

Mann Instruction Info 2

Information about courses not having had library instruction.

Dept	Course	Title	Pre-reqs, co-reqs, etc.
AEM	4300	International Trade Policy	Prerequisites: Prerequisite: ECON 1110-ECON 1120 or equivalents and intermediate microeconomics course.
AEM	4310	Agricultural and Food Policy	Prerequisite: Either AEM 2600, PAM 2000, ECON 3010, ECON 3130, or equivalent. Enrollment limited to: juniors, seniors, or graduate students.
AEM	4350	Political Economy of the WTO	Prerequisite: introductory microeconomics.
AEM	4380	Entrepreneurial Strategy for Technology Ventures	Enrollment limited to upper-level undergraduate and graduate students, or permission of instructor. If the course is full, you can sign up for the waitlist here: https://cornell.qualtrics.com/SE/?SID=SV_eKlqI7H5jTzhJ2d
AEM	4390	Technology Strategy	Prerequisites: Enrollment limited to upper-level undergraduate and graduate students, or permission of instructor. If the course is full, you may sign up for the wait-list here: https://cornell.qualtrics.com/SE/?SID=SV_56GP5sL6nydYKWh
AEM	4400	Retail Strategy	Prerequisite: AEM 2400 or equivalent. Preference given to AEM Majors.
AEM	4420	Emerging Markets	Prerequisite: AEM 2400, and PAM 2000, or ECON 3130 (now ECON 3030) or AEM 2600/2601. Enrollment limited to: seniors or graduate students. Course enrollment by application only - Email Carol Thomson (cmt8) if you'd like to enroll. Section 201 (Wednesday evening) is for Grad students only. Preference given to AEM Majors.
AEM	4421	Research and Strategy in Emerging Markets	Enrollment is limited to: AEM seniors and grad students only. AEM 4421 is offered only to those students who have been preselected to participate in the January 2015 SMART field research projects.
AEM	4460	Food Marketing Colloquium	Enrollment limited to: Food Marketing Fellows only.
AEM	4480	Executing Firm Strategy	Prerequisites: Dyson seniors only. Must have taken AEM 2240, AEM 2420, AEM 2601, AEM 3230 and a course in macroeconomics.
AEM	4500	Resource Economics	Prerequisite: MATH 1110, ECON 3130 (now ECON 3030), and familiarity with Excel. Preference given to AEM Majors.
AEM	4520	Advanced Accounting	Prerequisite: AEM 3360. Preference given to AEM Majors.
AEM	4530	Auditing and Assurance	Prerequisite: AEM 3360. Preference given to AEM Majors.
AEM	4532	Fraud Examination	Prerequisites: AEM 4530 or permission of instructor.
AEM	4550	Economics of Advertising	Prerequisite: AEM 2600 or Intermediate microeconomics, and Introductory statistics. Preference given to AEM juniors and seniors. Please answer short survey questions via this link: http://tinyurl.com/AEM4550 . If you have any questions, please email Nicole Albright at nja35@cornell.edu .
AEM	4560	Federal Income Taxation of Business Entities, Estates and Trusts	Prerequisites: AEM 2210 or AEM 2225, or equivalent.
AEM	4570	Advanced Corporate Finance	Enrollment limited to: AEM majors. Prerequisite: AEM 3240 or 2240 - Finance.
AEM	4640	Economics of Agricultural Development	Prerequisite: ECON 1110 or 1120 or permission of instructor. Preference given to AEM Majors.

AEM	4660	Market Dynamics, Computer Simulation and Modeling	Prerequisite: An Undergraduate Accounting and Finance course. An upper level Financial Accounting course will be accepted in place of Finance. Juniors and Seniors only. If you are concurrently enrolled in one of the two required prerequisite classes, please contact the instructor to request an exception. Students not meeting prerequisites will be dropped. Once course is full, fill out the online form here: http://tinyurl.com/AEM4660Spring2015EnrollmentReq to be put on the waitlist.
