

TENTATIVE SCHEDULE (**UPDATED** 1/5/2012)

Week	Topics	Lecture Schedule	Labs (Thursday)
Jan 9-13	I Introduction Course outline and objectives General description of nearshore processes	Mon Tue Wed	
Jan 16-20	II Waves and surf Linear waves review Wave shoaling and refraction on a beach	Tue Wed	I Tide/Surge/Swell Observations
Jan 23-27	Wave transformation over irregular bathymetry Diffraction around breakwaters and harbor entrances Nonlinear waves (Stokes, Cnoidal, Solitary waves)	Mon Tue Wed	
Jan 30-Feb 3	Nonlinear wave transformation over shoals and beaches Wave reflection and “surf beat” Spilling, plunging, and surging breakers	Mon Tue Wed	II Wave Refraction Computations
Feb 6-10	Selected Topics	<i>Class Presentations</i> Mon Tue Wed	
Feb 13-17	III Currents and sea level Wave set-up and undertow	Mon	
Feb 20-24	Longshore and rip currents	Tue	III Surf-Zone Wave And Current Observations
Feb 27-March 2	Wind-driven currents and storm surge Tides and seiches Numerical models	Mon Tue Wed	
March 5-9	IV Sediment transport Sediment mechanics Sediment transport and the evolution of beaches Beach morphology (ripples, bars, and cusps)	Mon Tue Wed	IV Monterey Beaches Field Experiment (~ ½ day field effort in small groups followed by analysis and group summary briefs) Dates TBD
March 12-16	Selected Topics	<i>Class Presentations</i> Mon Tue Wed	