

Underwater Technology Discussion

By Denise L. Bristol, Hillsborough Community College

You will be researching different aspects to underwater technology for this discussion. Please select a specific technology within your assigned category (see below).

Assigned categories are as follows, if your Last name starts with:

- **A-B:** Scuba diving technology including the Newt Suit, and different gas mixtures.
- **C-E:** Research Vessels
- **F-L:** HOV/subs- Research only not military
- **N-M:** ROV
- **O-P:** Platforms, Buoys (i.e. DART) or oceanographic satellites
- **S:** AUV or gliders
- **T-V:** Probes and sensors (datasondes, hydrolabs, also see ocean observatories, CTD units, etc...)
- **W-Z:** Wave, current and/or tidal energy

Please claim your underwater technology, by posting it to the discussion board, so that everyone does something different within your assigned group (for instance each HOV has a name, i.e. Alvin, Johnson Sea link, etc...). Please post name of equipment and type of equipment on this discussion post by _____. Once the specific technology has been claimed you must choose something different- no 2 people can do the same piece of equipment. So Read thru the list of replies before posting!

You must include in-depth details of

- Name of underwater technology and what it is
- Who owns it, how and where it is used,
- The depth range at which it can be used,
- The type of data it can collect
- Pro's and con's of using that specific equipment
- Other interesting facts about the equipment

Remember to cite your sources parenthetically (within the text) using CSE Name-year method and in a sources section (full citation).

Reply to at least 2 other students posts that were assigned a different category and add to their information (remember to cite your sources).

While there is no specific word count to this discussion, you are expected to thoroughly research and describe the technology or equipment. **DO NOT PLAGIARIZE** information! You should write the discussion in your own words.

Here are some resources to get you started:

- NOAA: <http://oceanexplorer.noaa.gov/technology/technology.html>
- Ocean Observatories - Rutgers University and University of Washington have local observatories
 - <http://oceanobservatories.org/instruments/>
 - <http://oceanobservatories.org/research-arrays/>
 - <http://www.interactiveoceans.washington.edu/>
- National Undersea Research Program - Aquarius underwater habitat: <http://oceanexplorer.noaa.gov/technology/diving/aquarius/aquarius.html>
- IODP: <https://www.iodp.org/>

Rubric for Underwater Technology Discussion:

Claimed U/W technology on Discussion Board	<table border="1"> <tr> <td>5.0 pts Claimed</td> <td>2.0 pts Claimed after someone else claimed it</td> <td>0.0 pts Did not claim</td> </tr> </table>					5.0 pts Claimed	2.0 pts Claimed after someone else claimed it	0.0 pts Did not claim	5.0 pts
5.0 pts Claimed	2.0 pts Claimed after someone else claimed it	0.0 pts Did not claim							
Learning Outcome: Spelling and grammar	10.0 pts 1 or less errors	8.0 pts 2-4 errors	6.0 pts 5 - 8 errors	3.0 pts 9 or more errors	0.0 pts Reads as a draft	10.0 pts			
Learning Outcome: Name of u/w technology and description	10.0 pts Includes name and detailed description of what the equipment is.	8.0 pts Includes name and a general description of equipment	6.0 pts name and definition only	3.0 pts name but no description	0.0 pts Not included	10.0 pts			
Learning Outcome: Who owns equipment, where and how it is used	10.0 pts Detailed description of who owns the equipment, how it is used and where it is used	8.0 pts Names who owns it with a general description of how and where equipment is used.	7.0 pts owner included with brief description of how and where equipment is used. More details are needed	5.0 pts missing 1 of the key components of owner, how or where equipment is used.	0.0 pts not included	10.0 pts			
Learning Outcome: Depth	5.0 pts Depth included with detailed constraints		3.0 pts depth included but no additional details.		0.0 pts Depth not icluded	5.0 pts			
Learning Outcome: Types of data	10.0 pts Detailed description of the types of data that can be collected with the equipment.	8.0 pts General description of types of data collected with equipment	6.0 pts Brief description of types of data that can be collected, but lacking details	3.0 pts only a single data type without detail	0.0 pts not included	10.0 pts			

Learning Outcome: Pro's and Con's	10.0 pts Includes detailed description of both the pro's and con's of using this u/w tech.	8.0 pts Includes a general description of both pro's and con's of using this u/w/ tech.	7.0 pts Includes a very brief description of both pro's and con's of using this u/w/ tech.	6.0 pts only includes detailed description of either a pro or con.	5.0 pts only includes a brief pro or con but not both, more details are required.	3.0 pts only a single pro and con without details.	0.0 pts Not included	10.0 pts			
Learning Outcome: Other interesting facts	<table border="1" style="width: 100%;"> <tr> <td data-bbox="485 431 852 521">5.0 pts Included with details</td> <td data-bbox="852 431 1283 521">3.0 pts included but lacking details</td> <td data-bbox="1283 431 1801 521">0.0 pts not included</td> </tr> </table>							5.0 pts Included with details	3.0 pts included but lacking details	0.0 pts not included	5.0 pts
5.0 pts Included with details	3.0 pts included but lacking details	0.0 pts not included									
Learning Outcome: Reply to 2 students	10.0 pts detailed response to 2 other students with added information	8.0 pts 2 replies with General information added - a bit more detailed needed	6.0 pts responded to 2 other students but lacked adding any additional information	4.0 pts single reply with some added information	2.0 pts single reply that was not detailed or did not add information	0.0 pts No replies	10.0 pts				
Learning Outcome: Parenthetical Citations	10.0 pts proper in-text citations, that correlate to sources section	8.0 pts proper in-text citations with only minor errors , that correlate to sources section	6.0 pts Proper in-text citation with only a few errors but do not correlate to sources section.	3.0 pts improper in-text citations using foot noted or web links	0.0 pts no in-text citations/ Plagiarism!		10.0 pts				
Learning Outcome: Sources Section/ Citations	10.0 pts Sources cited properly and correlate to parenthetical citations.	8.0 pts Sources cited properly with only a couple of minor errors and correlate to parenthetical citations.	7.0 pts Sources cited properly with minor errors but do not correlate to parenthetical citations.	5.0 pts incorrect citation method or multiple errors within citations	0.0 pts No sources cited/ plagiarism!		10.0 pts				
Learning Outcome: Discussion post completed on time	<table border="1" style="width: 100%;"> <tr> <td data-bbox="485 1390 1157 1479">5.0 pts Full Marks</td> <td data-bbox="1157 1390 1801 1479">0.0 pts No Marks</td> </tr> </table>						5.0 pts Full Marks	0.0 pts No Marks	5.0 pts		
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