DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCEWINTER INTERSESSION 2019EESC 1050SOCIETY AND THE OCEAN SYLLABUSJOHN BEATTY

SYLLABUS AND COURSE OUTLINE

SINCE THERE IS NO TEXT BOOK FOR THE CLASS, IT IS VERY IMPORTANT YOU COME TO ALL THE CLASS MEETINGS SINCE THE LECTURES SHOULD GIVE YOU THE BACKGROUND TO READ THE ARTICLES.

If you miss a class

(a) check the web site: You can go to: <u>http://johnbeatty.name</u>

Or more directly to

http://www.sci.brooklyn.cuny.edu/~jbeatty/coresea/2019 W/indexa.html

(b) Make a friend of someone in the class so you can get copies of their notes. If all else fails (including you) - come talk to me. My office hours are before and after the class for about an hour. If I am not in the classroom, I will likely be in 3131 Ingersoll Hall. If for some reason, you cannot come in earlier than the class or stay later, let me know (by e-mail or making an arrangement after or before the class) and we can make an appointment to meet some other time.

I do suggest if you feel you want to have a book, you can get a copy of How the Ocean Works (see below) either by buying it on line (Amazon, Abebooks, Alibris) or find a copy in the library (either at BC or through interlibrary loan or at Brooklyn Public Library, NY Public Library, Queens Public Library and so on).

RECOMMENDED TEXT BOOK

Denny, Mark; 2008; How the Ocean Works; Princeton University Press, NJ The text deals largely with oceanography. There will be materials placed on a web site regularly dealing with the societal aspects. You should check the site regularly. The URL is:

http://www.sci.brooklyn.cuny.edu/~jbeatty/coresea/2018fallmw/index.html

REQUIRED ARTICLES

(They are all on this web site unless noted differently) Many are pdfs so allow some time for them to load. Most are only a few pages and rather light. Some are heavier reading Although all the articles are linked on the web site, the actual URL is given after the article in case the link fails.

FOR TOPIC 1:

"The Challenger" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/challenger.pdf "Explorers on the Challenger" found at

http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Explorers.pdf

"Tides and Waves" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/tides_and_waves.pdf

"Waves and Tides" found at

http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/waves_and_tides.pdf

"Ocean Waves" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/WAVES.pdf

"Ocean Waves in Deep Water" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Deep_Water_Ocean_Waves.pdf

"Tsunami!" found at

http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Tidal_Wave.pdf

FOR TOPIC 2:

"Strange Relations" found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Binder1.pdf</u>

"Algal Blooms" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Algal_Blooms.pdf

"Reviving Dead Zones" found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Reviving_Dead_Zones.pdf</u>

"Scientists from the California Academy of Sciences Discover New Marine Species and Assess Coral Reefs in Easter Island (Rapa Nui)" found at "Scientists from the California Academy of Sciences Discover New Marine Species and Assess Coral Reefs in Easter Island (Rapa Nui)" found at

http://www.sci.brooklyn.cuny.edu/~jbeatty/coresea/SCIENTISTS_FROM_THE_CALIFORNIA_ACADEMY_OF_SCIENCES_DISCOVER_NEW_MARINE_SPECIES_AND_ASSESS_CORAL_REEFS_IN_EASTER_ISLAND.pdf

FOR TOPIC 3:

"The Diving Women of Korea and Japan" found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/AMA.pdf</u>

"Food from the Sea" found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Food_from_the_sea.pdf</u>

Japanese Pearl Culture-The Women Who Dive for Pearls" found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Japanese_Pearl_Divers.pdf</u>

"Greek Sponge Divers" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/sponge_divers.pdf

"Trade in the Ancient World" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/TRADE IN ANCIENT WORLD.pdf

FOR TOPIC 4:

"Counting the Last Fish" found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Last_fish.pdf</u>

"El Nino" found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/El_Nino.pdf</u>

"Status of Wave and Tidal Power Technologies for the United States" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/wave_and_tidal_power.pdf

"Impacts of the Fukusima nuclear accident of fishing and fishing grounds" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/Impacts_of_the_Fukushima_nucle.pdf

"Addressing Climate Change and Sea Level Rise in the Pacific Islands" found at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/addressing_climate_change.pdf

I may notify you of additional papers to read. There is a bibliography which can be found at <u>http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/BIBLIO.pdf</u>

in case the link isn't working. I do this (i.e. notify you) through the e-mail address you have on CUNY FIRST. Check and be sure that is the correct e-mail address for you. If not change it. There may be some discussion of mathematical equations and chemical equations, but you will not be expected to be able to do any of those on the exams.

There is also a short bibliography which might prove useful at http://userhome.brooklyn.cuny.edu/anthro/jbeatty/CORESEA/BIBLIO.pdf

VISIT TO THE AMERICAN MUSEUM OF NATURAL HISTORY

There is a "field trip" you should make to the American Museum of Natural History to visit a number of the halls there. These halls are (a) Biodiversity, (b) Ocean Life, (c) and several of the ethnographic halls.

These are detailed in the "guide" that will be on the website shortly.

Don't panic. The museum is a great place to go. It has a suggested donation, but they ask only for a contribution. You do not have to pay the "suggested" price. So since there is no text book for the course, you should be able to manage this. The museum is accessible from a number of subways. You will have a

small "guide" that I will give you that will tell you how to get there and what to look for. There will be questions on the final based on the museum trip.

GRADES

Grades are based on 2 out of 3 quizzes and a final

The quizzes will be given at the ends of Topics 1, 2 and 3 (see "Topics" above and also below). The final exam covers the entire terms work. Tests are short answer (multiple "guess") and are scored on scantron sheets so be sure to bring at least ONE (better more) #2 pencil(s) the days when the quizzes and exams are being given.

