

# CS 891: Scalable Microservices: Overview (Part 4)

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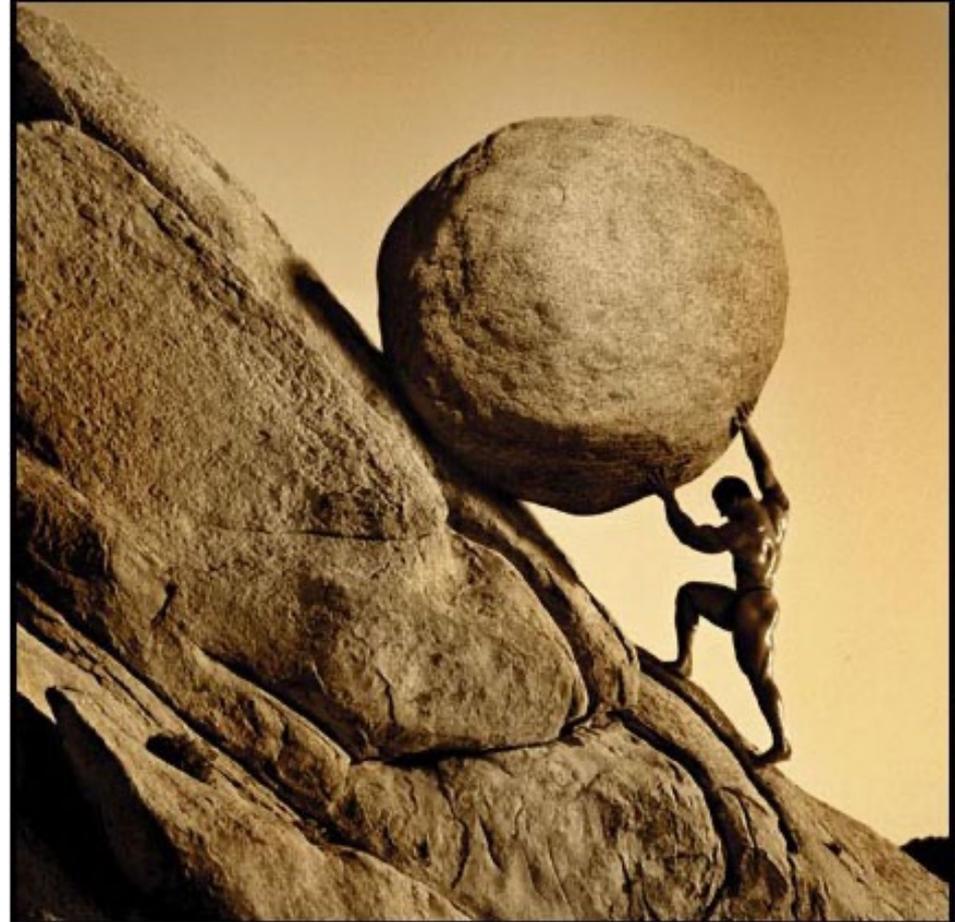
**Institute for Software  
Integrated Systems**

**Vanderbilt University  
Nashville, Tennessee, USA**



# Learning Objectives in this Lesson

- Understand the course topics & logistics
  - Course philosophy
  - Course contents
  - Structure of the lecture material
  - Overview of the assignments & assessments
  - Setting up Java & IntelliJ
  - Setting up GitLab et al.
  - Accessing Java 19 source code
  - Summary

