

# CS 4414/5416: Systems Programming

## Lab 5: FFI and assembly

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2026-09-25

Primary goal: Work together on something

- Fine to have small groups (up to 4)
- Work on the lab assignment during the hour

This week is about interfacing Rust with C and examining assembly output.

- Parts 1-2: set up **build.rs** and safe wrappers for C functions
- Part 3: check out the C and Rust assembly output
  - Assembly language depends on the platform!
  - You may want to use Google cloud shell:  
<https://shell.cloud.google.com>
  - You may also use your VM if you want
- If you finish with spare time, check out **llvm-mca!**

Repo: <https://github.coecis.cornell.edu/cs4414-f26/lab-05>

At the end of the hour run **cargo package** and submit the **crate** file as a group on Gradescope (I will grade based on whether the crate builds and tests pass).

- If you finish with spare time, check out **llvm-mca** too!
- If you used a VM, REMEMBER TO SHUT DOWN YOUR VM!
- Try using **rust-bindgen** to automatically create bindings!