SER 321 B Session

SI Session

Thursday, March 20th 2025

7:00 pm - 8:00 pm MST

Agenda

What is SI?

About Me

Session Times & Expectations

Course Tips!

What is SI?

Informational Video

What is SI?

About Me

Katie

- Born and raised near Chicago, Illinois
  - Moved around within the Northern Suburbs
  - Currently in Grayslake
- Work at a local Italian restaurant

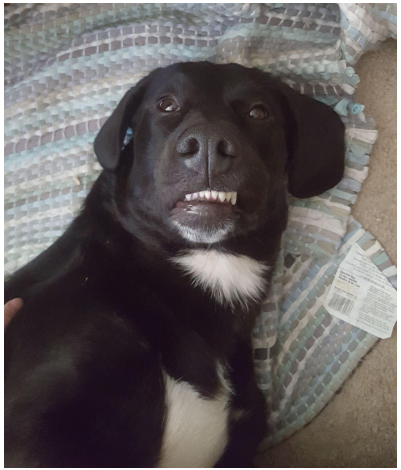
- Received AS from my local Community College
- Transferred to ASU for Software Engineering
- Runs in the family
  - Father is a Software Architect
  - Mother is a Quality Assurance Analyst

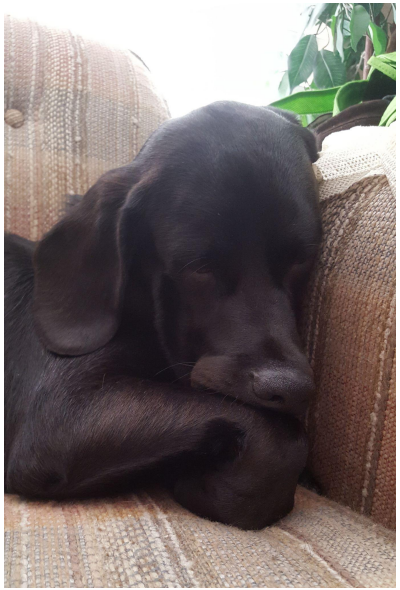
- Graduating this May! 🙌

About Me

Katie

- Hobbies
  - Gaming
  - Football (Go Bears!)
  - Reading
  - Learning
  - Doggos! 😊





SI Session Expectations

Thanks for coming to the **SER 321** SI session. We have a packed agenda and we are going to try to get through as many of our planned example problems as possible. This session will be recorded and shared with others.

- If after this you want to see additional examples, please visit the drop-in tutoring center.
- We will post the link in the chat now and at the end of the session.
- Please keep in mind we are recording this session and it will be made available for you to review 24-48 hours after this session concludes.
- Finally, please be respectful to each other during the session.

Interact with us:

Zoom Features

Zoom Chat

- Use the chat feature to interact with the presenter and respond to presenter's questions.
- Annotations are encouraged.

