

College Core Curriculum

This curriculum is based on an interrelated set of principles that emphasize intellectual and practical skills, transferable tools for integrative learning, and disciplinary perspectives. It recognizes writing, oral communication, and information literacy as central tools for learning and disseminating new knowledge that permeate the entirety of the learning experience. The curriculum is intended to help students understand the synergistic and complementary relationships among academic disciplines and their varied approaches to describing, analyzing, comprehending, interpreting, and critiquing a range of phenomena in both human cultures and the physical and natural world. In doing so, it will prepare students to apply the skills, knowledge and sense of responsibility they have gained to new settings and complex problems as engaged citizens in an interconnected world.

Although students will satisfy the requirements in different ways, each student must devise a program in accordance with the College Core Curriculum and the University Writing Requirement.

Components of the College Core Curriculum

Intellectual Skills

- Foundation Seminar
- Lab Science
- Foreign Language
- Integrated Perspectives

Tools for Critical Engagement

- Diversity in the U.S.
- Environmental Connections
- Global Connections
- Quantitative Reasoning

Disciplinary Perspectives

(two from each division; one course must meet the divisional learning goals)

- Arts and Humanities
- Natural Sciences and Mathematics
- Social Sciences

Disciplinary Depth

- The Major(s)
- Academic Conventions of Writing, Speaking, and Information Literacy
- Culminating Experience

One course from each of the Tools for Critical Engagement categories may also count as a course within the Disciplinary Perspectives categories, but not the Disciplinary Perspectives course(s) used to meet the CCC learning goals. Advanced Placement (AP) courses, International Baccalaureate (IB) courses, and courses taken elsewhere for Bucknell credit may be used to fulfill CCC requirements only when approved by the appropriate department chair and the coordinator of the CCC. Any course that fulfills a College Core Curriculum requirement can count toward a major or minor or to fulfill the Writing Requirement.

The following descriptions articulate the learning outcomes for each of the types of courses within the components of the curriculum.

Intellectual Skills

Transferable knowledge and a range of intellectual abilities drawn from different modes of inquiry across disciplines are essential components of any liberal education. These courses help students develop important academic capacities for use during their undergraduate career and in the rapidly changing world they will enter after college.

Foundation Seminar

(one writing-intensive W1 course in the fall of the first year)

Students will develop writing, reading, speaking, listening, and information literacy skills necessary for collegiate-level academic work.

Students will develop capacities for independent academic work and become more accountable for their own learning.

Lab Science

(one course from the list of designated courses)

Students will develop a unified understanding of scientific theory and practice in modern natural science.

Students will demonstrate an understanding of the development of science as an intellectual pursuit and of the ways in which scientific ideas are formulated, modified, and come to be accepted.

Students will demonstrate skill in the application of scientific techniques and methods, including the collection, analysis, and interpretation of data, and communication of results.

Foreign Language

(one course from the list of designated courses)

Students will study language as a complex multifunctional phenomenon – as a system for communicating thought and information and as an essential element of human thought processes, perceptions, and self-expression – that allows students to understand different peoples and their communities.

Students will examine the world, their own culture, and their own language through the lens of a foreign language and culture.

Integrated Perspectives Course

(one team-taught interdisciplinary course taken during the sophomore or junior year from the list of designated courses)

Students will recognize, construct, and evaluate connections among different intellectual methods, ways of learning, and bodies of knowledge.

Tools for Critical Engagement

Courses in this category provide students with an opportunity to apply their skills and knowledge to problems and issues that challenge us today or have done so throughout history.

Diversity in the United States

(one course from the designated list of courses)

Students will acquire contextualized knowledge about some aspect of complex group interactions in the United States.

Students will use concepts and tools of inquiry from at least one discipline to analyze issues related to the diversity of cultural experiences in the United States.

Students will reflect critically on the ways in which diversity (broadly understood) within the United States shapes the experience of citizens and persons residing in the United States.

Environmental Connections

(one course from the designated list of courses)

Students will analyze, evaluate, and synthesize complex interrelationships between humans and the natural world.

Students will evaluate critically their personal connections to the natural world in one of the following ways: reasoning about ethical issues, directly experiencing the natural world, connecting to their community, or relating individual choices to larger societal goals.

Students will apply knowledge of the physical, cultural, or social connections between humans and the natural world, according to their interests and disciplinary preferences, in at least one of the following ways:

- Tracing the fundamental physical interconnections between humans, other species and the environment
- Explaining how natural systems function and how human actions affect them
- Distinguishing between human impacts and natural changes
- Elucidating the concept of sustainability
- Analyzing past cultural constructions of the environment
- Analyzing current cultural narratives that shape our relationship to the environment
- Analyzing societal mechanisms that influence our relationship to the environment
- Assessing governance and political conflicts regarding human-environment relationships
- Understanding the role of technological, economic and scientific knowledge in environmental decision-making and power relations between social actors.

Global Connections

(one course from the designated list of courses)

Students will use concepts and tools of inquiry to examine the beliefs, history, social experiences, social structures, artistic or literary expressions, and/or traditions of one or more cultures or societies located outside the United States.

OR

Students will use appropriate tools of inquiry to understand the interdependent nature of the global system and the consequences this interdependence has for political, economic, and social problems.

Quantitative Reasoning

(one course from the designated list of courses)

Students will demonstrate college-level knowledge of a body of mathematical and/or statistical techniques suitable for modeling and analyzing real world questions/situations, and will gain some experience in such modeling, including experience in building, describing, testing, analyzing, and making predictions from such models.

