# **Course Information**

Sarah Diesburg Operating Systems CS 3430

### Instructor

- Sarah Diesburg (diesburg@cs.uni.edu)
- Office: 311 ITTC
- Office hours: MWF 10:00-10:50am, 1:00-1:50pm, and by appointments
- Class websites:
  - http://www.cs.uni.edu/~diesburg/courses/cs3430\_sp14/index.htm
  - UNI eLearning

### **Class Schedule**

- Lecture MWF 2:00-2:50pm in ITTC 328
  - Mandatory: Two general OS lectures, one recitation lecture per week (subject to change)
  - Attendance will be randomly taken and count towards 5% of your final grade

# Why Study Operating Systems?

- The OS is the largest and the most complicated software running on most machines
- It contains many important system concepts
  - Design principles
  - Complexity hiding
  - Performance tuning
  - Resource coordination

# **Applicability of OS Skills**

- Software engineering
- Database design and implementation
- Network design and implementation
- Distributed computing

# **Learning Objectives**

- Operating system concepts
  - Process management, CPU scheduling, synchronization, caching, file systems, and so on
- Programming skills
  - User-level shell
  - Kernel module, system call, synchronization primitives, file system

### **Prerequisites**

- CS 1410 Computer Organization
- CS 1520 Data Structures
- CS 1800 Discrete Structures

### **Required Skills**

 Proficiency in UNIX programming and debugging environment

 Proficiency in C or other high-level programming language

### **Course Material**

- Lecture notes (posted at the class website)
- Textbook:
  - Silberschatz, Galvin, Gagne,
    Operating System Concepts,
    9<sup>th</sup> Edition



# **Class Grading**

- Two components
  - Exams (45%)
  - Homework assignments and projects (50%)
  - Attendance (5%)



- Exam 1 (10%)
- Exam 2 (10%)
- Comprehensive final exam (25%)

### **More on Exams**

- 80% based on lectures, assignments, and projects
- 20% based on your ability to apply various principles learned in the class

# **Assignments and Projects**

- Homework assignments (10%)
  - Paper submissions
- 3 4 projects 1 (10 15% each)

# **Passing the Course**

- To receive >= C for course, you must get a passing grade on
  - The projects (overall average)
  - The final exam
- Not that passing the above does not automatically imply >=C!

# If you pass projects and final, your grade will be:

■ 100 – 92 A

B

C+

- 91.9 90 A-
- 89.9 88 B+
- 87.9 82
- 81.9 80 B-
- **79.9 78**
- 77.9 72 C
- 71.9 70 C-

■ 69.9 – 68 D+

D

F

- 67.9 62
- 61.9 60 D-
  - **■** 59.9 0

# Assignments

- Individual homework assignments
  - Testing your ability to apply knowledge from the lectures and readings
  - One bonus point for each homework assignment
    - Constructive comments on lectures and recitations
    - Or, a funny story of the week

# Projects...

Increasingly difficult

#### In teams of two people

 Team of 3 only in exceptional circumstances (email me)

### **Computer Accounts**

- CatID credentials to access the eLearning website
- Make sure you are checking your UNI emails.
  - Important class announcements will be sent frequently from the eLearning interface to your UNI email account.
- You will also be receiving specialized login accounts to a class-specific programming server. More details to be announced in class.

# **Your Responsibilities**

- Understand lecture and reading materials
- Attend office hours for extra help, as needed
- Uphold academic honesty
- Turn in your assignments on time
- Check class Web page and your garnet email account and regularly

### Dos and Don'ts

- Do share debugging experiences
- Do share knowledge of tools
- Do acknowledge help from others
- Do acknowledge sources of information from books and web pages

### Dos and Don'ts

- Don't cheat
- Don't copy code from others
- Don't paraphrase code from others either
  E.g., changing variable names & indentations
- Don't post more than 1 line of code to the discussion board

### **Course Policies**

- Attendance mandatory
- There are no make-up exams for missed exams...
- Honor code: read your student handbook
- Students with disabilities
  - Report to Student Disability Resource Center
  - Bring me a letter within the first week of class

### To see or not to see me

- I am not psychic
- Please let us know if...
  - Class is too hard
  - You don't have the background
  - Class can be improved in certain ways
- When in doubt, email me...

# **Survival Tips**

- Post messages and read the discussion board frequently
  - Sign up to receive emails
- Start on projects and assignments early!
- Web search engines are your good friends
- Start on projects and assignments early!