Group Members:_____ Section: _____

10 Coastal Processes

The purpose of this lab is to familiarize you with coastal processes and the tools we use to study them.

Prior to lab time, familiarize yourself with the following terms: beach, berm, barrier island, estuary, longshore current, delta, headland, spit, tidal flat, submergent coastlines, emergent coastlines, wave-cut cliff, breakwater, sea wall, jettie and groin.

10.1 In-Lab

In Lab, we will explore together tools available on the internet for studying coastal zones.

10.2 Outside of lab

The following assignments should be handed in at the beginning of next week's lab. These utilize online photos and map.

- On the web site http://terraserver-usa.com/, locate the aerial photo from 11/27/1999 of the barrier island (Santa Rosa Island) at Pensacola Beach, FL. Print it out to turn it.
- Switch to Topo view of the same location. Use the panning tool to move west till Pensacola Naval Air Station is centered in the map. Print this out to turn in. What are two features identified that indicate that humans have altered the coastline?

- Look at the image at http://alt.ngs.noaa.gov/ivan/PHOTOS/26301194.jpg Locate the orange beach-ball water tower. This photo is one of many taken by NOAA from a low-altitude flight along the coast after hurricane Ivan. It is the same one shown in my essay, *Pensacola Beach Nourishment Project.* Locate the fishing pier in the photo and zoom in on it. What is its condition?

- Visit http://coastal.er.usgs.gov/hurricanes/ivan/photos/. Scroll down to the photo pairs from Pine Beach AL. What was the impact of Hurricane Ivan upon Pine Island? Explain how the feature probably formed.

- Visit http://www.mthurricane.com/Hurricane_Ivan.htm. Find the picture of the Corvette. Print it out to turn in.