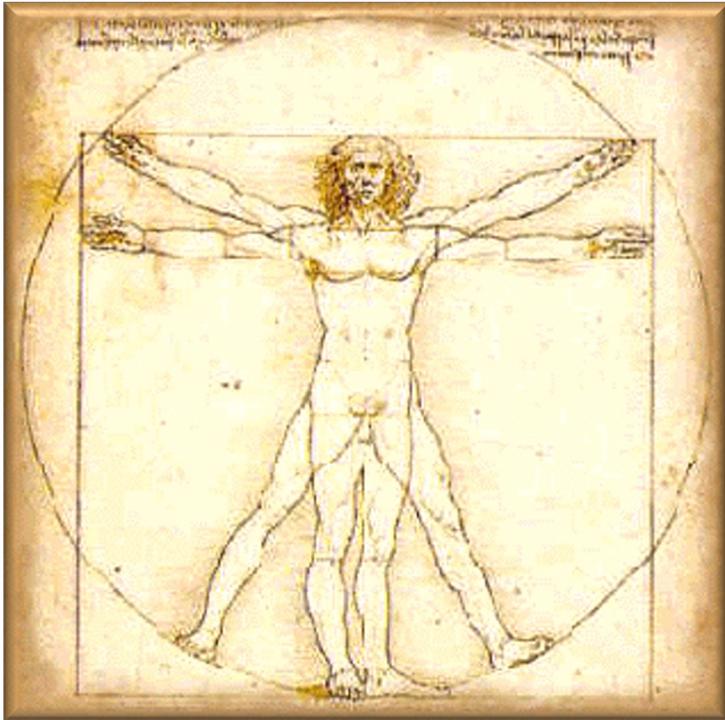


# Summary



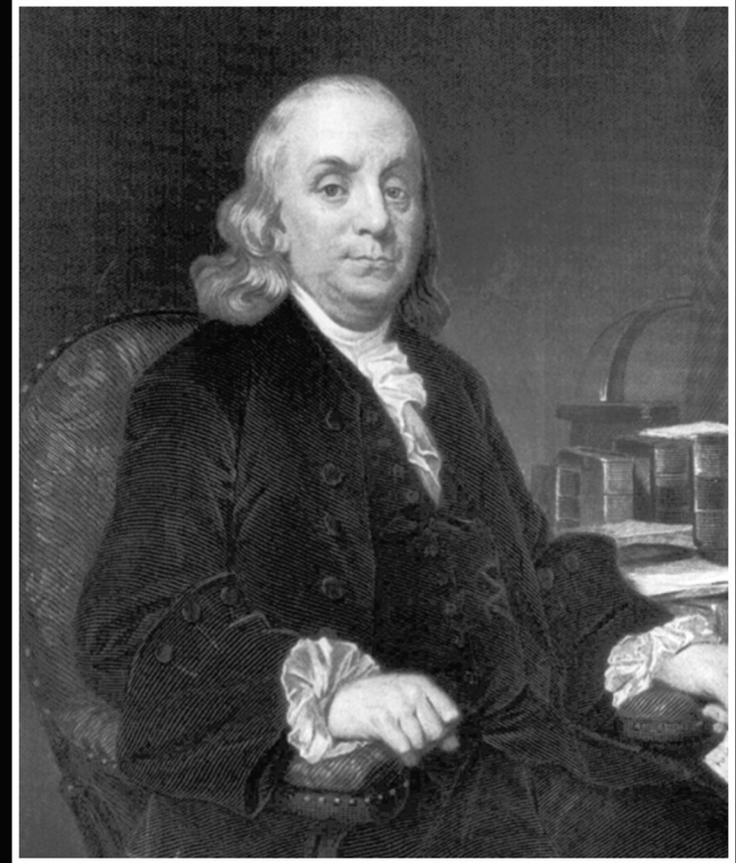
# Summary

- You will get out of this course what you put into it



# Summary

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- Be prepared to work hard



## HARD WORK

“Human Felicity is produc'd not so much by great Pieces of good Fortune that seldom happen, as by little Advantages that occur every Day” - Benjamin Franklin

