Developing and Enhancing Emergency Management Programs at the Undergraduate Level

Daniel J. Klenow, PhD, and George A. Youngs, PhD

At North Dakota State University (NDSU), the emergency management undergraduate and graduate degree programs are currently offered in a multidisciplinary department. The initial curricular offering was an emergency management minor, which was started in 2001 through what was then called the Department of Sociology/Anthropology. In 2002 the North Dakota State Board of Higher Education (SBHE) approved the university’s request to offer degrees at the bachelor’s, master’s, and doctoral levels. In 2007 the departmental name was changed to the Department of Sociology, Anthropology, and Emergency Management to communicate the full range of its course offerings. This paper focuses on the development of NDSU’s undergraduate program—specifically, its curriculum development, student recruitment, and overall management.

Curriculum Development

Successful curriculum development involves a synergistic interplay of faculty size, assets, attitude, and core curriculum needs. A prerequisite for effective curriculum development is a critical mass of faculty inside the department with expertise in emergency management along with faculty outside the department teaching supportive courses. Faculty recruitment is a challenging aspect for emergency management programs, and we have had more than one failed search. Nevertheless, our overall experience has been positive, and we have secured tenure-track faculty members for four
positions, with another one in process. These personnel have the depth of knowledge and diversity of backgrounds necessary to provide a solid curriculum for our major.

The aforementioned duality—the need for strong faculty both inside and outside the department—reflects our two-cluster approach to curriculum development. The first cluster focuses specifically on emergency management courses. As discussed below, we have made our introductory course a gateway course both for emergency management majors and for nonmajors who, perhaps because of disaster coverage in the mass media, are attracted to the human phenomenon of disaster. We have also modified our approach to disaster phase courses; added courses that address key issues in emergency management; and added a summer visiting professor program that further increases the diversity of our curriculum and gives students expanded exposure to emergency management issues.

The second cluster focuses on the incorporation of courses outside the emergency management program. As noted below, this includes reliance on coursework in two of the disciplines that have contributed to the body of knowledge in disaster studies—sociology and anthropology—and in the specification of suggested minors in a diverse array of fields directly related to emergency management.

This two-cluster approach is critical to the development of a holistic and integrated emergency management curriculum as it reflects the many streams of intellectual work that are foundational to this developing field.

**Cluster One: Emergency Management Curriculum Development**

Several changes were initiated to enhance the basic emergency management curriculum and allow for other benefits, such as increased student recruitment. The first of these changes was the modification of our sophomore introductory course, which was initially titled Introduction to Emergency Management. Since most students do not know what emergency management is, we decided to provide a more topical title and to drop the course to the freshman level. The new course is titled Emergencies, Disasters, and Catastrophes, which more directly reflects topics that the average person, with little or no knowledge of emergency management, will understand and thus should attract more students. In fact, the enrollment has increased from 10–15 students to 35–45 students per section, and the course is now being offered every semester instead of annually. These changes in title, course number, and the frequency of offerings are correlated with an increase in course enrollment and a steady increase in the number of declared emergency management majors.

The introductory course is a critical part of our curriculum as it serves as one of the focal points for the recruitment of majors and minors. Currently, we are submitting
documentation to have the Emergencies, Disasters, and Catastrophes course approved as a general education course in the social science area. This designation should further increase student enrollment in the course, which can mean not only greater awareness of the emergency management major and minor, but also more education for larger numbers of students about the nature of emergency management and the professional diversity and societal importance of this developing field.

In the context of this introductory course change, it is important to note that we define our mission, relative to emergency management curriculum, to include the expansion of knowledge about the field to students beyond its majors and minors. We believe that a dissemination of knowledge to larger numbers of students will result in a more informed public and thus help to forward a greater understanding of the field. The field of emergency management can benefit significantly if future accountants, nurses, teachers, engineers, pharmacists, biologists, and others have exposure to it through a general education course in a university setting. Furthermore, there is no reason why, having taken the appropriate prerequisite courses, an undergraduate emergency management major could not take his or her background and apply to medical school, law school, or a school of public health, for example. In summary, we view our program as potential preparation for a wide range of professional career choices.

In another recent curricular revision, we changed the mitigation, preparedness, response, and recovery four-course sequence from the junior/senior level to the sophomore level. Our emergency management major had a “gap” in which students took one lower-division course and then jumped up to the junior/senior level. Moving the four phase courses to the sophomore level provides a transition to the upper division. Introducing these courses early in the major also gives students the core analytic tools that they will need as they transition to the junior- and senior-level courses, such as International Disasters, Special Populations in Disasters, Spatial Analysis in Emergency Management (GIS), and Business Continuity and Crisis Management.

