

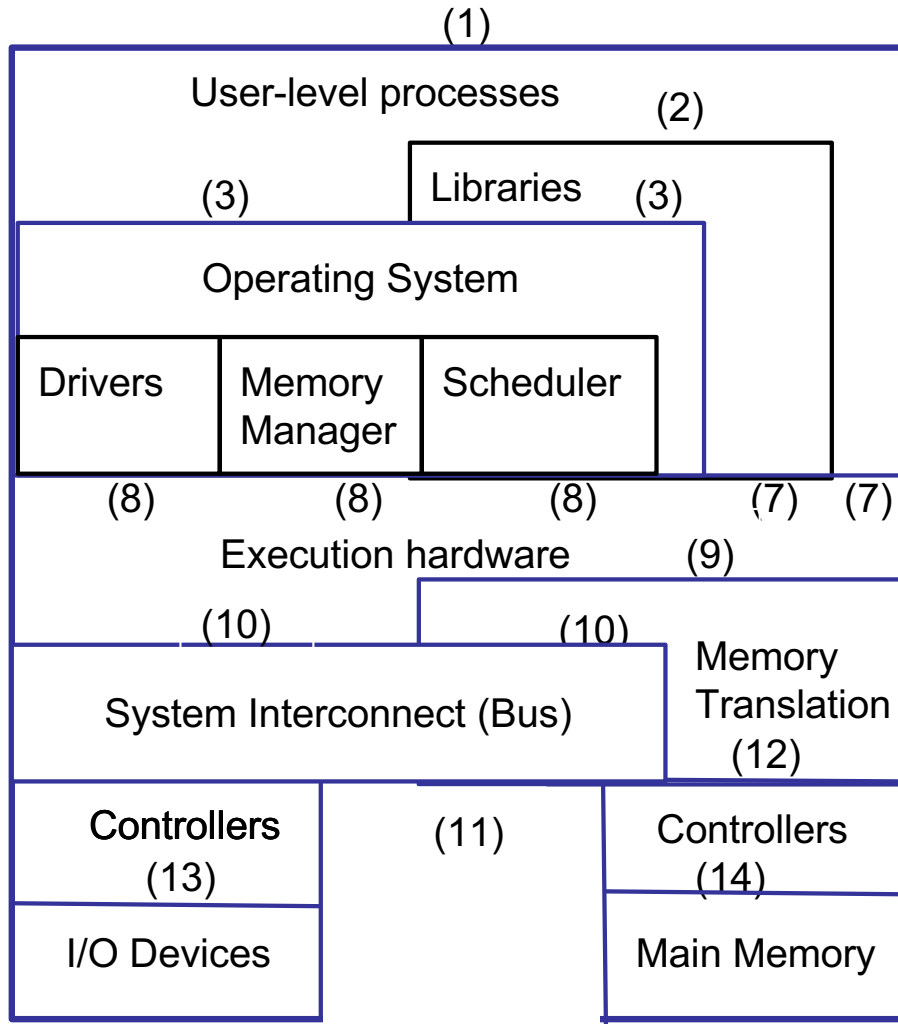
# Operating Systems Course Overview

Instructor: Kartik Gopalan

Class website:

