

Readings: Ch. 9-10

Here is a list of some of the terms that you should study for the first 50-point exam. This list is not guaranteed to be complete, and not all of the items here will be covered. Most of the questions will be about things that have been discussed in lecture or lab.

A make-up exam will only be provided if you have a legitimate medical or legal emergency that is documented by a signed note with a phone number for verification. Missing the exam on the scheduled date for any other reason will result in a score of zero and a lower final grade.

organic vs. inorganic molecules	photic vs. aphotic zones	dinoflagellates & zooxanthellae
carbohydrates	temperature zones & thermocline	red tides & neurotoxins
lipids	pelagic vs. benthic	diatoms & frustules
proteins	neritic vs. oceanic	phytoplankton vs. zooplankton
nucleic acids	littoral vs. bathyal	holoplankton vs. meroplankton
	abyssal vs. hadal	bioluminescence
cell theory		
cell cycle & cell division	I° vs. II° productivity	Plantae
cytoplasm	photo- vs. chemosynthesis	chlorophyll
cell membrane & cell wall	trophic levels	accessory pigments
cilia & flagellum	producers vs. consumers	algae or seaweed
organelles	herbivores	thallus
nucleus & chromosomes	I° & II° carnivores	blade, stipe, holdfast, & bladder
mitochondria & chloroplasts	decomposers	green algae
kingdoms of life	food chain, web, & pyramid	brown algae (incl. kelp)
primordial soup experiment		red algae (incl. coralline algae)
protenoid microspheres	symbiosis	flowering plants
chemical evolution	neutralism [ 0 0 ]	sea grass & mangroves
deep-sea hydrothermal vents	competition [ – – ]	limiting factors for photosynthesis
	predation & parasitism [ + – ]	latitude & productivity
ecology	mutualism [ + + ]	
biosphere & ecosystems	commensalism [ + 0 ]	temperature regulation
population vs. community	opportunistic vs. equilibrium spp.	ectothermic vs. endothermic
habitat vs. niche	J vs. S growth curves	learned vs. instinctual behavior
	El Niño & Southern Oscillation	nature vs. nurture
light vs. depth		taxis vs. navigation
temperature vs. depth	Monera	swimming vs. diving
gravity vs. buoyancy	cyanobacteria	sociality vs. solitary behavior
water pressure vs. depth	photobacteria	displays & pheromones
viscosity vs. temperature	chemosynthetic thermobacteria	gonads & cloaca
salinity (‰)		dioecious vs. monocious
pH, O <sub>2</sub> , & CO <sub>2</sub> vs. depth	Protista vs. protozoans	spermatozoa & ova
	foraminifera & radiolaria	external vs. internal fertilization
	calcareous vs. siliceous shells	genetic vs. environmental sex