Course Introduction

Mattox Beckman

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
DEPARTMENT OF COMPUTER SCIENCE

Table of Contents

Welcome to CS 296-25!

Topics for discussion:

- ▶ Logisitics — instructor, grades, course objectives, lecture format
- ▶ CLOJURE

Me!

Name Mattox Beckman

History PhD, Fall 2003, University of Illinois at
Urbana-Champaign
Lecturer 2013–2015 Illinois Institute of Technology

Research Areas Programming Languages, Mathematical Foundations of
Computer Science, CS Education

Specialty Partial Evaluation, Functional Programming

Professional Interests Teaching; Partial Evaluation; Interpreters;
Functional Programming; Semantics and Types; Category
Theory

Personal Interests Cooking; Go (Baduk, Wei-Qi, Igo); Theology and
Philosophy; Evolution; Meditation; Kerbal Space
Program; Home-brewing; ... and many many more ...

Contact Info

Instructor   Mattox Beckman

Best Contact   via email. I pretend to use inbox zero, but not on weekends.

Email Addresses   <mattox@illinois.edu>.

Office   2227 Siebel Center

Office Hours   12:00–14:00 F; 3034 ECEB

Assignment

- ► Mini Machine Problems
  - ► Small CLOJURE programs
  - ► Collectively worth 50%
  - ► Probably 4 of these.
- ► Final Project
  - ► Announced in a few weeks
  - ► Worth the other 50%
- ► You may collaborate with one other student.

Grade Guarantees

93	A
90	A-
87	B+
83	B
80	B-
77	C+
73	C
70	C-
60	D
<60	F

- ▶ This is just for formality—you are all "supposed" to get an A in this course.
- ▶ To get an A+ you will need to do an extended version of the final project.

Table of Contents

Quick Intro to Clojure

▶ The first thing about Clojure: parentheses!

Feature	C++	Clojure
Functions	f(x,y,z)	(f x y z)
Arithmetic	2 * x + 9 * y + 5	(+ (* 2 x) (* 9 y) 5)
If	if (x > y) a; else b	(if (> x y) a b)
Array	int a[3] = {1,2,3};	(def a [1 2 3])
Function	int inc(int i) {...}	(defn inc [x] (+ x 1))
Lists	not built it	'(10 20 30)

▶ This will seem weird at first, but...
  ▶ **Use a good editor!** and it will be easier to read.
  ▶ There will be *huge* advantages later on. Code and data have the same form!

▶ Enough talk. Let's do the activity.