*Remember: Arizona uses MST **all year***

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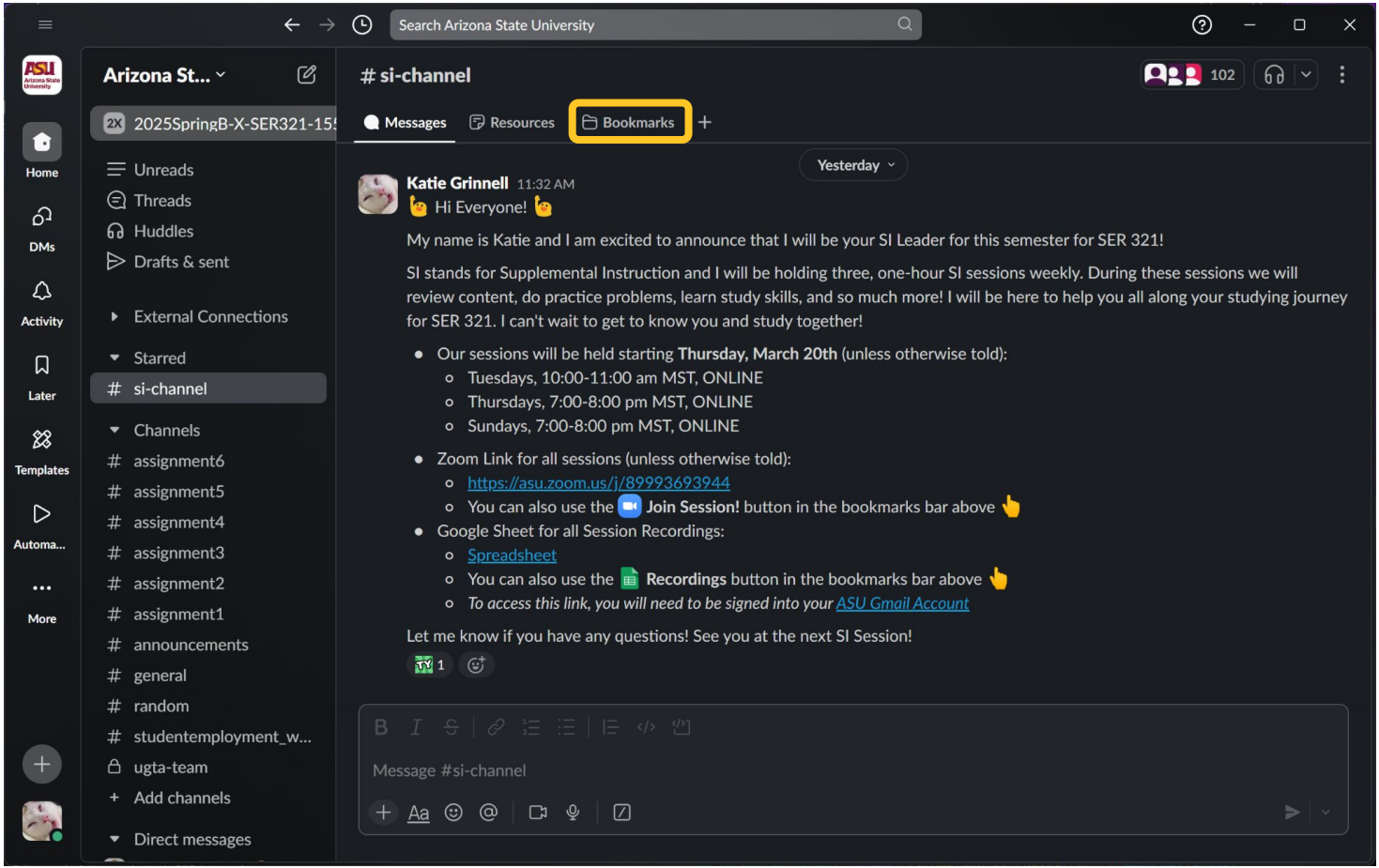
Session Schedule

Monday	
Tuesday	10:00 - 11:00 AM *MST*
Wednesday	
Thursday	7:00 - 8:00 PM *MST*
Friday	
Saturday	
Sunday	7:00 - 8:00 PM *MST*

SER 321
Slack Overview



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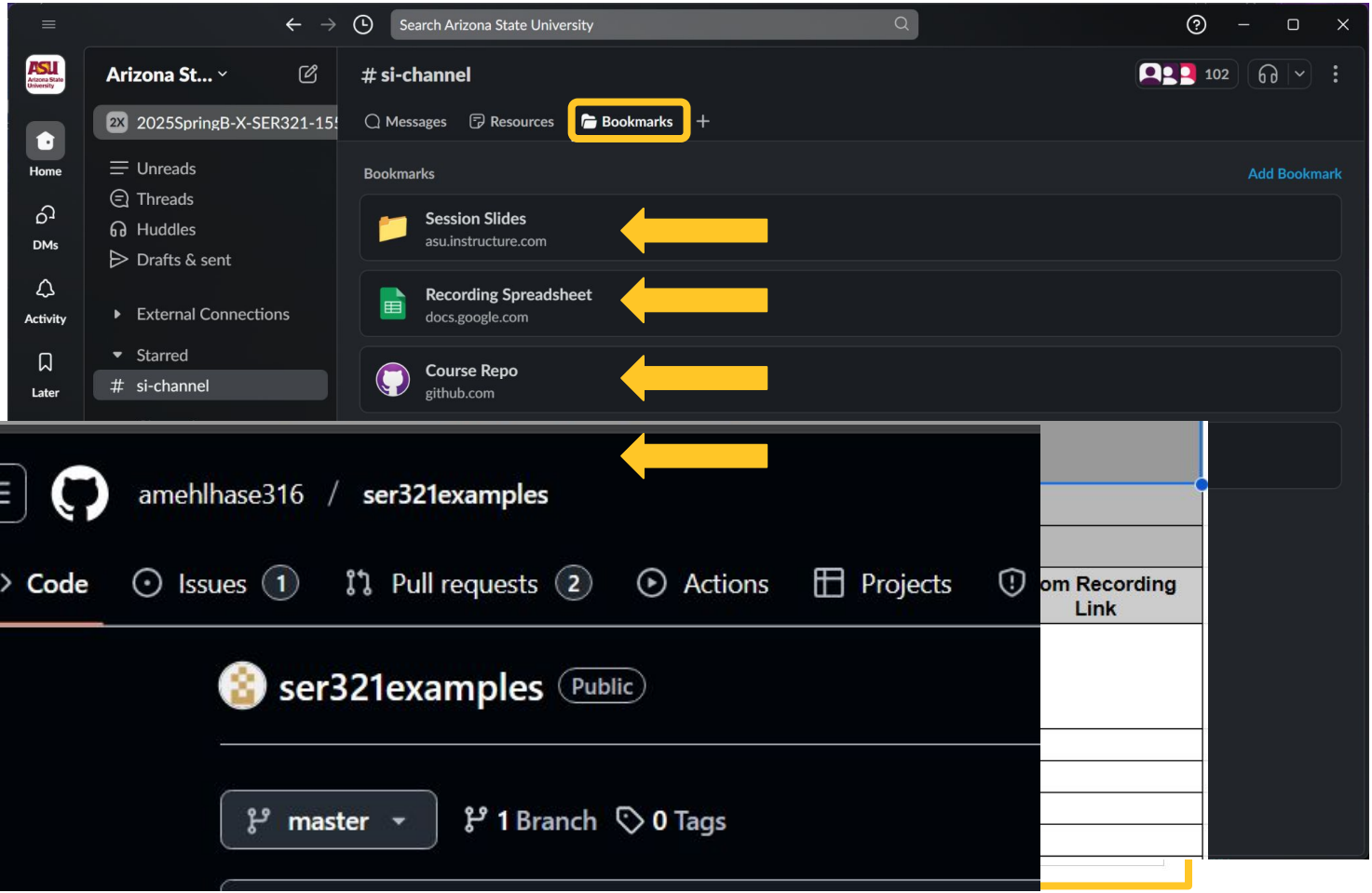
Slack Overview