As we have hired more faculty, our offerings have increased. As previously noted, our introductory course is now offered every semester. In addition, more elective courses are now available. For example, the addition of a planner with GIS training allowed us to create our own course titled Spatial Analysis in Emergency Management (GIS). Also, with our disaster phase courses no longer piggybacked as joint undergraduate and graduate courses, these two student populations can receive the separate attention that more effectively meets the needs of each group.

Further diversification in curriculum content and personnel has been achieved via a visiting distinguished professor summer program. For the past several years, the emergency management program has allocated one summer school course allocation
to an intensive one-week course taught by an outside professor. Visiting professors have included Dennis Milet, Lucien Canton, Elaine Enarson, and Jarret Brachman. Unfortunately, while this summer course initiative has been used by many graduate students, few undergraduates have participated.

**Cluster Two: Supportive Curriculum Development from Other Disciplines**

The emergency management program is currently offered as part of a three-field multidisciplinary department. This has been an effective structure for the establishment of the undergraduate and graduate programs because the emergency management field draws from the field of disaster studies, which includes significant contributions from sociologists. The emergency management program also benefits from the inclusion of both a sociology course in methodology, which helps to provide a strong social science core to the program, and a statistics course offered by the Statistics Department. The inclusion of these courses is particularly significant because they enhance critical thinking skills and help students to understand how new knowledge is created.4

The social science core adds an effective theoretical component to our curriculum through courses in social organization and other social science electives, such as Environmental Sociology, International Disasters, Environmental History, and an anthropology course titled Disaster and Culture. This theoretical component expands, supplements, and supports the theoretical content of the emergency management courses offered in cluster one.

These curricular developments are not final or sacred. As noted earlier, our curriculum is continually under review for possible additions, deletions, and enhancements.5 For example, we are currently restructuring our Sociology of Disaster course into a broader course, Socio-Behavioral Foundations of Emergency Management, which will review key empirical findings and theories in the social and behavioral sciences that provide the foundation for central issues in emergency management at the small-group, organizational, and societal levels. By blending sociology, psychology, communication, history, political science, and other social science–based perspectives,6 this course will underscore the many connections that the field of emergency management has to traditional academic disciplines.7 These connections are critical as emergency management continues to develop its own academic foundation.

Again, our supportive curriculum reaches beyond core requirements and electives in our major. As a research-intensive Division 1 university with over 100 majors, NDSU provides emergency management students with a wide range of options for minors that can enhance their curriculum. Some of the available minors include anthropology,
business, communication, food safety, geography, logistics, political science, psychology, and sociology. We are currently working on a brochure that will detail how specific minors will provide the background needed to support various emergency management career choices.

Finally, as we note below, our program may soon move out of the Department of Sociology, Anthropology, and Emergency Management to become a separate department. Looking far into the future, we anticipate that an administratively distinct emergency management unit would enhance our program’s campus visibility and lead to additional programmatic connections with other departments both inside and outside our location in the College of Arts, Humanities, and Social Sciences (e.g., with the College of Business; the College of Pharmacy, Nursing, and Allied Health Sciences; the College of Agriculture, Food Systems, and Natural Resources; and the College of Engineering and Architecture).

Thus, our two-cluster approach to curriculum development requires an active core faculty in emergency management as well as positive relationships with faculty in a variety of other disciplines, departments, and colleges. Following this approach is not only an exciting and stimulating challenge but also an essential part of exposing students to the diversity of academic resources available for understanding and practicing emergency management.

**STUDENT RECRUITMENT**

In an ideal world, academic programs will maintain a steady growth pattern with little effort from the faculty. In the early days of undergraduate emergency management programs, growth was often slow and required marketing. At NDSU, our initial growth was slow; when the program first began in 2001, it was not reflected in the name of the department, there was little awareness of the new major or its meaning, and enrollments were minimal (fewer than ten undergraduates). Since then, however, the program has grown steadily to include fifty-four undergraduate majors at the end of the 2009 fall semester; and the graduate program, which currently has thirty students, has, until recently, been larger than the undergraduate program.

One important factor for creating awareness of—and, we hope, student recruitment for—the program was the inception of a student newsletter, which was initially developed and written by doctoral student Jessica Jensen. This publication documents key program activities, profiles undergraduate and graduate students, and shares a wide range of other pertinent information about emergency management. Of special note, one issue of the newsletter focused on recruiting high school students to the
program; this issue was mailed to career counselors in a wide range of high schools in Minnesota and North Dakota.

Additional efforts to enhance the visibility of our new major included, most significantly, the change in the department name from the Department of Sociology/Anthropology to the Department of Sociology, Anthropology, and Emergency Management. This change, which occurred in 2007, resulted in new signage, new letterhead, and various revisions to bulletins and related publications—all of which served to expand awareness of the program.

