CSC 116

Introduction to Programming and Problem Solving

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COURSE CREDIT: 4 hrs. credit PREREQUISITES: CSC 115

OFFICE HOURS: MWF 10-11:50; TR 9:25-11:40; other hours by appointment

TEXT: *Java Software Solutions: Foundations of Program Design*, 5th Edition

John Lewis and William Loftus

OTHER MATERIALS: A USB storage device.

DESCRIPTION: Three hours of lecture and three hours of laboratory per week. This course is designed

as an introduction to programming and problem solving. Topics to be included are the abstractions necessary for the program development process, design methodology, control structures, looping, procedures, interface design, functions, simple data types,

aggregate data structures and objects.

RATIONALE: This course is required of all majors and minors in Computer Science and Computing

and Information Systems as well as various other degree programs on campus.

LEARNING OBJECTIVES: After successfully passing this course, the student will be able to write well-

designed object-oriented programs using the Java language and will be prepared for entry into Data Structures. See below for a complete list of objectives or at

http://www.mc.edu/campus/users/mwiggins/csc116.html.

EVALUATION: The instructor reserves the right to make adjustments as necessary.

Tests: There will be a four exams worth 100 points each. (400 points)

Assignments: There will be 5-8 programming/problem solving assignments worth a total of 200 points.

Lab Assigns: There will be a 11 laboratory assignments worth a total of 200 points. At the end of

each lab a quiz on that particular lab will be administered. The lab grade will be

determined by that quiz.

Final Exam: There will be a comprehensive final examination given at the time specified by the

college. This examination will be worth 200 points. Monday, May 7, 2006, 8:00 -

10:00 a.m.

Grading Scale: 900 - 1000 points **A** 600 - 699 points **D**

800 - 899 points **B** 0 - 599 points **F**

700 - 799 points **C**

CLASS ATTENDANCE: The student is expected to attend classes. Regulations for class attendance are

given in the Class Schedule. Remember in a MWF class 12 absences is an

automatic F. Three tardies counts as one absence in this class. (See the Mississippi College catalog). Laboratory attendance is very important!! Four absences in lab will result in a grade of 0 for the lab portion of the course.

MAKE-UP WORK & TESTS: Students are expected to take tests on the day they are assigned. However, it is the student's responsibility to contact the instructor in case of an emergency illness or death in the family **before** the test. At that time the student and instructor will agree on a time for the make-up exam. This time should be within 2 days of the missed test. Assignments are to be turned in on the day they are due!! All work is due at the beginning of the class period. Any work not turned in will lose 10% credit for each school day *until the third day*. The due date at the beginning of class is day 1. No work will be accepted after the third day. Under no circumstances will work be accepted after the assignment has been graded and handed back in class. Laboratory work will be due at the end of each week's lab at which time a lab quiz will be administered. Exceptions to this may be made at the instructor's discretion.

ACADEMIC INTEGRITY: This statement on academic honesty in computer science courses is an addendum to the Mississippi College policy 2.19 found at

http://www.mc.edu/publications/policies/academic/219.wpd.
In a computer science class individual effort is expected. Student misconduct not only includes cheating on tests, but also extends to copying or collaborating on programming assignments, projects, lab work or research unless otherwise specified by the instructor. Using other people's accounts to do your work or having others do your work is prohibited. Close proximity in lab does not mean collaboration is permitted. NOTE: Discussing logical solutions to problems is acceptable, exchange of code, pseudocode, designs, or procuring solutions from the Web, other texts, the Internet or other resources on or off campus is not acceptable.

First offense: grade of 0 for **all** parties involved unless the "guilty" party can be determined as well as any punishment deemed necessary under policy 2.19

Second offense: grade of F in the course as well as any punishment deemed necessary under policy 2.19

SPECIAL ACCOMMODATIONS:

If you need special accommodations due to learning, physical, psychological, or other disabilities, please contact Dr. Buddy Wagner in the Counseling and Career Development Center. He may be reached by phone at (601) 925-3354 or by mail at P. O. Box 4016, Clinton, MS 39058.

