Wright State University

## CORE Scholar

Fall 2009

# CS 208: Computer Programming for Business I

David M. Hutchison

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### Repository Citation

## Syllabus

### Course Information

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| Course title: | Computer Programming for Business I |
| Course number: | CS 208 Section 01, Lab Section 01 |
| Course discipline: | Computing Sciences |
| Course description: | CS 208 is the first in a sequence of two programming classes required for MIS majors. This course will introduce students to the basic concepts of programming. Examples are from business applications and display graphics and emphasis is on problem solving with the computer as a tool. |
| Course date: | Wednesday, September 9, 2009 through Wednesday, November 18, 2009 |
| Location: | 152A Russ Engineering Center |
| Meeting day (s): | Monday |
| Meeting time (s): | 6:05 - 9:35 (includes lecture and lab) |
| Prerequisite (s): | Familiarity with basic computer concepts and the Microsoft Windows environment. |

### Instructor Information

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| Name: | David M. Hutchison |
| Email: | david.hutchison@wright.edu |
| Office location: | 152A |
| Office hours: | Before and after class, as needed or by appointment |
| Biography: | • B.S. Computer Science, Wright State University, 1990<br>• M.B.A. Project Management, Wright State University, 1995<br>• Sun certified Java Programmer<br>• Sun certified Java Developer<br>• Project Management Professional<br>• Current (Winter 2008-Present) instructor of CS 208 and CS 209<br>• Previous (1997-2001) and current instructor of CS 208 and CS 209<br>• Instructor of various independent Java, C programming, and Oracle-related Java courses |
| Teaching assistants: | TBD (tbd@wright.edu) |

### Course Goal

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| Course goals: | This course, in conjunction with CS 209, is designed to help students achieve a high degree of proficiency in intermediate level programming skills. |

### Course Policies

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| Introduction: | All course policies are subject to change. |

### Course Requirements

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| Requirements: | This course assumes no prior programming experience. You are required to have a thumb drive or similar media. Although not required, a backup is highly recommended as well. Some students use email for backups - whatever works for you, but you need some type of backup! |

### Course Schedule

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| Schedule: | The course schedule presented in the WebCT Calendar is *tentative*. We will do our best to adhere to this schedule, but events beyond our control (e.g., weather) may impact the dates and content. I will do my best to not slip any exam dates. |

### Class Attendance

Policy:         It is your responsibility to attend all classes - attendance will not be taken. Since this class is held only once a week, you stand to miss out on a lot of information, quizzes, labs, project hints, etc. if you choose to skip a class. Of course, prior notice of your missing class would be appreciated. Another way to think about it - if I haven't a clue who you are because of your choosing not to attend class, then don't expect any leniency when it comes to "curving" grades.

### Grading Policy

Policy:         Grading is on a straight 10-point increment scale. That is, >90 is an A, 80-89 is a B, 70-79 is a C, 60-69 is a D, and <60 is an F. Weights of exams, assignments, etc. are as follows:

- 20% - Mid-term exam
- 20% - Final exam
- 25% - Programming assignments
- 10% - Quizzes
- 15% - In-class labs
- 10% - Homework

Remember, your grade is weighted - it is *not* a straight points-based computation.

### Course Lab

Lab:         You must be enrolled in the lab associated with this class (i.e., CS 208 lab, section 01). The WebCT site for the lab will *not be used*.

**In-class Lab Assignments**
Weekly lab assignments will be provided during each lab session, beginning with the first night of class. These assignments are to be worked on during lab and submitted prior to the end of the night's lab session, regardless of whether or not they are complete. These assignments will consist of straightforward coding problems such as executing an already written program, writing source code for in complete programs, or designing a complete Java application. Each lab will be worth 50 points.

### Academic Dishonesty

Policy:         Violators will receive an F for the course and will be reported to the university - official university policy will be followed (Click here for the policy). You are required to work individually on your programming assignments. You are permitted to exchange ideas with your peers, but you are not permitted to use someone else's work. Additionally, you may not share your work with someone else. If you choose to violate these rules, then all students involved will suffer the consequences.

### Course Exams

Exams:        All students are required to take both exams. Make-up exams are only given on a case-by-case basis. If you are unable to attend an exam, you are required to provide an acceptable and documented reason *prior* to the exam.

### Course Quizzes

Quizzes:      Five announced quizzes will be given during the quarter. Makeups will not be allowed without advanced coordination with the instructor (and no one other than the instructor).

### Course Homework

Homework:     Five outside of class homework assignments will be given. These are straightforward assignments meant to take no more than an hour to complete The idea is to force you to do some programming outside of class.

### Programming Assignments

Assignments:    There will be three programming assignments over the course of the quarter. Each of these assignments is worth 100 points, each will state the required due date, and each will state the requirements for that assignment (e.g., provide a design, test cases, source code, etc.). You are

required to earn at least 60% of the total points for *each individual* assignment. Failure to earn 60% on each assignment will result in *failure of this course!* Failure to reach an average of 75% across all assignments will also result in *failure of this course!* Late assignments will only be accepted for documented reasons, previously arranged with the instructor (i.e., *not* the lab TA). Please see the lab TA for a description of how points will be allocated for each programming assignment.

## Textbook

Required reading: *Java Programming: From The Ground Up*, Ralph Bravaco, Shai Simonson, McGraw-Hill, 1 edition (January 22, 2009), 978-0073523354

## Midterm Exam

Content: Chapters 1-4.

## Final Exam

Content: Comprehensive, with a concentration on chapters 4-6. How much of chapter 6 is included in the final exam will depend on how much we can cover during the last week of the quarter. I will do my best to schedule a review session from 7:00 til 8:00 the evening of the final exam.

## Chapter 1

Topics:
- Course overview
- What is a computer?
- Programming languages
- Java overview
- Software engineering
- Program development process

Readings: Bravaco, Chapter 1

## Chapter 2

Topics:
- TextPad
- What is a program made of?
- Our first Java program
- Basic input and output
- Expressions
- Data types
- Operators and precedence
- Mixing data types
- The + operator and strings
- Types of errors

Readings: Bravaco, Chapter 2

## Chapter 3

Topics:
- Variables
- Obtaining data from outside a program
- Final variables
- Conversion Between Primitive Data Types
- Assignment operators
- Increment and decrement operators
- Programming style

Readings: Bravaco, Chapter 3

## Chapter 4

Topics:
- if statements
- Nested if statements
- if-else statements
- Nested if-else statements

- if-else-if statements
- switch statements

Readings:        Bravaco, Chapter 4

## Chapter 5

Topics:
- while loop
- do-while loop
- for loop
- Nested loops
- break and continue keywords

Readings:        Bravaco, Chapter 5

## Chapter 6

Topics:
- Java's predefined methods
- Writing your own methods
- Format of a method definition
- Returning a value
- Void methods
- Calling methods
- Passing parameters to a method
- Local variables
- Scope and lifetime

Readings:        Bravaco, Chapter 6