AEM	4660	Market Dynamics, Computer Simulation and Modeling	Preference given to ENG and AEM majors. To be added to the waitlist, fill out the form here: http://tinyurl.com/AEM4660
AEM	4940	Undergraduate Special Topics in Applied Economics and Management	Enrollment by application only.
AEM	4960	Applied Economics and Management Internship	Enrollment limited to AEM students only. Submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)). Do not sign into section 601. You will be put in the course after submitting form online.
AEM	4960	Applied Economics and Management Internship	Enrollment limited to AEM students only. Submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)). Do not sign into section 601. You will be put in the course after submitting form online.
AEM	4970	Individual Study in Applied Economics and Management	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)). Do not sign into section 601. You will be put in the course after submitting form online.
AEM	4970	Individual Study in Applied Economics and Management	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)). Do not sign into section 600. You will be put in the course after submitting form online.
AEM	4980	Supervised Teaching Experience	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)). Do not sign into section 601. You will be put in the course after submitting form online.
AEM	4981	Supervised Teaching: Accounting Course	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)). Do not sign into section 601. You will be put in the course after submitting form online.
AEM	4981	Supervised Teaching: Accounting Course	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)). Do not sign into section 651. You will be put in the course after submitting form online.
AEM	4990	Undergraduate Research	EMPTY
AEM	1500	An Introduction to the Economics of Environmental and Natural Resources	Closed to Dyson School students (Dyson students can take AEM 2500). Preference given to ESS students. Students who have taken introductory microeconomics should enroll in AEM 2500. If you're unable to enroll and would like to be placed on the wait-list, please contact Suzanne Wapner at sw38@cornell.edu. Please include your major, year, and the reason you need this course this semester.
AEM	2000	Contemporary Controversies in the Global Economy	Seats for Juniors will open up on April 17th at 9am.
AEM	2010	Spreadsheet Modeling for Management and Economics	Enrollment limited to: AEM Majors ONLY, with preference given to Sophomores and Freshmen.
AEM	2010	Spreadsheet Modeling for Management and Economics	Enrollment limited to: AEM Majors only, with preference given to Sophomores and Freshmen. AEM rising Seniors will not be allowed to pre-enroll in April.

AEM	2050	Introduction to Agricultural and Development Finance	Recommended prerequisites: Calculus and/or statistics; a course in Economics. Students who have taken AEM 2240/2241 are not allowed to enroll in AEM 2050.
AEM	2100	Introductory Statistics	Enrollment preference given to: AEM Majors.
AEM	2210	Financial Accounting	Not open to freshman or Dyson students.
AEM	2210	Financial Accounting	Prerequisites: For non-Dyson Majors only. Must have sophomore standing or higher. Class is full, to be placed on the waitlist, fill out the online form here: https://docs.google.com/forms/d/1zaKAA5Ms9C6k5FX_H_i8f2a9iVYi-PQ5JPkiXoV3d5I/viewform?usp=send_form
AEM	2225	Financial Accounting For Dyson Majors	AEM 2225 is for Dyson majors only. Non-majors can enroll in AEM 2210.
AEM	2240	Finance	Prerequisite: AEM 2100, AEM 1200 and AEM 2210 or equivalents. Enrollment preference given to: AEM majors and minors. To be put on a waitlist, please fill out this doc: https://docs.google.com/forms/d/15FeD8d0rygzf8LWXoKZECdoki4M_YwaSnR1gH6_vQw/viewform
AEM	2240	Finance for Dyson Majors	Prerequisite: AEM 2100, AEM 1200, and AEM 2210, or equivalents. Dyson undergraduates only.
AEM	2241	Finance	Prerequisites: AEM 2100, AEM 1200, and AEM 2210, or equivalents. Non-Dyson Majors only. Priority given to Dyson Minors and University-Wide Business Minors.
AEM	2400	Marketing	For non-AEM majors with sophomore standing or higher.