A poster was designed to promote the emergency management degree program at the undergraduate and graduate levels. In addition to information about the program, the poster contains three photos of well-known regional disaster scenes. The central photo shows a plane dropping fire retardant on burning buildings in downtown Grand Forks during the flood of 1997; the other two photos show the Minneapolis I-35 bridge collapse and the 2008 Hugo, Minnesota, tornado. The poster was produced in various sizes and posted around the campus; larger posters were framed and given to key program partners, such as local emergency managers and North Dakota and Minnesota emergency management officials.

As another part of our multichannel marketing efforts for the program, the poster was digitized and is displayed periodically on the multiple flat-screen televisions in the university’s Memorial Union, where space can be rented on the screens for one-week blocks. In the future it would be desirable to have marketing for the program integrated into regional television broadcasts of university athletic events. Universities typically highlight several programs in their television marketing campaigns, and a developing program such as emergency management might benefit from significant enrollment growth if promoted regionally.

OVERALL PROGRAM MANAGEMENT

When undergraduate and graduate enrollments are combined, the emergency management program, as of fall 2009, had the largest number of majors in the department. This, in conjunction with the growth of two other programs not reflected in the departmental name, is creating additional administrative work. Because of the complexity of managing a three-discipline department, as well as the need for increased awareness of the emergency management program and the diverse mission of the program, which includes applied as well as expanded multidisciplinary academic components, it has been proposed that a separate Department of Emergency Management be created with its own administrator. This proposal has been approved at the departmental, college, and graduate school levels. If approved by the university senate and
the SBHE, this change should enhance the interdisciplinary nature of the program at NDSU, as key core courses in sociology will be retained and additional links with other departments will be developed. The department will also have separate representation in the college and at the university level.

Autonomous departmental status should increase program awareness and stimulate additional enrollment growth. Such autonomy should make faculty recruitment easier as the department would be able to craft its own promotion, tenure, and evaluation guidelines. And an autonomous unit focused only on emergency management may be more inviting for new faculty who may not want to risk going into a multidisciplinary department with potentially diverse teaching and research expectations.

**FINAL OBSERVATIONS**

Emergency management programs face numerous challenges to their curriculum development efforts, some of which we have tried to address in our program. Yet a number of questions or issues remain that are of critical importance for the field, including the following:

1. Programs must have sufficient faculty to cover the substantive issues in the field. The curriculum must also balance the presentation of content with the development of critical thinking skills.\(^9\)

2. Developing a strong, sizable core faculty is difficult. Although such fields as sociology, community and regional planning, and public administration can produce doctorates with interests that intersect those of emergency management, few graduates are interested in abandoning their discipline for a new field. An extremely small number of programs currently grant doctoral degrees in emergency management or closely related fields such as disaster science.

3. The future relationship of emergency management to the broad field of disaster studies and the sociological subfield of disaster sociology is unclear. Will disaster studies and disaster sociology develop a stronger professional identity within their substantive domains, or will researchers in those fields gravitate toward and energize the emerging field of emergency management?\(^10\)

4. Because a solid emergency management curriculum must reach beyond basic emergency management courses, many departments and colleges must cooperate in the program’s development. Unfortunately, heavy demand among their own majors leads some programs to restrict admissions in their courses.
Emergency management programs are now widespread on college campuses. The resource base of textbooks has been steadily growing, as have student enrollments. Still, departments face many challenges in developing a strong core faculty and a solid curriculum base. Program autonomy and cross-discipline collaboration are important parts of this developmental process.

Endnotes


2 A number of law schools have a focus on disaster law and disaster planning. The University of California at Berkeley, for example, has a Center for Catastrophic Risk Management and a course titled Disasters and the Law. Columbia Law School also has a focus on issues related to disaster planning and posts scholarly articles on its website. Stanford School of Medicine has a focus on Disaster Medicine, which its website (http://emedit.stanford.edu/disaster/) defines as being "concerned with the health, medical, and emotional issues of disaster casualties; and the elements of disaster management, including planning, mitigation, assessment, response, and recovery."

3 Sometimes the focus of discussion for emergency management curriculum may suggest that collegiate programs are preparing students only for positions as state, county, or municipal emergency managers. We agree that students must be prepared for those positions, but their degree can also lead to other important opportunities. See, for example, Robert McCreight, “Educational Challenges in Homeland Security and Emergency Management,” Journal of Homeland Security and Emergency Management, http://www.bepress.com/jhsem/vol6/iss1/34 (accessed March 29, 2010).


6 For a perspective on the importance of history as well as other social sciences in emergency management, see Lucien G. Canton, Emergency Management: Concepts and Strategies for Effective Programs (Hoboken, N.J.: John Wiley & Sons, 2007).

