Information Systems Department University of Maryland Baltimore County Baltimore Maryland 21250

Departmental Office: room ITE 404 ph. 410-455-3206

IS 147 Introduction to Programming: Spring 2019 Sections 1-4

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web http://userpages.umbc.edu/~redding/

Course Delivery Site http://blackboard.umbc.edu

Office Hours: ITE 414, see posted schedule at ITE414 for appointments

Meeting Times: Sections all: Lecture Tuesdays 8:30-9:45am

Discussion Sections: Section 2 Thursdays 8:30-9:45,

Section 3 Thursdays 10:00-11:15, Section 4 Thursdays 11:30-12:45,

See UMBC Schedule of Classes for room assignments

<u>Textbook</u>: The "text" is the REVEL for Liang online version of Introduction to Java Programming from Pearson publishing: ISBN 13: 9780134167008 See: https://console.pearson.com/enrollment/ol890p

<u>Course Description</u>: "This course introduces basic principles and techniques involved in computer programming and computing. Methods of algorithm development, program development and program design are taught using an object-oriented programming language. Projects are geared toward those typically found in the information systems field." 3 credits. Prerequisite: IS 101 or COMP101 recommended (from catalog).

You should also have a good math background at least through College Algebra before starting IS147.

This course is an introduction to *both* programming and the principles of computer science. You will learn how to program with principles that are relevant to all programming languages and also learn the basic concepts and vocabulary of computer science. It is a very important course in your education and will require significant weekly work on the readings and the programming projects. It will give you the concepts that will make your future IS courses easier and give you a valuable programming skill that you can use in future courses. This course serves as preparation for IS 247. We will be using the Java programming language.

Instructional Methods: Discussion, Lectures and Demonstrations

Attendance and Participation: Regular and punctual attendance is expected of all students. In the case of absence due to emergency (illness, death in the family, accident), religious holiday, or participation in official College functions, it is the student's responsibility to confer with the instructor about the absence and missed course work.

<u>Class Preparation:</u> All of the reading and homework assignments should be completed before the class in which the material is to be discussed.

<u>Course Requirements:</u> Regular Punctual Attendance, Class Assignments & Homework, Tests, Programming Projects.

Grading: There are 6 Learning Units: Each Learning Unit will typically consist of a mix of: online reading assignments (10%), in class lab programming (10%), programming homework (10%), an objective test (35%) and a hands-on programming test (35%). The units have a varying amount of material and importance therefore they have a variable weight when it comes to a final grade for the semester.

Unit 1 from Chapters 1 and 2 (Intro and basic Java) is worth 15% of the overall grade.

Unit 2 from Chapters 3 and 4 (Conditionals & Strings) is worth 20% of the overall grade.

Unit 3 from Chapter 5 (Loops) is worth 20% of the overall grade.

Unit 4 from Chapters 6 and 9 (Methods and Classes) is worth 20% of the overall grade.

Unit 5 from Chapters 7 and 8 (Arrays) is worth 20% of the overall grade.

Unit 6 from Chapter 10 (Objects) is worth 5% of the overall grade.

Since each Learning Unit is a preparation for the next, students need to master the material to at least an adequate level (80%) in the current unit in order to have a reasonable chance to succeed in subsequent units. (Blackboard total points are irrelevant as we use a weighted system- your current numerical grade is always available as a running total expressed as a percentage from 0-100%.)

IS instructors are expected to have exams and evaluations which result in a reasonable distribution of grades. With respect to final letter grades, the University's Undergraduate Catalogue states that, "A, indicates superior achievement; B, good performance; C, adequate performance; D, minimal performance; F, failure" There is specifically no mention of any numerical scores associated with these letter grades. Final letter grades in this course conform to the University's officially published definitions of the respective letter grades. In accordance with the published University grading policy, it is important to understand that final letter grades reflect academic achievement and not effort. While mistakes in the arithmetic computation of grades and grade recording errors will always be corrected, it is important to understand that in all other situations final letter grades are not negotiable and challenges to final letter grades are not entertained.

