintain a course portfolio in which you assemble all the work produced by you during this course. The portfolio becomes an indispensable resource for your learning of the subject matter. It is also a means of expressing yourself professionally in the field of computing: materials are timely filed, well organized for easy access, and presented in a high-quality format.

The student portfolio is maintained in electronic format. Create a folder called **CS181** in your Rivier computer account on the network drive. The folder has the following subfolders: **HOMEWORK, LABS, TESTS**. When you work on a Java project that is a homework assignment or a lab, the folder that contains all the Java files and assignment report has the name **H3T** or **L5R**.

You earn 2 points for partial portfolio submissions when you take a test, and a final 1 point at the time
7. Academic Honesty and Collaboration [priceless]
Collaboration is encouraged and supported in the classroom through lab activities and discussion, and outside the classroom via emails, course bulletin board posts, and interaction among students to understand an assignment description, course concepts and their application, programming features, debugging errors, outcome requirements. However, the Java programs, program documentation, homework write-ups you submit must be entirely your own work.

You are expected to abide by the College policy on Academic Honesty (see the statement at the end of this document).

8. Attendance [priceless]
Attendance is taken every class. Students are responsible to attend all classes. Although there is no penalty for absences in this course, failure to attend impacts negatively the quality of your performance and the quality of our class as a whole.

Reading and homework assignments are due every class. You develop lab projects every class. Except for extraordinary situations you should not miss any class. In one sentence: attendance is not optional. It is really, truly (I cannot emphasize it enough!) priceless!

You are expected to abide by the College policy on attendance. See the Statement on Attendance at the end of this document.

9. Late Assignments, Make-Up Exams, Missed Classes [not a choice!]
Policies for late assignments and make-up exams are very strict and they apply only in exceptional cases of student illness, accident, or emergencies that are properly documented. Paraphrasing the attendance policy, on time submission of assignments is not an option.

A late submission may be granted ONLY IF you:
- Let me know ahead of time that the deadline will be missed.
- Provide proof or explanation that serious medical, personal, or family circumstances prevented you from meeting the deadline.
- A minimal submission is presented at the due date. For example, a report template with the text of the assigned work and the regular section headings.

There is no penalty for late submissions IF AND ONLY IF you comply with the late submission policy. If you omit to inform me about a missing deadline and do not present a minimal submission, you receive no credit for your assignment. Granted late submissions are due the following class.

It is your responsibility to make arrangements with the instructor for make-up exams before the class that follows the missed class.

If you miss a class, it is your responsibility to get informed about class presentation and activities. Use the web site and contact your peers. I will meet with you to answer your questions only after you have prepared for and got informed about the missed class.
## Grading

Final grades are broken up as follows:

- Homework assignments:
  - 19 submissions x 1 point each = 19 points
  - 4 submissions x 5 points each = 20 points
- Tests: 3 tests x 10 points each = 30 points
- Portfolio: 7 points
- Final Exam: 24 points

