



STANDARD COURSE SYLLABUS

COMPUTER PROGRAMMING II (Java), CSC 2623

(Revised Spring 2021)

COURSE TITLE: Computer Programming II (Java), CSC 2623

COURSE DESCRIPTION: This course is a continuation of the object-oriented language from CSC 1613. This includes advanced program development, algorithm analysis, string processing, recursion, internal search/sort methods, simple data structures, debugging and testing of large programs. Three hours lecture/lab. Prerequisite: A grade of "C" or better in CSC 1613.

COURSE GOALS: This course will provide instruction and practice in program design and coding of application programs using Java programming software to do the following:

1. Continue to apply problem-solving and software development methodologies in program creation and execution.
2. Apply arrays, both single and multi-dimensioned, in program creation and execution.
3. Apply the use of simple recursion in program creation and execution.
4. Apply the use of search/sort algorithms in program creation and execution.
5. Demonstrate object-oriented (OO) programming: create classes and applications that instantiate the objects of the class.
6. Demonstrate the searching of an array and linked list using the following search algorithms: sequential search and binary search.

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, students should be able to:

1. Apply the components of object-oriented programming language and use of integrated development environment to solve complex problems
2. Explain the usage of arrays and perform manipulation on arrays
3. Create multiple classes and utilize static, final and enums to manage large applications and promote reuse
4. Recognize the usage of inheritance by creating class hierarchy and utilizing protected members to limit data access across classes
5. Develop applications using abstract classes and polymorphism
6. Describe exception handling mechanism to develop robust and fault-tolerant programs
7. Compare and contrast the String, String Builder, and Character classes and Regular Expression capabilities to manipulate and validate data

COURSE REQUIREMENTS:

- Students must meet the requirements of the NWCC attendance policy.
- Students must have a final average that is passing as defined by the grading scale listed in the Course Outline.
- Students must take the final exam.

METHODS OF INSTRUCTION:

The methods of instruction used for this course may include any or all of the following:

- Lecture
- Discussion
- Laboratory Exercises
- Audio/Visual presentations (overhead, PowerPoint, video, etc.)
- Outside Assignments
- Class Demonstrations
- Assigned Projects

ASSESSMENT METHODS:

The assessment methods used for this course may include any or all of the following:

1. Homework / Classwork / Programming Exercises
2. Laboratory Exercises
3. Quizzes
4. Exams

REQUIRED TEXTBOOKS:

Java How To Program, Early Objects, by Paul Deitel and Harvey Deitel ISBN-13: 978-0-13-480030-1
ISBN-10: 0-13-480030-3

REQUIRED EQUIPMENT/MATERIALS/SUPPLIES:

See the individual instructor's Course Outline for the specific equipment/materials, supplies to purchase.

GRADING SCALE:

NWCC does not have a standard grading scale for all classes. See the individual instructor's Course Outline for the specific grading scale for this class.

NWCC'S OFFICIAL ATTENDANCE POLICY:

Regular and punctual attendance at all scheduled classes is expected of all students and is regarded as integral to course credit. There are times, however, when students must miss class. **Nevertheless, if a student has an excessive number of absences based on the MCCB allowed absences chart before the withdrawal deadline, that student will be withdrawn from the class with a grade of "W."** Particular policies and procedures on absences and makeup work are established for each class and are announced in writing at the beginning of the term. Each student is directly responsible to the individual instructor for absences and for making up work missed. The instructor reserves the right to remove from the classroom any student whose conduct is disruptive to the learning process. For more information about the appeal process, contact the appropriate Dean or the Associate Vice President for Academic Instruction.

For On Campus Classes: Students are expected to be prompt in class attendance. A student is counted absent from class if he or she misses more than 10 minutes of a class meeting. Three tardies constitute one absence.

For Online Classes: Students must attempt at least one of that week's graded class assignments or they will be marked absent for that week.

