

PURDUE HOMELAND SECURITY INSTITUTE

Homeland Security Graduate Area of Specialization

Pam Aaltonen PhD, School of Nursing
Marti Burns, PHSI
Tim Collins, MBA, PURVAC
William Field, EdD, Agricultural and Biological Engineering
William Foley, PhD, Public and Environmental Affairs, IUPUI
Fariborz Farahmand, PhD, CERIAS

Judson Jeffries, PhD, African American and African Studies, Ohio State
Dean Larson, PhD, Organizational Leadership and Supervision, Purdue Calumet
Clifford Racz, MS, Agricultural and Biological Engineering
Jackie Rees, PhD, Krannert School of Management
David Tate, MS, School of Health Sciences
Rodney Vandever, PhD, Organizational Leadership and Supervision

Introduction

In 2006, an interdisciplinary team of faculty at Purdue University partnered with the Purdue Homeland Security Institute (PHSI) to develop a set of graduate level courses that would serve as the basis for a graduate-level Area of Specialization (AOS). Students who complete the requirements of the AOS will earn degrees in their respective fields with the Homeland Security AOS noted on their transcript. The opportunity to obtain an AOS in Homeland Security is one of the first of its kind.

Plan of Study

- The Area of Specialization must be approved by the school or department as an option for Masters students.
- The student's plan of study will then be approved by the graduate committee and department or school similar to other plans of study.
- The two core Homeland Security courses (3 credits each) are required.
- Depending on requirements from the student's department or school, several courses related to Homeland Security are also required to complete the AOS.

Core Homeland Security Courses

Foundations in Homeland Security Studies

This course uses an interdisciplinary approach to address the fundamental issues related to preparing for, responding to, and recovering from major catastrophic events, both intentional and unintentional, that threaten the security and well-being of private and public sector resources and infrastructures. Presentations by experts in the field of Homeland Security discuss topics including:

- Real world case studies such as the Sept. 11th attacks and Hurricane Katrina
- Crisis decision making and emergency management resources/infrastructure
- Conducting risk assessment and risk management
- Psychology of terrorism
- Collaborative response and team-building skills

Managing Resources and Applications for Homeland Security

This course builds upon Foundations in Homeland Security Studies, providing examples and practice in applying and managing the resources, including technologies, used in the private and public sectors for Homeland Security programs. The interdisciplinary approach used in the Foundations course continues to address issues including:

- Local, State, and Federal preparedness programs
- Healthcare Preparedness
- Corporate Security
- Information security and privacy

Additional Requirements

Team Building Project

One goal of the courses is to demonstrate the importance of team building skills and effective communication during a crisis. A lesson learned from recent disasters is that all levels of emergency response – local, state, and federal – need to be able to work together and communicate effectively. In order to accomplish this goal, each member of the class is assigned a team that will address a real world problem. The teams describe their solutions in a final presentation and report at the end of the semester. The solutions are judged by a panel consisting of course faculty and professionals who work in Homeland Security-related fields. These solutions are then given to the organizations that the students were working with.



Picture of students participating in the Indiana District 4 full-scale exercise

Exercise/Field Experience

Students can participate in either a pre-scheduled disaster team exercise or an on-site field experience.

Team Exercise: Participate in the planning, deployment, and evaluation of a training exercise.

Field Experience: Participate in an out-of-state trip that usually occurs during Spring Break. Previous field experiences took students to New Orleans and Alabama to help in the ongoing recovery process from Hurricane Katrina.



Homeland Security students tour an emergency operations center.

Results

- Over 80 students have taken at least one of the Homeland Security courses.
- Students have participated in several projects and activities, including:
 - Authoring of mutual aid agreements
 - Elementary school disaster planning
 - Aid in planning and executing large full-scale Homeland Security exercises
 - Hurricane Katrina disaster aid and cleanup
 - Analysis of bridge targets over the Mississippi river
 - Improved emergency management at the university, long term care facilities, and emergency shelters
 - Development of recommendations for accommodating the Pets Evacuation and Transportation Standards Act of 2006
 - Mass fatality management
- Several students have changed to a Homeland Security-related field as a result of taking the courses.
- Two students received DHS HS-STEM Fellowships.
- Graduates work in food security, international pandemic planning, U.S. government agencies and contractors, and further graduate study.
- Curriculum has been made available through the Indiana Department of Homeland Security for use by other colleges and universities.

Conclusions

The development of a series of courses for Homeland Security studies has been beneficial for promoting Homeland Security within existing fields at Purdue University. Additionally, the promotion of an Area of Specialization has been a useful tool in recognizing motivated students and allowing greater employment opportunities with corporations and governmental entities looking for leaders in Homeland Security.

Acknowledgements

We wish to thank the Indiana Department of Homeland Security for their financial support in developing the Homeland Security curricula.