DROPPING A COURSE: LAST DROP DATE - March 23

Students cannot withdraw after this date with a W (passing) unless the three following criteria are met:

- Extenuating circumstances (clearly outside the student's control)
- Passing the course at the time of withdrawal
- Does not have excessive absences at the time of withdrawal

NOTE: Dropping <u>after the THIRD (3rd) WEEK</u> will result in a grade of W appearing on your permanent record (transcripts). See http://www.mc.edu/publications/policies/academic/213.wpd.

TENTATIVE COURSE OUTLINE

	TENTATIVE COURSE OF TERME	Reading Assignments
1	Jan 17 Course Policies / Chapter 1 - Introduction	Read 1-58
2 3	19 Chapter 1	Read 59-112
4	22 Chapter 1 24 Chapter 2 - Data & Expressions	Read 39-112
5	24 Chapter 2 - Data & Expressions 26 Chapter 2	
6	29 Chapter 2	Read 113-158
7	31 Chapter 3 - Using Classes & Objects	Read 113-130
8	Feb 2 Science & Mathematics Tournament - No Class	
9	5 Chapter 3	
10	7 Chapter 3	Read 159-208
11	9 Chapter 4 - Writing Classes	
12	12 Chapter 4	
13	14 Exam 1 - Chapters 1-3	
14	16 Chapter 4	Read 209-292
15	19 Chapter 5 - Conditionals & Loops	
16	21 Chapter 5	
17	23 Chapter 5	
18	26 Chapter 5	Read 293-370
19	28 Chapter 6 - Object-Oriented Design	
20	Mar 2 Chapter 6	
21	5 Chapter 6	Read 371-438
22	7 Chapter 7 - Arrays	
23	9 Exam 2 - Chapters 4-6	
24	12 Spring Recess	
25	14 Spring Recess	
26	16 Spring Recess	
27	19 Chapter 7	
28	21 Chapter 7	Read 439-482
29	23 Chapter 8 - Inheritance *LAST DROP DATE	
30	26 Chapter 8	
31	28 Chapter 8	Read 483-532
32	30 Chapter 9 - Polymorphism	
33	Apr 2 Chapter 9	D 1 500 550
34	4 Chapter 9	Read 533-578
35	6 Good Friday - Easter Holiday - No Class	
36	9 Chapter 10 - Exceptions	
37	11 Exam 3 - Chapters 7-9	
38	13 Chapter 10	D 1 570 (14
39	16 Chapter 10	Read 579-614
40	18 Chapter 11 - Recursion	
41 42	20 Chapter 11	Day 1 615 642
42	23 Chapter 11	Read 615-642
43 44	25 Chapter 12 - Collections	
44	27 Exam 4 - Chapters 10-11	Dead Days
43 46	30 Chapter 12 May 2 Wrap-Up & Review	Dead Days Dead Days
47	7 Comprehensive Final Examination 8:00-10:00 a.m.	Denn Duys
┱/	1 Comprehensive I mui Examination 0.00-10.00 a.m.	

CSC 116 LABORATORY SCHEDULE

LAB#	WEEK OF	COURSE CONTENT
1	January 22	Get acquainted
2	January 29	Lab 1
3	February 5	Lab 2
4	12	Lab 3
5	19	Lab 4
6	26	Lab 5
7	March 5	Lab 6
8	12	No Lab - Spring Recess
9	19	Lab 7
10	26	Lab 8
11	April 2	Lab 9
12	9	Lab 10
13	16	Lab 11
14	23	Lab 12

Program Submission Guidelines

All programs should be submitted via Moodle (http://cosmo.mc.edu/moodle). Source code must be submitted as well as <u>all</u> files necessary for the programs execution. A text file containing the following information should be part of the submission.:

- Author's name
- Date completed
- Brief problem description
- Statement regarding whether the program works or not.
- If the program does not work, a brief but concise description of what is wrong and what it will take to "fix" it.

The names of these files should be relevant to the name of the assignment. Multiple files may be submitted via Moodle by "zipping" them. Only .zip format will be accepted. No .rar files, please.