GEO 508 Intensive Field Course (IFC): Introduction to NRT core concepts
Hatfield Marine Science Center, Newport Oregon
September 12-16, 2016

Learning outcomes

Student will:

1. Recognize the myriad of perceptions of the NRT core concepts, describe them, and relate them to groups of people and disciplines
2. Experience multi-disciplinary, inter-disciplinary and trans-disciplinary collaboration
3. Learn about and develop an Individual Development Plan
4. Develop an individual presentation about the evolution you've undergone over the week regarding your perception of the three NRT core concepts
5. Develop a team presentation about your NRT research
6. Set schedules and timeline for progressing on NRT Project Team activities

Throughout the schedule we refer to:
Individuals: each student
Faculty: each mentor
Team: students working on a similar project
Cluster: student + faculty working on the same project
Group: any non-defined ensemble of individuals who may have something in common, e.g., group of students not coinciding with a team, group of faculty, scientists, stakeholders, managers, tourists, indigenous people, etc.

Schedule

Day Time	Speaker(s)/Event	Where
Monday, Sept. 12th		
8:00 A.M. Head out to HMSC from Corvallis		HMSC
9:30 A.M.-10:15 A.M.	Students set up bunks, food put away.	HMSC
10:15 A.M.-1:00 P.M.	**1. Welcome, Introductions[1], Introduction to Core Concepts and Desired Outcome of the NRT Program.** *(Lorenzo Ciannelli)* **2. Primer on the Program's first Core Concept: Coupled Natural-Human (CNH) marine system.** *(Flaxen Conway, Ana Spalding, Lorenzo Ciannelli)* **3. Introduction to multi-, inter-, and trans-disciplinary collaborative work** (*Ciannelli and Conway)*	Library Seminar room
1:00 P.M.-2:00 P.M.	**Catered Lunch**	Cafeteria
2:00 P.M.-4:00 P.M.	**Individual Development Plans (IDP)** 1. What they are and why they are important and helpful. *(Dorthe Wildenschild,* Graduate School). 2. Individual students and their faculty mentor work on the student's IDP together; begin to share this with others on their NRT Project Team.	Library Seminar room

[1] This is the opportunity for each person (students, faculty, staff) to share in 1 minute three things: 1. name and discipline; 2. connection to the marine place (work, fun, spirit, etc.); and 3. experience working in other disciplines on a team.

4:00-5:30 P.M	**Students take a *trip alone*** to *explore the marine place* -- take photos, journal, talk with people, etc. -- to begin to describe and understand the CNH (**coupled natural-human marine system**) in Newport.	Newport
6:00 P.M.	***NRT Program group dinner**	Rogue Brewery
7:00-9:00 P.M.	**Reflection & Sharing Time:** 1. Individually reflect on "***how does your discipline inform, and is informed by, the study of CNH system?***" *Write this in your IFC journal.* 2. Share your perceptions from your "solo trip" with at least one other student.	Library Seminar room
Tuesday, Sept 13th		
9:00 A.M.-10:30 A.M.	**Morning Check In:** 1. Individual students share **with the larger group (2-3 mins each)** their personal and disciplinary perspectives on the CNH (**coupled natural-human) marine system** (sharing reflections from their solo trip, their individual disciplinary reflection, their evening sharing with another). 2. Build a Concept Map on the second NRT core concept: Risk and Uncertainty Analyses and Communication (*facilitated by Cynthia Char*)	Library Seminar room

10:30 A.M.-12:00 P.M.	**Primer on the Program's second Core Concept: Risk and Uncertainty Analyses and Communication** (R&U) *(Ed Waymire, Nathan Gibson, Alix Gitelman)*	Library Seminar room
12:00 P.M.-1:00 P.M.	**Catered lunch**	Cafeteria etc.
1:30 P.M.-3:00 P.M.	**Core Concept in Practice:** Visit **Jeff Feldner's** fishing vessel and learn about the concept of CNH in action as it relates to Project CROOS *(Jeff Feldner [fisherman], Gil Sylvia [marine economist], Pete Lawson [NOAA scientist])*	Newport docks
3:30 P.M.-4:00 P.M.	Break	HMSC
4:00 P.M.-5:30 P.M.	Students **take a *trip in*** *pairs* (open choice) to explore the marine place -- take photos, journal, talk with people, etc. again – but this time look for and consider the concept of **R&U** in the CNH marine system in Newport.	Newport
6:00 P.M.	**Uncatered Dinner:** Cook, share, relax	Cafeteria etc.
7:00-9:00 P.M.	**Reflection & Sharing Time:** 1. Individually reflect on ***"How might your discipline perceive, analyze and communicate about R&U in the CNH marine system?"*** 2. "Pair-Share": Pairs share their reflections on the linkages between R&U and CNH with one other pair.	Library Seminar room
Wed., Sept. 14th		
9:00 A.M.-10:30 A.M.	**Morning Check In:** Pairs share **with the larger group** their personal and	Library Seminar room