<http://oscourse.github.io>

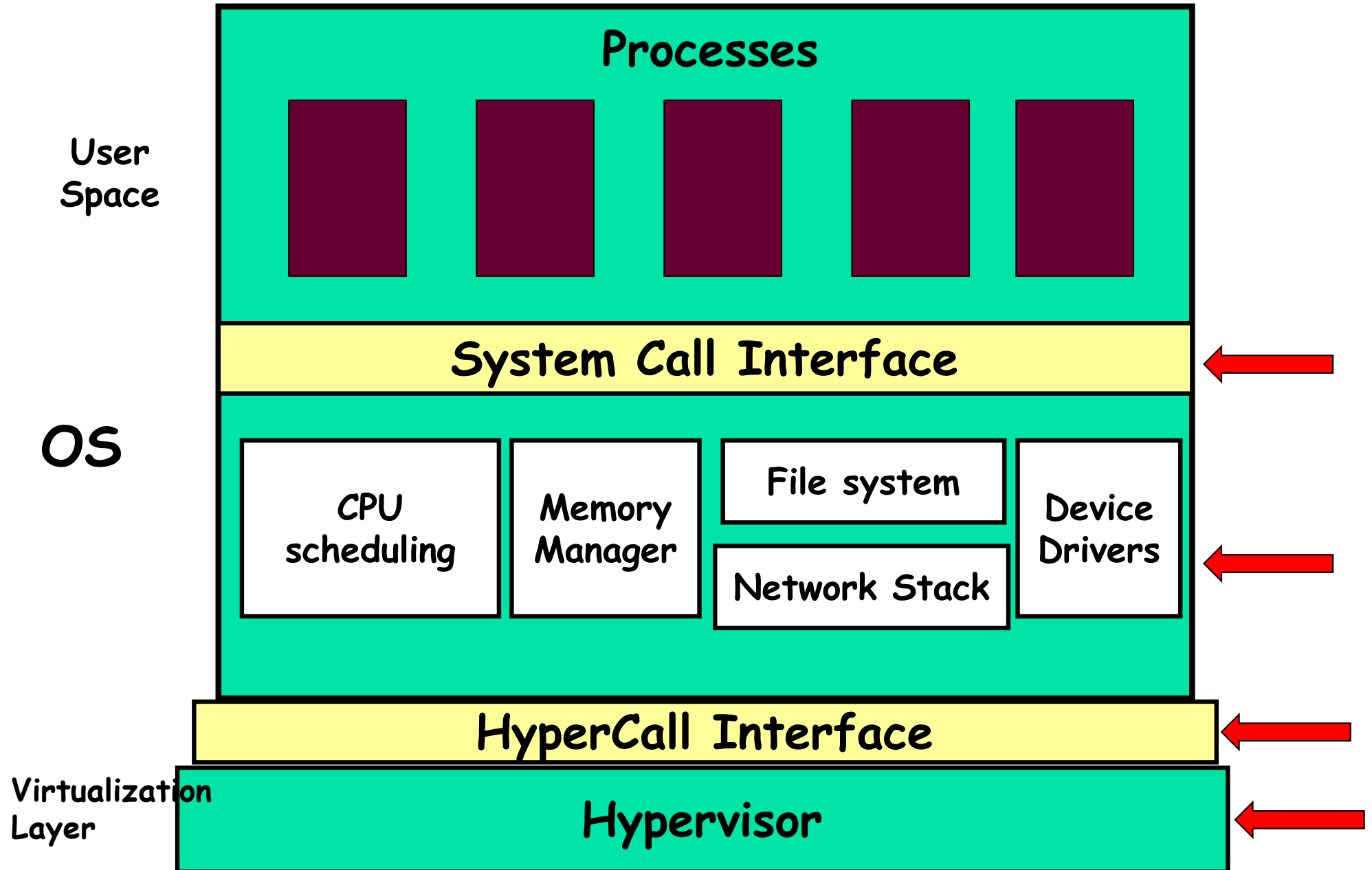
# Interfaces in a Computer System



User ISA : 7  
 System ISA : 8  
 Syscalls : 3  
 ABI : 3, 7  
 API : 2, 7

ISA = Instruction Set Architecture  
 ABI = Application Binary Interface  
 API = Application Programming Interface

# Layers of Software



# Coverage of Topics

- Processes and Threads
- CPU Scheduling
- Memory Management
- Concurrency
- File Systems
- Input/Output
- Security
- Virtualization
- Basics of Programming in the Linux Kernel
- Other topics as appropriate

# Class Logistics

- Course Material
  - Lecture slides and papers posted on the class website
  - Andrew Tanenbaum, Modern Operating Systems, 3rd or 4th edition
  - Operating Systems: Three Easy Pieces
    - <http://pages.cs.wisc.edu/~remzi/OSTEP/>
    - Online and free
  - No need to buy the books unless you want to.
- Read the course policies on the class website.
- Website will also have office hours, test dates, assignments, test samples etc.

# Accounts you need

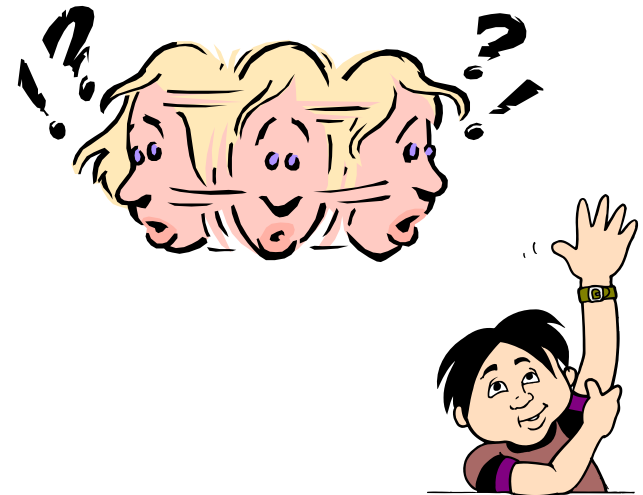
- BU Email account
  - <yourid>@binghamton.edu
  - For communicating with me and TA
  - For receiving announcements
- CS LDAP Account
  - To log into machines in G-7, Q-22, and remote.cs.binghamton.edu
- Access to blackboard
  - For submitting your assignments
  - Getting grades
  - <http://blackboard.binghamton.edu>
- A VM to work on
  - Either on google cloud, or your own machine, or G-7/Q-22 lab
  - Your own Linux kernel that you will work with.

