

Atkins, P.J. (2014) Coastal geographies, *Geography Review* 27, 3, 9

Coasts are a popular core topic in 'A' Level geography, usually from a physical point of view, although of course there are economic uses of the seaside fringe and the notion of hazard and risk at the ocean margin is a cross-over topic of substance. Indeed the topic has such relevance and richness of detail that specialised degrees are available in it, for instance the BSc in Coastal Geography at Bangor.

<http://www.bangor.ac.uk/courses/undergrad/index.php.en?view=course&prospectustype=undergraduate&courseid=2&subjectarea=5>

There are a number of organizations that promote the integrated study of coasts and estuaries in the hope that resilience to coastal degradation can be increased and sustainability achieved. These include the Coastal and Estuarine Research Federation and the Coastal Society.

<http://www.erf.org/>

<http://www.thecoastalsociety.org/>

Coastal processes and landforms

A good starting point on the physical side is the chapter 'coastal processes and landforms' in Robert Gabler's *Physical Geography*, which is partially reproduced by Google Books – type the author's name into the dialogue box that appears when you visit the link below. Michael Pidwirny's online textbook also has useful material, and for an introduction with British examples, see the Joint Nature Conservation Committee's website.

<http://books.google.co.uk>

<http://www.physicalgeography.net/fundamentals/10ac.html>

<http://jncc.defra.gov.uk/page-3012>

If you are interested in advanced interpretations of coastal geomorphology, it is possible to find the powerpoints of lectures on university websites and Slideshare is another source of helpful material.

<http://www.colby.edu/geology/GE254/index.html>

<http://www.soest.hawaii.edu/coasts/lecture/gg420/resources.html>

<http://gis.ess.washington.edu/grg/courses/ess230/>

<http://classes.uleth.ca/200303/geog1000c/Lecture%2015.ppt>

<http://www.slideshare.net/angelaorr/geog-100lecture-17coastal-geomorphology>

The United States Geological Survey maintains many sites of relevance to coastal issues. British case studies are presented by the British Geological Society and some local authorities.

<http://marine.usgs.gov/>

<http://www.usgs.gov/science/science.php?term=221&type=feature>

<http://pubs.usgs.gov/circ/c1075/contents.html>

http://www.nwrc.usgs.gov/fringe/ff_index.html

http://www.educationscotland.gov.uk/resources/ng/e/ngresource_tcm4230130.asp?strReferringChannel=nationalqualifications&strReferringPageID=tcm:4-672951-64

<http://www.bgs.ac.uk/>

<http://www.coastalexplorer.eastriding.gov.uk/homepage.html>

Coastal management and sea-level rise

Rising sea levels are often quoted as a potential threat of climate change, for instance potentially affecting low-lying port cities such as London. The Thames Barrier was built in the 1980s to cope with tidal surges but the sea level is now thought to pose an additional threat.

<http://www.environment-agency.gov.uk/homeandleisure/floods/38353.aspx>

<http://www.independent.co.uk/environment/climate-change/floods-could-overwhelm-london-as-sea-levels-rise--unless-thames-barrier-is-upgraded-8616204.html>

http://cegis.usgs.gov/sea_level_rise.html

Sea levels are only one management issue at the coast. Others include coastal erosion, pollution, destruction of coastal ecosystems and a range of other human-environment interactions. In America the NOAA Coastal Services Centre shows sensitivity to social science coastal analyses and has a website dedicated to what it calls the 'social coast'. The closest equivalent in Britain is the Environment Agency.

<http://www.csc.noaa.gov/digitalcoast/socialcoast>

<http://www.environment-agency.gov.uk>

<http://www.ncl.ac.uk/tcmweb/tcm/czmlinks.htm>

If sea levels do rise in future there will be a number of small island states, particularly in the Pacific, that will be at risk. Some of these, supported by international organizations, have started planning their paths to adaptation. The Global Islands Network has a website with information on this and other coastal issues, as does SIDSnet (Small Island Developing States network). The United Nations Environment Programme also has resources on islands, and there are many other internet sources of comment on land-ocean interactions in the coastal zone.

<http://www.globalislands.net/>

<http://www.sidsnet.org/>

<http://islands.unep.ch/>

<http://www.loicz.org/>

And Finally

Visualising coastal processes is a good way of learning about them. NASA helps us with this through its Geomorphology from Space portal, which has remotely sensed images backed up by maps and text. NASA's Visible Earth programme is another source of astonishing satellite photographs of coasts.

http://disc.sci.gsfc.nasa.gov/geomorphology/GEO_6/index.shtml

<http://visibleearth.nasa.gov/view.php?id=69721>

Peter Atkins is Professor of Geography at the University of Durham