Students are required, by the end of the sophomore year, to take one of these courses or a first-year seminar that is designated to meet the same requirement. The courses offered each term vary, but a broad selection is taught every year.

CORE 110S Discovering Biology
How do humans know what is known about life on Earth? This course looks at some of the major questions that have informed human understanding of the living world over the past 150 years. The course begins with perhaps the oldest biological question of all: why are there so many living things? It shows how Charles Darwin's brilliant answer forms the foundation for much of modern biology. By following the path of discovery leading from Darwin, students learn about a devout monk named Gregor Mendel, a feisty chemist names Louis Pasteur, two brash young scientists named Watson and Crick, and many more. The course explores the great diversity of life, what fuels the living world, how organisms adapt to change, and aspects of how they interact with each other and with the physical environment. The approach is student-active and hands-on; students work together to unravel a few of the mysteries of life. This course is intended for those who are interested in biology but probably will not choose to major in the life sciences.

CORE 114S Ecology, Ethics, and Wilderness
This course explores the ways in which modern science, employing abstractions, logic, and quantification, effectively describes the workings of the natural world and provides a framework for considering new ethical relationships among humans, nonhumans, and the nonliving world. The course examines the ways in which scientific concepts, such as deep geologic time and Earth history, biological evolution and co-evolution, and ecosystem dynamics can inform humans about radical moral stances (e.g., biocentrism, deep ecology). Also, the course investigates whether a scientific perspective, in and of itself, is sufficient to resolve pressing environmental problems, most of which are the outcome of complex social, economic, political, philosophical, and historical forces that operate on regional and global scales.

CORE 120S Earth Resources
Management of the Earth's energy, mineral, and water resources is a subject of ongoing controversy and debate. This debate revolves around two related issues: the diminishing supply of some resources and the environmental cost of resource extraction and energy production. This course examines the origin and geologic setting of Earth's resources, and how these factors influence resource exploration, extraction, and use. Environmental and economic aspects of resource extraction are explored. Students examine the public debate about resource management and conservation, as well as the roles of politics and the media in shaping this debate. This course emphasizes student-led discussions of case studies dealing with current resource-related topics. The purpose of this course is to create a framework in which resource issues can be evaluated, integrating the scientific and social issues inherent in resource development.

CORE 126S/126SL Computers in Arts & Science
This course introduces students to the inner workings of computers, the Internet, the Web, the Cloud, and Web applications such as Google search, Google maps, e-commerce, and social networks. The course also teaches skills: create a Web page; add a Google map to it; build a Website; add interactive features by writing a few short pieces of code; analyze a small social network. Apart from Web-related material, students discuss the notions of data modeling and analysis, and complete lab work building simple but useful financial models; in the process, the course covers the basics of financial literacy. There are several lab assignments in the course: a short paper on the issues of privacy and security and two group projects, one to build a Website on the
subject of your choice, the other to analyze a social network. The required credit-bearing laboratory CORE 126SL must be taken concurrently with CORE 126S. No computer experience is required. This course is crosslisted as COSC 100.

CORE 140S Language & Cognition
What is the relationship between language and cognition? To answer this question this course explores the interrelation between verbal expression and such cognitive faculties as bodily experience, imagination, memory, categorization, and abstract thought. The study of language as a cognitive phenomenon is a relatively new discipline. It originated in the late 1970s and early 1980s. Since then, cognitive linguistics has been a rapidly growing field that has both benefited from and contributed to its allied disciplines of cognitive psychology, cognitive anthropology, and cognitive neuroscience. The course begins by examining the advantages and shortcomings of the cognitive perspective on the different levels of language (e.g., sounds, words, sentences, texts, etc.). Students explore the connections of cognitive linguistics with the related fields that are broadly referred to as the "cognitive sciences." No background in linguistics is required, but interest in linguistics is expected.

CORE 150S Linguistics: Data, Theory and Experiments
Language is by far the most important means of communication among humans and the central cognitive ability separating them from the rest of the animal kingdom. Linguistic activity is all-pervasive and forms the foundation of all other high-level symbolic activities. At the same time, many aspects of this activity remain deeply mysterious. How did the language ability come about? Why is it that children learn their first language with such ease, while most adults have great difficulties learning a second one? How is it possible to learn such a complex set of rules in such a short time, on the basis of a very small corpus of data, much of it grammatically incorrect? These and other questions form the subject matter of the field of linguistics and are explored in this course.

CORE 154 S Caribbean Ecology and Environmental Concerns
When we think of the Caribbean, the first images that come to mind are beautiful, clear, blue oceans, white sandy beaches, never-ending sunshine, and perpetual serenity with laid-back populations. Yet these images do not capture the presence of the myriad ecological and social concerns of the region. What are the different ecological settings of these islands, ranging from the terrestrial to the marine? What are the human-environment interactions within these ecological contexts? How have these interactions led to stressors within the ecological settings, and what are the implications of these stressors? This course seeks to address how these questions are answered through the use of science and also seeks to highlight some of the limitations of science when contending with complex ecological and social systems, using the Caribbean region as the area of focus.

CORE 156S Drugs, Brain, & Behavior
Drugs, used recreationally and medicinally, can have physiological and behavioral consequences that are important to both the individual and society. The processes in the brain and nervous system that mediate drug-induced effects on behavior and physiology are examined with emphasis on the strategies and methods used to evaluate, scientifically, the effects of drugs. This course is designed for students with no background in the field of neuroscience.

CORE 165S (Ir)Rationality of Decisions
For a long time, economics has assumed that individuals are perfectly rational in the sense that they are able to process an unlimited amount of information, make complex decisions, and predict future outcomes. The finding of a significant set of anomalies has prompted economists to seek for explanations outside of the perfect rationality model. The emerging field of behavioral economics is the result of relaxing the assumption of
perfect rationality in modeling individual decision making. The course provides students the opportunity to think about their own decision-making process, compare it to what has been found in the literature, and then apply this knowledge to the application of the scientific method to examine a hypothesis of their own. This course provides a broad overview of behavioral economics, explicitly addressing the scientific perspective on questions: How do we make decisions? Do people know what they want and do they know the expected well-being they get from it? Does the status quo matter? Do we care what others think? Are individuals truly selfish? Do individuals keep mental accounts? This course requires no prior exposure to economics or statistics.