

**COLLEGE OF AGRICULTURE
AND
LIFE SCIENCES
BACHELOR OF SCIENCE DEGREE
GRADUATION REQUIREMENTS**

Credit Requirements

- A. **Minimum Total Credits: 120** academic credits are required for graduation.

Important Exceptions:

- **Repeated courses increase** the number of credits required for graduation by the number of credits in the course. These credits **do** count toward the minimum 12 credits required for full-time status.
 - **Review or supplemental courses** (e.g., 1000- to 1099-level) **increase** the number of credits required for graduation by the number of credits in the course. These credits **do not** count toward the minimum 12 credits required for full-time status.
 - **Physical Education courses do not** count toward 120 credits for graduation. They **do not** count toward the minimum 12 credits required for full-time status.
- B. **Minimum Credits at Cornell: 60** academic credits must be completed at Cornell (includes CALS Exchange, Cornell in Rome, Capital Semester and Urban Semester).
- C. **Maximum Non-Cornell Credits: 60** non-Cornell credits (AP, CASE, IB, GCE, French Baccalauréat, transfer coursework, Cornell Abroad) can be applied toward degree requirements. A first-year student can transfer in 30 credits before the first semester in CALS. (AP, CASE, IB, GCE, French Baccalauréat, and transfer credits)
- D. **Minimum Credits from College of Agriculture and Life Sciences: 55** CALS credits are required for graduation. CALS credits include all courses from departments within CALS and courses offered in the Biological Sciences, Biology & Society, Earth and Atmospheric Sciences, Information Science, Nutritional Science, and Statistical Science Departments.
- E. **Minimum Letter-Graded Credits: 100** ([Proration Chart](#) for Non-Cornell credit).
- F. **Maximum Credits earned through Independent Study, Research, Teaching**

Assistantships, and/or Internships: 15 credits of “unstructured” coursework can be applied toward graduation requirements ([Proration Chart](#) for Non-Cornell credit).

Physical Education Requirement

- A. **Physical Education Requirement:**

Successful completion of two 1-credit non-academic PE Cornell courses with a satisfactory grade (SX). Students are expected to complete the Physical Education Requirement in their first two semesters at Cornell.

*Note: Physical education credit does not count toward the 120 credits needed to graduate or toward the 12-credit minimum required for full-time status.

Exception: Students who externally transfer to Cornell from another accredited college or university are exempt from the physical education requirement.

- B. **Swimming Requirement:** Successful competition of the swim test <http://pe.cornell.edu/requirements>. Swim tests are typically taken as part of the orientation process. Exception: Students who externally transfer to Cornell’s College of Agriculture and Life Sciences from another accredited college or university are exempt from the swim test.

Residency Requirements

- A. **Eight semesters of full-time study are expected.** Transfer students are credited with one semester in residence for each full-time semester (or equivalent) earned at another institution.
- B. **Internal transfer students must be enrolled in CALS for at least two semesters** includes conditional semester sponsored by CALS in the Internal Transfer Division.
- C. **The final semester before graduation must be completed in a Cornell program as a full-time student. (The School of Continuing Education does not count towards a final semester of residency.**
- D. **Students in the ninth and final semester may be eligible to apply for prorated tuition.** The eligibility criteria are listed online at <https://cals.cornell.edu/academics/registrar/policies#prorated-tuition>.

Grade-Point Average (GPA) Requirements

Minimum cumulative GPA: 2.00 or above must be maintained. The cumulative GPA includes all letter grades earned at Cornell.

Schedule Requirements

- A. **A minimum of 12 academic credits per semester** is required to be a full-time student in good academic standing. *NOTE: Students must enroll in an average of 15 credits per semester to be on track to graduate in 8 semesters.*
- B. **Students must enroll in at least one CALS course** each semester until 55 CALS credits have been earned.
- C. Review or supplemental courses (1000- to 1099-level courses and Physical Education (PE) courses) **do not** count toward the 12 credit minimum required for full-time status.
- D. First-year students **may not** enroll in more than 18 credits, not including PE or review/supplemental courses and are limited to one S-U optional course per semester.
- E. If a student wishes to exceed *22 academic credits (to a maximum of 25 credits) in one semester, they must submit a request through [Chatter](#) to add the additional course.

*[Subject to eligibility](#)

Distribution Requirements

The purpose of the distribution requirement is to have all students achieve common learning outcomes. It is expected that through college and major course requirements graduates will be able to:

- Explain, evaluate, and effectively interpret factual claims, theories and assumptions in the student's discipline(s) (especially in one or more of the college's priority areas of Food & Energy Systems, Social Sciences, Life Sciences and Environmental Sciences) and more broadly in the sciences and humanities
- Find, access, critically evaluate, and ethically use information
- Integrate quantitative and qualitative information to reach defensible and creative conclusions.
- Communicate effectively through writing, speech, and visual information.
- Articulate the views of people with diverse perspectives.
- Demonstrate the capability to work both independently and in cooperation with others.

Through the study of the **physical and life sciences**, students develop their understanding and appreciation of the physical sciences, enhance their quantitative reasoning skills, and gain an appreciation of the variability of living organisms. **The social sciences and humanities** give students perspective on the structure and values of the society in which we live, and prepare them to make decisions on ethical issues that will affect their work and role in society. **Written and oral expression** is designed to help students become competent and confident in the use of oral and written communication to express themselves and their ideas.

Important Notes:

*Credits received for independent study, fieldwork, teaching, research, work experience, and internships **cannot** be used to fulfill the distribution requirement. Review or supplemental courses, such as 1000- to 1099-level courses, will **not** be counted in the distribution areas.*

*First-Year Writing Seminars (FWS) **cannot** be used to satisfy the Physical and Life Sciences distribution area.*

Physical and Life Sciences 18 credits in at least three disciplines of which six credits must be introductory life sciences/biology and three credits in chemistry or physics and a quantitative literacy course.

