



Introduction to programming	INFOL1201	5 credits	55 Hours
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1. Course Description

This course introduces principles of programming. Topics include design and implementation of programs that use a variety of data structures, control flow, functions, and conditionals, naming, scoping, and binding. Students will be expected to design, implement, and debug programs. Includes SAS eLearning and SAS Training modules.

2. Textbook[s]

Introduction to Java Programming and Data Structures, 11th Edition, by Y. Daniel Liang, Pearson.

3. Additional References

- B. Eckel, *Thinking in JAVA*, Fourth Edition, Prentice Hall, 2006.
- Nell Dale, C. Weems and Mark Headington, *Programming and Problem Solving with JAVA*, Johns and Bartlett Publishers, 2003.

4. Course Learning Outcomes:

After completing the course, the student:

- Should be able to apply most of the fundamental structures of Java programming languages.
- Should have analytical skill needed for solving smaller computational problems in Java programming language.
- Knows how to debug the written code.
- Should be able to write documented clean code.

5. Assessment Strategy

Quiz1	10%
Quiz2	10%
Midterm Exam (Computer based)	20%
Final Exam (paper based)	60%

Course tentative schedule



Week	Topic	Lab Assignment	in class work
1	Introduction to Computers, Programs, and Java		
2	Elementary Programming		
3-4	Selections		
5-6	Mathematical Functions, Characters, and Strings		
7-8	Loops		
9-10	Methods		
11-12	Single-Dimensional Arrays		
13	Multidimensional Arrays		