

# AGRICULTURE & LIFE SCIENCES (ALS)

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## ALS 1100 - Veteran's Seminar (2 Credits)

Many Veterans experience challenges when transitioning from the military to civilian life, and from a community college to Cornell University. The seemingly disconnected and unstructured environment of a large, Ivy League university can further exacerbate these challenges and result in student Veterans not taking advantage of all the opportunities available to them in college. ALS 1100 is a seminar that aims to assist Veteran students during the transition from military service or smaller college experience to collegiate life at Cornell and later, a civilian career. Students will engage in experiential learning opportunities, reflections, excursions, discussions, and seminars aimed at helping them explore their transition to Cornell, academic opportunities and various available resources on campus and in the local community.

**Enrollment Information:** Enrollment limited to: Veteran students.

**Last Four Terms Offered:** Summer 2025, Spring 2025, Summer 2024, Spring 2024

### Learning Outcomes:

- Implement strategies for maximizing your VA educational benefits.
- Develop an action plan that puts you on the path to achieving your academic and professional goals.
- Describe the vast opportunities at Cornell University for personal, professional, and academic growth.
- Translate your military experience into marketable skills that are attractive to civilian employers.
- Establish a network of colleagues who will help you succeed in your transition.
- Identify and implement strategies to successfully address your transition.
- Engage regularly with a community of undergraduate veterans.

Schedule of Classes (<https://classes.cornell.edu/>)

## ALS 1110 - Introduction to Digital Agriculture (2 Credits)

The goal of this course is to expose students to the breadth and diversity of applications of digital tools in modern agriculture with special emphasis on food production systems. We will explore and discuss the main drivers of the digital transformation in agriculture at a local and global scale. Special emphasis will be placed on the integration of basic concepts of systems biology, data science, and engineering. The socio-economic implications of deployment and utilization of digital tools will be covered. Examples of development, deployment, and post-implementation assessment of digital tools for improving the sustainability of plant and animal food production systems will be discussed. Ultimately, students will recognize the need for interdisciplinary efforts to propel the digital transformation of food production agriculture while benefiting society and the planet.

**Last Four Terms Offered:** Fall 2024, Fall 2023, Fall 2022

### Learning Outcomes:

- Recognize and describe the diverse areas of agriculture and food production systems that utilize and are impacted by digital tools.
- Evaluate, integrate, and apply information from at least two different fields of study to create coherent and persuasive arguments about potential solutions to DA-related problems.
- Recognize the drivers of the digital transformation in agriculture.
- Examine the socio-economic implications of adoption of digital tools in agriculture.
- Ability to logically and clearly present and discuss conclusions from a DA-related study to a multi-disciplinary audience.
- Acquire team building, analytical, and presentation skills through evaluation, and integration of information related to Digital Agriculture.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 1200 - Information Chaos: Navigating Today's Information Landscape (1 Credit)**

In 1987, a weekday edition of the New York Times contained more information than the average person was likely to encounter in a lifetime in seventeenth-century England. Now more than 30 years later, it is hard to imagine how much more information we encounter in our daily lives. Access to quality information is at the heart of an informed and engaged citizenry, yet as more information floods the information landscape, worrisome information also spreads. What makes information worrisome? What makes it valuable? This course includes the theoretical, methodological and practical concepts and skills needed to understand and evaluate today's vast information landscape. The course will focus primarily on information systems in the U.S., although several prominent examples of international information systems will also be included.

**Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022

**Learning Outcomes:**

- Compare various information types that exist and articulate the value(s) and problems(s) of each.
- Recognize the structural and ideological differences between various information systems (i.e., News sites, academic databases, federal repositories, etc.) that produce and disseminate information.
- Translate complex research questions into a search strategy with appropriate search tools and platforms.
- Apply various assessment tools to evaluate the credibility of information.
- Utilize citation management software to organize information conceptually and thoughtfully.
- Demonstrate understanding of attribution by properly citing the work of others.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 1210 - Data Democratization (3 Credits)**

Access to quality data and information is at the heart of an informed and engaged populace. However, the skills required to process and make sense of data have historically been disproportionately held by state and corporate actors who often possess more resources to collect, store and analyze data than everyday people. This is particularly true in the context of surveillance technology, where use of data collected from such means is not equitably distributed, or equally advantageous. Through a framework of data democratization, this class will equip students with the skills needed to critically interrogate and use authentic data from a variety of open data sources to inform their personal decisions, including civic engagement and issue advocacy.

