

Operating Systems – Fall 2005

Instructor: Dave Hollinger (*Dave*)

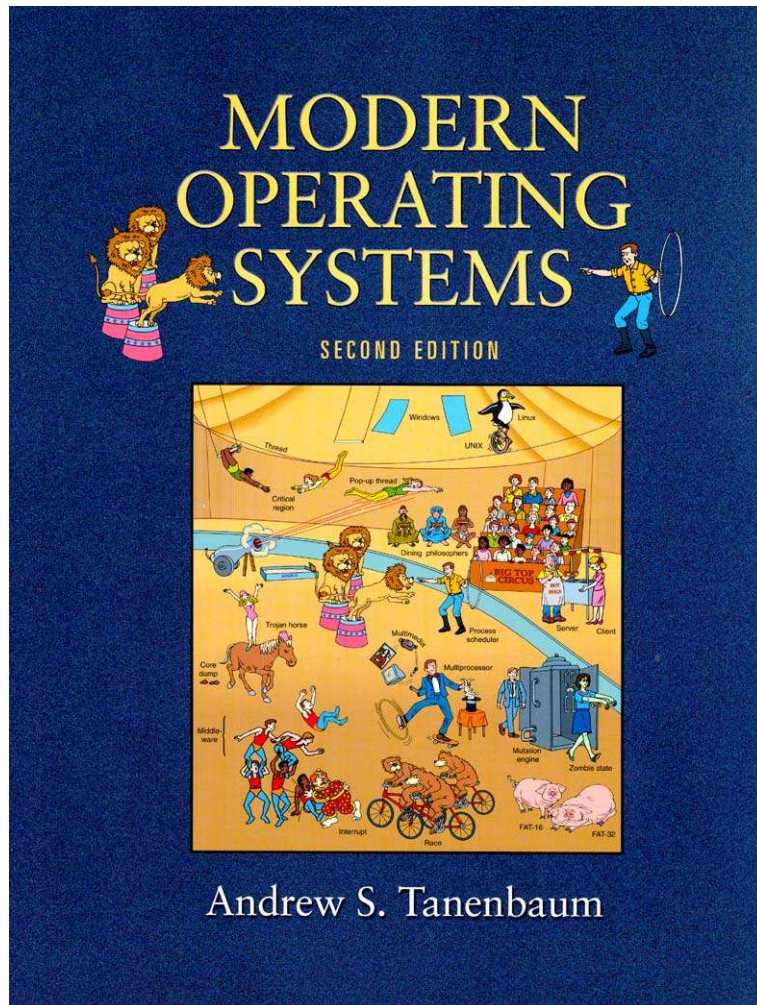
Web Sites:

www.cs.rpi.edu/~hollingd/opsys

webct.rpi.edu

Email: opsys@cs.rpi.edu

TextBook



- Required!
- Great book – easy to read.
- We will also rely on information from many other sources (on the www).

Grades

- 55%: Projects/Homework
 - some large programming projects
 - possibly some research projects
- 45%: Tests (three – each worth 15%)
- No Final Exam
 - the last test will be during the last class meeting.

Projects/Homework

- Some large programming projects.
 - written in C (sometimes C++ is OK).
 - Unix Systems Programming.
- Some small programming projects.
- Possibly some *research* projects:
 - design data structures/algorithms
 - look at open source OS code and write a report.

Unix Programming

- Everyone should have a CS account.
- `ssh to freebsd.remote.cs.rpi.edu:`
 - `monica,ashley & mary-kate.cs.rpi.edu`
- Grading will be done on BSD!
- Develop code anywhere you want, but make sure you test on FreeBSD!

CS Accounts

- Remote access to CS department workstations.
- New email address: *username@cs.rpi.edu*
- CS Lab documentation: www.cs.rpi.edu/lab
 - Instructions on how to access machines, etc.
 - web based email management (spam filtering, forwarding, etc.)
 - Account restrictions, etc.

CS Workstations

- You don't have a machine all to yourself!
 - learn about the `ps` command.
 - make sure you know how to `kill` a process gone bad.
 - pay attention to how much disk space you use!
 - `df` and `du` can be helpful.
 - learn to annoy people!:

```
for user in `who -q | grep -v \#`; do echo "Hello" | write $user; done
```

