

Using Python to Teach Informatics Majors at University of Michigan

Dr. Charles Severance

www.dr-chuck.com

Pycon2008 Lightning Talk

www.sakaiproject.org

- Sakai - Open Source Learning Management System
- Benevolent Dictator for Three Years
- Executive Director for One Year
- Volunteer Developer
- University of Michigan School of Information



informatics.umich.edu

iNFORMATiCS
The Michigan Difference



Welcome!

Thank you for your interest in Informatics. The new concentration in Informatics is the result of two years of planning and collaboration by three schools within the University of Michigan: the College of Literature, Science, and the Arts, the College of Engineering, and the School of Information.

Informatics is expected to be available as an undergraduate concentration in University of Michigan's College of Literature, Science and the Arts beginning with the Fall 2008 term. (pending approval of the President's Council of the State University of

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News + Events:

03.26.08

LS&A Concentration Fair

Michigan Union Ballroom

11:00 AM - 4:00 PM

04.02.08

Informatics Open House

Undergrad Science Building

East Atrium

www.si182.com

[About SI182](#) | [Book](#) | [Course Resources](#) | [Course Site](#) | [Instructor Page](#) | [Python](#)

This is an anonymous view of the course web site on the CTools (Sakai) Collaborative and Learning Environment at the University of Michigan. You would see more information if you were to join the course web site (see [About SI182](#) for more details).



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Text Book

?

Python Programming: An Introduction to Computer Science

John Zelle

ISBN 1-887902-99-6, \$40.00

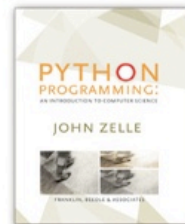
Go to John Zelle's Python Page, "[Teaching with Python](#)"

Take a look at [organizations using Python](#)

Here are some [businesses that use Python](#)

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Contents

Foreword, by Guido van Rossum
[\(PDF file\)](#)

1. Computers and Programs
2. Writing Simple Programs [PDF file](#)
3. Computing with Numbers
4. Computing with Strings
5. Objects and Graphics [PDF file](#)

This book is suitable for use level first course in computing as the increasingly popular c CS0.

It is difficult for many students to grasp basic concepts in computer programming. A large portion of this confusion can be blamed on the traditional tools and materials used to teach CS. This textbook was written with the overarching goal to present

I don't like programming.
I am not so good at math.

SI 182

Tech?

CS Degree

Other Degree

We don't assume that
just because you are in
a computer class -
that you intend to
pursue a computer
career.

www.si182.com - Cool Bits

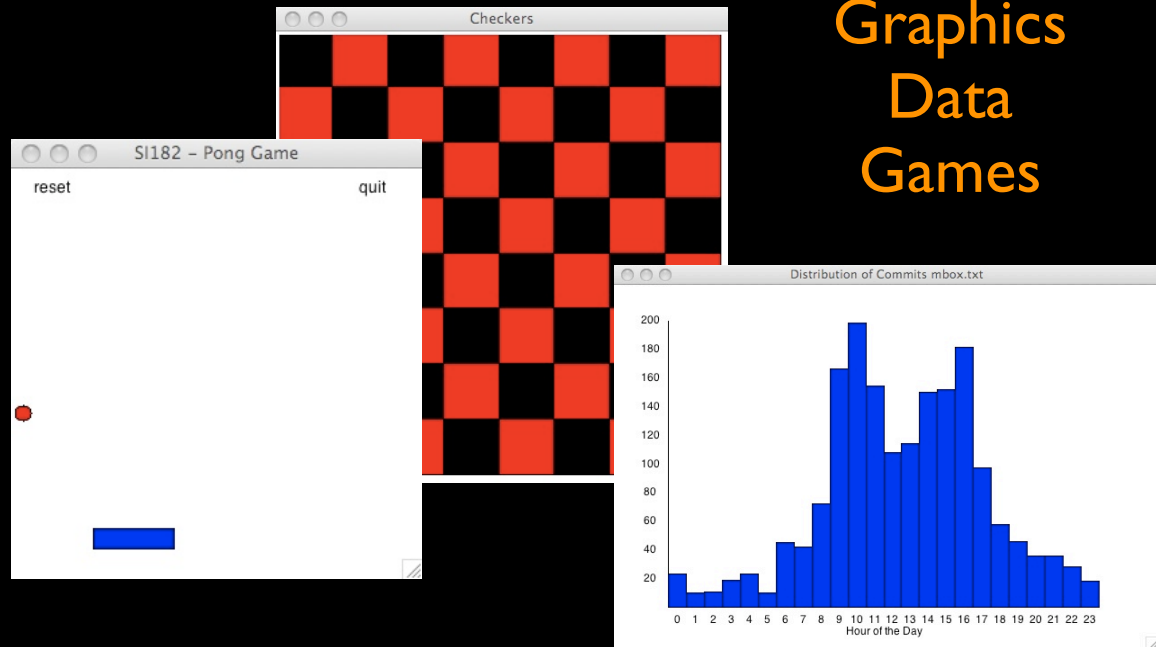
- All materials open from the moment of creation
- Course Design Expectation: Gender Friendly and Major Friendly
- Learning community - (aka dev list)
- Group Learning - Practical In-Lab Exams
- Depth-first Sprint - Fill in Gaps - Build Comfort

www.si182.com - Themes

Data Sprint:

Variables
Strings
Loops
Files
If
List
Dictionary

Objects
Graphics
Data
Games



Engineering / Computer Science

- Exploring using Python as the first programming course for all Engineering Computer Science Majors
- Already approved Python alternative to long-standing first C source
- Python CSI course will be taught Fall 2008 for the first time