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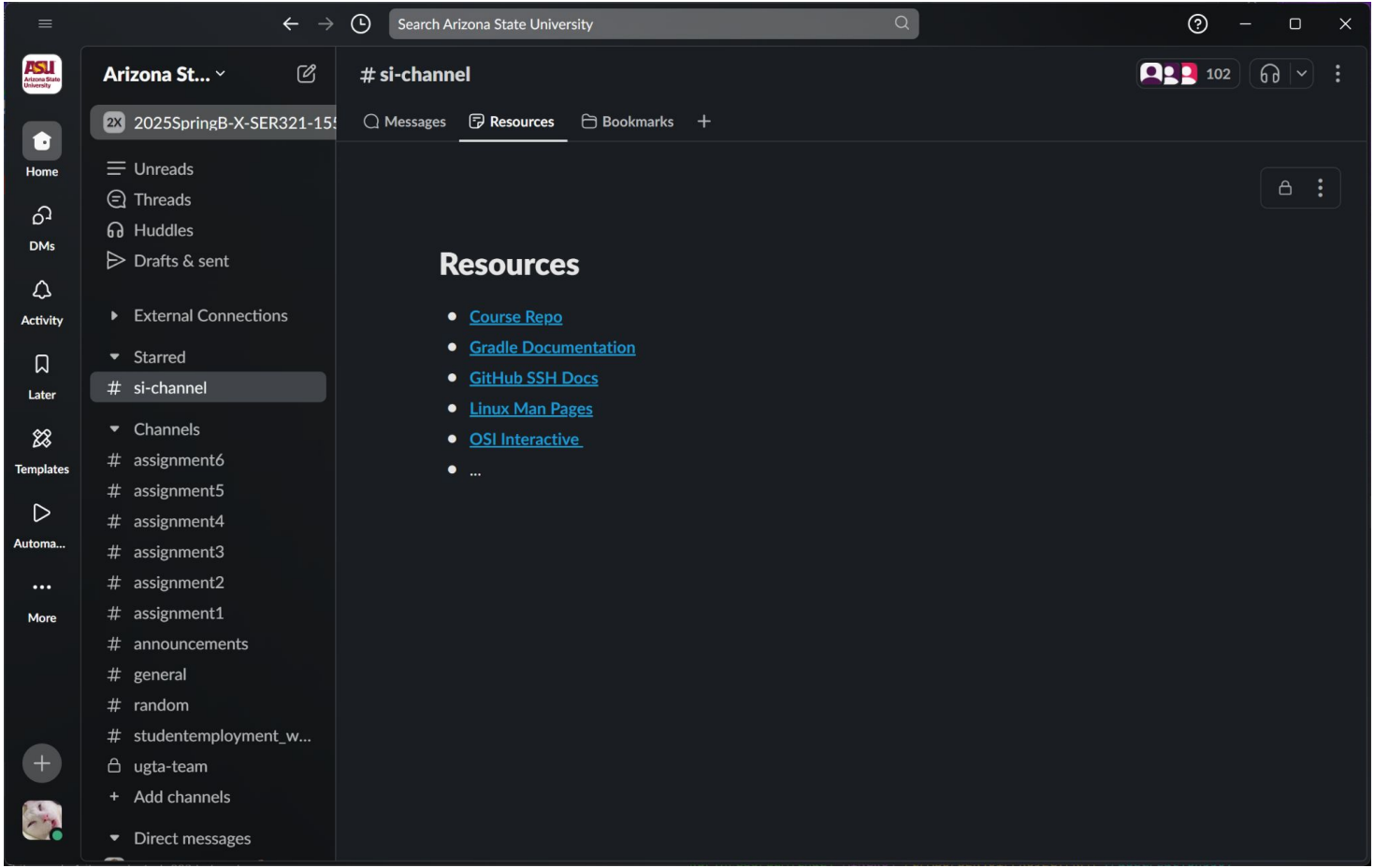
Slack Overview