**Distribution Requirements:** (DLG-AG, SBA-AG)

**Last Four Terms Offered:** Fall 2024, Fall 2022, Fall 2021

**Learning Outcomes:**

- Describe the strengths and limitations of different quantitative and qualitative data types (e.g., self-report survey data; observational/trace data; archival records as data; clinical records, etc.) and be able to select those most suitable for their research question or need.
- Explain how various social factors (economic, cultural, political and personal) influence the production, preservation and use of data, and marginalize the perspectives, histories, and research of certain human communities.
- Identify sources of open and reusable datasets, and be able to locate datasets based on student interest. Assess the strengths and limitations of the dataset, including data provenance and how robust the metadata is.
- Utilize open-source tools (R; Tableau Public; Atlas Open) for simple data manipulation, analysis and visualization.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 2050 - Introduction to Agricultural Finance (3 Credits)**

Crosslisted with AEM 2050

Introductory course which provides an overview of principles and practices of agricultural and development finance, from the perspectives of the business owner, lender, and policymaker. Topics include sources of capital, financing entry into agriculture, financial analysis, capital management, financial statements, credit instruments, loan analysis, and financial risk. Applications in farm investments, the Farm Credit System, crop insurance, and risk management.

**Distribution Requirements:** (SBA-AG)

**Last Four Terms Offered:** Fall 2024, Fall 2023, Spring 2023, Spring 2022

**Learning Outcomes:**

- Students will learn and be able to apply financial concepts to solve financial economic problems in agriculture and development including understanding mortgages, bonds, equity, and other fundamental concepts.
- Students will gain an introductory knowledge and understanding to financing concepts including time value of money, financial and risk management instruments, among others.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 2300 - CALS Global Fellows Intl Internship Prep. Workshop (1 Credit)**

This course is designed to equip CALS Global Fellows with the tools and knowledge to be prepared, effective, and cross-culturally competent during their summer internship placement. The course will encourage students to critically reflect on the objectives of an engaged experience and how it can influence academic and personal development. We will explore the invisible boundaries of working in global business, and NGO settings and examine cultural intelligence and cross-cultural dynamics, encouraging students to develop as future leaders in a variety of environments. Please anticipate at least four hours of additional group and individual time that includes meetings and/or consultations with program leadership, partners across campus, including past Global Fellows; and with the Global Fellows office team.

**Exploratory Studies:** (CU-CEL)

**Last Four Terms Offered:** Spring 2025, Spring 2023, Spring 2022, Spring 2021

**Learning Outcomes:**

- Describe oneself and others relative to strengths and NACE competencies.
- Reflect critically on their internship as a tool for making meaning.
- Plan for responding to emotional triggers and how to advocate for oneself.
- Evaluate and examine the host organization, internship position, and region/country.
- Locate and employ resources that address individual health and safety abroad.
- Discuss and apply selected strategies and tools that address a variety of challenges of entering and working in a new setting.
- Define and describe professional, personal, and intercultural learning goals, and identify the avenues to meet these.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 2310 - Business and Economics of Food (3 Credits)**

Crosslisted with AEM 2310

This course will examine the food system from an economic and business perspective. In the first part of the course, students will study the key economic and regulatory elements that affect the production of food. The second section will focus on the business aspects of food and beverage processing, distribution and retailing, and the material in the final section will focus on a range of contemporary business and economic issues that are relevant to consumers of food and beverages.

**Prerequisites:** ECON 1110.

**Distribution Requirements:** (AFS-AG)

**Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022

**Learning Outcomes:**

- Students will be able to use and evaluate scientific and economic information to reach defensible conclusions.
- Students will be able to identify the implications of business decisions on the supply of food.
- Students will be able to describe the effects of information and policies in food and beverage markets.
- Students will be able to develop skills to evaluate the consequences of consumer behavior for food products.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 2400 - Developing a Reflective Tutoring Practice (1.5 Credits)**

This course provides tutors with an opportunity to reflect on and refine their own tutoring practice, in the context of literature and theory about peer teaching and learning in an inclusive environment. Participants complete readings, participate in group discussions with hands-on practice and role-playing, conduct peer observations and debrief about those observations, and practice reflective journaling. Most sessions include discussion or sharing of e-Portfolios. Topics discussed in class include developing an active, student-centered tutoring practice, fostering a growth mindset and enhancing resilience in tutors and tutees, managing the unexpected, problem-solving, leading groups, and communicating productively across difference.