# Summary

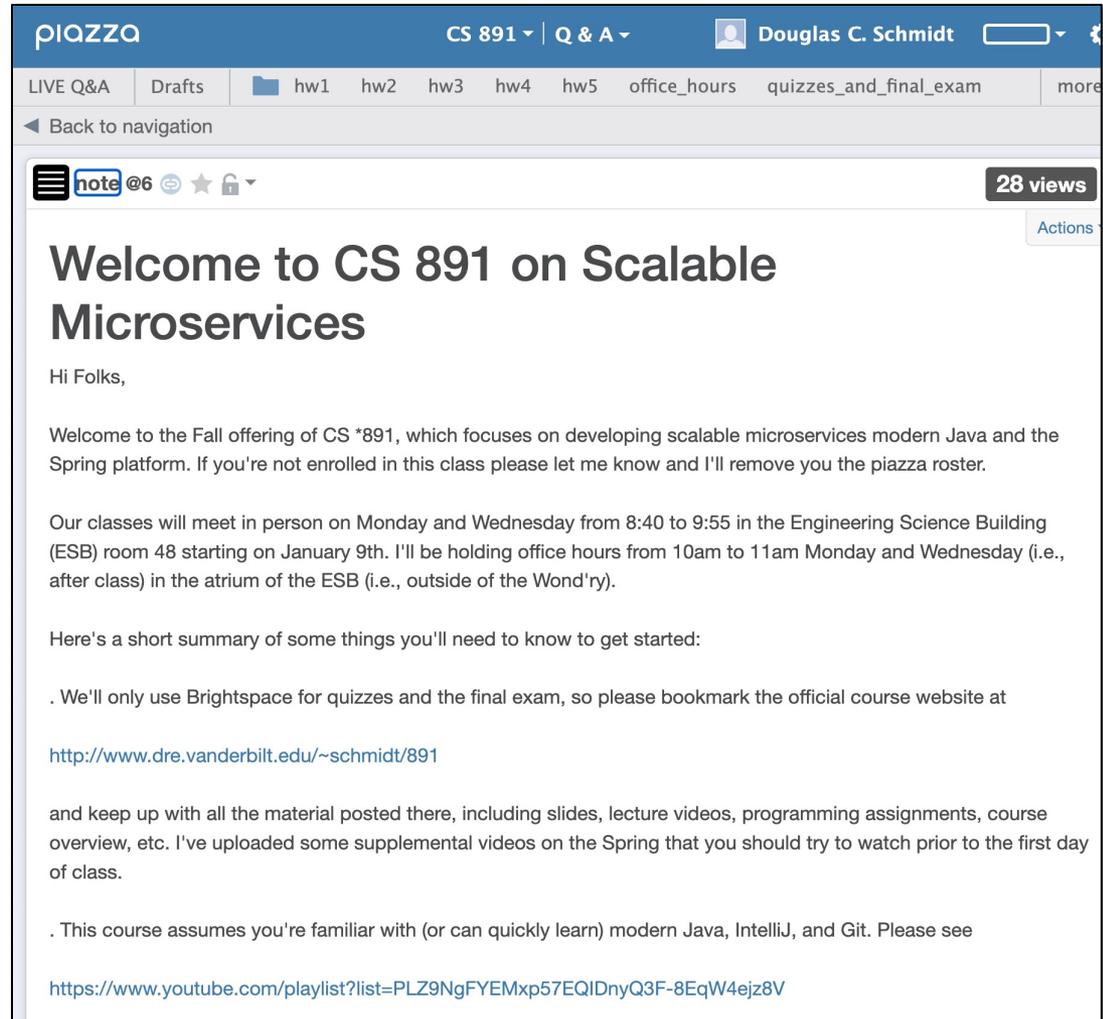
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- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
    - & make sure to follow directions for submitting programming assignments



# Summary

- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
- Participate in discussions in class & on piazza



The screenshot shows a Piazza post from Douglas C. Schmidt. The post title is "Welcome to CS 891 on Scalable Microservices". The content includes a greeting "Hi Folks," and a welcome message to the Fall offering of CS \*891, which focuses on developing scalable microservices modern Java and the Spring platform. It also provides meeting information for Monday and Wednesday from 8:40 to 9:55 in the Engineering Science Building (ESB) room 48, starting on January 9th. The post includes a short summary of things to know to get started, such as using Brightspace for quizzes and the final exam, and bookmarking the official course website at <http://www.dre.vanderbilt.edu/~schmidt/891>. It also mentions supplemental videos on the Spring platform and a YouTube playlist for modern Java, IntelliJ, and Git, with the URL <https://www.youtube.com/playlist?list=PLZ9NgFYEMxp57EQIDnyQ3F-8EqW4ejz8V>.

