# COMPSCI 172 – Introduction to Object-Oriented Programming in Java

## Fall 2013, Section 2,

## TR 12:30pm-1:45pm, McGraw 115

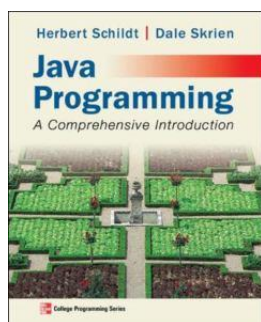| | |
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| **Instructor** | **Cheng Thao** |
| Office | McGraw 109 |
| Email | thaoc@uww.edu |
| Phone | 262-472-5002 |
| Office Hours | MTWRF 10:00am – 11am or by appointment |

## Course Description

This course will give students the essentials of object-oriented programming in Java. Students will learn to formulate algorithms, to solve problems and to implement those solutions with a Java program that employs objects and classes. The student will be introduced to object-oriented design, applications, and applets, class construction, methods and message passing, arrays, string-processing, file processing, and some event-handling and Graphical User Interface programming. This course is designed for students with some prior programming experience.  This course will prepare students for the course MCS 220 Concepts of Programming.

## Prerequisites

COMPSCI 171 and either MATH 152 or MATH 143 or equivalent preparation and consent of the instructor.

**A student may not earn credit for any course which is a pre-requisite for another course in which credit has been earned unless prior departmental approval is obtained.**

## Text & Software



**TEXT**: JAVA PROGRAMMING-COMPREHENSIVE INTRO Author: SCHILDT ISBN: 0-078-02207-X available through UW-Whitewater Book Rental.

**SOFTWARE**: The lab computers have all the necessary software, but if you want to program on your own computer, you will need Java SDK from http://www.oracle.com/technetwork/java/javase/downloads/index.html.  You may also use an IDE such as Eclipse (eclipse.org) or Netbeans (netbeans.org).

## Tentative Schedule

| Week | Chapter | Topics | Activities |
|------|---------|--------|-----------|
| 9/2 | Chapter 1 | Intro to Java | Lab 1 |
| 9/9 | Chapter 2 | Variables, basic data type, arithmetic operations | Lab 2 |
| 9/16 | Chapter 2 | Arithmetic operations, relational operators | Lab 3 |
| 9/23 | Chapter 3 | Selection statement | Lab 4 |
| 9/30 | Chapter 3 | Loop statements | Lab 5 |
| 10/7 | Chapter 5 | Array, String, Scanner, Math | Lab 6 |
| 10/14 | Chapter 4 | Method | Project 1 due |
| 10/21 | Chapter 4 | Review and Midterm (10/24) | |
| 10/28 | Chapter 6 | Design of a class | Lab 7 |
| 11/4 | Chapter 6 | Basic use of objects | Lab 8 |
| 11/11 | Chapter 6, 9 | Object return type, package | Lab 9 |
| 11/18 | Chapter 11 | File input/output | Lab 10 |
| 11/25 | Chapter 11 | File input/out, Thanksgiving | |
| 12/2 | Chapter 17 | Graphical Interface: Swing | Project 2 due |
| 12/9 | Chapter 18 | Swing controls: buttons, textbox, etc. | Lab 11 |
| 12/16 | Final Exam | 12/17 1:00pm-3:00pm | |

## Grading

| Grade Items | Weights |
|-------------|---------|
| Midterm | 20% |
| Projects | 40% |
| Labs | 20% |
| Final | 20% |

## Grading Scale

| 93-100% A | 87-89% B+ | 77-79% C+ | 67-69% D+ | 0-59% F |
|-----------|-----------|-----------|-----------|---------|
| 90- 92% A- | 83-86% B | 73-76% C | 63-66% D | |
| | 80-82% B- | 70-72% C- | 60-62% D- | |

## Grading Policies

- Lab exercises are to be done and checked off in class. Make up lab exercises are only given for emergency reasons. Lab exercises are graded as PASS/FAIL.
- There will be two programming projects. Late programming assignments are penalized 10% for each day late. Copying someone else's work would result in zero. Programing assignments are graded using a 10 point scale.

- Makeup exams are only given for emergency reasons.

## Additional Information and Resources

### *Religious Beliefs Accommodation*

Board of Regents policy states that students' sincerely held religious beliefs shall be reasonably accommodated with respect to scheduling all examinations and other academic requirements. Students must notify the instructor, within the first three weeks of the beginning of classes, of the specific days or dates on which they will request accommodation from an examination or academic requirement. For additional information, please refer to the section in the <u>University Bulletin</u> and the <u>Timetable</u> titled "Accommodation of Religious Beliefs."

### *Academic Misconduct*

The University believes that academic honesty and integrity are fundamental to the mission of higher education and of the University of Wisconsin System. The University has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards are subject to disciplinary action. UWS Chapter 14 identifies procedures to be followed when a student is accused of academic misconduct. For additional information, please refer to the section in the Student Handbook titled "Student Academic Disciplinary Procedures."

### *Absence for University-Sponsored Events*

University policy adopted by Faculty Senate and the Whitewater Student Government states that students will not be academically penalized for missing class in order to participate in university-sanctioned events. They will be provided an opportunity to make up any work that is missed; and if class attendance is a requirement, missing a class in order to participate in a university-sanctioned event will not be counted as an absence. A university-sanctioned event is defined to be any intercollegiate athletic contest or other such event as determined by the Provost. Activity sponsors are responsible for obtaining the Provost's prior approval of an event as being university-sanctioned and for providing an official list of participants. Students are responsible for notifying their instructors in advance of their participation in such events.

### *University Statement*

The University of Wisconsin—Whitewater is dedicated to a safe, supportive and non-discriminatory learning environment. It is the responsibility of all undergraduate and graduate students to familiarize themselves with University policies regarding Special Accommodations, Misconduct, Religious Beliefs Accommodation, Discrimination and Absence for University sponsored events. (For details, please refer to the Undergraduate and Graduate Timetables; the "Rights and Responsibilities" section of the Undergraduate Bulletin; the Academic Requirements and Policies and the Facilities and Services sections of the Graduate Bulletin; and the "Student Academic Disciplinary Procedures" [UWS Chapter 14]; and the "Student Nonacademic Disciplinary Procedures" [UWS Chapter 17]).