

**Chen, JCSU**  
**DHS Coastal Resilience Center**  
**Education Project Work Plan**

1/1/2016 – 6/30/2020

1. **Project Title:** Preparing Tomorrow's Minority Task Force in Coastal Resilience through Interdisciplinary Education, Research, and Curriculum Development

2. **Principal Investigators.**

- PI, Dr. Hang Chen, Chair and Associate Professor of the Department of Computer Science and Engineering Johnson C. Smith University

3. **Other Education Participants/Partners**

UNC-Chapel Hill, UNC-Charlotte, and Jackson State University (major partners)

4. **Short Project Description.**

We focus on the integrative, interdisciplinary nature of real-world problems and strive to bridge traditional academic programs to develop solutions to coastal resilience and its related problems facing our nation. The proposed program will build an undergraduate education framework to prepare tomorrow's minority task force in coastal resilience (approximately 80% of students are minorities), which presents tailored courses in coastal resilience, applied research experience, knowledge transfer activities, scientific seminars, and summer camps.

5. **Abstract.**

Given the national need to prepare future coastal resilience professionals with educational and research experience, this proposed program supports a critical mission. Most existing coastal resilience related curriculum currently either target graduate programs or vocational education. We will develop an undergraduate education framework that meets the needs and standards for excellence in undergraduate education.

The project is designed around the following aims:

- 1) **Aim 1:** Develop a curriculum to prepare undergraduate students for careers in coastal resilience;
- 2) **Aim 2:** Create partnerships to conduct applied research in the area of coastal resilience;
- 3) **Aim 3:** Create ongoing opportunities for the transfer of skills, knowledge, people and ideas between JCSU and the community at large.

To help reach these goals, we define the following objectives:

- 1) **Objective 1:** Develop four new courses to educate students with demonstrated interests and aptitudes in the area of coastal resilience study;
- 2) **Objective 2:** Design and deploy interdisciplinary coastal resilience seminar series;
- 3) **Objective 3:** Establish and develop Faculty/Student research collaborations in coastal resilience;
- 4) **Objective 4:** Design and offer a summer camp to expose and increase the awareness of undergraduate students in coastal resilience study.