

Expanding and Strengthening the Institutionalized Multidisciplinary Certificate

Disaster and Coastal Studies (DCS)

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Other Participants/Partners: Internal collaboration with Psychology, Sociology, Physics, Economics and Education Departments and External Collaboration with local Emergency Management Agencies

SHORT DESCRIPTION

To enable Homeland Security related career and higher education pathways, the project will focus on enhancing students' skills and knowledge in conducting research, sponsoring interactive forums in high-risk communities in collaboration with the local Emergency Management Agency, and working with other Tougaloo College departments to include more elective courses in the certificate program.

ABSTRACT

The Interdisciplinary Minor: Disaster and Coastal Studies (2008-2015) implementation was an effort to address the Department of Homeland Security's Post-Katrina Emergency Reform Act of 2006. The Minor has subsequently been modified into a Multidisciplinary Certificate. Disaster Coastal Studies (DCS) Certificate is Tougaloo College's first Certificate program and became institutionalized as a part of its curriculum from Fall 2018. The 12 credit hour DCS certification includes modified core courses and elective courses from Psychology, Sociology, Mass-Communication, Political Science, and the Natural Sciences.

The DCS certificate provides a comprehensive curriculum, which incorporates a multidisciplinary perspective in understanding the nature of disasters and the organizational issues inherent in the planning, preparedness, management, and mitigation of disaster events. The program also provides training in essential interdisciplinary technical skills such as Geographical Information Systems (GIS) and provides field experiences for students through internships with end-users. The DCS certificate addresses the demand of the United States Department of Homeland Security (DHS) along with the local and state

government needs for trained professionals in the area of disaster management. The DCS certificate program is designed to be inclusive of all disaster-related stakeholders. In particular, the DCS program addresses an important threat to vulnerable populations and provides a qualified training and career pathway to the demography of students more representative of such susceptible populations, (who are underrepresented in disaster management fields).

In year six, four activities were planned with the year 6 carryover money with the goal of strengthening and expanding the institutionalized DCS certificate program. Two reasons the proposed goal was not met completely are:

- Due to COVID 19, the College opted to continue the 2020 -2021 academic year remotely. This affected the progress of the certificate program such as recruitment, hands-on skills development for the students, etc.
- Due to receiving the award in January, a majority of the activities had to start around February.

To overcome these setbacks and achieve the certificate program's objectives in year seven, the project will launch three student-centered activities and move into the second phase of the community outreach initiatives. The proposed year seven activities are:

- Undergraduate student training for visualization and analysis of large-scale time series disaster/hazard datasets and case studies.
- Psychological Effect of COVID-19 among survivors of natural disaster.
- Emergency Management Agencies' personnel experience of natural disaster preparedness during COVID-19 Pandemic in Mississippi.
- Continue and shift into in-person interactive disaster preparedness forum in high-risk communities—collaborating with local emergency management personnel, which will help in disaster preparedness and create more resilient communities.
- Project PI will also work with the Tougaloo College Division of Education and Economics Department to develop/modify graduate and undergraduate courses so that students have more elective course options within the DCS Certificate. PI will work on another new initiative to develop a degree program in Environmental Justice. The DCS courses will be included in the Environmental Justice program. This new program will be developed in collaboration with J5 GBL company and the Natural Science Division of Tougaloo College.

During the seventh year, student-centered activities, community engagements, and collaboration with other disciplines will definitely enhance the Multidisciplinary Certificate: Disaster Coastal Studies (DCS) and is expected to strengthen the already institutionalized program. The success of the DCS certificate program has the potential to be used as a model to emulate disaster management programs at other organizations and help to diver-

sify Homeland Security's workforce with skilled personnel.