

| Week | Date  | CS347  | CS333                                   | Date  |
|------|-------|--|---|-------|
| 1    | 2/8   | Course introduction  | Lab1<br>Hello OS!                       | 3/8   |
|      | 4/8   | abstractions and interfaces, OS tasks and building blocks                    |   |       |
| 2    | 9/8   | the process abstraction, limited direct execution, the system call interface | Lab2<br>just process it!                | 10/8  |
|      | 11/8  | PCBs, runqueues  |   |       |
| 3    | 16/8  | signals, fork and exec   | Lab3<br>processing with processes       | 17/8  |
|      | 18/8  | system call details  |   |       |
|      | 18/8  | <b>Quiz 1 ???</b>  |   |       |
| 4    | 23/8  | the first user process, kernel threads                                       | <b>Labquiz1</b>                         | 24/8  |
|      | 25/8  | scheduler, scheduling policies   |   |       |
|      | 25/8  | <b>Quiz 1 ???</b>  |   |       |
| 5    | 30/8  | memory virtualization, address space abstraction                             | Lab4<br>xv6 system calls                | 31/8  |
|      | 1/9   | address translation  |   |       |
| 6    | 6/9   | paging, swapping   | Lab5<br>munching on memory              | 7/9   |
|      | 8/9   | memory management  |   |       |
| 7    | 13/9  | xv6 memory management  | <b>Labquiz2</b>                         | 14/9  |
|      | 15/9  | xv6 trap handling + scheduling   |   |       |
| 8    | 20/9  | <b>Midsem week</b>   |   | 21/9  |
|      | 22/9  |  |   |       |
| 9    | 27/9  | synchronization, atomicity   | Lab6<br>sync saves sink                 | 28/9  |
|      | 29/9  | spinlocks  |   |       |
| 10   | 4/10  | mutexes, semaphores, condition variables                                     | Lab7<br>sync++                          | 5/10  |
|      | 6/10  | use cases --- producer consumer, reader-writer etc.                          |   |       |
| 11   | 11/10 | threads, pthreads  | Lab8<br>pthreads are in the building    | 12/10 |
|      | 13/10 | <b>Quiz 2</b>  |   |       |
|      | 13/10 |  |   |       |
| 12   | 18/10 | file systems   | <b>Labquiz3</b>                         | 19/10 |
|      | 20/10 | file systems   |   |       |
| 13   | 25/10 | VFS  | Lab9<br>files --- no store, no compute! | 26/10 |
|      | 27/10 | IO stack   |   |       |
| 14   | 1/11  |  | Lab10                                   | 2/11  |
|      | 3/11  |  |   |       |
| 15   | 8/11  | virtualization   | <b>Labquiz4</b>                         | 9/11  |
|      | 10/11 | containerization   |   |       |
| 16   | 16/11 | <b>Endsem</b>  |   | 16/11 |
|      | 26/11 |  |   |       |