Document:	Beginning Programming (Java) Course Administration			
Revised:	**April 20, 2022**			
Course Title:	Beginning Programming (Java)			
Course Number:	CMSC 1513			
Section:	CRN 25440 and IVE CRN 25439, 4:15 – 5:30 p.m. Monday and Wednesday. MCS 113			
Instructor:	Dr. Thomas R. Turner; Office: MCS 134; Work Phone: 974-5383, e-mail: trturner@uco.edu			
Office Hours:	**Time**	**Monday**	**Wednesday**	**Friday**
	9:00 – 9:50 a.m.	MCS 134	MCS 134	MCS 134
	3:00 – 4:00 p.m.	MCS 134	MCS 134	
	Time	**Tuesday**	**Thursday**	
	6:30 – 7:30 p.m.	MCS 134	MCS 134	
	Please make an appointment to visit me during my office hours.			
Text:	1. Liang, Y. Daniel Introduction to Java Programming: Brief Version 11th Ed. Pearson Education Inc. 2013 ISBN-13 978-0-13-461103-7			
Prerequisites:	1. 2 Years High School Algebra			
Course due dates:	All assignments, projects, reports and quizzes are due at the beginning of class on the date given in this document unless otherwise specified. Exams that are administered in class are due at the end of the class period.			
Course Scoring:	**Task**	**Date**	**Value**	
	Test 1	**2-14**	**150**	
	Test 2	**3-28**	**150**	
	Final Test	**5-6**	**300**	
	Projects	Table 2	250	
	Reports	Table 3	50	
	Total		**900**	
Grading:	**A**: 90% (810-900); **B**: 80-89% (720-809); **C**: 70-79% (630-719); **D**: 60-69% (540-629); **F**: 59% (0-539) and below.			
Notice:	Beepers and cellular phones are prohibited in class.			

Caveat:	This lecture schedule, projects, reports, quizzes, tests, and due dates are all subject to change. Changes are presented in class ***You*** are responsible for the material presented in class.
Class Web Page:	The course administration and assignments can be found on URL **http://www.comsc.uco.edu/~trt/cs1513.html**
Course Directory	The course directory is on the department computer (**cs.uco.edu**). You can find project test data files in the course directory. **~tt/cs1513/**
Student Disabilities:	Students with disabilities who require accommodations may contact Disability Support Services. **http://bronze.uco.edu/disability_support/**
Absences:	1. A **45-point bonus** is awarded to any student having no recorded absences. The attendance bonus will be denied to any student who is absent for any reason. The attendance bonus will not be granted to any student having an excused absence. 2. A student may be absent for up to **three (3)** classes without penalty: these three classes are counted as excused absences. No notification or documentation is required except when a test is given. 3. **Fifteen (15)** points will be deducted from the student's final score for the **fourth and every subsequent** class for which the student is recorded absent. 4. A student will receive a zero on an examination unless written justification is presented to the instructor. Acceptable justification includes university sanctioned travel, military obligation, serious illness or injury, or death or serious illness in the immediate family. Work-related conflicts are not acceptable excuses. 5. Please note that **roll is taken** for those students enrolled in the **Interactive Video** section at the time this class is scheduled to meet on campus. **No recording is available for later viewing.**
Academic Honesty and Collaboration:	Students are encouraged to collaborate. However, each student must make a ***unique*** contribution to any joint effort and that unique contribution must be ***visible*** in the work submitted by the student. Partially or completely copied assignments shall be considered a prima facie case for academic dishonesty.

