

IC221 Systems Programming - 2008 Syllabus		
M	Lecture 1	Intro
W	Lecture 2	UNIX Organization
R	Lab 1	UNIX Familiarity
M	Lecture 3	UNIX Development Env't: xemacs, command-line compiling, argc/argv, "stdin/stdout", shell IO redirection
W	Lecture 4	C vs C++: printf/scanf, C-strings, structs
R	Lab 2	C basics (printf/scanf, C-strings, structs)
W	Lecture 5	More C: dynamic memory, file IO
R	Lab 3	C file IO (fopen, etc), dynamic memory (malloc, etc)
M	Lecture 6	bash intro:
W	Lecture 7	More bash: scripting
R	Lab 4	bash: scripting
M	Lecture 8	.dot/.rc files, environment, the login process
W	Lecture 9	UNIX filesystem structures
R	Lab 5	mytouch
M	Lecture 10	Processes and the memory layout of a program; review
W	Exam 6	
R	Lab 6	Shell IO redirection (mma, mmam, mmamV2)
T	Lecture 11	Process creation: fork
W	Lecture 12	Parent/child processes; exit, wait
R	Lab 7	fork
M	Lecture 13	exec
W	Lecture 14	dup
R	Lab 8	fork/exec/exit/wait
M	Lecture 15	Signals
W	Lecture 16	Signals
R	Lab 9	Signals
M	Lecture 17	SEIC
W	Lecture 18	IPC, fifo & pipes
R	Lab 10	Pipes
M	Lecture 19	Concurrency
W	Lecture 20	Concurrency
R	Lab 11	Producer/consumer concurrency problem
M	Lecture 21	Deadlock; review
W	Exam 12	
R	Lab 12	Smokers concurrency problem
M	Lecture 22	Networks: general concepts (terms, protocols)
W	Lecture 23	Networks: protocols and services (TCP/IP, UDP, DNS)
R	Lecture 24	Networks: IP addressing, sockets
M	Lab 13	Socket intro
W	Lab 13	Socket intro
R	Lab 14	bc program using sockets
M	Lecture 25	Networks: client/server
W	Lecture 26	Catch up/review
R	Lab 15	Distributed game
M	Lecture 27	SOFS