## Class Schedule

<table>
<thead>
<tr>
<th>W#</th>
<th>Day</th>
<th>Date</th>
<th>Due Reading and Lab Activities</th>
<th>Next Class Assignments</th>
</tr>
</thead>
</table>
| 1  | T   | Jan 16 | R1T: Ch 1 Objects and classes: 1.1 to 1.9  
    |     |       | L1T: Do exercises 1.1 to 1.11. | H1T                    |
| 1  | R   | Jan 18 | R1R: Ch1 Objects and classes: 1.10 to 1.14  
    |     |       | L1R: Do exercises 1.12 to 1.25 | H1R                    |
| 2  | T   | Jan 23 | R2T: Ch 2 Understanding class definitions: 2.1 to 2.9  
    |     |       | L2T: Do exercises 2.1 to 2.42 | H2T                    |
| 2  | R   | Jan 25 | R2R: Ch 2 Understanding class definitions: 2.10 to 2.18  
    |     |       | L2R: Do exercises 2.43 to 2.73 | H2R                    |
| 3  | T   | Jan 30 | R3T: Ch 3 Object interaction: 3.1 to 3.10  
    |     |       | L3T: Do exercises 3.1 to 3.27 | H3T                    |
| 3  | R   | Feb  1 | R3R Ch3 Object interaction: 3.11 to 3.15  
    |     |       | L3R Do exercises 3.28 to 3.38 | H3R*                   |
| 4  | T   | Feb  6 | R4T Ch 4 Grouping objects: 4.1 to 4.7  
    |     |       | L4T Do exercises 4.1 to 4.9 | H4T                    |
|    |     |       | Prepare and submit first installment of class portfolio P1 |                         |
| 4  | R   | Feb  8 | Test 1 – InClassT1 (IC-T1)  
    |     |       | Independent Reading: 4.8 | TakeHomeT1 (TH-T1)     |
|    |     |       |                               | R5T                    |
| 5  | T   | Feb 13 | R5T Ch 4 Grouping objects: 4.9 to 4.11  
    |     |       | L5T Do Exercises 4.23 to 4.38 | H5T                    |
| 5  | R   | Feb 15 | R5R Ch 4 Grouping objects: 4.12 to 4.13  
    |     |       | L5R Do exercises 4.39 to 4.57 | H5R                    |
| 6  | T   | Feb 20 | R6T Ch 5 More sophisticated behavior: 5.1 to 5.3  
    |     |       | L6T Do exercises 5.1 to 5.11 | H6T                    |
| 6  | R   | Feb 22 | R6R Ch 5 More sophisticated behavior: 5.4  
<pre><code>|     |       | L6R Do exercises 5.12 to 5.20 | H6R                    |
</code></pre>
<p>| 7  | T   | Feb   | R7T Ch 5 More sophisticated behavior: 5.5 to 5.9 | H7T                    |</p>
<table>
<thead>
<tr>
<th>Week</th>
<th>Day</th>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 7    | R   | Mar 1 | R7R Ch 5 More sophisticated behavior: 5.10 to 5.14  
L7R Do exercises 5.43 to 5.60 |
| 8    | T   | Mar 13 | R9T Ch 7 Designing classes: 7.1 to 7.7  
L9T Do exercises 7.1 to 7.13  
Prepare and submit first installment of class portfolio P2 |
| 8    | R   | Mar 15 | Test 2 – InClassT1 (IC-T2)  
Independent Reading: 7.8 to 7.9  
TakeHomeT2 (TH-T2) R10T |
| 9    | T   | Mar 20 | R10T Ch 7 Designing classes: 7.10 to 7.13  
L10T Do exercises 7.9 to 7.41 |
| 9    | R   | Mar 22 | R10R Ch 7 Designing classes: 7.14 to 7.16  
L10R Do exercises 7.42 to 7.54 |
| 10   | T   | Mar 27 | R11T Ch 8 Improving structure with inheritance: 8.1 to 8.4  
L11T Do exercises 8.1 to 8.6 |
| 10   | R   | Mar 29 | R11R Ch 8 Improving structure with inheritance: 8.5 to 8.11  
L11R Do exercises 8.7 to 8.14 |
| 12   | T   | Apr 3  | R12T Ch 9 More about inheritance 9.1 to 9.10  
L12T Do exercises 9.1 to 9.11 |
| 12   | R   | Apr 10 | Final date to withdraw with a W grade  
R13T Ch 11 Building graphical user interfaces: 11.1 to 11.4  
L13T Do exercises 11.1 to 11.13  
Prepare and submit first installment of class portfolio P3 |
| 13   | R   | Apr 12 | Test 3 – InClassT3  
Independent Reading 11.5.1 to 11.5.4  
TakeHomeT3 (TH-T3) R14T |
| 14   | T   | Apr 17 | R14T Ch 11 Building graphical user interfaces: 11.5  
L14T Do exercises 11.14 to 11.33 |
| 14   | R   | Apr 19 | R14R Ch 11 Building graphical user interfaces: 11.6 to 11.8  
L14R Do exercises 11.34 to 11.63 |
| 15   | T   | Apr 24 | R15T: Ch 11 Building graphical user interfaces: 11.9  
L15T Do exercises 11.64 to 11.72 |
| 15   | R   | Apr 26 | R15R: Review  
L15R |
| 16   | R   | May   | Final Exam (FE): 11:00 AM to 1:00 PM |
College Policies

- American with Disabilities
- Academic Honesty
- Statement on Attendance

**Americans with Disabilities Act (ADA)**
Rivier College wants to provide reasonable accommodations to students with disabilities. To accomplish this goal effectively and to ensure the best use of our resources, the College expects students to provide timely notice of a disability to the Office of Special Services for verification and for evaluation of available options. Any student whose disabilities fall within ADA should inform the instructor within the first two weeks of the term of any special needs or equipment necessary to accomplish the requirements for the course. To obtain current information on this procedure, contact the Office of Special Services at telephone extension 8497.