Table 1. Lecture Schedule

Class	Date	Topic	Reference
1	1-10	Course administration	Lecture Notes
		Lecture 1 Introduction to Computers, Programs, and Java™	Ch 1.1 p 1
		Lecture 2 What is a Computer?	Ch 1.2 p 2-7
		Lecture 3 Programming Languages	Ch 1.3 p 7-9
2	1-12	Lecture 4 Operating Systems	Ch 1.4 p 9-10
		Lecture 5 Java, the World Wide Web, and Beyond	Ch 1.5 p 10-11
		Lecture 6 The Java Language Specification, API, JDK, JRE, and IDE	Ch 1.6 p 11-12
3	1-19	Lecture 7 Installing Java	Lecture Notes
		Lecture 7.1 Installing NetBeans	Lecture Notes
		Lecture 8 A Simple Java Program	Ch 1.7 p 12-15
		Lecture 9 Creating, Compiling, and Executing a Java Program	Ch 1.8 p 15-18
4	1-24	Lecture 10 Programming Style and Documentation	Ch 1.9 p 18-20
		Lecture 11 Programming Errors	Ch 1.10 p 20-23
		Lecture 12 Developing Java Programs Using Netbeans	Ch 1.11 p 23-25
5	1-26	Lecture 13 Introduction to Elementary Programming	Ch 2.1 p 34
		Lecture 14 Writing a Simple Program	Ch 2.2 p 34-37
		Lecture 15 Reading Input from the Console	Ch 2.3 p 37-40
		Lecture 16 Identifiers	Ch 2.4 p 40
		Lecture 17 Variables	Ch 2.5 p 40-42
6	1-31	Lecture 18 Assignment Statements and Assignment Expressions	Ch 2.6 p 42-43
		Lecture 19 Named Constants	Ch 2.7 p 43-44
		Lecture 20 Naming Conventions	Ch 2.8 p 44-45
		Lecture 21 Numeric Data Types and Operations	Ch 2.9 p 45-48
		Lecture 22 Numeric Literals	Ch 2.10 p 48-50
		Submit report r01	

Table 1. Lecture Schedule (Continued)

Class	Date	Topic	Reference
7	**2-2**	**Class cancelled – Bad Weather** **Submit project p01 – Computing pi (1.7)**	
8	2-7	Lecture 23 Evaluating Expressions and Operator Precedence	Ch 2.11 p 50-52
		Lecture 24 Case Study: Displaying the Current Time	Ch 2.12 p 52-54
		Lecture 25 Augmented Assignment Operators	Ch 2.13 p 54-55
		Lecture 26 Increment and Decrement Operators	Ch 2.14 p 55-57
		Lecture 27 Numeric Type Conversions	Ch 2.15 p 57-59
		Lecture 28 Software Development Process	Ch 2.16 p 59-63
		Lecture 29 Case Study: Counting Monetary Units	Ch 2.17 p 63-65
		Lecture 30 Common Errors and Pitfalls	Ch 2.18 p 65-67
9	2-9	Lecture 31 Introduction to Selections	Ch 3.1 p 75-76
		Lecture 32 `Boolean` Data Type	Ch 3.2 p 76-78
		Lecture 33 `if` Statements	Ch 3.3 p 78-80
		Lecture 34 Two-Way `if-else` Statements	Ch 3.4 p 80-81
		Lecture 35 Nested `if` and Multi-Way `if-else` Statements	Ch 3.5 p 81-83
		Lecture 36 Common Errors and Pitfalls	Ch 3.6 p 83-87
		Submit project p02 – Convert Celsius to Fahrenheit (2.1)	
10	***2-14***	***Test 1***	***Chapters 1 – 2***
11	2-16	Test 1 Reprise **Submit project p03 – Future Value (2.21)**	
12	2-21	Lecture 37 Generating Random Numbers	Ch 3.7 p 87-89
		Lecture 38 Case Study: Computing Body Mass Index	Ch 3.8 p 89-90
		Lecture 39 Case Study: Computing Taxes	Ch 3.9 p 90-93
		Submit project p04 – Quadratic Equation (3.1)	
13	**2-23**	**Class Cancelled – Bad Weather**	

