# **CSCI151: Object-Oriented Programming Spring 2015**

#### **Course Overview**

**Meetings:** MWF 9:25 - 10:30 am

in Hall of Sciences S4

**Instructor:** Emily Hill

ehill@drew.edu Hall of Science 314 (973) 408-3198

**Office Hours:** M 3:00 pm - 3:30 pm

T 11:30 am - 1:30 pm W 1:00 pm - 1:30 pm

### **Required Materials**



#### **Textbook**

Barry Burd, *Java for Dummies*, 2014. This book is available electronically for free to all Drew students through ebrary (<a href="http://site.ebrary.com.ezproxy.-drew.edu/lib/drew/detail.action?docID=10870252">http://site.ebrary.com.ezproxy.-drew.edu/lib/drew/detail.action?docID=10870252</a>) or you can purchase a hard copy.

David J. Eck. *Introduction to Programming Using Java*, 7th edition, 2014. This book is freely available online (<a href="http://math.hws.edu/javanotes/">http://math.hws.edu/javanotes/</a>).

We will also make use of other free online learning materials.

#### Laptop

To explore and implement the topics we will be discussing in class, you will need a laptop.



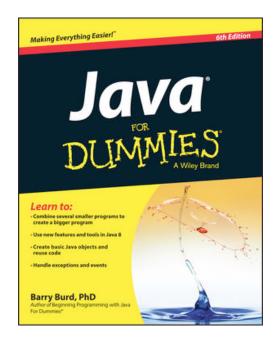
#### **Integrated Development Environment**

You will need to work on programming assignments outside of class time. In this course, we will be using Eclipse IDE for Java Developers: <a href="http://www.eclipse.org/downloads/">http://www.eclipse.org/downloads/</a>, which is freely available for Windows, Mac, and Linux.



## **Learning Objectives**

Designing, writing, and testing structured computer programs using Java. By the end of this course, students should be able to: (1) decompose problems into actions and objects, (2) apply advanced programming constructs such as recursion and collections to implement solutions, (3) use inheritance to facilitate localized changes, (4) design & implement an event-driven application with a graphical user interface, and (5) take advantage of automated development tools.



#### Assessment

Class Participation: 10% It is expected that students will attend all classes, come having completed all assigned material and practice exercises, and be prepared to answer questions and work through exercises. Class participation will be graded according to attendance, preparation, and effort to learn during class time. Showing up is necessary, but not sufficient, to earn a good participation grade. Students will not be penalized for absences covered by a Drew Policy (Religious Observance, Athletics, Serious Illness, Death in the Family), but are responsible for all material covered during their absence.

**Homeworks & Labs: 30%** As with any skill, learning to program takes constant practice. Once a skill has been mastered through practice exercises and graded homeworks, the next step is to demonstrate mastery with a graded lab. These exercises will typically be started in class and completed over the following week.

**Projects: 30%** Once a skill has been mastered in isolation, the next step is to apply the newly learned skill with previously learned concepts to solve a larger problem.

**Exams: 30**% While assignments evaluate your ability to apply course concepts in working programs, a midterm and final exam will be given to assess your mastery of the concepts *without a computer*.

**Final Grades.** Letter grades will be assigned based on mastery of concepts: exceptional (A), complete (B), almost complete with minor mistakes (C), little mastery with effort (D), no mastery and little effort (F). Letter grade ranges will be determined for each exam as well as the final average. *Your final grade cannot be more than a letter grade higher than your highest exam letter grade.* 

## **Building a Learning Environment**

**In-class use of technology.** You are expected to use a laptop during class to work through examples and practice coding on assignments. Using technology such as laptops, tablets, and phones for non-class activities significantly limits your in class work time and potential learning opportunities. Come to class prepared to be mentally engaged the entire time, and limit technology use for unrelated activities to before or after class.

**Academic Honesty.** Your work in this course is subject to Drew's academic honesty policy. If you don't understand the work you submit, or if I suspect for any reason that you have submitted work that isn't yours or that otherwise violates Drew's policy, I am required to report my suspicion to the Dean of the College. Drew's standards and procedures are posted on the CLA Dean's UKnow space. Don't be afraid to discuss course topics with your peers, but your assignments should be your own.

**Academic Accommodations.** Should you require academic accommodations, you must file a request with the Office of Disability Services (BC 119, extension 3962). It is your responsibility to self-identify with the Office of Disability Services <a href="http://www.drew.edu/academicservices/disabilityser-vices/register">http://www.drew.edu/academicservices/disabilityser-vices/register</a> & provide faculty with appropriate documentation from that office at least one week prior to any request for specific course accommodations. There are no retroactive accommodations. Accommodations letters should be submitted to instructors as early in the semester as possible.