

WEB-BASED ACADEMIC ROADMAPS: ILLUSTRATING EDUCATIONAL PATHWAYS*

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OVERVIEW

This presentation introduces dynamic, web-based academic roadmaps for current and prospective students, their families, and the broader public. The American public is often unclear about the connections that exist between institutional mission, programs of study, educational outcomes, and the development of competent, reflective graduates who are prepared for the complexities of contemporary society. This gap in communication contributes to our national retention problems, confusion among our students and graduates as to what they should know and be able to do at the conclusion of their studies; and ultimately, perhaps, to inadequate public support for higher education. These roadmaps are intended to convey an institution's intentional academic scaffolding of expectations for student learning; sequenced courses and programs of study; and ultimate outcomes.

The goals of this project[†] are to improve student recruitment and retention and to empower student learning by creating better communication and advising tools that render the higher education enterprise TRANSPARENT for learners and their families.

To address this challenge, we are drawing upon the power of electronic formats and relational databases to illustrate educational objectives, educational outcomes, and workplace applications. Ultimately, roadmaps should convey the complex academic and real-life pathways that a student might pursue, along with the advising advice that will help a student to succeed.

In essence, each Academic Roadmap is a "one-stop" portal to a discipline and its associated major course(s) of study and career options. The roadmaps, once completed and tested, will address a full range of information which will allow students to:

- **review** the national needs and issues that their major will prepare them to address (as graphic and bulletin board form). What are the career needs today and tomorrow?;
- **meet** notable professionals and current students in the field through streaming video on-site interviews. A student interested in natural resources may meet a professional conservation biologist who is GPS tracking elephants in Malaysia, or **visit** with an environmental scientist who studies coastal wetlands in New England. A student interested in geosciences might meet professionals who specialize in vulcanology, hydrogeology, paleontology, or sedimentology;
- **engage** in the kind of creative problem-solving scenarios specific to the field;

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- **view** the full two-year and/or four-year requirements of their majors, including syllabi for each required course, course learning objectives, course assignments, criteria for evaluation, transfer agreements etc.;
- **review** the Expected Student Outcomes for the major and see how these will be developed by the curricular and co-curricular activities;
- **enrich** their interaction with their own personal record of learning;
- **explore** in some depth the various career options for which their major will prepare them. Links to professional requirements will elucidate academic and experiential career requirements;
- **link** to digital learning tools such as virtual laboratories, field trips, and problem-based learning exercises;
- **link** widely to opportunities for graduate study, student research, internships, service learning, and summer jobs in the field;
- **obtain** information and links to sites for program opportunities for underrepresented students; and
- **learn** about advanced degree options.

We envision discrete audiences who will benefit from these tools:

1. **high school students** (and families) curious about the discipline and the major;
2. **freshman or sophomore undergraduates** who are mapping out a course plan;
3. the **undeclared or exploratory student** who is developing information with which to make a decision as to a major course of study;
4. the **community college student** who is concerned about articulating with a four-year program;
5. **graduating seniors** who need to understand the dimensions of their educational accomplishments, their next possible steps toward a profession, and preparation for taking those next steps;
6. **guidance counselors, college advisors, colleagues and others** who need or are interested in acquiring information on our program or the discipline;
7. **parents and relatives of students**; and
8. the **broader public**.

FOR FURTHER INFORMATION

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