

PLAN 754: Natural Hazards Resilience Speaker Series Seminar Spring 2020

Instructor: Shaleen Miller
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Director Natural Hazard Resilience Certificate

Office: Alumni 413C

Office Hours: Thur 2-3pm or by appt

Class Location: Hanes Art Center 218

Class Time: Thursday 5:00-6:30

Seminar Overview:

Invited practitioners and scholars will discuss a range of pertinent topics, including research findings, experience in practice, and the translation of knowledge to action. Speakers are drawn from federal, state, and local jurisdictions; scholars from pertinent fields of study, including physical and social scientists; private sector representatives, including corporations, insurance officials, developers, and consultants; members of the media; politicians; environmental and social justice advocates; community leaders; members of various professional associations; and others as identified.

Course Objectives:

- 1) Gain insights from natural hazards and disaster scholars and practitioners that may not be obtained in other Graduate Certificate Program coursework and research, including applied practice-based knowledge, awareness of job opportunities, and the most pressing needs in the field.
- 2) Develop an “esprit de corps” among students through an exposure to leaders in the field.
- 3) Gain a greater understanding of the link between the state of our natural environment and the effects of natural hazards and disasters on human settlements.
- 4) Gain a greater understanding of the management of natural hazards and disasters, including how nations, cities, communities, and organizations prepare for, respond to, mitigate against, and recover from extreme events.
- 5) Understand the translation of knowledge generation to practice through applied research and experiential educational opportunities for students participating in the certificate program.

Course Format:

This course is intended to expose students to a range of scholars, practitioners, and translational experts in the field and help foster an esprit de corps among those pursuing the Graduate Certificate in Natural Hazards Resilience. It is also intended to introduce prospective students and interested faculty to a range of topical issues spanning natural hazards, disasters, and climate change adaptation. Students are required to attend each lecture and participate in group discussions with invited guests and the instructor, to include assigned readings. Two writing exercises are assigned

Student Evaluation:

Each requirement listed below is worth 50% of grade

1. Class participation (general class discussion/interaction with invited guests)
 - a. Each class counts equally towards the grade, for discussion participation and pre-submitted questions
 - b. Students are expected to research and submit 3 thoughtful questions for each speaker
 - c. Students are expected to participate in the class discussion with the speaker
2. Class writing exercise (2x)
 - a. Students will write blog posts of 600-800 words each about two of the speakers. These will be in pass/no pass grading. A no-pass may be edited and turned back in within 1 week for regrading. Posts with high pass will be posted on the CRC website.

Course Grades will be assigned as follows:

High pass: Misses no more than 1 class. Both writing assignments receive a pass, 1 of which receives a high pass.

Pass: Misses no more than 2 classes. Both writing assignments receive a pass.

Low Pass: Misses no more than 3 classes. Only one writing assignment passed.

Anything below the requirements listed above will receive a FAIL.

Reading List:

Required reading materials will be available in digital format in the course folder. Additional readings may be assigned by guest speakers in advance of their lecture.

Course Outline

In addition to discussing a specific topical area as identified in the syllabus, each speaker has been asked to discuss their own career trajectory, their area of specialization, and insights tied to issues such as the translation of research to practice, the use of research and data in policymaking, and issues/challenges/opportunities facing future graduates. This informal discussion will be held during our regularly scheduled class.

Speakers and Topical Areas

Session 1 (January 9): Course Introduction. The first class will involve a review of the course. Students will introduce themselves, including their major, academic interests, future aspirations, and why they chose to enroll in the course. This will help me and the speakers tailor their remarks to student's interests, when possible.

Speaker: none

Session 2 (January 16): Sustainability and Resilience on Campus, Adam Long, Greenhouse Gas Specialist, UNC Chapel Hill & **Amy Armbruster**, Research and outreach manager for Three Zeros Environmental Initiative

This class will run long because it includes a tour of campus facilities. Please plan for **extra hour**.

Meet on the 4th floor of the FedEx building.

Session 3 (January 23): TBD (Tentative: Speaker from Resilience Office of North Carolina)

Session 4 (January 30): The Resilience Initiative for Coastal Education (RICE): A Discussion of Heritage in Harm's Way and Gullah Geechee Communities that will be impacted by Climate Change and Sea Level Rise, Arnold George

Albert George has the honor of serving as the first Director of Conservation for the South Carolina Aquarium and is also the Co-Founder of the Amazon Reforestation Project. Prior to the Amazon Reforestation Project, he worked as the Director of Education for the Georgia Aquarium Inc. He has also held appointments as a Management Consultant for Booz Allen Hamilton and as a Research Associate for the Center for Marine Environmental Science and Biotechnology. Mr. George completed his B.S. in Marine Biology and Chemistry from Savannah State University and the P.R.E.P. program at Yale University concentrating in physiology cellular molecular genetics, and then completed a program of study from the Harvard University John F. Kennedy School of Government/MIT in addition to completing a Master's of Science from the Georgia Institute of Technology. He is also the founder of the Georgia Green Economy Summit and the Resilience Initiative for Coastal Education (RICE) which has worked to promote green economy growth and resilience strategic planning in the state of Georgia and the Lowcountry of South Carolina.