Introductory Life Sciences/Biology Requirement: Students must complete at least six academic credits from the following [Course Recommendation Chart](#).

Chemistry/Physics: Complete a minimum of three credits of chemistry or physics. Includes all Cornell courses with the CHEM or PHYS prefix (excluding courses that are supplemental, independent study, research, TA, internship, and First-Year Writing Seminar).

Quantitative Literacy: Faculty legislation requires minimum competency in quantitative literacy. This requirement can be satisfied by earning a score of 4 or 5 on the AP Calculus exam or a score of 5 on the AP Statistics exam, or transfer an approved calculus or statistics course with a minimum letter grade of "C" or better; or take an approved math or statistics course at Cornell.

Other Physical Life Sciences: Please refer to the comprehensive search engine of college distribution requirements (oap.cals.cornell.edu/searchDist.aspx) for the most up to date list of courses that meet this requirement.

Social Sciences and Humanities Students must complete four courses of 3 or more credits each from the following seven categories of courses in the humanities and social sciences. At least one course **MUST** be completed in three different categories. No more than two courses in the same department will be counted toward the distribution requirement. To view a detailed list of these courses, please view the search engine on DUST (<https://dust.cals.cornell.edu>) titled

“Find Courses for Distribution Requirement.” If the course can be counted towards this requirement, the course will be coded in the Courses of Study with the category prefix listed below after the title.

Social Sciences & Humanities Categories:

Cultural Analysis (CA)

These courses study human life in particular cultural contexts through interpretive analysis of individual behavior, discourse, and social practice. Topics include belief systems (science, medicine, and religion), expressive arts and symbolic behavior (visual arts, performance, poetry, myth, narrative, and ritual), identity (nationality, race, ethnicity, gender, and sexuality), social groups and institutions (family, market, and community), power and politics (states, colonialism, and inequality).

Foreign Language (FL)

These courses are taught by the following departments: Africana Studies and Research Center (AS&RC – language only), Asian Studies (BENGL, BURM, CHIN, HINDI, INDO, JAPAN, KHMER, KOREA, SANSK, TAG, THAI, and VIET), Classics (CLASS, LATIN, GREEK and Sanskrit – language only), German Studies (GERST – language only, DUTCH, and SWED), Linguistics (LING – languages only), Near Eastern Studies (NES - languages only), Romance Studies (CATAL, FRROM, ITALIA, PORT, QUECH, and SPANR), and Russian Studies (RUSSA, HUNGR, POLSH, SEBCR, and UKRAN).

Human Diversity (D-AG)

These courses address **several** of the College’s stated goals for undergraduate education, specifically, the expectation that in the course of earning a degree, students will enhance their abilities to communicate with people of different cultural perspectives; to listen carefully and respectfully to the views of others, especially views with which they disagree; and to employ ethical reasoning in judging ideas, actions, and their implications. These courses explore the challenges of building a **diverse** society, and/or examine the various processes that marginalize people and produce unequal power relations regarding race, nationality, ethnicity, sexuality, religion, gender, age, or economic status.

Historical Analysis (HA)

These courses interpret continuities and changes--political, social, economic, diplomatic, religious, intellectual, artistic, scientific--through time. The focus may be on groups of people, dominant or subordinate, a specific country or region, an event, a process, or a time period.

Knowledge, Cognition, and Moral Reasoning (KCM)

These courses investigate the bases of human knowledge in its broadest sense, ranging from cognitive faculties shared by humans and animals such as perception, to abstract reasoning, to the ability to form and justify moral judgments. Courses investigating the sources, structure, and limits of cognition may use the methodologies of science, cognitive psychology, linguistics, or philosophy. Courses focusing on moral reasoning explore ways of

reflecting on ethical questions that concern the nature of justice, the good life, or human values in general.

Literature and the Arts (LA)

These courses explore literature and the arts in two different but related ways. Some courses focus on the critical study of artworks and their history, aesthetics, and theory. These courses develop skills of reading, observing, and hearing and encourage reflection on such experiences; many investigate the interplay among individual achievement, artistic tradition, and historical context. Other courses are devoted to the production and performance of artworks (in creative writing, performing arts, and media such as film and video). These courses emphasize the interaction among technical mastery, cognitive knowledge, and creative imagination.

Social and Behavioral Analysis (SBA)

These courses examine human life in its social context through the use of social scientific methods, often including hypothesis testing, scientific sampling techniques, and statistical analysis. Topics studied range from the thoughts, feelings, beliefs, and attitudes of individuals to interpersonal relations between individuals (e.g., in friendship, love, conflict) to larger social organizations (e.g., the family, society, religious or educational or civic institutions, the economy, government) to the relationships and conflicts among groups or individuals (e.g., discrimination, inequality, prejudice, stigmas, conflict resolution).

Written and Oral Expression 9 credits total, of which at least six must be in written expression. Oral expression is not required by the college, but may be required for some majors. If not required, all nine credits may be in written expression. Courses in written and oral expression may be selected from the following:

Oral Expression

COMM 2010, 3060
ENTOM 3350
ILRLR 3300 (2300)
PLSCI 3940
AEM 2700
PMA 3815

Written Expression

First-Year Writing Seminars
AEM 2000
BIOSM 3500
COMM 2310, 3010, 302, 3030, 3040, 3060,
DSOC 4800
ENGL 2800, 2810, 2880, 2890, 3820–3850, 3880, 3890
SOC 3620
STS 3020

CALS College Graduation Progress Worksheet

Students can use this [worksheet](#) to track their own college progress.