Table 1. Lecture Schedule (Continued)			
Class	**Date**	**Topic**	**Reference**
14	2-28	Lecture 40 Logical Operators Lecture 41 Case Study: Determining Leap Year	Ch 3.10 p 93-97 Ch 3.11 p 97-98
15	3-2	Lecture 42 Case Study: Lottery Lecture 43 `switch` Statements Lecture 44 Conditional Operators	Ch 3.12 p 98-100 Ch 3.13 p 100-103 Ch 3.14 p 103-104
16	3-7	Lecture 45 Operator Precedence and Associativity Lecture 46 Debugging	Ch 3.15 p 104-105 Ch 3.16 p 106
17	3-9	Lecture 47 Introduction to Mathematical Functions, Characters, and Strings Lecture 48 Common Mathematical Functions Lecture 49 Character Data Type and Operations **Submit project p05 – Palindrome Integer (3.12)**	Ch 4.1 p 119-120 Ch 4.2 p 120-125 Ch 4.3 p 125-130
18	3-21	Lecture 50 The String Type Lecture 51 Case Studies Lecture 52 Formatting Console Output Lecture 53 Loops Introduction	Ch 4.4 p 130-139 Ch 4.5 p 139-145 Ch 4.6 p 145-148 Ch. 5.1 p 159-160
19	3-23	Lecture 54 The while Loop Lecture 55 Case Study: Guessing Numbers Lecture 56 Loop Design Strategies Lecture 57 Controlling a Loop with User Confirmation or a Sentinel Value	Ch. 5.2 p 160-162 Ch. 5.3 p 163-165 Ch. 5.4 p 166-167 Ch. 5.5 p 168-169
20	3-28	Lecture 58 The `do-while` Loop Lecture 59 The `for` Loop Lecture 60 Which Loop to Use? Lecture 61 Nested Loops Lecture 62 Minimizing Numeric Errors	Ch 5.6 p 170-173 Ch 5.7 p 173-176 Ch 5.8 p 176-178 Ch 5.9 p 178-180 Ch 5.10 p 180-182
21	3-30	Lecture 63 Case Studies Lecture 64 Keywords *break* and *continue* Lecture 65 Case Study: Checking Palindromes Lecture 66 Case Study: Displaying Prime Numbers **Submit project p06 – Phone Key Pad (4.15)**	Ch 5.11 p 182-186 Ch 5.12 p 186-189 Ch 5.13 p 189-191 Ch 5.14 p 191-193

Table 1. Lecture Schedule (Continued)

Class	Date	Topic	Reference
22	***4-4***	***Test 2***	***Chapters 3 – 5***
23	4-6	Test 2 Reprise	
24	4-11	Lecture 67 Introduction to Methods Lecture 68 Defining a Method Lecture 69 Calling a Method Lecture 70 `void` vs. Value-Returning Methods Lecture 71 Passing Parameters by Values Lecture 72 Modularizing Code **Submit project p07 – Loan Cost (5.21)**	Ch 6.1 p 206 Ch 6.2 p 206-208 Ch 6.3 p 208-211 Ch 6.4 p 211-214 Ch 6.5 p 214-217 Ch 6.6 p 217-219
25	4-13	Lecture 73 Case Study: Converting Hexadecimals to Decimals Lecture 74 Overloading Methods Lecture 75 The Scope of Variables	Ch 6.7 p 219-221 Ch 6.8 p 221-224 Ch 6.9 p 224-225
26	4-18	Lecture 76 Case Study: Generating Random Characters Lecture 77 Method Abstraction and Stepwise Refinement **Submit project p08 – Future Investment Value (6.7)**	Ch 6.10 p 225-227 Ch 6.11 p 227-234
27	4-20	Lecture 78 Introduction to Single-Dimensional Arrays Lecture 79 Array Basics Lecture 80 Case Study: Analyzing Numbers Lecture 81 Case Study: Deck of Cards Lecture 82 Copying Arrays	Ch 7.1 p 247-248 Ch 7.2 p 248-255 Ch 7.3 p 255-256 Ch 7.4 p 256-258 Ch 7.5 p 258-259
28	**4-25**	**Margin** **All unsubmitted assignment due**	
29	**4-27**	**Margin**	
30	***5-6***	***Final Exam, 3:00 – 4:50 p.m., Friday, May 6, 2022***	***Comprehensive Ch 1 – Ch 7.5***

Table 2. Projects			
Project	**Due**	**Value**	**Description**
p01	**2-2**	**25**	p01 – Computing pi (1.7)
p02	**2-9**	**25**	p02 – Convert Celsius to Fahrenheit (2.1)
p03	**2-16**	**25**	p03 – Future Value (2.21)
p04	**2-21**	**25**	p04 – Quadratic Equation (3.1)
p05	**3-9**	**25**	p05 – Palindrome Integer (3.12)
p06	**3-30**	**25**	p06 – Phone Key Pad (4.15)
p07	**4-11**	**25**	p07 – Loan Cost (5.21)
p08	**4-18**	**25**	p08 – Future Investment Value (6.7)
Bonus		**25**	
Bonus		**25**	
Total		**250**	

Table 3. Reports			
Report	**Due**	**Value**	**Description**
r01	**1-31**	**50**	**Library research report**
Total		**50**	