

SIO 87 – Spring 2022

First-year seminar in Oceans and Human Health (OHH)
2:00 – 3:00 PM Thu, Vaughn Hall 300
(1 Unit)

Instructor: Bradley Moore (bsmoore@ucsd.edu)

Here in San Diego we are intimately linked to the ocean for our food, recreation, jobs... and our health. This seminar course will focus on the ocean connection to our health, including harmful algal blooms, seafood-toxin illnesses, methyl mercury and persistent organic pollutants, aerosols, ocean pathogens, oceanic oil spills, marine plastic pollution, nutraceuticals, and medicine from the sea. Students will have the opportunity to review current literature and lead class discussions on a relevant topic of interest to them.

<u>Date</u>	<u>Topic</u>
March 31	Course overview and self introductions
April 7	Harmful algal blooms – toxic <i>Pseudo-nitzschia</i> diatoms in coastal CA
April 14	Mercury and human health
April 21	Green fluorescent protein and marine biotechnology
April 28	Marine plastic pollution and food web pathways
May 5	Aquaculture and food safety
May 12	Medicines from the sea – from a cone snail toxin to a pain medication
May 19	Oceanic oil spills – a look back at the Deepwater Horizon disaster
May 26	General class discussion on undergraduate research, fellowships, career options
June 2	No class

Course Objectives

1. To expose students to a broad variety of topics in oceans and human health (OHH)
2. To read, critically evaluate and discuss research manuscripts in OHH
3. To discuss research opportunities in OHH at UC San Diego and SIO

Text

None. Primary literature to be assigned in class

Grading

Literature Reflections* – 7 x 1 pt = 7 points total

Class participation – 9 x 1 pt = 9 points total

Pass = 12 points

*Each week, reading reflections will be due by midnight the day before class and will focus on the reading of an assigned paper and answers to three questions – What was the paper about? What did you find interesting or surprising? What did you find confusing?