

SIO 210 syllabus as of October 3, 2014

Please check updates on SIO 210 TED site (calendar format) and course website

<http://www-pord.ucsd.edu/~ltalley/sio210/index.html>

Sections	Date	Observational topic	Dynamical topic	Due dates; Special notes	Tank experiments
	Oct 3	Introduction; Physical properties of seawater I			
1-all	Oct 6	Physical properties of seawater I, II		Assignment 1	
1-S1	Oct 8	Physical properties of seawater III	Dyn. I: Advection, transports		
1-S2	Oct 10	Physical properties of seawater III	Dyn. I: Advection, transports		
2-all	Oct 13	Typical distributions I, II		Assignment 1 due	Tank 1 Convection
2-S1	Oct 15	Typical distributions II	Dyn. II: Equations of motion, non- rotating; heat, salt		
2-S2	Oct 17	Typical distributions II	Dyn. II: Equations of motion, non- rotating; heat, salt		
3-all	Oct 20	Observational and data analysis methods		Assignment 2	Tank 2 Taylor columns
3-S1	Oct 22	Data analysis methods	Dyn. III: Rotation, geostrophy		
3-S2	Oct 24	Data analysis methods	Dyn. III: Rotation, geostrophy		
4-all	Oct 27	Atmospheric circulation		Assignment 2 due Paper or JOA topic/title due	Tank 3 General circulation (atmosphere)
4-S1	Oct 29	Surface forcing, heat and freshwater budgets	Dyn. IV: Friction; Ekman layers		
4-S2	Oct 31	Surface forcing, heat and freshwater budgets	Dyn. IV: Friction; Ekman layers		
5-all	Nov 3	Mid-term (in class)			
5-all	Nov 5	Waves		Hendershott ALL STUDENTS	
5-all	Nov 7	Tsunamis, Tides I		Hendershott ALL STUDENTS	
6-all	Nov 10	Tides II, Internal waves		Hendershott Assignment 3	Tank 4 Rossby waves
6-S1	Nov 12	Eddies, Rossby waves	Dyn. V: Potential vorticity, beta effect		
6-S2	Nov 14	Eddies, Rossby waves	Dyn. V: Potential vorticity, beta effect		

7-all	Nov 17	Pacific Ocean wind-driven circulation		Assignment 3 due	Tank 5 Ekman pumping/suction
7-S1	Nov 19	Atlantic, Indian wind-driven circulation	Dyn. VI: Sverdrup balance, western boundary currents		
7-S2	Nov 21	Atlantic, Indian wind-driven circulation	Dyn. VI: Sverdrup balance, western boundary currents		
8-all	Nov 24	Eastern boundary currents	Dyn. VII: Eastern boundary currents	Paper or JOA project due	Tank 6 Ocean gyres
8-all	Nov 26	Equatorial circulation and El Nino Southern Oscillation	Dyn. VIII: Equatorial circulation and ocean-atm. feedbacks	ALL STUDENTS	
(-)	Nov 28	(Thanksgiving holiday)		(holiday)	
9-all	Dec 1	Southern Ocean circulation	Dyn. IX: Southern Ocean wind-driven circulation	Assignment 4	Tank 7 Thermohaline circulation
9-S1	Dec 3	Atlantic Ocean deep circulation	Dyn. X: Thermohaline circulation		
9-S2	Dec 5	Atlantic Ocean deep circulation	Dyn. X: Thermohaline circulation		
10-all	Dec 8	Global circulation		Assignment 4 due	Tank 8 Source-sink flow
10-S1	Dec 10	Climate and the oceans			
10-S2	Dec 12	Climate and the oceans			
	Dec 17	Final exam 3-6 PM			