

Course Mechanics

Outline

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- 3 Prerequisites
- 4 Instructor
- 5 Sessions
- 6 Text
- 7 Grading
- 8 Software
- 9 Policies
- 10 Qualities for Success
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Website

<https://www.swamiiyer.net/cs451>

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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

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:

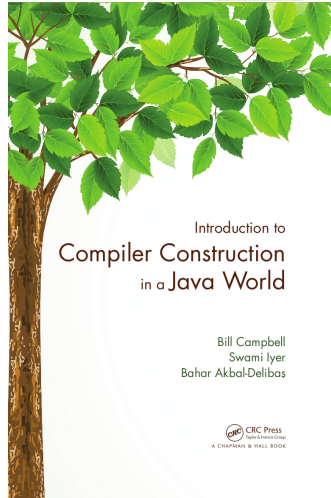
- Tue Thu 9:45 AM – 10:45 AM and 2:45 PM – 3:45 PM (in-person)
- Wed 10:00 AM – 12:00 PM (remote)

Sessions

Class

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

Text



Grading

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

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

Classroom

Policies

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Piazza

Policies

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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



Qualities for Success

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 CS account

Sign up for Piazza

Sign up for Gradescope

Immediate Action Items

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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