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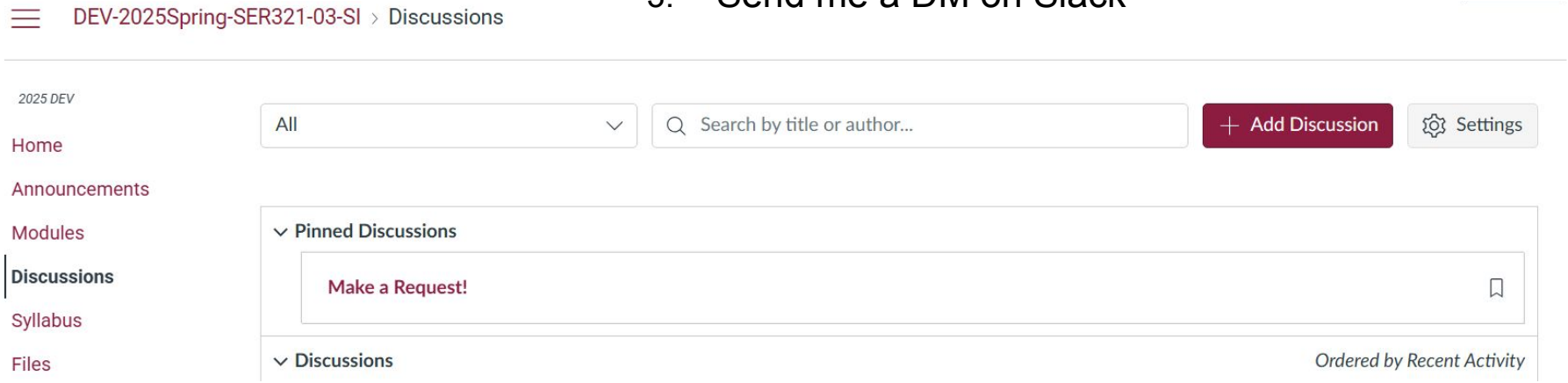
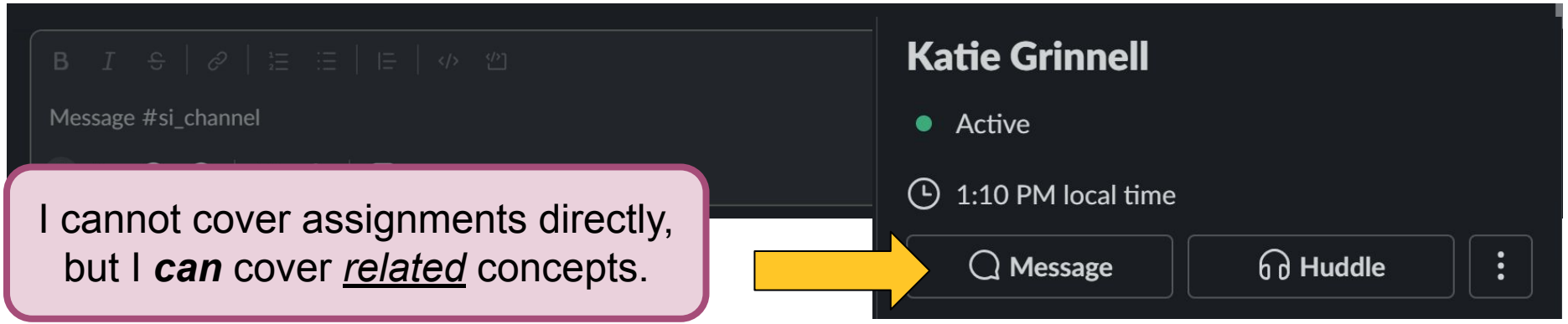
Making a Request

1. Post in the Canvas Discussion Board
2. Post in the #si_channel
3. Send me a DM on Slack





I cannot cover assignments directly, but I ***can*** cover ***related*** concepts.