**Academic Honesty**

Plagiarism and cheating are serious breaches of academic honesty. In general, plagiarism is defined as the presentation of someone else’s work in whatever form: copyrighted material, notes, film, art work, reports, statistics, bibliographies, and the like, as one’s own, and failing to acknowledge the true source. Quoting word-for-word, or almost so, or using the argumentation of another source without acknowledging this dependence also constitutes plagiarism. Cheating is defined as the giving or attempting to give or to receive unauthorized information or assistance during an examination or in completing an assigned project. Submission of a single work for two separate courses without the permission of the instructors involved is also a form of cheating.

If students are unsure whether a specific course of action would constitute plagiarism or cheating, they should consult with their instructor in advance.

Penalties for plagiarism and cheating vary with the degree of the offense and may take the form of the following academic sanctions:

- the grade of F for the work in question;
- the grade of F for the course;
- notification of the department chair and/or Academic Dean of the College of the misconduct of the student;
recommendations that the student be suspended or dismissed from the College.

Statement on Attendance

The classroom is the heart of the educational experience at Rivier College because it provides, uniquely, a formal setting for the important exchanges among faculty and students. Regular and punctual attendance at all classes, essential for maximum academic achievement, is a major responsibility of Rivier College students. Failure to attend and contribute to the classroom environment significantly and demonstrably reduces the quality of the educational experience for everyone in the classroom. As a result, absences almost always impact the quality of performance.

As part of its commitment to a quality educational experience for all members of the Rivier community, the College formally requires specific attendance policies to be developed by its professors and reviewed by the Division Head and Academic Dean. Any attendance policy used by an individual professor as a criterion for evaluation must be specified in the course syllabus and presented to students during the first week of classes. These policies can be found in respective course syllabi, and may include reasonable penalties and sanctions for excessive absences.

In the event of prolonged illness, accident, or similar emergency, it is the responsibility of the student to notify both the professor and the Office of the Academic Dean. Students must remember that it is always their responsibility to make up the work they may have missed during an absence from class. Students are directed to confer with their professors when their absences jeopardize satisfactory progress. Whenever a professor is absent without notification, students are expected to wait fifteen minutes before leaving and to sign an Attendance List, which a class member delivers to the Office of the Academic Dean.

Instructors are required to record attendance and alert the Registrar when a student fails to attend the equivalent of two weeks of courses (2 absences for a course meeting once a week, 4 absences for a course meeting twice a week, 6 absences for a course meeting three times a week). The student will then be alerted that he/she is in danger of falling under the 'habitual non-attendance policy' (see below).

Habitual Non-Attendance Policy

Habitual non-attendance is defined as an absence in any course (for any reason whatsoever) equating to three full weeks of missed class sessions (3 absences for a course meeting once a week, 6 absences for a course meeting twice a week, 9 absences for a course meeting three times a week).

It is the responsibility of the student to notify the College of any intention to withdraw from a course or withdraw from the College. The College will attempt to resolve the issue of habitual non-attendance with the student; however, the College reserves the right to withdraw students who are no longer attending classes. Habitual non-attendance in one or more classes may result in administrative withdrawal from the class or classes affected, withdrawal from the College or, in cases with extenuating circumstances, an administrative leave of absence. In such cases a grade of W of NF will be assigned to the classes affected according to the appropriate date published in the academic calendar.

Students who have attended no class sessions of a course or courses from which they are registered by the end of the drop/add period will be dropped from each class not attended. If a student never
attended any courses during the drop/add period, the student will be withdrawn from his/her full schedule of courses.