AEM	2480	Food and Consumer Packaged Goods Industry Dynamics	Prerequisite: AEM 2200/1200 and AEM 2400/2420 (Marketing can be taken in the same semester). Enrollment preference given to Dyson Students. To be put on a wait-list, email Professor Hawkes at rod.hawkes@cornell.edu and copy Pam Duffy at pjd222@cornell.edu.
AEM	2500	Environmental and Resource Economics	Prerequisite: ECON 1110. Enrollment preference will be given to students in majors that specifically require AEM 2500.
AEM	2600	Managerial Economics I	Prerequisite: ECON 1110, and MATH 1106, or MATH 1110. Open to Dyson School Majors only.
AEM	2601	Managerial Economics II	Prerequisite: prior enrollment in AEM 2600 or equivalent. AEM students only.
AEM	2700	Management Communication	Prerequisites: This course is for AEM majors only. ONLY AEM Freshmen will be able to enroll for the Spring.
AEM	2700	Management Communication	This course is for AEM majors only.
AEM	2770	Excursions in Computational Sustainability	Prerequisites: Students are expected to have basic knowledge of probability theory and calculus.
AEM	3020	Farm Business Management	Not open to freshman. This course is a prerequisite for AEM 4050 and 4270. On days farms are visited, the section period is 1: 25-6:00 pm.
AEM	3040	Dairy Markets and Policy Seminar	This course requires sophomore or higher class standing and will be taught with recorded lectures online. There are no formal meeting times for lectures. Two to three physical discussion sections will be held during the semester. Students will be given a choice of 3 alternative days and times during a discussion section week.
AEM	3100	Business Statistics	Prerequisites: AEM 2100 or equivalent. Preference given to AEM students.
AEM	3120	Branding and Brand Management	Prerequisites: AEM 2420 or equivalents.
AEM	3200	Business Law I	Enrollment limited to: juniors, seniors, or graduate students. Preference given to: AEM Majors.
AEM	3210	Business Law II	Prerequisite: A course in business law, or permission of instructor. Enrollment is limited to: juniors, seniors, and graduate students.
AEM	3220	Digital Business Strategy	Preference given to: AEM Majors.
AEM	3230	Managerial Accounting	Prerequisite: AEM 2210 or equivalent. Priority given to AEM sophomores.
AEM	3260	Cooperative Business Management	Prerequisites: AEM 1200 or AEM 2200.

AEM	3270	Marketing-Operations Simulation	Prerequisite: AEM 2210 or permission of instructor. Its preferred that AEM 2400 and AEM 4480 were taken first as well. Preference given to: AEM Majors.
AEM	3280	Innovation and Dynamic Management	Enrollment limited to: seniors and grad students.
AEM	3290	International Agribusiness Study Trip	Prerequisite: previous business management or applied economics courses necessary. Course fee: Field study co-payment \$750, scholarships available based on financial need. Students are selected with priority given to juniors and seniors in CALS. Open by application by October 24th.
AEM	3310	Introduction to Business Regulation	Prerequisite: Intermediate Micro at the level of ECON 3130, PAM 2000, or AEM 2600/AEM 2601; AEM 1200 or AEM 2200; AEM 3200 recommended but not required.
AEM	3320	Leadership and Management in Sports	Prerequisite: AEM 1200 or equivalent. Preference given to: AEM Majors.
AEM	3340	Women, Leadership, and Entrepreneurship	Enrollment limited to: juniors and seniors. Preference given to AEM Majors. You can add yourself to the wait list here: http://tinyurl.com/kw4zn9x
AEM	3350	International Technology Marketing of Biotechnology	Prerequisite: ECON 1110 and BIOG 1109 or equivalents.
AEM	3360	Intermediate Accounting I	Prerequisite: AEM 2210 and AEM 3230. Preference given to AEM Majors. To be considered for enrollment in AEM 3360, please fill out the online form here: https://docs.google.com/forms/d/1ZAX-XM08wIhGMaoS4EzaAE8qtiz__JeNMGKBSCT-zA8/viewform
AEM	3370	Intermediate Accounting II	Prerequisite: AEM 3360.