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Tips for Success!

If a PDF is required,
COMPLETE IT AS YOU MAKE PROGRESS!

- Start assignments ASAP
  - Read the entire document first!
  - Be sure to checkout the Assignment Helper Docs!
  - Try to group related requirements into sections
- Commit ***a lot***
- Use the Course Repo - it's there for a reason!
- Monitor the slack channels!
- Ask questions!

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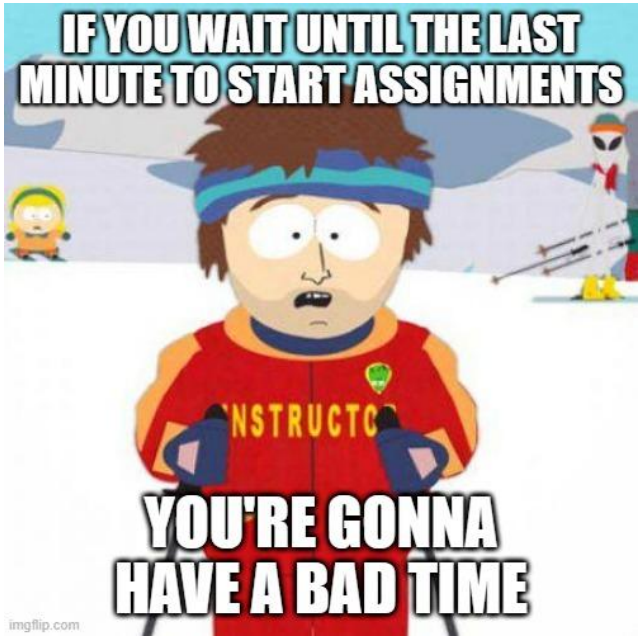
Tips for Success!

START ASSIGNMENTS ASAP



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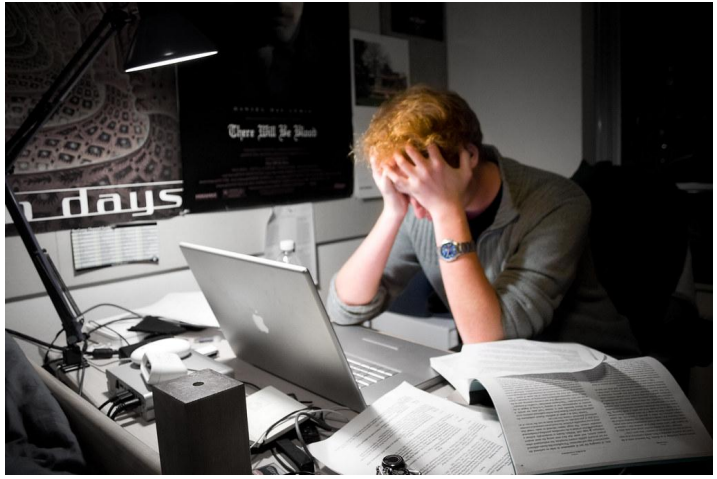
Tips for Success!