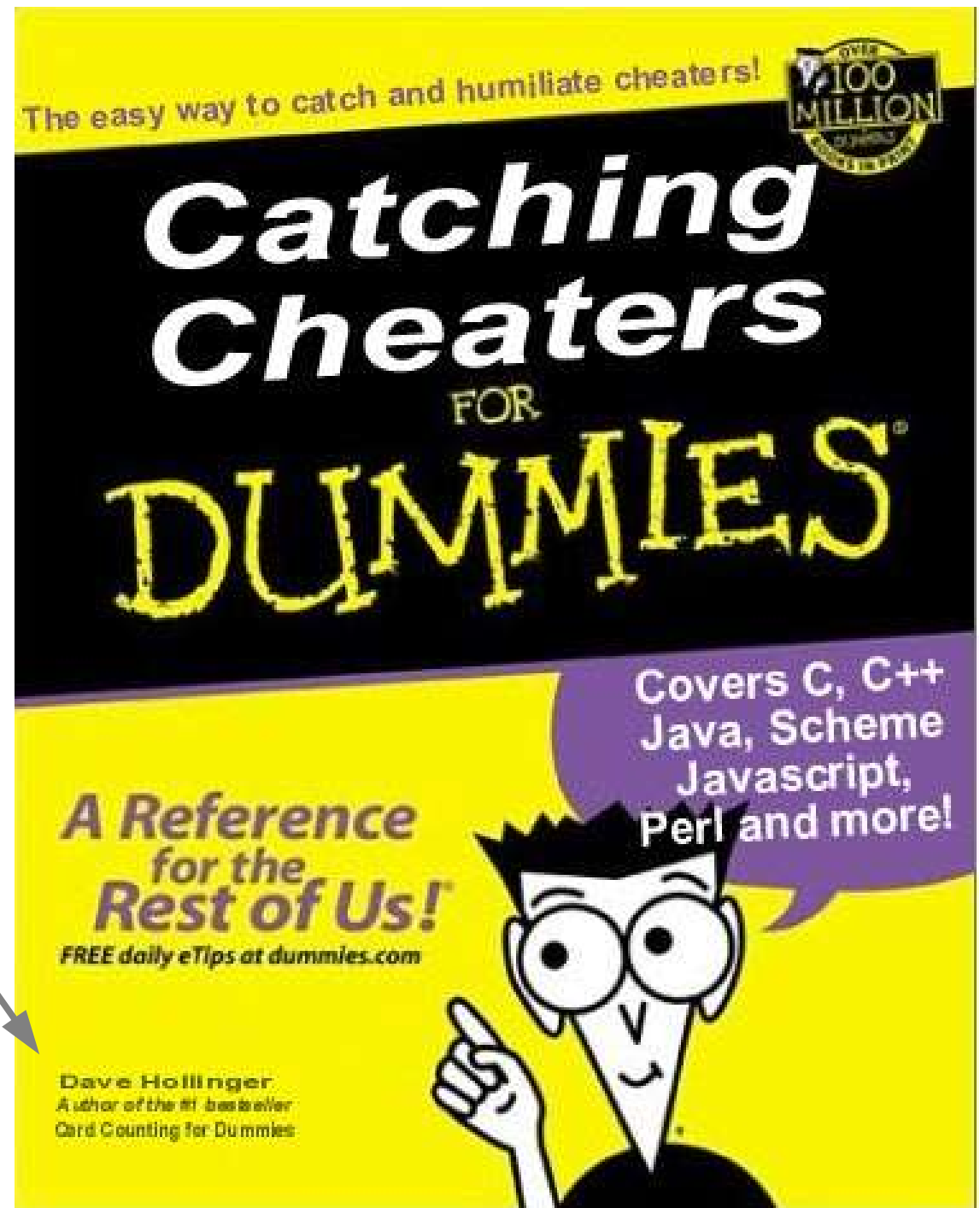
Tentative Schedule

- The Syllabus includes tentative reading schedule, this will certainly change...
 - The test dates will not change!
- We will follow the book fairly closely, although we will also look at other sources of information.
 - The book is great for “the big picture”, but we need to look elsewhere for details...

Academic Integrity

- Any duplicate or near duplicate homework submissions will result in a minimum of a 2 letter grade drop for the final course grade for all students involved and may result in a failure for the entire course.
- For programming projects, you may *discuss* homework with other students (this includes WebCT discussion boards) but sharing of code in any form is not acceptable.
- Looking at another student's code or showing your code to another student is **not** permitted.

Dave is a world renowned cheater catcher and author!



Programming Project Requirements

- Every file must include a comment at the top of the file including your name.
- There must be a file named README that includes your name, a one-line description of each file submitted, instructions for building, etc.
- You must comment your code – if we can't easily follow your code you lose points.

Course Topics

- History
- Systems Programming
- Deadlock
- Memory
- I/O
- File Systems
- Security
- Networking
- Multimedia
- Multiple Processors
- Case Studies
 - Linux, FreeBSD
 - Windows