Table 1- Maximum Allowed Absences Chart

Term Length (weeks)	Class Meetings Per Wk	1	2	3	4	5	6	7
	Maximum number of allowed absences							
1		0	0	0	1	1	1	1
2		0	1	1	1	1	2	2
3		0	1	1	2	2	2	3
4		1	1	2	2	3	3	4
5		1	1	2	3	3	4	5
6		1	2	2	3	4	5	6
7		1	2	3	4	5	6	7
8		1	2	3	4	5	6	7
9		1	2	4	5	6	7	8
10		1	3	4	5	7	8	9
11		1	3	4	6	7	9	10
12		2	3	5	6	8	10	11
13		2	3	5	7	9	10	12
14		2	4	6	7	9	11	13
15		2	4	6	8	10	12	14
16		2	4	6	9	11	13	15
17		2	5	7	9	11	14	16
18		2	5	7	10	12	14	17

This table is based on the number weeks on a given term and how often a class meets on a per week basis. For example, in a 15-week term such as a 'normal' Fall or Spring semester, in a class that meets MWF (3-times per week), a student would be allowed to miss class 6 times. On the 7th absence he/she must be taken out.

PLAGIARISM AND CHEATING/ACADEMIC HONESTY:

Both cheating and plagiarism are prohibited. Plagiarism is the presentation of another person's ideas, words, or work as one's own. Students who wish to appeal the decision of their instructor with regards to an allegation of cheating or plagiarism should notify the Associate Vice President for Academic Instruction or the appropriate Dean in writing within one (1) week of the formal decision by their instructor. The Associate Vice President or appropriate Dean will, within a reasonable amount of time, convene an Ad Hoc Committee to hear the student's appeal and will notify the student in writing of the date, time, and location of the hearing. The Ad Hoc Committee will be chaired by the Associate Vice President or appropriate Dean and may consist of up to two (2) faculty members and two (2) students. The Committee will review all supporting documentation and hear from the accused student in person.

The accused student may submit any documentation and present witnesses in his/her defense at that time. The Committee will render a decision following the hearing and the decision of the Committee is final.

ADDITIONAL POLICIES (COURSE OUTLINE):

Individual instructors and specific programs may have policies and requirements in addition to those listed here. Any additional course information that is particular to a given teacher or program will be included in the Course Outline attached to this syllabus.

Note: The instructor reserves the right to make any necessary changes to the information provided in the syllabus and the course outline during the semester.

STATEMENT OF AUTHORITY:

The instructor reserves the right to remove from the classroom any student whose conduct is disruptive to the learning process.

ADA STATEMENT:

Students with disabilities are encouraged to notify their instructors of their condition at the beginning of the semester. The college and your instructors will make reasonable accommodations for persons with documented disabilities.

AFFIRMATIVE ACTION:

Northwest Mississippi Community College does not discriminate on the basis of race, color, national origin, sex, disability, religion, sexual orientation, gender identity, age, or status as a veteran or disabled veteran in all its programs and activities. Northwest Mississippi Community College prohibits sexual harassment and all forms of sexual violence, regardless of sex, gender identity or sexual orientation. The following have been designated to handle inquiries regarding non-discrimination policies: Americans with Disabilities Act of 1990/Section 504 of the Rehabilitation Act of 1973: Disability Support Services Coordinator, Tate Hall, P.O. Box 7046, 4975 Highway 51 North, Senatobia, MS 38668, telephone number (662) 562-3309, e-mail address mkelsay@northwestms.edu; Title II of the Age Discrimination Act: Vice President for Finance and Administration, James P. McCormick Administration Building, P.O. Box 7017, 4975 Highway 51 North, Senatobia, MS 38668, telephone number (662) 562-3216, e-mail address jhorton@northwestms.edu; Title IX of the Educational Amendments of 1972/Title VII of the Civil Rights Act of 1964: (For student-related matters) Associate Vice President for Student Services and Enrollment Management, Tate Hall, P.O. Box 7010, 4975 Highway 51 North, Senatobia, MS 38668, telephone number (662) 562-3409, e-mail address trush@northwestms.edu or (for employment-related matters) Director of Human Resources, James P. McCormick Administration Building, P.O. Box 7038, 4975 Highway 51 North, Senatobia, MS 38668, telephone number (662) 560-5216, email estanford@northwestms.edu.

SAFETY STATEMENT:

The safety and security of students, faculty, and staff is very important to Northwest Mississippi Community College. A copy of the Annual Security Report, published annually by the Campus Police Department, details Northwest policies and procedures regarding campus safety. A copy of the report,

which contains the annual crime statistics report, is available online in the current Northwest Bulletin (www.northwestms.edu/bulletin) or on the Northwest website.