AEM	3380	Social Entrepreneurs, Innovators, and Problem Solvers	Preference given to AEM Majors. Please email Lisa Biskup ldb5@cornell.edu, for information on enrolling.
AEM	3390	Research Methods in International Development	Prerequisites: AEM 2100 and Econ 1110 or equivalents.
AEM	3440	Consumer Behavior	Enrollment preference given to: AEM, Nutrition, and Human Ecology students.
AEM	3450	Sustainability Marketing	Prerequisites: AEM 2420 or AEM 2400 and AEM 2410 or permission of Instructor.
AEM	3500	Investments in the Global Economy	Prerequisites: AEM 2240.
AEM	3520	Financial Statements Analysis	Prerequisites: AEM 2225, AEM 2240, AEM 2010
AEM	4000	Practitioner's Overview of Securities Markets and Investment Banking	Enrollment preference given to: Sophomores and above in the AEM program. To request permission to enroll, please fill out this form: http://tinyurl.com/AEM4000Spring2015EnrollmentReq
AEM	4010	Commercial Bank Management	Prerequisite: ECON 1110 or 1120. Enrollment preference given to: AEM juniors and seniors.
AEM	4020	Food and Brand Lab Workshop I	
AEM	4021	Food and Brand Lab Workshop II	Preference given to AEM Majors. Please contact the Cornell Food & Brand Lab (foodandbrandlab@cornell.edu) for information on enrolling.
AEM	4040	Credit and Banking in Agriculture	Prerequisite: AEM 4050/2050 or AEM 2240, or equivalent. Admittance to Farm Credit Fellows Program.
AEM	4060	Risk Simulation and Optimization	Prerequisite: at least one course equivalent to AEM 3240 or AEM 4050 and at least one course in statistics; or instructor's permission. Priority given to AEM seniors and grad students. Working knowledge of Excel is required. Must bring laptop to class that has access to microsoft excel (Apple users must have PC compatibility).

AEM	4070	Advanced Financial Analytics with Applications in Agriculture and Development	Prerequisites: AEM 2010, AEM 2240, and a course in statistics/econometrics. Basic programming knowledge and statistical knowledge, or a course in programming (Python, C++, MATLAB, etc.) highly recommended and assumed. Appropriate for well qualified Dyson undergraduates, and students in a technical field such as Engineering/CS who have an interest in finance.
AEM	4110	Introduction to Econometrics	Prerequisite: AEM 2100 and either ECON 3130, AEM 2600 or equivalent.
AEM	4120	Computational Methods for Management and Economics	Prerequisite: AEM 2100 or equivalent. Primarily for juniors, seniors and M.S. degree candidates. Preference given to AEM Majors..
AEM	4140	Behavioral Economics and Managerial Decisions	Prerequisite: AEM 2600, ECON 3130 (now ECON 3030) or PAM 2000. Enrollment limited to: juniors and seniors. Preference given to AEM Majors.
AEM	4150	Price Analysis	Prerequisite: AEM 2100 or equivalent, ECON 3130 (now ECON 3030), PAM 2000 or AEM 2600/2601 or equivalent. Preference given to AEM Majors.
AEM	4160	Strategic Pricing	Prerequisite: AEM 2600 or Intermediate Microeconomics, and Introductory Statistics. Preference given to AEM juniors and seniors. Please answer short survey questions via this link: http://tinyurl.com/AEM4160 . If you have any questions, please email Nicole Albright at nja35@cornell.edu .
AEM	4190	Strategic Thinking	Prerequisites: Prerequisite: Intermediate Microeconomics course such as AEM 2600, PAM 2000, ECON 3010, ECON 3030 (formerly 3130), or equivalents.
