

CS201 Course Syllabus
Winter 2012
T,R: 6:10PM-7:50PM

Instructor	Valentino Crespi Email: vcrespi@calstatela.edu Office location: E&T A318 Office hours: TR: 4:30PM-5:50PM. Outside those hours by appointment.
Course number	CS 201
Course name	Introduction to Programming
Credits	5 units
Contact hours	7 hours/week (4 hours of lectures and 3 hours of laboratory)
Coordinator	Behzad Parviz
Text book	Y. Daniel Liang. <i>Introduction to JAVA Programming (8th Edition)</i> . Prentice Hall, 2011. Other Text: H.M. Deitel and P.J. Deitel. <i>JAVA: How to program, 8th Edition</i> . Prentice Hall, 2009.

Course Information	<ol style="list-style-type: none">a) Algorithm development for structured programming and computer programming; designing, coding, debugging, and documenting programs. Laboratory activities on problem analysis and software developmentb) Prerequisites: Math 103: College Algebra and Trigonometry.c) This course is required in the BS program
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Course Goals	<p>The Student Learning Outcomes that are addressed by the course are:</p> <p><i>SLO #2. Students will be able to demonstrate fluency in at least one programming language and acquaintance with at least three more.</i></p> <p><i>SLO #3. Students will have a strong foundation in the design, analysis, and application of many types of algorithms.</i></p> <p><i>SLO #5. Students will have the training to analyze problems and identify and define the computing requirements appropriate to their solutions.</i></p> <p><i>SLO #6. Students will have the training to design, implement, and evaluate large software systems working both individually and collaboratively.</i></p> <p><i>SLO #7. Students will be able to communicate effectively orally and in writing.</i></p> <p>Other outcomes of instruction: At the end of the course students are able to:</p> <ul style="list-style-type: none">• Divide a problem into its logical set of components• Have a good understanding of the basic programming concepts• Create simple classes with a few methods• Have a good understanding of how a good program design reduces
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- coding and debugging time
- Design and code mid-level problems

Brief list of topics to be covered

- Introduction to Computers, Programs, and Java
 - What is a Computer
 - Computer Organization
 - The Internet and the World Wide Web
 - Basics of a typical Java Environment
- Elementary Programming
 - Studying a Simple Program in Java
 - Displaying Text in a Dialog Box
 - Arithmetic
 - Decision Making: Equality and Relational Operators
 - Programming Design
- Control Statements
 - Algorithms
 - Pseudocode
 - if...else Selection Statement
 - while Repetition Statement
 - Formulating Algorithms
 - Compound Assignment Operators
 - Primitive Types
 - for Repetition Statement
 - do...while Repetition Statement
 - switch Multiple-Selection Statement
 - break and *continue* Statements
 - Logical Operators
- Methods
 - Program Modules in Java
 - static Methods, *static* Fields
 - Declaring and using Methods with Multiple Parameters
 - Argument Promotion and Casting
 - Java API Packages
 - Scope of Declarations
 - Method Overloading
- Arrays
 - Declaring and Creating Arrays
 - Examples Using Arrays
 - Passing Arrays to Methods
 - Multidimensional Arrays
 - Variable-Length Argument Lists

**Laboratory
Projects**

5-10 Projects to be completed during laboratory hours.

Grading Policy

Lab Projects: 35%, Quizzes/HW: 15%, Midterm: 30%, Final: 20%.

A 90 – 100

B 80 – 90

C 60 – 80

NC below 60

**Academic
Integrity**

Cheating will not be tolerated. All parties involved will receive a grade of F for the course and be reported to the proper authorities.

General Policies

- No makeup exams.
- No cell phones.
- No internet during lecture.
- Students arriving 30 minutes after the beginning of class will be admitted at the discretion of the instructor in order to prevent any disruption of the lecture.
- Students are warmly invited to visit the instructor during office hours for questions and clarifications. Meetings outside office hours are possible by appointment.

ADA Statement

Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.