See [piazza.com/vanderbilt/spring2023/cs891](https://piazza.com/vanderbilt/spring2023/cs891)

# Summary

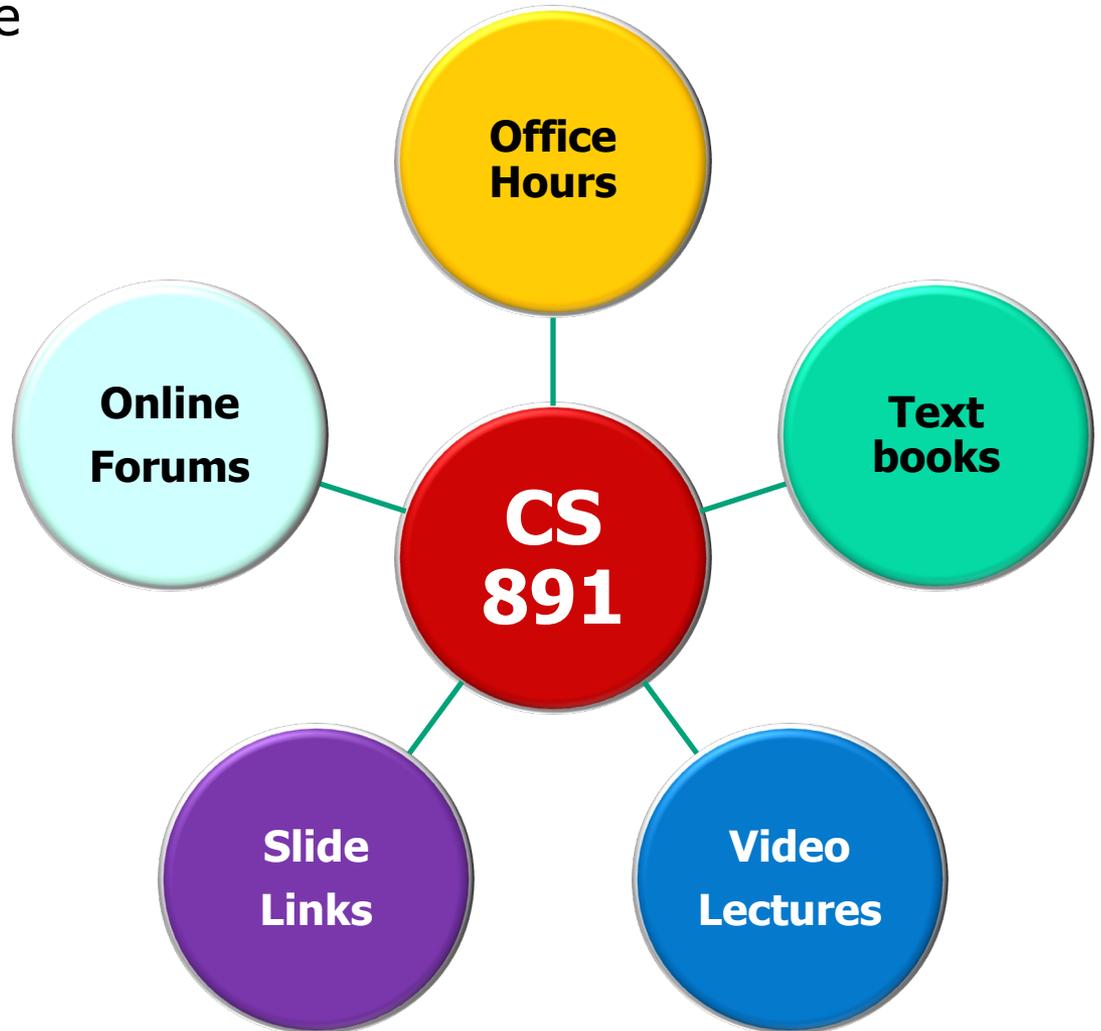
- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
- Participate in discussions in class & on piazza
  - Please get in the habit of checking piazza frequently!