**Enrollment Information:** Primarily for students who are concurrently engaged as peer tutors at Cornell. Open to: LSC tutors. Other tutors may enroll with permission of instructor.

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

**Learning Outcomes:**

- Develop a student-centered tutoring practice.
- Practice and master tutoring skills in a safe environment.
- Provide productive feedback to peers.
- Create and maintain a comfortable working environment for diverse learners.
- Identify and refer tutees who need additional help.
- Respond to emergencies, interruptions, and unanticipated problems during tutoring sessions.
- Reflect on and evaluate their experiences as tutors.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 3020 - Farm Business Management (4 Credits)**

Crosslisted with AEM 3020

This course explores the management of farm and food enterprises, with a focus on topics, policies, and issues relevant to New York State agriculture. This course will cover management issues related to organization and context, farm and food policy, marketing, finances, operations, and human resources. To practice applying the concepts and tools learned in class, as well as to support NYS farm and food businesses, this course includes an engaged learning project. In working with your client business you will learn to appropriately use economic and business principles, as well as to employ clear communication strategies.

**Prerequisites:** at least one of the following courses: AEM 1200, AEM 2050, AEM 2200, AEM 2240 / 2241, AEM 2310.

**Enrollment Information:** Not open to: first-year students.

**Exploratory Studies:** (CU-SBY)

**Last Four Terms Offered:** Fall 2024, Fall 2023, Fall 2022, Fall 2021

**Learning Outcomes:**

- Find, use, and evaluate financial information and decision-tools to make defensible management decisions.
- Advance skills to work with real life clients.
- Develop technical competency to appropriately apply economic and business principles to farm and food businesses.
- Expand written and oral communication skills, including the ability to clearly communicate analysis methods and findings.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 3105 - Post-Internship: Reflection on Engaged Experiences (1 Credit)**

Crosslisted with GDEV 3105

The College of Agriculture and Life Sciences (CALS) offers students opportunities for experiential and engaged learning through internships with organizations in communities and organizations locally, domestically, and internationally. While personal and professional growth happens during the internship itself, engaged learning theory suggests that intentional, scaffolded opportunities for reflection on those experiences is what enables transformative student learning and invites students to make connections between their individual actions and larger systems of global change. To that end, in this course students complete weekly reflection and skill building activities to intentionally discern what they have learned and continue building on that learning going forward. Students will summarize key course takeaways in a professional poster to be presented during the annual CALS Engaged and Experiential Learning Symposium.

**Prerequisites:** IARD and GDEV majors: GDEV 2105 and pre-departure portfolio, or GDEV 3104; CALS Global Fellows: ALS 2300.

**Enrollment Information:** Enrollment limited to: Global Development majors who have completed their GDEV internship within the previous year, and students in the CALS Global Fellows program who completed a Global Fellows internship during the summer immediately preceding this course.

**Distribution Requirements:** (EEE-AG)

**Exploratory Studies:** (CU-CEL)

**Last Four Terms Offered:** Fall 2024, Fall 2023, Fall 2022

**Learning Outcomes:**

- Articulate the knowledge, skills, and attitudes that they've developed or refined as a result of their internship.
- Formulate a plan for building on their experience to further their personal and professional development during the remainder of their time at Cornell, as well as in other academic or non-academic contexts.
- Critically review and share constructive feedback on a peer's work, as well as evaluate the value of feedback received from peers relative to guiding their own revisions.
- Create an informative and visually appealing poster which effectively communicates engaged learning or research outcomes and related implications.
- Design and deliver an elevator speech in which they effectively and succinctly convey key points they want their target audience to understand about their poster topic.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 3260 - Cooperative Business Management (4 Credits)**

Crosslisted with AEM 3260

An evaluation of the fundamental principles, structure, finance, management, and governance associated with cooperatively structured businesses, with an emphasis on agricultural cooperatives. Analyses of the cooperative business organization within the modern economy are emphasized through a mix of lectures, case study discussions, and engaged learning projects with cooperative industry clients.

