

Final Project Model List

*Note : Models done in class are not available as projects

Spain (available for perusal in 316 (45132), many have their equivalents in Keen)

8.5	Deer and hunters- age class model	age class
8.6	North Sea fisheries age class model	age class-not available
8.8*	Flour beetle cannibalism	age class-not available
12.5	PCB toxin accumulation & flow in an aquatic ecosystem	ecosystem
12.7	The English channel ecosystem	ecosystem
12.8	Old-field broomsedge community	ecosystem- not available
13.6	Monod microbial growth with nutrient limitation	microbial growth
14.9	Iodine compartment model	physiology
15.5	Gene regulation - Jacob Monod feedback	feedback
15.3	Mammalian body temperature regulation in heat	physiology
15.4	Bat thermoregulation in cold	physiology
17.1	Model of glycolysis	biochem, metab.
17.2	Mass action in single substrate reactions	biochem, metab.
17.5	Yates-Pardee Feedback control of metabolism	metab., feedback
17.6	Allosteric control of phosphofructokinase	biochem, feedback
19.6	Probabilistic (Monte Carlo) decay (19.6 a-e)	stochastic
21.4	Stochastic epidemic simulation	stochastic
22.4	Queuing simulation of enzyme-substrate interaction	stochastic biochem

Keen & Spain (listed by book section)

13.4	Global carbon model	ecosystem
14.4a,b	Counter and Cocurrent flow compared	physiology
14.4 +	Counter Current Multiplier	physiology
15.6	Human Heart & Aorta - Pressure/Flow model	physiology
15.4	Multi-compartment Ca metabolism model (if not used=INU)	physiology
17.6	Hormonal control with two feedback mechanisms (INU)	feedback
22.9	Model of cell growth	development
24.5	Epidemic Thresholds	epidemic,age class
24.7	Rabies Epidemic model	epidemic,age class

You may also choose any other Keen model in consultation with and with the approval of myself.