# Summary

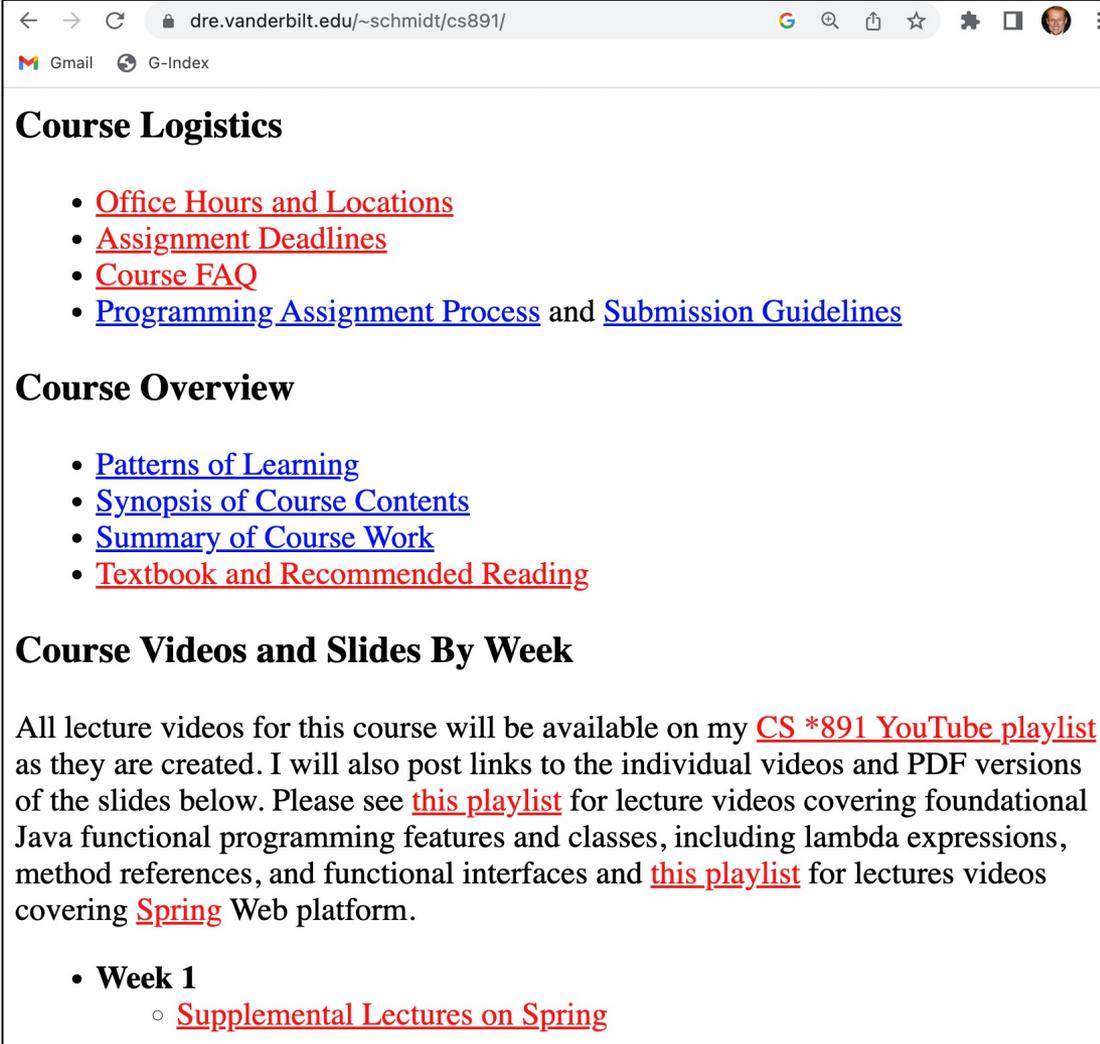
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- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
  - Participate in discussions in class & on piazza
- Avail yourself of available resources



# Summary

- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
  - Participate in discussions in class & on piazza
- Avail yourself of available resources
  - My website contains a lot of useful information!