AEM	4210	Derivatives and Risk Management	EMPTY
AEM	4230	Contemporary Topics in Applied Finance	Prerequisite: ECON 1110, Math 1110 or equivalent, AEM 2100 or equivalent, AEM 3240. Enrollment limited to: AEM students.
AEM	4280	Valuation of Capital Investment	Prerequisite: AEM 2100 and 2240 or equivalents. Preference given to AEM Majors.
AEM	4290	International Financial Management	Prerequisite: AEM 2100 and 2240. Preference given to AEM Majors.
AEM	4990	Undergraduate Research	Enrollment limited to: students with GPA of at least 2.7. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) . Do not sign into section 700. You will be put in the course after submitting form online.
AEM	6070	Advanced Financial Analytics with Applications in Agriculture and Development	Prerequisites: graduate standing. Basic programming knowledge and statistical knowledge, or a course in programming (Python, C++, MATLAB, etc.) highly recommended and assumed. Appropriate for graduate students in AEM, or graduate students in a technical field such as Engineering/CS who have an interest in finance.
AEM	6080	Production Economics	Prerequisite: ECON 3130 and MATH 1110 or equivalents.
AEM	6300	Policy Analysis: Welfare Theory, Agriculture, and Trade	requisites: Prerequisite: Either PAM 2000, ECON 3010, ECON 3030 (formerly 3130), or equivalent.
AEM	6320	Open Economy Analysis: Theory and Applications	Prerequisites: Prerequisite: ECON 3030 (formerly 3130)/ECON 3040 (formerly 3140) or permission of instructor
AEM	6390	Research Methods in International Development	Prerequisite: graduate standing.
AEM	6400	Analysis of Agricultural Markets	Prerequisite: AEM 4100 or 4150 or equivalent.
AEM	6480	Food and Consumer Packaged Goods Industry Dynamics	Prerequisites: Must be a Graduate student in the MPS-ABEIC Program

AEM	6510	Environmental and Resource Economics	Open to graduate students.
AEM	6940	Graduate Special Topics in Applied Economics and Management	Required for: First-year AEM PhD students.
AEM	6980	Supervised Graduate Teaching Experience	Enrollment limited to graduate students. Any questions, please contact Linda Sanderson at LGM2@cornell.edu
AEM	6980	Supervised Graduate Teaching Experience	Enrollment limited to: graduate students.
AEM	6990	M.P.S. Research	Enrollment limited to: M.P.S. students. Sign into your faculty section.
AEM	6990	M.P.S. Research	Enrollment limited to: M.P.S. students.
AEM	7000	Individual Study in Applied Economics and Management	Enrollment limited to: graduate students. Enroll under the faculty member that you are working with. Credit, class hours, and other details arranged with faculty member.
AEM	7000	Individual Study in Applied Economics and Management	Enrollment limited to: graduate students.
AEM	7010	Applied Microeconomics I	
AEM	7020	Applied Microeconomics II	Prerequisite: ECON 6090 and 6100, and AEM 7100. Enrollment limited to: Ph.D students.
AEM	7100	Econometrics I	Prerequisite: matrix algebra and statistical methods courses at level of ILRST 3110 or ECON 6190.
AEM	7130	Dynamic Optimization	Prerequisite: ECON 6090 and 6170.
AEM	7150	Applied Microeconomic Research I	Enrollment limited to and required for: all second-year AEM Ph.D. students.
AEM	7151	Applied Microeconomic Research II	Enrollment limited to and required for: AEM Ph.D. students.
AEM	7440	Advanced Consumer Research	Enrollment limited to: graduate students. Enrollment preference given to: AEM, Nutritional Science, or Food Technology students.
AEM	7500	Resource Economics	Prerequisite: ECON 6090 and 6180 or AEM 7130.
AEM	7510	Environmental Economics	Prerequisite: ECON 6090 and graduate-level econometrics.
AEM	7650	Development Microeconomics Graduate Research Seminar	Enrollment limited to: graduate students. Permission of instructor is required.