Session 5 (February 6): Corps R&D for understanding coastal hazards, Juli Rosati.

Dr. Julie Rosati is the Technical Director, Flood and Coastal in the Coastal and Hydraulics Laboratory. She earned a doctorate in coastal engineering from Louisiana State University and brings more than 30 years of coastal research and development experience to the position. She recently supported the North Atlantic Coast Comprehensive Study, and has been a leader in the Regional Sediment Management and Coastal Inlets programs. Rosati is a Professional Engineer licensed in Mississippi. She is also an active member and technical leader in the American Shore and Beach Preservation Association.

Session 6 (February 13): TBD

Session 7 (February 20): Virtual Class- Log in will be provided via Zoom (Tentative: Hurricane Michael Resilience- Shaleen Miller & Dennis Smith)

Session 8 (February 27): A Tale of Two Cities: A Critical Analysis of the Risk Perceptions and Place Attachments of Coastal Resident's at Risk for Sea Level Rise in North Carolina, Michelle Dovil

Dr. Michelle Dovil was born and raised in Miami, FL, she has always had an interest in both the social and natural sciences. She teaches courses in both Sociology and Criminal Justice at FAMU. She received her baccalaureate degree in sociology, with a minor in women studies from the University of Florida. Go Gators! Michelle later moved to Washington, DC, where she received her master's and doctorate degree in sociology from Howard University. She has worked on several research projects both domestically and internationally in places that include Washington, DC; New Orleans, LA; Norman, Oklahoma; Wilmington, North Carolina; Sendai, Japan, etc. She recently was awarded \$24,000 from the Department of Homeland Security to conduct research on the impacts of climate change on coastal communities.

Session 9 (March 5): Coastal Modeling, Brian Blanton

Dr. Blanton is a coastal physical oceanographer with extensive experience in numerical models and high-performance computation. Strengths include storm surge and tide dynamics, forecasting of coastal water levels and waves, data analysis and scientific programming. Specific research and applications areas include the impacts of sea level rise on modification of the coastal floodplain; application of the storm surge model ADCIRC/SWAN and the development of computational model

systems for coastal inundation modeling and flood insurance studies; storm surge and wave model validation.

SPRING BREAK – March 9th-13th

Session 10 (March 19): Insurance, Risk, and Flooding, Miyuki Hino & Distributed energy resources – opportunities to build resilience in the face of natural hazards, Noah Kittner

Session 11 (March 26) Planning for Resilience: Roles for Planning and Planners, Paula Shea

Paula is the Chief Planner for the City of Norfolk, Virginia. She has a bachelor's degree from the College of William and Mary and a Master's of Planning from the University of North Carolina-Chapel Hill. Paula currently oversees zoning, floodplain management, historic preservation, data analysis and long range planning for the City. Her mission as Chief Planner is to break down silos and ensure that all "planners plan" or think comprehensively.

Session 12. (April 2): Jaimie H. Masterson

Jaimie Hicks Masterson is program coordinator Texas Target Communities (TTC) at Texas A&M University. TTC collaboratively works with communities to mitigate threats to the economy, environment, and culture. With TTC, Masterson develops community training curriculum on community resilience, vulnerability and asset mapping, city planning, and hazard reduction and mitigation. Masterson also helps communities access the tools necessary to make the most of local time, talent, and treasure, as well as, connects faculty and student expertise to community needs in order to provide high-impact service learning while supplementing gaps in low community capacity.

Session 13 (April 9): Communication & Hazards, Keith Acree Public Information Officer at North Carolina Emergency Management

Session 14 (April 16): Coastal Hazards & Resilience: Corps of Engineers Planning Perspective, JB Smith

J. Bailey Smith is a Coastal Technical Planning Expert with the U.S. Army Corps of Engineers (USACE) Philadelphia District. Mr. Smith is the project manager for the post-Sandy New Jersey Back Bays Focus Area Study of the North Atlantic Coast Comprehensive Study (NACCS), and has contributed to the NACCS and the post-Katrina coastal risk management and restoration studies in Louisiana and Mississippi. Mr. Smith oversaw the Delaware Estuary Regional Sediment Management Plan and previously worked at the USACE Engineer Research and Development Center in Mississippi.

Session 15 (April 23): No class for APA conference