The screenshot shows a web browser window with the address bar displaying [dre.vanderbilt.edu/~schmidt/cs891/](http://dre.vanderbilt.edu/~schmidt/cs891/). The page content is as follows:

## Course Logistics

- [Office Hours and Locations](#)
- [Assignment Deadlines](#)
- [Course FAQ](#)
- [Programming Assignment Process](#) and [Submission Guidelines](#)

## Course Overview

- [Patterns of Learning](#)
- [Synopsis of Course Contents](#)
- [Summary of Course Work](#)
- [Textbook and Recommended Reading](#)

## Course Videos and Slides By Week

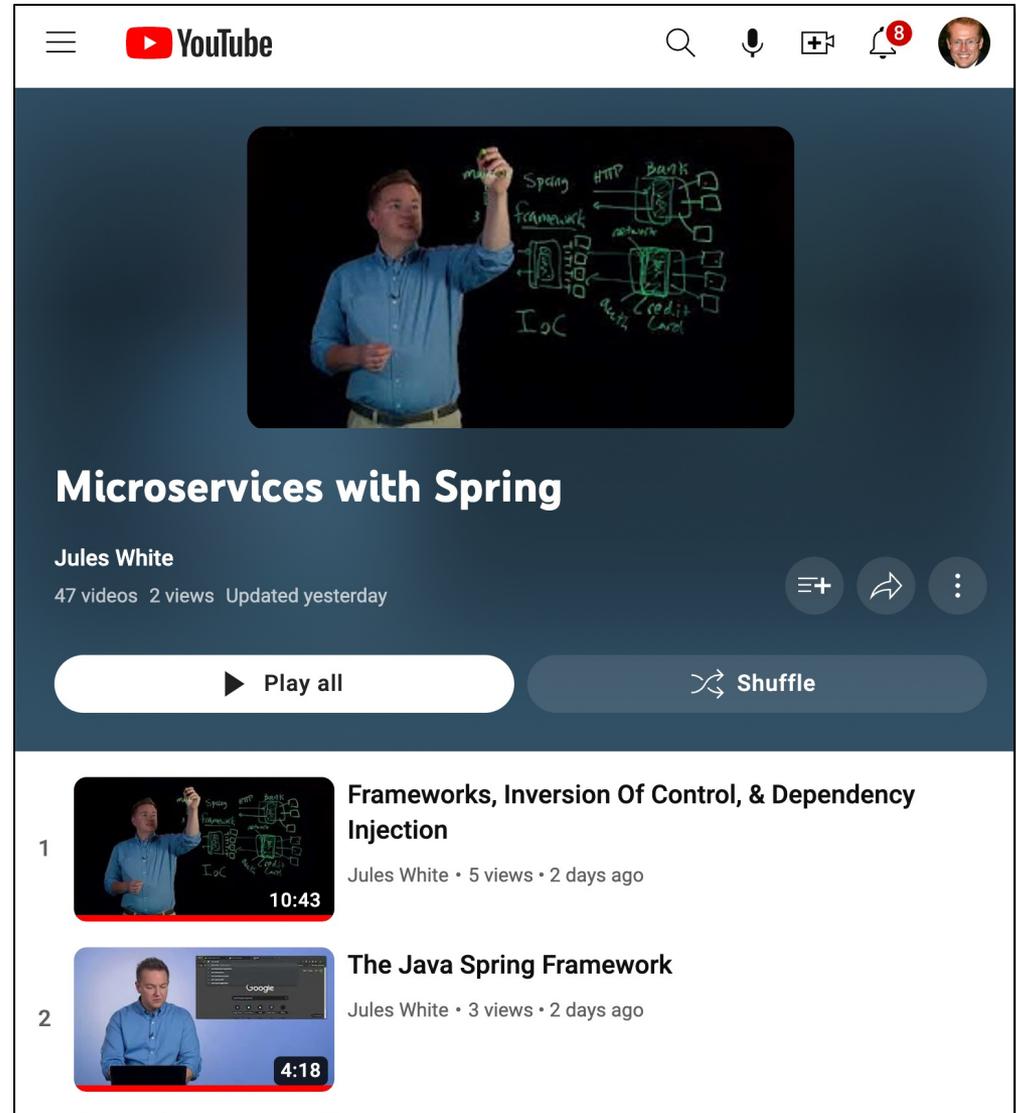
All lecture videos for this course will be available on my [CS \\*891 YouTube playlist](#) as they are created. I will also post links to the individual videos and PDF versions of the slides below. Please see [this playlist](#) for lecture videos covering foundational Java functional programming features and classes, including lambda expressions, method references, and functional interfaces and [this playlist](#) for lectures videos covering [Spring](#) Web platform.

