

Ocean Literacy Survey

Please respond to all questions. You will not be penalized for incorrect answers.

Name:

Educational Demographics:

Year: a) Freshman b) Sophomore c) Junior d) Senior

College (in NCSU):

- | | | |
|----------------------|----------------------|---------------------|
| a) CHASS | b) Ag & Life | c) PAMS |
| d) Management | e) Education | f) Engineering |
| g) Natural Resources | h) Design | i) Undecided or FYC |
| j) Textiles | k) Lifelong Learning | l) Other |

What is the main reason you are taking this oceanography course?

- a) this particular course is required for my major
- b) this course fulfills general education requirement
- c) simple curiosity and/or personal interest
- d) other _____

Sources of Information:

Circle the two or three ways you have learned most about the ocean (before this class):

- a) formal education: a whole course in ocean science
- b) formal education: just touched on ocean science in other courses
- c) informal education: aquariums and museums
- d) informal education: a camp or the Ocean Science Bowl
- e) personal experience: actually going to the beach
- f) friends and family: in conversation
- g) media: TV, magazines, etc
- h) other: _____

If the media are an important source of information, please list a few examples below:

Circle the range of numbers that best represent the how many times each year you visit the beach or shore.

<1 1-3 4-10 10-20 20-50 >50

How many times each year do you visit an aquarium, zoo or museum where you might learn about the ocean?

<1 1-3 4-10 10-20 20-50 >50

Attitudes about the Ocean and Oceanography

Here are a number of statements that may or may not describe your beliefs about learning oceanography. You are asked to rate each statement by selecting a number between 1 and 5 where the numbers mean the following:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

Choose one of the above five choices that best expresses your feeling about the statement. If you don't understand a statement, leave it blank. If you have no strong opinion, choose 3.

- ___ My actions can have a significant effect on the health of oceans and coastal areas.
- ___ I have a personal responsibility to work for the health of the oceans and coastal areas.
- ___ I am familiar with the environmental issues facing the coastal areas in my home state
- ___ I have enough background knowledge to write a substantive letter to my congressional representative about an issue affecting the ocean.
- ___ The oceans and coastal regions overall are so vast and healthy that they can continue to absorb pollution and other kinds of man-made stresses for the foreseeable future.¹
- ___ Man-made stresses are endangering coastal regions and the ocean's ability to sustain itself and may well be leading to long-term damage and serious problems.¹
- ___ Knowledge in oceanography consists of many disconnected topics.²
- ___ I find that reading the text in detail is a good way for me to learn oceanography.²
- ___ I cannot learn oceanography if the teacher does not explain things well in class.²
- ___ I study oceanography to learn knowledge that will be useful in my life outside of school.²
- ___ Nearly everyone is capable of understanding oceanography if they work at it.²
- ___ To understand oceanography I discuss it with friends and other students.²
- ___ The subject of oceanography has little relation to what I experience in the real world.²
- ___ To understand oceanography, I sometimes think about my personal experiences and relate them to the topic being analyzed.²
- ___ When studying oceanography, I relate the important information to what I already know rather than just memorizing it the way it is presented.²

¹ AAAS Public Opinion Survey

² Colorado Learning Attitudes about Science Survey

Understanding the Ocean (multiple choice and short answer mixed together)

Size of the Ocean

- 1) How deep is the ocean, on average?
a) 100 yards b) 1 mile c) 500 meters d) 4000 meters
e) 20,000 leagues f) 6000 kilometers
- 2) What familiar size or distance is similar to the depth of the ocean?
- 3) The surface of a basket ball has bumps and grooves that at their deepest may be about 1 mm deep. If the ocean were 1 mm deep, how big would the earth be?

a) size of a baseball (73 mm diameter)
b) size of the basketball (243 mm diameter)
c) could just fit under the hoop (3 m high)
d) as big as the stadium (250 m across)
- 4) How much of the Earth is covered with ocean?
- 5) What fraction of the total water on earth is in the ocean?
- 6) When your toilet flushes, the water swirls around. Would it swirl in the opposite direction in Australia?
- 7) Why or why not?

Oceans and Life

- 8) Where is a greater diversity of living organisms found?
a) on land b) in the ocean c) both equally
- 9) What produces most of the earth's oxygen?
a) forests b) plants in the ocean c) both equally
- 10) What would the earth be like without an ocean?

Coastal Processes

11) What is the essential nature of barrier islands?

- a) stasis and stability b) motion and change

12) In general, what is the effect of human attempts to stabilize the shoreline?

- a) increased erosion b) decreased erosion c) no effect

Oceans and Humans

12) Describe a few ways scientists study the ocean.

13) What causes the **most** ocean pollution?

- a) oil spills at sea b) litter from beaches c) runoff from land

14) List 2-5 ways your actions affect the ocean.