AEM	7650	Development Microeconomics Graduate Research Seminar	Enrollment limited to: graduate students with permission of instructor.
AEM	7900	Graduate-Level Thesis Research	Enrollment limited to: students in a Ph. D. program before "A" Exam has been passed. Permission of graduate committee chair is required.
AEM	8900	Master's Level Thesis Research	Enrollment limited to: students admitted specifically to a Master's program. Permission of committee chair is required.
AEM	9900	Doctoral-Level Thesis Research	Permission of graduate committee chair is required.
AGSCI	2940	Introduction to Agricultural Machinery	To enroll, contact Bob Schindelbeck (rrs3@cornell.edu). The dates and times of the four lecture periods will be determined during the first lab. Most labs will involve working with farm equipment or touring farm environments so students should wear boots or sturdy shoes and casual clothes.

AGSCI	4960	Internship in Agricultural Sciences	You must have a designated internship advisor prior to enrollment. Contact Kari Richards(ksu2@cornell.edu) or stop by the office at 707 Bradfield, 255-0660. You submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study)
AGSCI	4960	Internship in Agricultural Sciences	You must have a designated internship advisor prior to enrollment. Contact Kari Richards(ksu2@cornell.edu) or stop by the office at 707 Bradfield, 255-0660. You must submit a Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies).
AIS	3330	Ways of Knowing: Indigenous and Local Ecological Knowledge	Enrollment limited to: Juniors, seniors, and grad students. Sophomores require permission of instructor (ksk28@cornell.edu).
AIS	3400	Contested Terrain: Hawaii	Enrollment limited to: students in Hawaii. Taught in Hawaii.
AIS	4970	Independent Study	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
AIS	4970	Independent Study	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
AIS	6010	American Indian and Indigenous Studies Speaker Series	The class will occur every other Wed. unless otherwise specified.
AIS	6970	Independent Study in American Indian Studies	Sign up under faculty member's section with prior faculty approval. If you do not see your faculty member listed, contact 140 Roberts Hall.
AIS	6970	Independent Study in American Indian Studies	Sign into your faculty section. If your faculty member is not listed, please contact 140 Roberts Hall or the graduate school to add the faculty member.
ALS	3100	Foundations in Leadership: Skills for Professional Success and Life	Prerequisite: Junior or senior.
ALS	3200	Leadership and Global Service Learning - Pre Fieldwork Course	Pre-requisite: Students must undertake study abroad, fieldwork, research, internship or community engaged service-learning (in the US or in another country) by the end of the calendar year or have permission of instructor.
ALS	4000	Leadership for Campus Sustainability	Prerequisites: one or more courses with a sustainability focus or substantial involvement with sustainability programming.
ALS	4000	Leadership for Campus Sustainability	Prerequisites: one or more courses with a sustainability focus or substantial involvement with sustainability programming.
ALS	4940	Special Topics in Agriculture and Life Sciences	To enroll, contact Amy Kohut (aek44).
ALS	4960	Internship in Agriculture and Life Sciences	Not open to students who have earned internship credits elsewhere or in previous semesters. Students must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ALS	4960	Internship in Agriculture and Life Sciences	Not open to students who have earned internship credits elsewhere or in previous semesters. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.

ALS	4970	Independent Study in Agriculture and Life Sciences	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ALS	4970	Independent Study in Agriculture and Life Sciences	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
ALS	4980	Undergraduate Teaching Assistant	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
ALS	4990	Undergraduate Research in Agriculture and Life Sciences	Students must register using independent study form (available in 140 Roberts Hall).
ALS	4990	Undergraduate Research in Agriculture and Life Sciences	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
ALS	5100	Leadership Development for Life Scientists	Enrollment limited to: graduate students.
ALS	5780	International Teaching Assistant Development Program Course 1	Open to Graduate International Teaching Assistants. Priority given based on immediacy of TA assignment. No course audits allowed. One additional bimonthly meeting (time TBA) with instructor required.