# Students with disabilities

- Please contact me, preferably, within the first two weeks of class.
- Please contact the SSD office for any accommodations.
  - Bring me their letter listing the accommodations required.
- Don't hesitate to tell me if some aspect of the class is not working for you.
  - We will promptly work with you and SSD to fix it.

# To ask or not to ask?

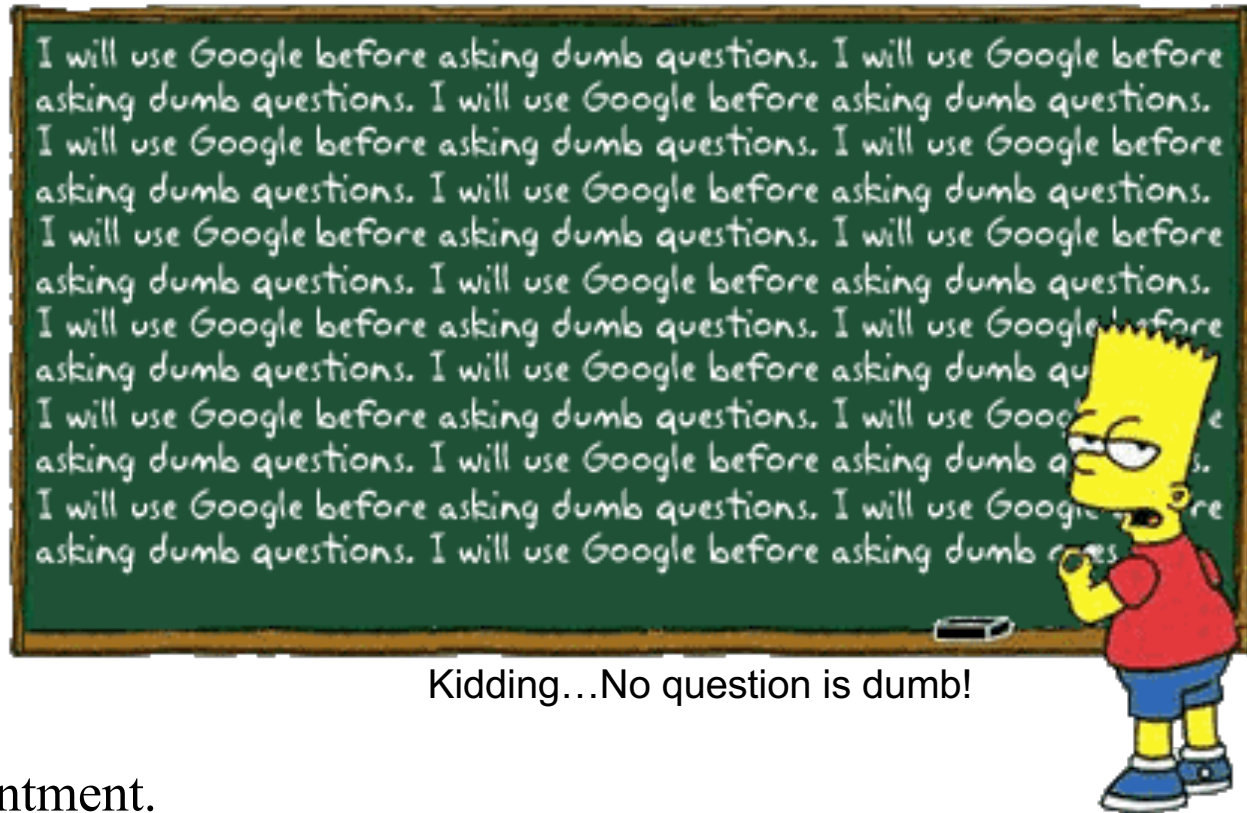
- Instructor and TAs are not a psychics!
  - If you don't ask, then we won't know how to help.
- Please let us know if...
  - You are lost
  - You don't understand something
  - You don't have the background
  - Class can be improved in certain ways
- Ask for help early
  - Don't wait till the last minute
- Feel free to give feedback
  - Especially in the middle of the semester
  - Direct feedback is always welcome.