**Prerequisites:** at least one of the following: AEM 1200, AEM 2200, AEM 3020, ILRID 1700, or permission of instructor.

**Exploratory Studies:** (CU-CEL)

**Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022

**Learning Outcomes:**

- Identify and illustrate alternative economic justifications for cooperatives as a business entity relative to other forms of business.
- Distinguish the unique characteristics of the governance, finance, and management of cooperatives and hypothesize and evaluate how they support or hinder business performance.
- Appraise and critique contemporary issues facing cooperatives, with an emphasis on the challenges and opportunities facing cooperatives that compete with investor-owned firms.
- Cultivate business relationships with cooperative industry firms to appraise contemporary issues they face and to formulate, assemble, and recommend solutions and actions that address them.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4305 - CALS Exchange: Food, Agriculture & Environmental Science at ISA (15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4306 - CALS Exchange: Agroecology & Sustainable Food Industries at ISARA (5-15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4307 - CALS Exchange: French, Food, & Wine and Global Issues/ Global Business at PURPAN (5-15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4308 - CALS Exchange: Harper Adams University (15 Credits)**

**Last Four Terms Offered:** Fall 2024, Fall 2023, Fall 2022, Fall 2020

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4309 - CALS Exchange: School of Science, Hong Kong University of Science and Technology (HKUST) (1-15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4311 - CALS Exchange: IE University in Madrid & Segovia (15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4317 - CALS Exchange: National University of Singapore (NUS) (15 Credits)**

**Exploratory Studies:** (SEAREA)

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4325 - CALS Exchange: University College Dublin School of Agriculture & Food Sci or College of Sci (UCD) (15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4329 - CALS Exchange: University of Natural Resources and Life Sciences (BOKU) (15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4330 - CALS Exchange: Uppsala University (15 Credits)**

**Last Four Terms Offered:** Fall 2024, Fall 2023, Fall 2022, Fall 2020  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4331 - CALS Exchange: Wageningen University (15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4333 - CALS Exchange: National University of Taiwan, College of Bioresources and Agriculture (NTU) (15 Credits)**

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4334 - CALS Exchange: Hebrew University of Jerusalem-Faculty of Agriculture, Food and Environment (15 Credits)**

**Last Four Terms Offered:** Fall 2024, Fall 2023, Fall 2022  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4960 - Internship in Agriculture and Life Sciences (1-3 Credits)**

All 4960 internship courses must adhere to the CALS guidelines at [cals.cornell.edu/academics/student-research/internship](https://cals.cornell.edu/academics/student-research/internship). Students planning internships related to the discipline of a department are encouraged to enroll in the departmental internship course.

**Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4970 - Independent Study in Agriculture and Life Sciences (1-6 Credits)**

Independent study for undergraduate students.

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4980 - Undergraduate Teaching Assistant (1-4 Credits)**

Students learn and experience assisting in a course under the direction of a course instructor.

**Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4990 - Undergraduate Research in Agriculture and Life Sciences (1-6 Credits)**

Independent research for undergraduate students.

**Exploratory Studies:** (CU-UG)

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023  
 Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 4998 - Engaged Learning About Policy Making in Washington D.C. (4 Credits)**

Crosslisted with PUBPOL 4060, AMST 4998, GOVT 4998, CAPS 4998, NS 4998

The core course at Cornell in Washington is an engaged learning class that focuses on understanding and analyzing the professional experience of being in DC. Its primary purpose is to give students a chance to synthesize the lessons of their internship work by examining and reflecting on that work, investigating the context and structures of the policy and political world with which they are engaging, and learning and practicing the professional forms of writing that the community uses. This process occurs through readings, written assignments, guest speakers, and signature events. An internship is required for the class.

**Enrollment Information:** Enrollment limited to: students in the Cornell in Washington program.

**Distribution Requirements:** (OCE-IL), (SBA-AG), (SBA-HE)

**Exploratory Studies:** (EAAREA)

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023  
**Learning Outcomes:**

- Students will have employed engaged learning techniques through readings, class sessions, reflective journals, guest speakers, and other activities to examine the professional norms and codes of working in the policy world.
- Students will have identified the day-to-day processes of the American policy and political community in DC, its aims and goals, and how it works at the ground level.
- Students will have composed a series of policy memos and done an oral presentation in order to be able to construct a policy analysis and recommendation.
- Graduate students will have assessed the state of knowledge in their particular policy area.

Schedule of Classes (<https://classes.cornell.edu/>)



**ALS 5211 - Career Readiness: Engaged Learning for CALS Professional Master's Students (1 Credit)**

This course will provide CALS professional master's students with career readiness, an integral part of achieving success upon degree completion. Career readiness can be defined as the attainment and demonstration of competencies that broadly prepare graduates for a successful career transition. This course will be taught with the Engaged Learning framework, which will give students the opportunity to integrate professional development skills into career and life experiences. Students will engage in interactive sessions covering various topics crucial to career readiness, including goal-setting strategies, networking techniques, strengths identification, application materials preparation, interviewing tactics, and negotiation skills. Additionally, students will participate in mock interviews and information interviews to refine their communication skills. Throughout the course, students will have opportunities to network with alumni, faculty, and industry professionals, fostering mutually beneficial relationships that can enhance their career prospects. By actively participating in this course and utilizing the resources provided, student will develop the confidence and readiness to navigate the complexities of the job market and embark on successful career paths.