ALS	5780	International Teaching Assistant Development Program Course 1	Enrollment open to: Graduate International Teaching Assistants. Enrollment preference given to: immediacy of TA assignment. No course audits allowed. One additional bi-monthly (time TBA) with instructor required.
ALS	6015	The Practice of Teaching in Higher Education	Contact instructor for a permission code.
ALS	6016	Teaching as Research in Higher Education	Prerequisite: ALS 6015, (students participating in CTE collaborative programming (i.e. CIRTl, Teagle and future faculty programs in City and Regional Sciences and Biological and Biomedical Sciences Graduate Research and Teaching Fellowship Program) may be required to enroll in this course in order to complete their program requirements. This course is part of the fulfillment of the CTE Biological and Biomedical Sciences (BBS) Graduate Research and Teaching Fellowship Program. It will also be part of CIRTl offerings and is being considered for requirements for an additional group of Teagle grant participants.)
ANSC	1105	Contemporary Perspectives on Careers in Animal Science	Enrollment limited to: freshman, sophomores, first year transfer standing.
ANSC	2120	Animal Nutrition	Prerequisite: CHEM 2080 or equivalent. Recommended prerequisite: ANSC 1100, ANSC 1150. If lab section is closed, see professor.
ANSC	2150	Exotic Avian Husbandry and Propagation	If course is full, see professor. Students may not add after the second lecture period.
ANSC	2210	Principles of Animal Genetics	Prerequisite: One year of college Biology.
ANSC	2400	Animal Reproduction and Development	Prerequisite: ANSC 1100-1160 or equivalent or one year introductory biology.
ANSC	2410	Animal Reproduction and Development Lab	Prerequisite or co-requisite: ANSC 2400.
ANSC	2500	Dairy Cattle Principles	This course is a prerequisite for ANSC 2510, 3510, 3540, 3550. If course is full, see professor.
ANSC	2650	Equine Biology and Management	Prerequisite: ANSC 1100 and ANSC 1160 or permission of instructor. If course is full, see professor.
ANSC	2720	Feline Reproduction	Recommended prerequisite: ANSC 2400.

ANSC	3310	Applied Dairy Cattle Genetics	Prerequisite: ANSC 2500, ANSC 2210.
ANSC	3400	Comparative Mammalian Reproduction	Prerequisites: ANSC 2400 Animal Reproduction and Development or equivalent.
ANSC	3450	Reproductive Physiology and Management of Dairy Cattle	Prerequisites: ANSC 2400 Animal Reproduction and Development.
ANSC	3510	Dairy Herd Management	Prerequisite: ANSC 2500 or permission of instructor. Recommend prerequisite: AEM 3020.
ANSC	3511	Junior Dairy Fellows	Prerequisite: ANSC 2500. Enrollment is limited to: at least junior standing.
ANSC	3540	Dairy Cattle Herd Health	Prerequisite: ANSC 2500 or permission of instructor.
ANSC	3550	Dairy Cattle Nutrition	Prerequisite: ANSC 2500 or permission of instructor.
ANSC	3700	Immunology in Animal Health and Disease	Prerequisite: Introduction to Biology. Informal discussion sections, TBA.
ANSC	3920	Mechanisms of Animal Growth and Development	Prerequisite: ANSC 1100-1160 or equivalent intro physiology courses.
ANSC	3980	Animals in Biomedical Research	Prerequisite: 1 yr Intro biology, ANSC 1100 or equivalent intro physiology course. Introduces features and applications of various animal models for biomedical research on human health and diseases.
ANSC	4000	Feeding the World: The Biological and Quantitative Analyses of Livestock and Crop Systems	Recommended prerequisite: at least one course in biology, in agriculture or in economics.
ANSC	4010	Dairy Industry Seminar	Enrollment limited to: Junior or senior standing.
ANSC	4020	Seminar in Animal Sciences	Enrollment is limited to: students engaged in undergraduate honors research projects.