Troubleshooting Skills are **HUGE**

Looking to find the *balance*



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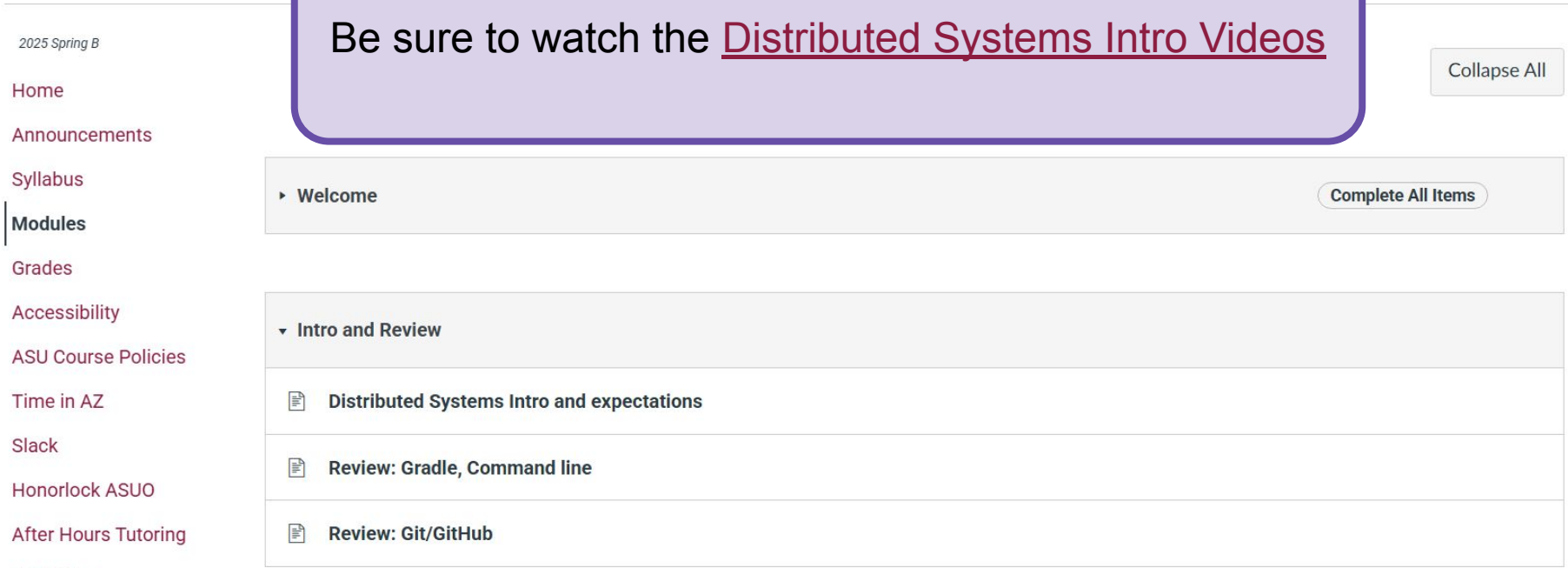
Tips for Success!

Be sure to watch the Distributed Systems Intro Videos



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Tips for Success!

Watch the Gradle Canvas Videos!

Videos cover:

- Build Structure
- Plugins
- Tasks
- Commands (build, clean, run, and test)
- Arguments

Follow the Setup guide in Canvas

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Setup

You will need ***two*** systems

Your MAIN device

Secondary Device

AWS EC2 Instance

Linux VM

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Setup

Follow the Setup guide in Canvas

Both systems ***need…***

Java 22

Gradle 8.10.2

User Guide

GIT

SSH Guide

Sockets/JavaSimpleSock2

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Gradle Examination

```
8  task SocketServer(type: JavaExec) {
9    group 'TCP Server/Client'
10   description 'Creates Server socket waits for up to 3 messages'
11
12   classpath = sourceSets.main.runtimeClasspath
13
14   main = 'SockServer'
15 }
```

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Gradle Examination

Sockets/JavaSimpleSock2

```
Tasks runnable from root project
--------------------------------

Build tasks
-----------
assemble - Assembles the outputs
build - Assembles and tests this
buildDependents - Assembles and te
buildNeeded - Assembles and tests
classes - Assembles main classes.
clean - Deletes the build directo
jar - Assembles a jar archive con
testClasses - Assembles test clas

Build Setup tasks
-----------------
init - Initializes a new Gradle b
updateDaemonJvm - Generates or up
wrapper - Generates Gradle wrappe

Documentation tasks
-------------------
javadoc - Generates Javadoc API documentation for the 'main' feature.

Help tasks
----------
buildEnvironment - Displays all buildscript dependencies declared in root project 'JavaSimpleSock2'.
dependencies - Displays all dependencies declared in root project 'JavaSimpleSock2'.
dependencyInsight - Displays the insight into a specific dependency in root project 'JavaSimpleSock2'.
help - Displays a help message.
javaToolchains - Displays the detected java toolchains.
outgoingVariants - Displays the outgoing variants of root project 'JavaSimpleSock2'.
projects - Displays the sub-projects of root project 'JavaSimpleSock2'.
properties - Displays the properties of root project 'JavaSimpleSock2'.
resolvableConfigurations - Displays the configurations that can be resolved in root project 'JavaSimpleSock2'.
tasks - Displays the tasks runnable from root project 'JavaSimpleSock2'.

TCP Server/Client tasks
-----------------------
SocketClient - Creates client socket sends a message and number to server
SocketServer - Creates Server socket waits for up to 3 messages

Verification tasks
------------------
check - Runs all checks.
test - Runs the test suite.

Rules
-----
Pattern: clean<TaskName>: Cleans the output files of a task.
```

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Gradle Examination

Check out the recording for the discussion!

