

**OCN 631 - Ocean Minerals**  
 T/Th ♦ 12:00n-1:15pm ♦ MSB 305  
 Spring 2008



**SYLLABUS\***

Instructors:	Dr. John C. Wiltshire	johnw@soest.hawaii.edu	Ph: 956-6042, MSB 319 (ofc hrs - by appt)
	Dr. Gary M. McMurtry	garym@soest.hawaii.edu	Ph: 956-6858, MSB 325 (ofc hrs - by appt)

JAN	15	Course organizational meeting- Intro to Marine Minerals	John Wiltshire
	17	Submersibles, Hawaii Undersea Research Lab, Intro Videos	Rachel Orange <i>Guest lecturer</i>
	22	Peak Everything - Running out of Commodities	Gary McMurtry
	24	Manganese Nodules and Marine Mining	John Wiltshire
	29	Deep Sea Mining Technology	John Wiltshire
	31	Minerals Processing	John Wiltshire
FEB	5	Offshore Oil and Gas	John Wiltshire
	7	Oil and Gas Technology, Future Oil Sources and Issues	John Wiltshire
	12	<i>Student seminar</i>	<i>Student 1</i>
	14	<i>Student seminar</i>	<i>Student 2</i>
	19	<i>Student Seminar</i>	<i>Student 3</i>
	21	<i>Student Seminar</i>	<i>Student 4</i>
	26	<i>Student Seminar</i>	<i>Student 5</i>
	28	<i>Student Seminar</i>	<i>Student 6</i>
MAR	4	<i>Student Seminar</i>	<i>Student 7</i>
	6	<i>Student seminar</i>	<i>Student 8</i>

**CONTINUED on REVERSE**

*\* Subject to change without notice. Schedule of student seminars are adjusted depending on the number of students.*

MAR	11	Economics of Marine Minerals	John Wiltshire
	13	World Metal Markets	John Wiltshire
	18	Formation Processes of Polymetallic Sulfides (PMS) on the Ocean Floor: Geology of the Smoker and PMS	Gary McMurtry
	20	Chemistry of Hydrothermal Vents and Polymetallic Sulfides	Gary McMurtry
Mar 24-28		 <b>SPRING BREAK + PRINCE KUHIO DAY (WED)</b> 	
APR	1	PMS Deposits: From Smoker to an Ore Body	Gary McMurtry
	3	Case Studies on the Ocean Floor: The Red Sea	Gary McMurtry
	8	Geology of Ferromanganese Crusts	Gary McMurtry
	10	<i>Student seminar</i>	<i>Student 1</i>
	15	<i>Student seminar</i>	<i>Student 2</i>
	17	<i>Student Seminar</i>	<i>Student 3</i>
	22	<i>Student Seminar</i>	<i>Student 4</i>
	24	<i>Student Seminar</i>	<i>Student 5</i>
	29	<i>Student Seminar</i>	<i>Student 6</i>
MAY	1	<i>Student Seminar</i>	<i>Student 7</i>
TUE	6	<i>Student Seminar</i> ( <i>Last day of instruction for Spr'08 is Wed, 5/07/2008</i> )	<i>Student 8</i>

**Grading: Seminar 1 - 20%, Write -up 20%**  
**Seminar 2 - 20%, Write -up 20%**  
**Class Participation 10%**

NO WRITTEN FINAL - HAVE A GREAT SUMMER!

