

Integrated Sciences Curriculum Map

	GEOL 106/106L	SCIN 295	SCIN 435
Outcome 1	x	x	X
Outcome 2	x		
Outcome 3	x		X
Outcome 4			X

Program Goals

Graduates should be able to:

1. demonstrate an understanding and knowledge of specific scientific principles and processes and the conceptual structure which integrates all scientific inquiry and enterprises;
2. evaluate the integrity and authority of scientific information by assessing its originating source and the methods used to generate it;
3. identify the underlying scientific issues which undergird critical policy decisions in both the public and private sectors;
4. communicate clearly scientific and mathematical ideas and innovations not only to scientists, but to other professionals and the public at large through oral presentations or by the visual and written media.

Learning Outcomes

All graduates will be able to:

1. demonstrate specific knowledge of chemistry, physics, biology, environmental science, and the earth sciences and of their common principles of understanding;
2. conduct scientific investigations, which may include experimental design and implementation, data analysis, and establishing conclusions;
3. communicate scientific knowledge and understanding clearly, succinctly, precisely, and effectively in oral and written forms, to technical and non-technical audiences;

Within the concentrations, graduates will be able to:

- 4a. communicate clearly and comprehensibly about those scientific issues which are critical to public understanding (*science journalism concentration*);
- 4b. set forth that scientific knowledge which directs public policy decisions and is integrated into both public and private administration of scientific and technological enterprises (*public policy/administration concentration*);
- 4c. rely upon a fundamental understanding of science and scientific research in carrying out business initiatives and enterprises, in sales, in management, and in assessment (*business administration concentration*);
- 4d. articulate the importance of and impacts of science on society and the role of society in scientific research and teaching (*science, technology and society concentration*).