	disciplinary perspectives on **R&U** in the CNH marine system (sharing reflections from their trip in pairs, their individual disciplinary reflection, and their evening "Pair-Share")	
10:30 A.M.-12:00 P.M.	**Primer on the Program's third Core Concept: Big Data** *(Alix Gitelman, Sinisa Todorovic, Lorenzo Ciannelli)*	Library Seminar room
12:00 P.M.-1:00 P.M.	**Uncatered Lunch**	Cafeteria
1:00 P.M.-3:00 P.M.	**Core Concept in Practice:** Visit HMSC / Visitor Center and learn about **R&U** as it relates to Marine Renewable Energy in Oregon *(Sarah Henkel, Kaety Jacobson, Joe Haxel)*	HMSC Visitor's Center
3:00 P.M.-4:00 P.M.	Break	
4:00 P.M.-5:30 P.M.	Students **take a *trip in a different "pair"*** (MUST choose someone OUTSIDE of your discipline) to explore the marine place -- take photos, journal, talk with people, etc. again – but this time look for and consider the concept of **Big Data** in the CNH marine system in Newport.	?
6:00 P.M.	**Uncatered Dinner:** Cook, share, relax	Cafeteria etc.
7:00-9:00 P.M.	**Reflection & Sharing Time:** 1. Individually reflect on **"*How might your discipline perceive, analyze and communicate about Big Data in the CNH marine system?*** 2. Pairs share their	Library Seminar room

	reflections on the linkages between Big Data and CNH with one other pair.	
Thurs., Sept. 15th		
9:00 A.M.-10:30 A.M.	**Morning Check In:** Pairs share with the larger group their personal and disciplinary perspectives on **Big Data** in the CNH marine system (sharing reflections from their trip, their individual disciplinary reflection, and their evening "Pair-Share").	Library Seminar room
10:30 A.M.-12:00 P.M	**Bringing the Core Concepts Together:** Changing ocean conditions are an excellent example of an issue to consider from a Big Data + R&U + CNH perspective *(Mary Hunsicker, Bill Peterson)*	Library Seminar room
12:00 P.M.-1:00 P.M.	**Uncatered Lunch**	Cafeteria
1:00-4:00P.M.	**Bringing the Core Concepts Together in Practice:** 1. Visit USGC / Lighthouse to observe and consider the marine place and changing ocean conditions in Oregon 2. Panel: Topic = **Alternative future scenarios for the marine place experiencing changing ocean conditions.** Panelist: Lorenzo Ciannelli, Ana Spalding , Belinda Batten Tuba Ozkan-Haller, and Patrick Corcoran *(Flaxen Conway* moderates)	Yaquina Head State Park Lighthouse and Board Room
4:30 – 6:00 P.M.	Students gather in their NRT Project Team to begin to	HMSC

	discuss *the Core Concepts and how they link to their team project*[2]	
6:00 P.M.	**Uncatered Dinner:** Cook, share, relax	Cafeteria etc.
7:00-7:30 P.M. 7:45-9:00 P.M.	**Individual synthesis:** 1. Working with Cynthia Char again, create a second concept map for R&U analyses and communication, and have opportunity to reflect on any differences from your first map. 2. Considering this and the evolution you've undergone over the week regarding your perception of the three NRT core concepts, prepare a 3-minute presentation that captures your evolved perception.[3]	Library Seminar room
Fri., Sept. 16th		
9:00 A.M.-12 P.M.	**Morning Check In:** 1. Individuals share their 3-minute presentation (these will be video recorded). 2. Ciannelli revisits the inter-disciplinary chapter and the trans-disciplinary team report. 3. Each NRT Project Team will then work together to craft and present (15minute) an initial description of the goals	Library Seminar room

[2] One way to present and discuss your team's NRT research and linkages with NRT core concepts is to follow the four steps outlined in the document 'Project.docx'.

[3] One way to approach this presentation is to discuss the first and last rendition of the R&U concept map that you have created during the IFC

	of their team's NRT **research**. This will also be video-recorded[4]	
12:00 P.M.-1:00 P.M.	**Uncatered Lunch**	Cafeteria
1:00 P.M.-4:00 P.M.	**Wrap Up** 1. Revisit the IDPs, and other program requirements. 2. Set plans for the academic year: each NRT Project Team begins to craft a schedule and set of objectives for developing/moving their projects forward	Library Seminar room
4:00 P.M.	Head back to Corvallis	Newport to Corvallis

PLEASE NOTE:

*HWY 20 will be closed from 7:30 P.M.-5:30 A.M. during this week.

** Directions to HMSC and a campus map will be forthcoming.

[4] One way to present and discuss your team's NRT research and linkages with NRT core concepts is to follow the four steps outlined in the document 'Project.docx'.