Course Mechanics

Outline

1. Website
2. Goal
3. Prerequisites
4. Instructor
5. Lectures
6. Text
7. Grading
8. Software
9. Policies
10. Qualities for Success
11. Immediate Action Items

Website

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https://www.swamiiyer.net/cs451

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`https://www.swamiiyer.net/cs451`

What's on the Site?

- Announcements (landing page)
- Course Info
- Calendar
- Lecture Material
- Projects
- Resources

Goal

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Theory:

- Scan a program into a stream of tokens
- Parse a program making its syntactic structure explicit
- Analyze and generate code for various programming constructs
- Allocate physical registers to a program expressed in terms of virtual registers

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Practice:

- Develop a compiler (called *j--*) in Java for a subset language (also called *j--*) of Java

Prerequisites

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CS310 (Advanced Data Structures and Algorithms)

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CS310 (Advanced Data Structures and Algorithms) *and*

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CS420 (Intro. to the Theory of Computation) *or* CS622 (Theory of Formal Languages)

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Permission of the instructor

Instructor

Instructor

Name: Swami Iyer

Instructor

Name: Swami Iyer

Contact Information:

- Office: M-3-201-14
- Email: siyer@cs.umb.edu

Instructor

Name: Swami Iyer

Contact Information:

- Office: M-3-201-14
- Email: siyer@cs.umb.edu

Office Hours:

- Tue Thu 9:45 AM – 10:45 AM and 2:45 PM – 3:45 PM (in-person)
- Wed 10:00 AM – 12:00 PM (remote)

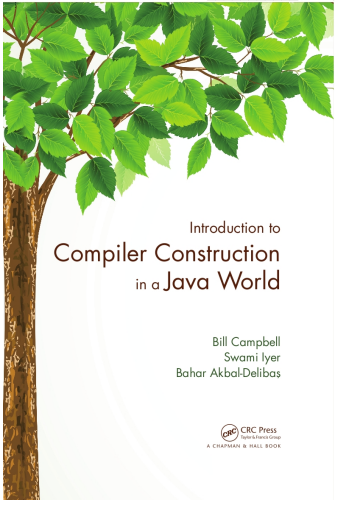
Lectures

Lectures

Section	When	Where
1	Tue Thu 4:00 PM – 5:15 PM	M-3-0430

Text

Text


Introduction to
Compiler Construction
in a Java World
Bill Campbell
Swami Iyer
Bahar Akbal-Delibas
CRC Press
Taylor & Francis Group
A CHAPMAN & HALL BOOK

Grading

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Assessment	% of Final Grade
Projects (1, 2, 3, 5, and best of 4 and 6)	25
Exams (1 and 2)	70
Participation	5

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If overall score is within 0.5% of a higher grade, it will be elevated to that grade

Software

Software

Piazza (Q&A)

Software

Piazza (Q&A)

Gradescope (grading)

Software

Piazza (Q&A)

Gradescope (grading)

Programming environment (projects)

Software

Piazza (Q&A)

Gradescope (grading)

Programming environment (projects)

Zoom (remote office hours)

Policies

Policies

Classroom

Policies

Classroom

Piazza

Policies

Classroom

Piazza

Collaboration

	Course Staff	CS451/651 Grads	Classmates	Others
Discuss concepts with	✓	✓	✓	✓
Acknowledge collaboration with	✓	✓	✓	✓
Expose your code/work to	✓	✓	✗	✗
View code/work of	✗	✗	✗	✗
Copy code/work from	✗	✗	✗	✗

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Academic Honesty

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Academic Honesty

Accommodations for students with disabilities

Qualities for Success

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Qualities needed to succeed in this course and as a programmer in general†:

- Curiosity
- Resourcefulness
- Persistence
- Excitement
- Patience
- Concentration
- Independence
- Focus
- Creativity
- Meticulousness

† Taken from the *10 Signs You Will Suck at Programming* by Jonathan Bluks

Immediate Action Items

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Sign up for CS account

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Sign up for Piazza

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Sign up for CS account

Sign up for Piazza

Sign up for Gradescope

Immediate Action Items

Sign up for CS account

Sign up for Piazza

Sign up for Gradescope

Setup the programming environment

Immediate Action Items

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Sign up for Piazza

Sign up for Gradescope

Setup the programming environment

Fill out the questionnaire available on Gradescope