OR

Based on a focused course experience, students will apply basic mathematical and/or statistical techniques at a college level of sophistication in the analysis and modeling of real-world questions or problems, including experience in building, describing, testing, analyzing, and making predictions from such models.

AND

Students will formulate questions and propositions for quantitative analysis, translate the question into a form appropriate for the chosen quantitative model, and interpret and evaluate the results of the model in ways meaningful to the problem at hand. Students will demonstrate the ability to assess the validity and limitations of quantitative models and an understanding of the role of the assumptions made in the construction of these models.

Disciplinary Perspectives

Courses in this category expose students to a wide range of modes of intellectual inquiry. To ensure that students sample broadly from the curricular offerings of the College of Arts and Sciences, they are required to take two courses from each of the College's divisions – the Division of Arts and Humanities, the Division of Natural Sciences and Mathematics, and the Division of Social Sciences. One course in each division must meet the learning goals stated below.

Arts and Humanities

(two courses; one must be from the designated list of courses)

Textual Analysis and Interpretation

Students will interpret texts with awareness of the texts' basic orientation in the world (historical, philosophical, religious, linguistic, etc.).

Students will construct arguments and evaluate canons using the evidence and tools of critical analysis appropriate to the object of inquiry.

Students will develop an appreciation of the fundamental ambiguities and complexities involved in all human attempts to answer questions about knowledge, values, and life.

OR

Arts Literacy and Practice

Students will appreciate, evaluate, and articulate the aesthetic and formal elements of a work of art.

OR

Students will comprehend and interpret works of art within historical and cultural contexts.

OR

Students will synthesize conceptual, formal, aesthetic and technical elements resulting in the performance or creation of works of art.

Natural Sciences and Mathematics

(two courses; one must be from the designated list of courses)

Students will demonstrate knowledge of scientific and/or mathematical content and principles in a disciplinary field.

Students will develop skills that enhance their ability to think critically about scientific, technological, and/or mathematical issues.

Social Sciences

(two courses; one must be from the designated list of courses)

Students will understand and examine the ways in which individuals interact with, and are shaped by, social groups, institutions, and social structures and how these social constructions shape history, space, values, culture, and behavior.

OR

Students will understand how behavior is shaped by biological and environmental history and the choices made throughout life.

AND

Students will apply principles of social and/or behavioral analysis drawn from various theoretical frameworks to critically interpret behavior and/or social issues.

Disciplinary Depth

The Major(s)

The disciplinary depth component of the curriculum provides students with the opportunity for sustained study in an academic discipline. Students learn to think deeply about a set of linked topics and the methodology of academic investigation in a specific field or a set of subfields, and within these categories they extend and develop their own ideas with more sophisticated and informed analysis. They acquire the intellectual confidence that comes from mastery of a body of knowledge and develop the skills to apply their learning beyond their coursework.

The academic major provides students with a framework for focused disciplinary study. Through a set of linked courses defined by faculty in departments and programs, students develop expertise in their discipline. Students in major courses have common academic backgrounds, and therefore upper-level major courses can address academic material at a sophisticated level.

Academic Conventions of Writing, Speaking, and Information Literacy

The College faculty has identified writing, speaking, and information literacy as essential intellectual competencies that need to be mastered by competent graduates. In-depth and discipline-specific study affords students an opportunity to practice these activities at a high level; therefore the curriculum of each major helps students meet the learning goals of speaking, information literacy, and writing through a variety of means.

Writing: Students will develop their writing abilities through coursework in the University Writing Program. Courses in the major will allow students to apply their writing ability to address and investigate issues at a more sophisticated level due to their mastery of the subject matter. These courses will allow students to write about topics they know best.

Speaking: Students will develop skills in formal presentation at a level reasonable for a college graduate in the particular major. Ways in which this skill can be obtained and practiced include but are not restricted to a course with student presentations, honors thesis defense, talk in a student colloquium series, presentation at a conference, or presentation of significant course projects.

Information Literacy: In the Foundation Seminar and in many other courses students have achieved basic competency in finding, analyzing, evaluating, and effectively using various sources of information. Courses in the major will build on these skills and introduce students to field-specific information retrieval techniques and to critical evaluation of content as customary in the field.

Culminating Experience

In addition to completing a body of specialized coursework, students in each major will complete an approved Culminating Experience usually in their senior year. Second-semester juniors may complete a Culminating Experience in a major with permission of the adviser and the department chair or program coordinator. The successful Culminating Experience will draw together a student's disciplinary experiences and provide a more coherent appreciation of the major's academic discipline. The structure of the Culminating Experience is left to the discretion of the faculty in the department or program offering the major (subject to the review of the Arts and Sciences Curriculum Committee). Types of Culminating Experiences will vary by major, but they may include a senior seminar, interdisciplinary course, independent study project, service learning, or an honors thesis.

Majors may be pursued in either the Bachelor of Arts degree program or from among the several Bachelor of Science and professional degree programs offered by the College of Arts and Sciences. When a major is available in more than one degree program, the choice of degree will likely depend upon the student's overall educational objectives: those seeking to emphasize a broader grounding in the liberal arts may choose the Bachelor of Arts degree program; those seeking to emphasize more sustained study in the major field may choose one of the Bachelor of Science or professional degree programs. Regardless of the choice of degree program, however, students will have the opportunity to fulfill all of the objectives of a liberal education and of specialization and to prepare for future endeavors, including advanced study.