Sockets/JavaSimpleSock2

```
8  task SocketServer(type: JavaExec) {
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```
TCP Server/Client tasks
-----------------------
SocketClient - Creates client socket sends a message and number to server
SocketServer - Creates Server socket waits for up to 3 messages
```

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Gradle

Check out the recording for the solution and discussion!

Sockets/JavaSimpleSock2

Which if statement will execute with
`gradle SocketClient -Phost=localhost -Pnumber=5` ?

A.
```
if (project.hasProperty("host") && project.hasProperty("message") && project.hasProperty("number")) {
  args(project.getProperty('host'),
          project.getProperty('message'),
          project.getProperty('number'));
```

B.
```
} else if (project.hasProperty("host") && project.hasProperty("message")) {
  args(project.getProperty('host'),
          project.getProperty('message'));
```

C.
```
} else if (project.hasProperty("host") && project.hasProperty("number")) {
  args(project.getProperty('host'),
          "Set by Gradle, since nothing provided: https://gph.is/2y76sj4",
          project.getProperty('number'));
```

D.
```
}  else if (project.hasProperty("host")) {
  args(project.getProperty('host'));
}
```

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Scratch Space

Upcoming Events

SI Sessions:

- Sunday, March 23rd at 7:00 pm MST
- Tuesday, March 25th at 10:00 am MST
- Thursday, March 27th at 7:00 pm MST

Review Sessions:

- TBD

Questions?

Survey:

https://asuasn.info/ASNSurvey

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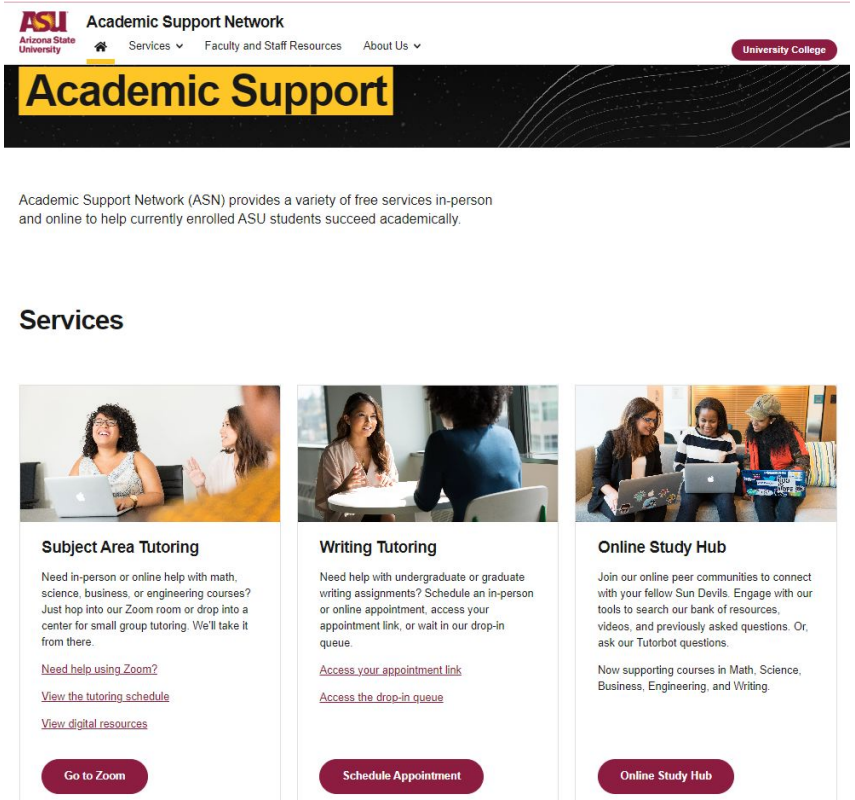
More Questions?

Check out our other resources!

