

Oceanography: The Hawaiian Pacific Course Syllabus

		WHAT	HOW
DAY 1 June 28/July 19 Monday	Morning	Learning styles; basics of earth sciences; history of oceanography Ch 1 and 2	Learning styles handout; open discussion on earth science, time line creation for history, review of previous/background science
	Afternoon	Pacific ocean mapping, Hawaiiana (how formed, colonized, etc)	Pacific maps, mysteries of oceanic islands kit, Hawaiian vocabulary worksheet
	Evening	Oahu sense of place	Create a personal map of Oahu (will use again for sand lab and will indicate beaches sampled throughout course), Michener's Hawaii, Hawaiian words
DAY 2 June 29/July 20 Tuesday	Morning	Plate tectonics and volcanism Ch 3 Begin bathymetry Ch 4 Quiz over Monday	Hawaii curriculum worksheets Ocean paper models
	Afternoon	Bathymetry Ch 4	Ocean floor set-up and soundings activity
	Evening	Tectonics and volcanism	CD in computer center, magnetism and pole reversals
DAY 3 June 30/July 21 Wed	Morning	Quiz over tectonics, bathymetry Sand and sediments Ch 5 Water chemistry Ch 6	Flash cards of sediment types; Chem kits practice, Marine geology (observing rocks and sand types, sediment sources, pore water)

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	Afternoon	Water chemistry Ch 6 Seawater chemistry Ch 7	Density temperature experiments; sea water experiments
	Evening	Review water chemistry, prepare field trip pages	Discussion of what a field trip IS and what will be recorded
DAY 4 July 1/July 22 Thurs	Morning	8-9 discussion of field trip plans. What is a beach profile, how will waves be evaluated	LEAVE FOR FIELD TRIP BY 9 Makapu'u
	Afternoon	FIELD TRIP	Return at 3
	Evening	De-briefing of trip	Complete field trip sheets; revise sheets for next time as appropriate
DAY 5 July 2/July 23 Friday	Morning	Review sediments, Weather and currents Ch 8 and 9	Sand lab, Construct a moon phase calendar; put wind patterns on globe
	Afternoon	Tides, El Nino Ch 11	El Nino movie and worksheets; ocean models
	Evening	Computer CD use	Weather, climate and tides CD
DAY 6 July 5/July 26 Monday	Morning	Tsunami, waves Ch 10	Condition Black movie; wave tank
	Afternoon	Coasts and ocean divisions Ch 12, Ch 13	Poster of ocean divisions, with representative life
	Evening	Computer CD use	Waves, earthquake and tsunami
DAY 7 July 6/July 27 Tuesday	Morning	Neuston and plankton Ch 14	Plankton identification; plankton net creation

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	Afternoon	Seaweeds, Hawaiian seaweeds Ch 15	Seaweed dissections. Seaweed slides, seaweed recipes "create a kelp forest" activity
	Evening	Hawaiian seaweed ID	Flash cards for field trip; prepare field trip sheets
DAY 8 July 7/ July 28 Wednesday	Morning	FIELD TRIP Quiz over neuston and plankton	Kailua Bay, Plankton seine, seaweed collection,
	Afternoon	FIELD TRIP	continuation
	Evening	Debrief trip	Write up data sheets, ID seaweeds, plankton collected
DAY 9 July 8/July 29 Thursday	Morning	Exam Benthic organisms Ch 15, 16	Dissect starfish, blue crabs, clams, mollusk handout
	Afternoon	Continue benthic critters	Make transects (PVC?)
	Evening	Ecology	Ocean realm video
DAY 10 July 9/July 30 Friday	Morning	Tide pools Nekton, pelagic animals Ch 15	Squid dissection, fish dissection, fish video.
	Afternoon	Continuation of nekton Deep sea Hawaiian fishes Powerpoint	shark video, deep sea critters Bioluminescence activity
	Evening	Field trip prep	Field trip worksheet
DAY 11 July 12/ Aug 2 Monday	Morning	Tide pool discussion Ch 16 FIELD TRIP	Transects, chemistry kits, etc
	Afternoon	FIELD TRIP continuation	Shark's Cove beach tide pools
	Evening	Field trip debrief	Observing tide pool organisms in class
DAY 12 July 13/ Aug 3 Tuesday	Morning	Quiz – fish ID Waikiki Aquarium trip	Waikiki aquarium
	Afternoon	Continuation of Waikiki aquarium	Aquarium behind the scenes

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	Evening	Field trip debrief	
DAY 13 July 14/ Aug 4 Wednesday	Morning	Hanauma Bay trip preparation	Field trip leave at 8:30
	Afternoon	FIELD TRIP	Continuation – carry out experiment
	Evening	Field trip wrap-up	complete worksheets
DAY 14 July 15/ Aug 5 Thurs	Morning	Marine resources, Marine laws, HI laws Ch 17	Computer time for HI laws research, set up debate; SPE's
	Afternoon	Marine laws debate – use of coastal areas on Oahu	Debate role playing
	Evening	Dance	
DAY 15 July 16/ Aug 6 Friday	Morning	NEMO/ Step into Liquid	leave
	Afternoon	Continue Nemo	Leave
	Evening	Pau	