

Winter 2010

CEG 860: Object-Oriented Programming

Krishnaprasad Thirunarayan

Wright State University - Main Campus, t.k.prasad@wright.edu

Follow this and additional works at: https://corescholar.libraries.wright.edu/cecs_syllabi



Part of the [Computer Engineering Commons](#), and the [Computer Sciences Commons](#)

Repository Citation

Thirunarayan, K. (2010). CEG 860: Object-Oriented Programming. .
https://corescholar.libraries.wright.edu/cecs_syllabi/1304

This Syllabus is brought to you for free and open access by the College of Engineering & Computer Science at CORE Scholar. It has been accepted for inclusion in Computer Science & Engineering Syllabi by an authorized administrator of CORE Scholar. For more information, please contact corescholar@www.libraries.wright.edu, library-corescholar@wright.edu.

CEG 860 Object-Oriented Programming

- **Instructor:** T. K. Prasad
- **Phone No.:** (937)-775-5109
- **Email:** t.k.prasad@wright.edu
- **Home Page:** <http://www.cs.wright.edu/~tkprasad>

- **Quarter:** Winter, 2010
- **Class Hrs:** Tu Th, 6:05pm to 7:20pm, 309 Oelman.
- **Office Hrs:** Tu Th, 3pm-4pm. 395 Joshi Research Center (or by appointment)

Course Objective

- To study the *why*, *what*, and *how* of Object-Oriented Programming.

Course Prerequisite

- CEG 760 Software Engineering

Course Description

This course motivates the need for object-oriented programming, and studies, in detail, object-oriented programming techniques, languages, and technology. The lectures will focus on the foundations of OOP, while the student presentations will focus on the applications and extensions of Object Technology.

Course Load

The course load includes programming assignments (in Java) and a presentation (with descriptive notes) worth 40 points, a midterm worth 30 points, and a final worth 30 points.

Texts

- Bertrand Meyer: *Object-Oriented Software Construction*. 2nd Edition. Prentice Hall, 1997. ISBN 0-13-629155-4
- Clemens Szyperski *et al*: *Component Software: Beyond Object-Oriented Programming*. 2nd Edition. Addison-Wesley, 2002. ISBN 0-201-74572-0

Reference

- Timothy Budd: *Introduction to Object-Oriented Programming*. 3rd Ed. Addison-Wesley, 2002. ISBN: 0-201-76031-2
- The Links Galore
- Garbage Collection
- K. Thirunarayan, G. Kniesel, and H. Hampapuram, Simulating Multiple Inheritance and Generics in Java, In : *Computer Languages*, Vol. 25(4), pp. 189-210, 2001.

Grading

The letter grades will be assigned using the following scale: A[90-100], B[80-90), C[70-80), D[60-70), and F[0-60). However, I reserve the right to adjust the scale somewhat to utilize the gaps in the distribution.

Class Schedule and Syllabus

Topic

Class 0	<u>Software Hell</u> <u>Bug Bites</u>
Class 0	<u>Professional Responsibility</u>
Class 1	<u>Motivation : Software Quality</u>
Class 2	<u>Intro. to OOP ; OOP by Examples</u>
Class 3	<u>OOP Embodiment by Examples</u>
Class 4	<u>Modularity; Reusability</u>
Class 5	<u>Classes ; Genericity</u>
Class 6	<u>Objects ; Garbage Collection</u>
Class 7	(* cont *)
Class 8	<u>Design by Contract; Exceptions</u>
Class 9	<u>Inheritance; Dynamic Binding</u>
Class 10	<u>Composition; Delegation</u>
Class 11	<u>Multiple Inheritance ; Implementation</u>
Class 12	<u>Inheritance Techniques</u>
Class **	Midterm (February 2)
Class 13	Talk 0: 2/14: TBA
Class 14	Talk 1: 2/19 : TBA
Class 15	Talk 2: 2/21 : TBA
Class 16	Talk 3: 2/26 : TBA
Class 17	Talk 4: 2/28 : TBA
Class 18	Talk 5: 3/4 : TBA
Class 19	Talk 6: 3/6 : TBA
Class 20	Talk 7: 3/11 : TBA
Class 21	Talk 8: 3/13 : TBA
	Finals (March 18, 8pm-10pm)
Extra	<u>Design Patterns and Frameworks</u>
Extra	<u>Abstract Data Types</u>
Extra	<u>Program Correctness</u>

Assignments (Winter 10)

- Assignment 1.
- Assignment 2.

Exams (Winter 07)

- Midterm.
- Final.

T. K. Prasad (30 Dec 2009)