				Math 319, CRN 52809; Prof. Andrew Ross		
Block#	Date 2015	day	unit	topics	HW assigned	HW due
1	5/4 13:00	Mon	general modeling	intro; math model examples; a math model has; graph sketching	M1	
2	5/4 14:15	Mon	general modeling	bloom's taxonomy; CCSS-M standards for mathematical practice; malaria nets--start simple; evacuation; modeling cycle	M2	M1
3	5/5 13:25	Tue	general modeling	real modeling cycle; oper tact strat; airline problems; concept maps; intro to excel (graphing, label axes, title, autofill, control-shift-down)	M3	M2
4	5/5 14:40	Tue	regression	linear regression: houses, predictions, residuals, graph residuals!	R1, R2	M3
5	5/7 13:50	Thu	regression	R^2; school district data; correlation/causation; ecological fallacy; common resid graphs; basic procedure; LSRL math model; averaging before regression?	R3	
6	5/11 13:00	Mon	regression	Pre-Lab at home: 4-function pre-quiz; in-class: answers; exponential fits, compound interest		R3 before class, R2
7	5/11 14:15	Mon	regression	yeast; logplots; power fit	R4	
8	5/12 13:25	Tue	regression	log-of-log, model selection, occam's razor, multivariate regression school data	R5	R4
9	5/12 14:40	Tue	regression	heat index; polynom; sines		R5
10	5/14 13:50	Thu	regression	falstad.com java fourier app; averaging and regression; waves and trends	R6	
11	5/18 13:00	Mon	regression	Quiz on R5; Logistic; overfitting/crossvalidation	R7, R8, R9	R6
12	5/18 14:15	Mon	optimization	LP toys, wyndor (no sensitivity analysis), knapsack, swimmers	O1	R7
13	5/19 13:25	Tue	optimization	shift scheduling; network flow	O2	R9
14	5/19 14:40	Tue	optimization	Networks		O1
15	5/21 13:50	Thu	optimization	MCNF node-node; ramen; brief fast-food intro; sensitivity analysis on wyndor; feas region; fundamental theorem of LP	O3	O2
16	5/25 13:00	Mon		Memorial Day	M4	O3
17	5/25 14:15	Mon		(homework due date delayed one day from what is shown)	O4	M4
18	5/26 13:25	Tue	optimization	example papers: dinosaur and relay; NLP: manufacturing, electricity		
19	5/26 14:40	Tue	optimization	concavity	O5	proposal 1
20	5/28 13:50	Thu	optimization	airport		O4, O5
21	6/1 13:00	Mon	optimization	shotspotter		
22	6/1 14:15	Mon	dynsys	Dynamical Systems; PID; credit card, repeated dosing		
23	6/2 13:25	Tue	projects	Project Presentations		project 1
24	6/2 14:40	Tue	projects	Project Presentations		
25	6/4 13:50	Thu	dynsys	limited population growth; quiz	D1; D2	
26	6/8 13:00	Mon	dynsys	pagerank; leslie; SIR; oilspill		D1; prop.2
27	6/8 14:15	Mon	dynsys	multiple initial conditions; equilibria; delta plots; phase-plane plots; fitting limited-pop growth	D3	D2
28	6/9 13:25	Tue	dynsys	observation noise, process noise	D4	D3
29	6/9 14:40	Tue	dynsys	repeated dosing? compartment models? accel/vel/pos?	M5	D4
30	6/11 13:50	Thu	spare	chaos; splines; PERT/CPM; modeling misconceptions		M5
	6/15/2015	Mon	presentations			project 2