- **Week 1**
  - [Supplemental Lectures on Spring](#)

See [www.dre.vanderbilt.edu/~schmidt/cs891](http://www.dre.vanderbilt.edu/~schmidt/cs891)

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- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
  - Participate in discussions in class & on piazza
- Avail yourself of available resources
  - My website contains a lot of useful information!
  - Also check out Prof. White's supplemental videos on Spring



The screenshot shows a YouTube interface for a playlist. At the top, the YouTube logo and navigation icons are visible. The main video player area displays a thumbnail of Jules White pointing at a whiteboard with a diagram of a microservices architecture. The diagram includes labels for 'Spring Framework', 'HTTP', 'Bank', 'Ioc', and 'Credit Card'. Below the video player, the title 'Microservices with Spring' is displayed, along with the creator's name 'Jules White' and video statistics '47 videos 2 views Updated yesterday'. There are buttons for 'Play all' and 'Shuffle'. Below the main video, two playlist items are listed: '1 Frameworks, Inversion Of Control, & Dependency Injection' (10:43) and '2 The Java Spring Framework' (4:18).

See [www.dre.vanderbilt.edu/~schmidt/cs891/supplemental-lectures.html](http://www.dre.vanderbilt.edu/~schmidt/cs891/supplemental-lectures.html)

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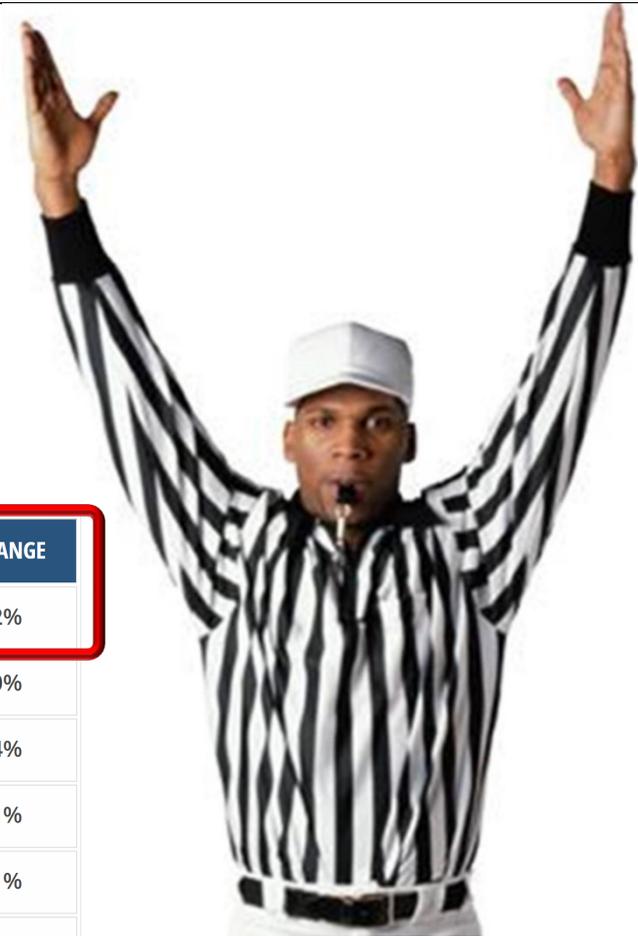


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Please resist the urge to email me (you can use private piazza posts if it's a confidential matter or you'd like to schedule a meeting)!

# Summary

- There are abundant opportunities!



