

OMNIBUS* COURSE SYLLABUS

FEB 11 2015

College of: Letters Arts and Sciences

Academic & Student Affairs

Department: Mathematical and Computer Sciences

Instructor: Jody Paul

Prefix and Course Number: CS390

Semester/year offered: Fall 2015

Banner Number (for Academic and Student Affairs use): CS 390K

(Students registering after Census date will be ineligible for the COF stipend and must pay the full tuition for the omnibus course. Please see COF-FAQ for details regarding registration deadlines: http://www.mscd.edu/news/cof/cof_faq.htm)

Course Title (30 characters or less): Programming Pragmatics

Schedule Type: Lecture Grading Mode: Letter

Credit Hours: 4 (4+0+0)

Total Contact Hours per semester (assuming 15-16 week semester):

Lecture 60 Lab 0 Internship 0 Practicum 0 Other (specify type and hours): _____

Additional Student Work Hours: 120 hours outside of class

Meeting Times/Dates: _____

Approved - Omnibus course:	
<u>LBPacker</u>	<u>2.7.2015</u>
Department Chair OR Program Director	Date
<u>Genia Long-Perotto</u>	<u>2/10/15</u>
Dean OR Associate Dean of School	Date
<u>Pat Shevlin</u>	<u>02/11/15</u>
Office of Academic and Student Affairs Designee	Date

Approved - Field Experience/Internship Only:	
Location of Internship	
Faculty Evaluation Group	Date
Field Supervisor**	Date

**Approval by the Field Supervisor is required and must be indicated by the original signature of that supervisor on the syllabus.

*Guidelines as set forth in Section V. F. of the *MSU Denver Curriculum Guidelines, Policies and Procedures* must be followed. A copy of the omnibus course syllabus must be on file in the Office of Academic and Student Affairs prior to the listing of the course in any semester schedule.

Specified repeatable course: No Yes _____ If yes, number of credits/repeats allowed _____

Prerequisites: CS1050, CS2050 with grades of "C" or better; or permission of instructor

Corequisites: None

Prerequisite(s) or Corequisite(s): None

Banner Enforced:

Prerequisite(s): CS 1050 with grade of "C" AND CS2050 with grade of "C"

Corequisite(s): _____

Prerequisite(s) or Corequisite(s): _____

Registration restrictions: Level UG Class _____ Program/Major _____ Student Attribute _____

Course Description:

This upper-division course addresses pragmatic aspects of programming essential for generating correct programs in real-world environments. Emphasis is on those things that "every programmer should know," including development principles (such as test-first development), best practices (such as source management and build configuration) and automated tools (such as static analyzers, debuggers, and test frameworks).

Required Reading Materials Similar to the Following:

Carter, J. D. (2011). *New Programmer's Survival Manual*. Pragmatic Bookshelf. 1934356816

Hunt, A. (1999). *The Pragmatic Programmer*. Addison-Wesley. 020161622X

Kevlin, H. (2010) *97 Things Every Programmer Should Know*. O'Reilly Media. 0596809484

Evaluation of Student Performance:

1. Homework Assignments
2. Programming Projects
3. Oral Presentations
4. Final Examination (optional)

Written communication skills will be applied in this course.

Specific Measurable Student Behavioral Learning Objectives:

Upon completion of this course the student should be able to:

1. Articulate philosophical principles underlying programming
2. Utilize software development principles (e.g., test-first development, ...)
3. Apply programming best practices (e.g., source management, build configuration, ...)
4. Selectively employ appropriate tools and metrics (e.g., static analyzers, debuggers, test frameworks, ...)

Detailed outline of course content (major topics and subtopics) or outline of field experience/ internship (experience, responsibilities and supervision):

(format – I, A, 1, a, etc.) – PLEASE SEE NOTE¹ BELOW

1. Philosophy of programming
2. Development principles (test-first development, ...)
3. Best Practices (source management, build configuration, ...)
4. Automated tools (static analyzers, debuggers, test frameworks, ...)

¹ NOTE: If the omnibus course includes student and/or course instructor research that involves (1) interviewing subjects **and/or** (2) handling personal data **and/or** (3) topics which could be viewed as “sensitive” (e.g., personal political views, health data, sexuality, etc.), **then approval by the Office of Academic and Student Affairs will require assurance that the guidelines described at the end of this document have been followed.**

ADA Syllabus Statement

The Metropolitan State University of Denver is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. If you have a disability which may impact your performance, attendance, or grades in this class and are requesting accommodations, then you must first register with the Access Center, located in the Auraria Library, Suite 116, 303-556-8387.

The Access Center is the designated department responsible for coordinating accommodations and services for students with disabilities. Accommodations will not be granted prior to my receipt of your faculty notification letter from the Access Center. Please note that accommodations are never provided retroactively {i.e., prior to the receipt of your faculty notification letter.) Once I am in receipt of your official Access Center faculty notification letter, I would be happy to meet with you to discuss your accommodations. All discussions will remain confidential. Further information is available by visiting the Access center website, msudenver.edu/access/.

Excerpt from

**METROPOLITAN STATE UNIVERSITY OF DENVER
GUIDELINES FOR THE PROTECTION OF HUMAN SUBJECTS**

Available in full on the MSU Denver website:

www.msudenver.edu/irb/

This required course content MUST be part of the “Detailed outline of course content” section of the omnibus course syllabus OR a statement must be attached that clearly states how the proper procedures have been followed by the course instructor.

THE ASSOCIATE VP FOR ACADEMIC AND STUDENT AFFAIRS CANNOT SIGN AN OMNIBUS SYLLABUS THAT APPEARS TO INVOLVE HUMAN SUBJECTS AND/OR PERSONAL DATA UNLESS THIS INFORMATION IS PROVIDED.