For this course it is anticipated that "A" grades may be in the 90-99% range, "B" grades may be from 80-89% and "C" grades range from 70-79%. All points from each Learning Unit are additive. Each student starts at zero points which is an "F", any other grade must be earned.

THERE WILL BE NO EXTRA CREDIT ASSIGNMENTS AVAILABLE!

Academic Integrity: By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabricating, plagiarism, and helping others to commit these acts are all forms of academic dishonesty and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. Full policies on academic integrity should be available in the UMBC Student Handbook, Faculty Handbook, or the UMBC Directory.

You may not copy other students' work or copy programs from the Internet. You will receive an F for any assignment found to be copied for the first time and any subsequent violations will result in immediate failure of the course. Also, do not post code in the forums. Always post pseudocode. It is a violation of the course policy to email each other code.

Disability Statement Student Disability Services (SDS)

UMBC is committed to eliminating discriminatory obstacles that may disadvantage students based on disability. Services for students with disabilities are provided for all students qualified under the Americans with Disabilities Act (ADA) of 1990, the ADAAA of 2009, and Section 504 of the Rehabilitation Act who request and are eligible for accommodations. The Office of Student Disability Services (SDS) is the UMBC department designated to coordinate accommodations that would allow students to have equal access and inclusion in all courses, programs, and activities at the University.

If you have a documented disability and need to request academic accommodations, please refer to the SDS website at sds.umbc.edu for registration information and to begin the process, or alternatively you may visit the SDS office in the Math/Psychology Building, Room 212. For questions or concerns, you may contact us through email at disAbility@umbc.edu or phone (410) 455-2459.

If you require accommodations for this class, make an appointment to meet with me to discuss your SDS-approved accommodations.

<u>Due Dates:</u> All assignments are to be handed in by the due date as announced in class and as listed on the updated online schedule. Late assignments are not accepted at all since you need to have all of the work for each unit completed prior to the tests for that unit.

<u>Make-up Policy</u>: Exams: No make-up exams except through arrangement with the instructor: and then for reasons deemed valid enough to warrant the making of a new, and potentially harder, test.

COURSE SCHEDULE: (Schedule subject to change-See the Schedule updates online

Online Schedule update

Inclement Weather: Any work or test due on a class date that has been canceled due to inclement weather will be due the next class meeting. (If the semester's last exam period is postponed, it will be given during the time period assigned during the University's official time and day indicated on the calendar posted by the registrar's office.)

week		Date	Lecture - Tuesdays	Lab- Wednesdays
1	Lecture	Jan 29	Intro to Course	
	Lab	Jan 31		Toolbox
2	Lecture	Feb 5	Chapter 1	
	Lab	Feb 7		Lab 1
3	Lecture	Feb 12	Chapter 2	
	Lab	Feb 14		Lab 2
4	Lecture	Feb 19	Review 1&2	
	Lab	Feb 21		Test 1 Chaps 1 and 2)
5	Lecture	Feb 26	Chapter 3-Selections/Conditionals	
	Lab	Feb 28		Lab 3
6	Lecture	Mar 5	Chapter 4 Strings, Characters	
	Lab	Mar 7		Lab 4
7	Lecture	Mar 12	Review 3&4	
	Lab	Mar 14		Test 2 (Chaps 3 and 4)
8	Lecture	Mar 19	Spring Break	
	Lab	Mar 21		Spring Break
9	Lecture	Mar 26	Chapter 5 Loops	
	Lab	Mar 28		Lab 5
10	Lecture	April 2	Review 5	
	Lab	April 4		Test 3 (Chapter 5)
11	Lecture	April 9	Chapter 6-Methods	
	Lab	April 11		Lab 6 (ch6)
12	Lecture	April 16	Chapter 9-Classes	
	Lab	April 18		Lab 6 (ch9)
13	Lecture	April 23	Review 6&9	
	Lab	April 25		Test 4 (Chaps 6 and 9)
14	Lecture	April 30	Chapters 7&8	
	Lab	May 2		Lab 7(Chaps 7 and 8)
15	Lecture	May 7	Review 7&8	
	lab	May 9		Test 5 (Chaps 7and 8)
16	Lecture	May 14	Test 6	
		May?	Final Exam Period available at instructor's discretion	See update