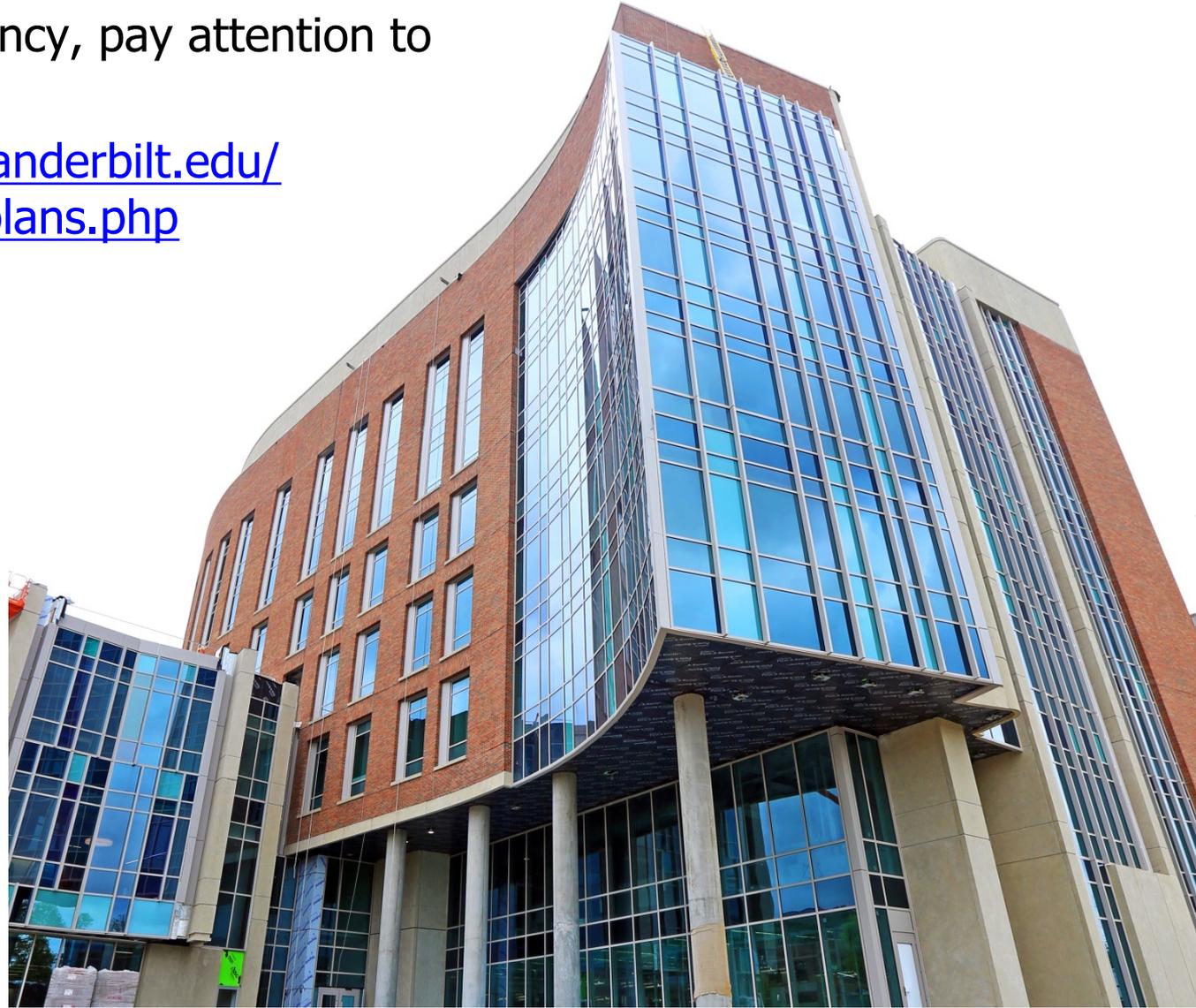
BROAD CATEGORY	2022 SALARY PROJECTION	2021 SALARY PROJECTION	% CHANGE
Computer Sciences	\$75,900	\$72,173	5.2%
Engineering	\$73,922	\$71,088	4.0%
Math & Sciences	\$66,760	\$63,316	5.4%
Social Sciences	\$61,173	\$59,919	2.1%
Business	\$60,695	\$58,869	3.1%
Agriculture & Natural Resources	\$57,807	\$54,857	5.4%
Communications	\$55,455	\$58,174	-4.7%
Humanities	\$50,681	\$59,500	-14.8%

See [www.nacweb.org/about-us/press/salary-projections-for-class-of-2022-bachelors-grads-mostly-showing-gains](http://www.nacweb.org/about-us/press/salary-projections-for-class-of-2022-bachelors-grads-mostly-showing-gains)

# Summary

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- If there's an emergency, pay attention to the escape route!
- See [engineering.vanderbilt.edu/about/evacuationplans.php](http://engineering.vanderbilt.edu/about/evacuationplans.php)



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