**Enrollment Information:** Enrollment limited to: CALS professional master's students. Other graduate students may register with permission of instructor.

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

**Learning Outcomes:**

- Identify and effectively articulate their professional strengths, skills, and career goals.
- Craft customized and professional resumes, cover letters and linkedin profiles, using interests and strengths identified through self-assessment.
- Develop personalized job search plans aligned with their career timelines.
- Utilize effective networking strategies, tools, and identify networking opportunities with alumni and potential employers.
- Demonstrate proficiency in interviewing skills.
- Employ negotiation techniques when evaluating job offers and salary packages using decision-making frameworks.
- Reflect professionalism through integrity, responsibility, and self-awareness in all aspects of their career pursuits.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 5780 - International Teaching Assistant Program Course (2 Credits)**

The International Teaching Assistant Program's (ITAP) foundational course, ALS 5780, provides an opportunity for multilingual graduate students to develop the oral communication skills necessary to be successful in their graduate programs, with emphasis on the skills they may need for teaching in the Cornell classroom. Through weekly classes, conferences with instructors, peer feedback and weekly assignments, students will work on advancing their oral English comprehensibility, pronunciation accuracy and improve their impromptu speaking skills. This course is designed for those working towards meeting the Language Proficiency requirement for teaching at Cornell University.

**Prerequisites:** ITA Language Assessment or permission of ITAP.

**Enrollment Information:** Priority given based on: immediacy of TA assignment.

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

**Learning Outcomes:**

- Narrate and describe in all major time frames.
- Engage in spontaneous conversation about topics of personal and general interest/current events.
- Accurately communicate ideas to listeners who are not accustomed to talking to non-native speakers.
- Speak in paragraphs, using connected discourse.
- Self-assess one's own oral language proficiency.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 5790 - International Teaching Assistant Development Program Course II (2 Credits)**

The International Teaching Assistant Program (ITAP) supports all multilingual graduate students who are currently teaching or plan to teach in the future. Designed as a follow-up to ITAP's foundational course, this course involves highly interactive seminars, consultations with the instructor, and the development of a personalized set of language priorities to help students expand their spoken English proficiency.

**Prerequisites:** ALS 5780 or permission of ITAP.

**Enrollment Information:** Priority given based on: immediacy of TA assignment.

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

**Learning Outcomes:**

- Expand English proficiency in order to communicate effectively as a Teaching Assistant.
- Narrate and describe in all major time frames.
- Engage in spontaneous conversation about topics of personal and general interest/current events.
- Accurately communicate ideas (to listeners who are not accustomed to talking to non-native speakers).
- Speak in paragraphs using connected discourse.
- Self-assess one's own oral language proficiency.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 5800 - International Teaching Assistant Program: Directed Study (1 Credit)**

The International Teaching Assistant Program's Directed Study course, ALS 5800, is designed for multilingual graduate students working toward meeting the Language Proficiency requirement for teaching at Cornell University. Through regular interaction with the instructor, participants will set goals and develop a personal plan of study to advance their English oral communication skills.

**Prerequisites:** ALS 5780 and ALS 5790.

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023

**Learning Outcomes:**

- Expand English proficiency to communicate effectively as a Teaching Assistant.
- Narrate and describe in all major time frames.
- Engage in conversation about topics of personal and general interest/current events.
- Accurately communicate ideas (to listeners who are not accustomed to talking to non-native speakers).
- Speak in connected paragraphs, using transitions.
- Self-assess one's own oral language proficiency.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 5900 - Project Development: CALS Professional Master's Programs (1-5 Credits)**

This course is the first in a sequence of two courses: ALS 5900, ALS 5910. Professional Master's students enrolled in this course will work with their advisor on the initial development of a final project to fulfill the requirements of their degree. This project may be an action program, the development of a plan to address a pertinent problem, the development of materials or methodology suited to the student's situation, or the development and execution of research appropriate to the profession. The project highlights the integration of coursework and skills acquired during the degree program.