# Asking Questions

- Make Google your friend!
  - Can't beat the response time!
- Email me/TAs anytime
- Stop by during office hours
- Any other time
  - Please email me for an appointment.
  - Otherwise, you may not find me, or you may find me busy with something else.



# Stressed?



- Keep the perspective
  - This is only one little course in the scheme of “things”.
- If you are overwhelmed with the course, talk to us.
- If you are depressed or panicking for any other reason.
  - Seek professional counseling.
  - <http://counseling.binghamton.edu/>
  - Hope you won't need to ☺

# Academic Integrity

## •Means

- Do your own work. Don't do others' work.
- Don't ask/give solutions, including code.
- Don't get code from the Internet.
- Protect your code

•Moss: A tool for detecting software plagiarism will be used.

•Please read the [policies](#) on course web page

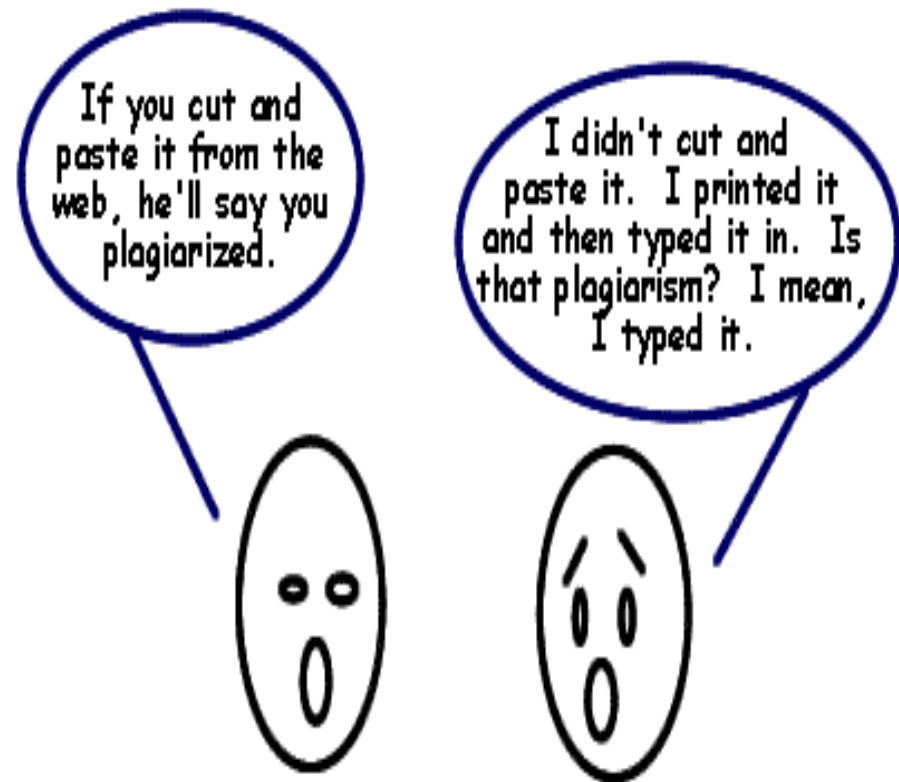
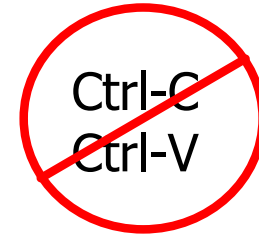
•<http://www.cs.binghamton.edu/~kartik/policies.html>

## •Dishonesty →

- You can get an F grade
- Be referred to the Dean's office

•Its better to submit your own imperfect own than to submit a perfect copied one.

- You get partial grades for incomplete work.
- But you'll get F for copied work.



[http://library.kcc.hawaii.edu/main/instruction\\_info/plagiarism1.html](http://library.kcc.hawaii.edu/main/instruction_info/plagiarism1.html)

# Missed Exams/Assignments

- No makeup exams/assignments.
  - Except for medical emergencies or jury duty when accompanied with valid documentation.
- Plan your other commitments (travel, interviews, etc) around deadlines.
  - Missing exams/deadlines due to such commitments is not a valid excuse.

Questions?