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| **ELEMENT** | **CONTENT** |
| DEPARTMENT | CIS |
| AUTHOR (S) | Jeremy Ouellette |
| COURSE NUMBER | **CIS 2271** |
| COURSE TITLE | **Java Programming** |
| SHORT TITLE | Java Programming |
| COURSE LEVEL | 2000 |
| DATE CREATED | 12/12/2011 |
| CHECKED/CHANGED | 3/1/2017 |
| PREREQUISITES |  |
| COREQUISITES |  |
| RESTRICTIONS |  |
| SPECIAL FEES | No |
| CREDITS | 4 |
| HOURS | 3 hours of lecture, 2 hours of lab per week |
| SEMESTER | Fall |
| COURSE DESCRIPTION | This course introduces the basic concepts and techniques of Java, including object-oriented programming (OOP). Essential topics include program structure; primitive and string data types; operators; expressions; control structures; static methods (including an introduction to recursion); exception handling; use of library packages; and top-down design. OOP concepts include classes and objects; instance methods and constructors; inheritance; polymorphism; and an introduction to object-oriented design. Time permitting, the course may cover the basics of graphical user interface construction. |
| SUGGESTED TEXTS | *Java for Everyone: Late Objects*; Cay Horstmann |
| OPTIONAL TEXTS |  |
| COURSE OUTCOMES | The successful student will be able to:   1. Understand and use language constructs 2. Contribute as a coder on a Java project |
| COURSE CONTENT | 1. Simple programming    1. Variables    2. Types    3. Assignments 2. Control structures (if/else/else if/switch) 3. Loops 4. Methods 5. Recursion 6. Arrays 7. Objects, fields, methods, and new 8. Inheritance 9. Exceptions 10. I/O 11. Collections 12. Packages 13. GUIs |
| LAB/STUDIO OUTCOMES | The successful student will be able to:   1. Produce a small but useful program |
| LAB/STUDIO CONTENT |  |
| LECTURE CAPACITY | 32 |
| LAB CAPACITY | 16 |
| GRADED OR P/NP | Graded |
| EVALUATION | Attendance, quizzes, online practice problems, homework, exams |
| DELIVERY METHOD | LEC, LAB |
| ROOM REQUIREMENTS |  |
| AUTHOR’S NOTES | A grade of C- or better in this course is required for registration in subsequent courses that require this course as a prerequisite. |