**Last Four Terms Offered:** Summer 2025, Spring 2025, Fall 2024, Summer 2024

**Learning Outcomes:**

- Identify a project topic through synthesizing information.
- Write a project proposal on the selected topic.
- Develop a plan for project completion, using project management skills.
- Identify means for collecting relevant information and analyzing data or literature.
- Analyze data or literature to develop a project report.
- Demonstrate teamwork by working collaboratively, if appropriate for the project.
- Critically analyze the findings and impacts of the project.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 5910 - Project Completion: CALS Professional Master's Programs (1 Credit)**

This course is the last in a sequence of two courses: ALS 5900, ALS 5910. Professional Master's students enrolled in this course will work with their advisor to finalize a project in fulfillment of the requirements of their degree. The student will analyze and summarize the results of their work. The successful completion of this course indicates the degree project has been finished, reviewed, and approved by the student's field.

**Prerequisites:** ALS 5900.

**Last Four Terms Offered:** Summer 2025, Spring 2025, Fall 2024, Summer 2024

**Learning Outcomes:**

- Produce a formal project report.
- Complete a project demonstrating graduate-level academic standards.
- Demonstrate critical analysis on a particular topic.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 6014 - Theater Techniques for Enhancing Teaching and Public Speaking (1 Credit)**

This course uses theater techniques to help graduate students enhance their classroom teaching and public speaking in both formal and informal environments. Using the storytelling and character-development techniques of theatrical improvisation, participants will build decision-making skills and their ability to think creatively under pressure through engaging exercises. The goals for this course are to enhance teaching presence in the classroom, form a learning community, and build the confidence necessary to connect with a variety of audiences in a range of educational settings. Participants will design and present a short lesson or talk.

**Last Four Terms Offered:** Fall 2023, Fall 2022, Fall 2020, Fall 2019

**Learning Outcomes:**

- Identify theater strategies for enhancing classroom teaching and public speaking in formal and informal settings.
- Utilize and practice improvisational techniques to think creatively under pressure and to project confidence and respect for diverse perspectives.
- Apply storytelling techniques to communicate discipline-specific content more effectively, and in a more engaging manner.
- Integrate story arcs into presentations and lesson planning.
- Describe research on the use of theater techniques for enhancing teaching including how using theater techniques works to build more inclusive classes.
- Design and present a short lesson or talk that includes: a rationale for how the lesson or talk was constructed around learning outcomes, the theater or public speaking principles applied, and methods for assessing student/audience engagement and learning.
- Demonstrate evidence of reflective practice and learning in short written assignments.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 6015 - The Practice of Teaching in Higher Education (1 Credit)**

This course will help you design and facilitate excellent learning experiences for students at the college level. You will be invited to choose a course that you might teach in the future and design elements of this course based on principles and research about how people learn best. Our meetings will be highly interactive with opportunities to practice teaching strategies and offer each other feedback.

**Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022

**Learning Outcomes:**

- Students will be able to use effective teaching practices based on research on how people learn.
- Students will be able to design learning experiences by aligning the learning outcomes, assessments, and course activities.
- Students will be able to identify strategies for creating and sustaining inclusive and supportive classroom communities.
- Students will be able to articulate their teaching values and strategies.

Schedule of Classes (<https://classes.cornell.edu/>)

**ALS 6016 - Assessment of Student Learning in Higher Education (1 Credit)**

The assessment of student learning is a critical skill set for faculty at U.S. colleges and universities. Too often, faculty members have little to no exposure to this important topic until they begin their academic teaching careers. This course-a complement to ALS 6015: The Practice of Teaching in Higher Education-addresses topics including: principles and frameworks of assessment, course-based assessment methods and technologies, curricular integration of assessment, and social and political issues in assessment.

**Prerequisites:** ALS 6015.

**Enrollment Information:** Enrollment open to: all graduate teaching assistants and graduate students interested in using research to inform and improve their teaching.

**Last Four Terms Offered:** Spring 2023, Spring 2018, Spring 2017, Spring 2016

**Learning Outcomes:**

- Distinguish between (class, course, and program) levels of assessment.
- Articulate learning outcomes at the course level.
- Apply and use assessment techniques and technologies that are appropriate for the learning outcomes of any given course.
- Develop pedagogical content knowledge (i.e. match teaching and assessment strategies to specific subject matter).
- Integrate assessment into course curricula.
- Define the Scholarship of Teaching and Learning (SOTL) in context.

Schedule of Classes (<https://classes.cornell.edu/>)