



# MARINE SCIENCE I: OCEANOGRAPHY

## LECTURE OUTLINE

- 1) Welcome, Expectations, Grading
- 2) Introduction to Oceanography
- 3) Geological Oceanography
  - a. Structure of the earth, ocean floor
  - b. Plate tectonics
  - c. Sedimentation, stratigraphy
  - d. Ocean habitats, coastal depositional environments
- 4) Ocean Science Issue I – Louisiana Land Loss

### TEST 1

- 5) Chemical Oceanography
  - a. Physical properties of water
  - b. Salinity, temperature and density
  - c. Dissolved gases, pH, and Carbon cycle
  - d. Global water cycle
  - e. Nutrient cycles
  - f. Photosynthesis
- 6) Ocean Science Issue II – Gulf Hypoxia

### TEST 2

- 7) Physical Oceanography
  - a. Latitude and longitude
  - b. Coriolis pressure gradient
  - c. Global wind patterns
  - d. Surface ocean currents
  - e. Deep ocean circulation
  - f. Waves
  - g. Tides
  - h. Shoreline processes, Estuarine circulation
  - i. Ocean Observing Systems

- 8) Ocean Science Issue III – Deepwater Horizon Oil Spill

### TEST 3

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### ADA Syllabus Statement

If a student has a disability that qualifies under the Americans with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.

Address:

The University of Southern Mississippi  
Office for Disability Accommodations  
118 College Drive # 8586  
Hattiesburg, MS 39406-0001

Voice Telephone: 601.266.5024 or 228.214.3232 Fax: 601.266.6035

Individuals with hearing impairments can contact ODA using the *Mississippi Relay Service* at 1.800.582.2233 (TTY) or email ODA at [oda@usm.edu](mailto:oda@usm.edu).