tutoring.asu.edu

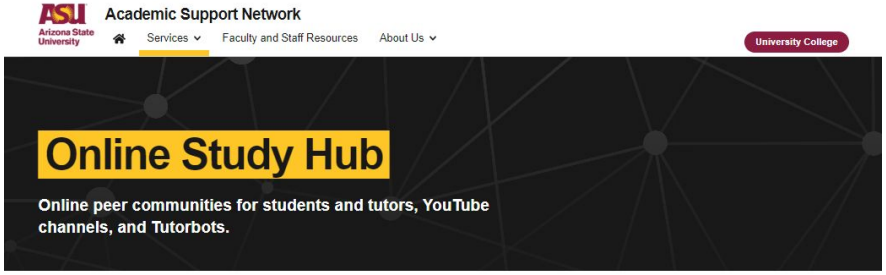


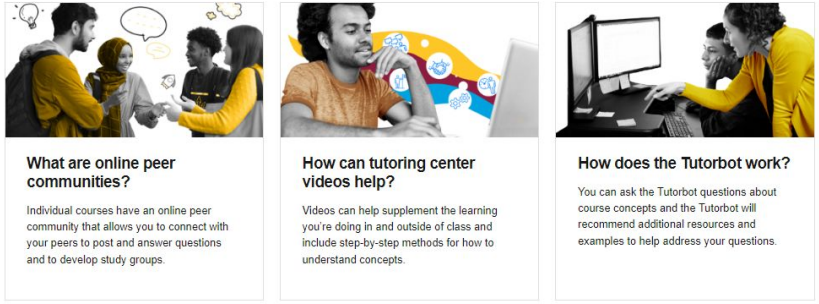
1. **Click on ‘Go to Zoom’ to log onto our Online Tutoring Center.**
2. **Click on ‘View the tutoring schedule’ to see when tutors are available for specific courses.**

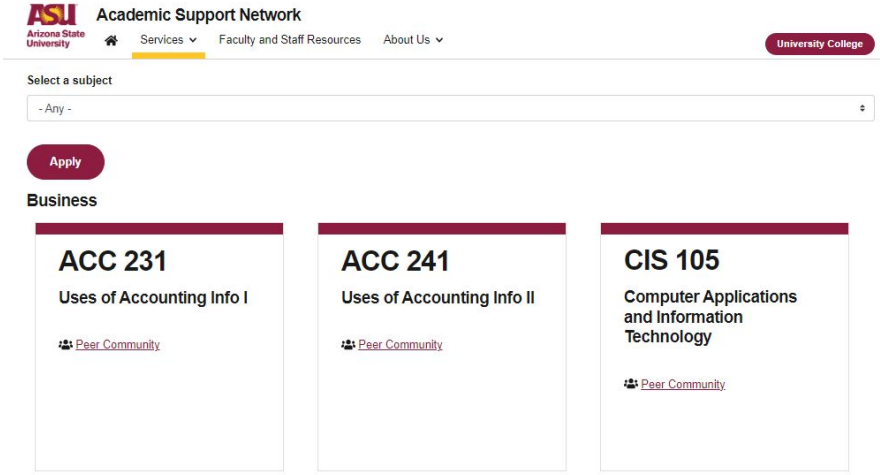
More Questions?

Check out our other resources!

tutoring.asu.edu/online-study-hub



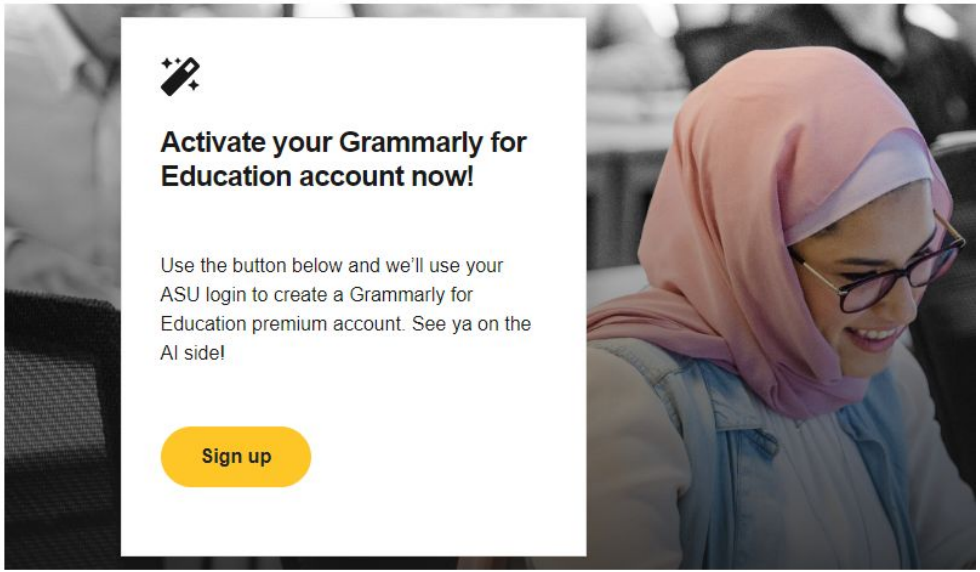




Don't forget to check out the Online Study Hub for additional resources!

Expanded Writing Support Available

Including Grammarly for Education, at no cost!



tutoring.asu.edu/expanded-writing-support

*Available slots for this pilot are limited

Additional Resources

- Course Repo
- Gradle Documentation
- GitHub SSH Help
- Linux Man Pages
- OSI Interactive