2020 WATER QUALITY INTERNET RESOURCES

PART 1-MARINE AND ESTUARY ECOLOGY

Marine Science – semester 1 –online textbook-2019

https://mrvanarsdale.com/marine-science/online-textbook/ Marine Science – semester 2 – videos of types of marine life -2019 https://mrvanarsdale.com/marine-science/semester-2/ http://web.gccaz.edu/~robru21251/BIO145StudyGuide.pdf http://www.jochemnet.de/fiu/OCB3043_LN.html http://drsticky.weebly.com/marine-biology-lecture-notes.html https://marine.rutgers.edu/dmcs/ms200/notes.html

Marine Bio – Practice Exam

http://mrvanarsdale.com/marine/marine-final-2019.htm

Marine Ecology

http://www.dse.ufpb.br/tarcisio/Artigos/Elements_of_Marine_Ecology_Tait_%281998%29_4ed.pdf http://www.climatehotmap.org/ http://www.iteachbio.com/Marine-Biology/marine.html https://marinebio.org/creatures/ http://msewell.weebly.com/uploads/7/0/4/5/70453749/6 - marine_fishes.pdf

Estuaries

<u>http://www.education.noaa.gov/Marine_Life/Life_In_An_Estuary.html</u> http://userpages.umbc.edu/~miller/geog318/estuarine_ecology_abridged.pdf http://www.csun.edu/~msteele/classes/marine_ecology/lectures/14_estuarine%20ecology.pdf https://oceanservice.noaa.gov/facts/estuary.html http://gis.ess.washington.edu/grg/courses/ess230/lectures/old_lectures/Estuaries-and-Deltas-lecture-2007.pdf

PART 2 – CORAL REEF ECOLOGY

Overview/General Sites on Coral Reefs http://coralreef.noaa.gov http://coris.noaa.gov/ http://serc.carleton.edu/eslabs/corals/5a.html http://coralreefs.wr.usgs.gov/ http://pubs.usgs.gov/fs/2009/3089/pdf/brewercoralfs3.pdf http://www.reefcheck.org/ http://datamanagement.reefcheck.org/Issues.asp https://www.epa.gov/cre https://www.epa.gov/nep http://ocean.si.edu/corals-and-coral-reefs **Coral Reefs - Threats (natural & anthropogenic):** http://pdf.wri.org/WRI12 PolypsInPeril poster side2 LR.pdf **Coral reefs & climate change:** https://coralreef.noaa.gov/ http://www.wri.org/publication/reefs-at-risk-revisited **Corals and Satellite Monitoring (real-time data)** http://coralreefwatch.noaa.gov/satellite/index.html **Coral Reef Restoration Programs-2019** https://www.coralrestoration.org/ https://mote.org/research/program/coral-reef-restoration

https://reefbuilders.com/2018/02/03/cozumel-coral-reef-restoration-program/ https://oceantoday.noaa.gov/restoringcoralreefs/ https://en.wikipedia.org/wiki/Coral_reef

PART 3 – WATER CHEMISTRY

Biological Oceanography and Marine Chemistry

http://ocean.stanford.edu/courses/bomc/lnotes.html https://www.coast.noaa.gov/estuaries/curriculum/chemistry-in-an-estuary.html https://ocw.mit.edu/courses/earth-atmospheric-and-planetary-sciences/12-742-marine-chemistry-fall-2006/lecture-notes/ http://ocean.stanford.edu/courses/bomc/cnotes.html https://nptel.ac.in/courses/IIT-MADRAS/Enivironmental_Chemistry_Analysis/Pdfs/1_2.pdf http://jrscience.wcp.muohio.edu/fieldcourses04/PapersMarineEcologyArticles/TheChemistryoftheOceansan.html

Water Quality: Marine, Coral Reef and Estuaries (Division B/C)- NOAA 2020

http://oceanservice.noaa.gov/education/tutorial_corals/welcome.html http://oceanservice.noaa.gov/education/kits/corals/supp_coral_roadmap.html http://oceanservice.noaa.gov/education/kits/estuaries/supp_estuaries_roadmap.html http://oceanservice.noaa.gov/education/kits/pollution/supp_pollution_roadmap.html

Water Cycle Collection (NOAA Education) link to

http://www.education.noaa.gov/Freshwater/Water_Cycle.html

This resource collection provides real-time and historic data sources that track and measure the water in different portions of the water cycle. Satellite images show water vapor in the atmosphere, and interactive maps can be searched to show precipitation, snow depths, river flows and evaporation rates. Included are also lessons, games, and hands on activities that model the complexity of the cycle. The Background resources allow students to investigate the water cycle holistically and in its individual parts.

Life in an Estuary Collection (NOAA Education) link to

http://www.education.noaa.gov/Marine_Life/Life_In_An_Estuary.html

This collection contains a broad range of resources about estuaries, including multimedia, lessons and activities, real-world data, and background information. Topics include estuary food webs, monitoring estuarine water quality, and the role of estuaries in the life cycles of aquatic species.