There are no make-up exams for the quizzes. If you come late, you will have missed the quiz and that is the one that will be dropped from the computation of the grade. If you miss more than one quiz then a "0" gets added in.

The final counts 40% of the grade. There are three quizzes and I drop the lowest of the three and the remaining two count 30% each

To be totally clear

2 highest quiz grades (30% each)	60%
Final	40%
TOTAL	.100%

If you arrive for a quiz or the final after anyone who has seen the exam has left the room for any reason, you will not be allowed to take the exam. This means basically, once the exam has started, you may not be able to take the exam so come on time No one arriving late to the quizzes or the final will be able to take the exam. LEARN TO BE ON TIME.

IMPORTANT!

Grades are based on a numerical average. They are not based on what you need, what you want, what you expect, family problems and so on. They are based purely on mathematical calculations from the scores on objectively scored exams. If you believe that I have entered a score incorrectly or that there is some clerical or mathematical error let me know AT ONCE. As soon as I have the grades for the term, they will be posted on the web site one or two days before I have to submit them to the registrar. The grades are posted to give everyone a chance to see if your grade seems correct. This means that if you notify me of a problem there is time to change it before the grades are actually scheduled. There is always a possibility that there is a problem and it is best to clarify it BEFORE the grades are sent to the registrar.

The Final Exam is WED , JAN 23. Do not plan any trips that will cause you to miss the final.

EXTRA CREDIT PROJECTS

You may do ONE AND ONLY ONE project from the list below. **This adds 5 points to your score on the final exam**, not to your final average for the course. Aside from the projects listed below there are no extra credit projects.

Extra credit projects must be handed in by JAN.21st. No late papers accepted. They are not to be emailed. Sorry, but I keep getting excuses that the paper must have gotten lost in cyberspace. They should be handed in no later than the start of class on JAN.21st.

There are several videos at the library which you can watch. Choose any one of them and write a short paper (1 to 2 pages) explaining the relevance of the video to the course:

- a. Jellyfish Invasion
- b. Deep Trouble (bonus material for Blue Planet)
- c. Kuruwitu: Between a Rock and A Hard Place
- d. Minamata

As far as I know these are not on you tube. Do not write to me and ask me to look at videos on you tube with the same name and tell you whether or not they are the same as the ones in the library.

ONCE AGAIN. The final grades will be posted on THIS CLASS' website the day after the final (maybe even the evening of the final. They will not be entered in the college until two days later

IF YOU HAVE ANY PROBLEMS OR QUESTIONS ABOUT YOUR TERM GRADE E -MAIL ME BEFORE then so that the problem can be resolved before the grades are officially entered. There will be no change of grades submitted after that.

The course is roughly organized around 4 sets of topics (1/ 4of the term for each). In each part the emphasis is on a different aspect of the topic - society and the sea, but it is the interactions of the different topics that will be the underlying theme

Topic 1: Early investigations into exploration of the oceans. How the ocean operates Principles behind the movements of the waters and lands in the oceans. Cook Darwin and the Challenger. Biases. Definitions, Impacts on societies. Geological changes and its impact. Appearance of land, impact of seismological activity; changes in ocean levels over time. Migrations into the New World, navigation, disasters, etc.)

Topic 2: Life in and on the ocean Different life forms in the oceans. Evolution and extinction. Kinds of life forms, classification systems. Trophic levels

Topic 3: People, society and culture and the way these interact with the ocean. Social structure (economics, politics etc.) Symbolics (religion and magic, art, folklore etc.)

Topic 4: People's impact on the ocean (over fishing, pollution, government regulations.) Development of "ocean sanctuaries".

These 4 topics are points of discussion and will not be kept separate in 4 sections, although each section will stress that topic.

Office Hours :

I am generally in the class room for about an hour before and a while after the class. If you need to meet with me (and you do if you are not doing well on the exams) and those times are not good for you, let me know and we can make an appointment for some other time. I am around a good deal, but you need to make sure I am not meeting with another student or doing other projects so you need to make an appointment – AND KEEP IT. You can e-mail me if necessary, at

profbeatty@gmail.com .

This is the best way to reach me. While I do not write with a quill, it may shock you to know that I do not have a cell phone and get e-mails ONLY on the computer. So leave enough time for me to find your e-mail during the day and read it. Do NOT text me since the only phone I have has a rotary dial and barely functions for speech.

Be sure to let me know who you are because from an e-mail that reads "sexy dancer @ brooklyn.cuny.edu" because, believe it or not, I will have no idea who you are.

Generally, I get back to everyone in a day or two. If you do not hear from me, the chances are your email has disappeared into cyberspace. In either case, send another e-mail or leave a note for me in my mailbox in the department of Earth and Environmental Sciences. If no one is in the office (3137 Ingersoll Hall) you can slip it through the door to the right of the office door but be sure to put my name on it so when it is found it will be put in my mailbox. You do not need to e-mail me to let me know you will not be in class. I will figure that out myself when you don't appear.

Cell Phones

If you feel compelled to have one, shut it off before you come to class. If it goes off during the class you will receive an "F" for the course. And if I can arrange it (and I probably can) something worse will happen as well!

SCHEDULE

Classes meet every MTWand TH from Jan 2 until Jan 23. The only exception is there are no classes on Jan 21 when the college is closed for Martin Luther King Day.

You can find the calendar at:

http://www.brooklyn.cuny.edu/web/about/administration/enrollment/registrar/bulletins/winter19/ calendar.php