ANSC	4110	Integrated Cattle Nutrition	Prerequisite: ANSC 1100 & ANSC 2120 or equivalent. Recommended prerequisite: ANSC 3550. Enrollment preference given to: juniors, seniors and entering graduate students. If course is full, see professor.
ANSC	4120	Whole-Farm Nutrient Management	Preferred prerequisite: ANSC 4110. Enrollment is limited to juniors, seniors, or graduate students.
ANSC	4140	Ethics and Animal Science	Enrollment is limited to: juniors or seniors.
ANSC	4270	Fundamentals of Endocrinology	See Professor if class is full.
ANSC	4400	Tools for a Lifelong Career in Research	Prerequisite: 20 credit hours in science and/or technology courses.
ANSC	4560	Dairy Management Fellowship	Enrollment limited to: senior standing. Prerequisite: ANSC 2500, ANSC 3510, AEM 3020, ANSC 3511 and ANSC 4510 or equivalent.
ANSC	4940	Special Topics in Animal Science	Prerequisite: ANSC 1100 or equivalent anatomy and physiology course see instructor).
ANSC	4960	Internship in Animal Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ANSC	4960	Internship in Animal Science	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.

ANSC	4970	Individual Study in Animal Science	Enrollment is limited to: students in animal sciences. Students must register using independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ANSC	4970	Individual Study in Animal Science	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ANSC	4980	Undergraduate Teaching in Animal Science	Prerequisite: GPA of at least 2.7. Students must register using independent study form Available online: (http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ANSC	4980	Undergraduate Teaching in Animal Science	Prerequisite: GPA of at least 2.7. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ANSC	4990	Undergraduate Research in Animal Science	Prerequisite: GPA of at least 2.7. Enrollment limited to: juniors or seniors. Not open to students who have earned 6 or more undergraduate research credits elsewhere in the college. Students must register using independent study form Available online: (http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ANSC	4990	Undergraduate Research in Animal Science	Prerequisite: GPA of at least 2.7. Enrollment limited to: juniors or seniors. Not open to students who have earned 6 or more undergraduate research credits elsewhere in the college. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ANSC	6100	Animal Science Seminar	Enrollment limited to: graduate students.
ANSC	6190	Field of Nutrition Seminar	Prerequisite: NS 6190 / ANSC 6190.
ANSC	6190	Field of Nutrition Seminar	Prerequisite: NS 6190 / ANSC 6190.
ANSC	6210	Reproductive Physiology /Endocrinology Seminar	Enrollment limited to: graduate students or permission of instructor.
ANSC	6210	Reproductive Physiology /Endocrinology Seminar	Enrollment limited to: graduate students or permission of instructor.
ANSC	6220	Graduate Student Research Updates	Enrollment in the Animal Science Graduate Program.
ANSC	6220	Graduate Student Research Updates	Enrollment in the Animal Science Graduate Program.
ANSC	7900	Graduate-Level Thesis Research	Enrollment limited to: students in a Ph.D. program only before A exam has been passed. Permission of instructor is required.
ANSC	7900	Graduate-Level Thesis Research	Enrollment limited to: Ph.D. students before A exam has been passed. Permission of advisor is required.
ANSC	8900	Master's Level Thesis Research	Enrollment limited to: master's students. Permission of advisor is required.
ANSC	8900	Master's Level Thesis Research	Permission of advisor is required. Enrollment limited to: students admitted specifically to a master's program.
ANSC	9900	Doctoral-Level Thesis Research	Enrollment limited to: students admitted to candidacy after A exam has been passed. Permission of advisor is required.
ANSC	9900	Doctoral-Level Thesis Research	Permission of advisor is required. Enrollment limited to: students admitted to candidacy after A exam has been passed.
BEE	1200	The BEE Experience	Enrollment limited to: Requirement for CALS BEE freshman. Not required for students who have completed an ENGR1 course. Prerequisite: BEE majors or permission of instructor.

BEE	1510	Introduction to Computer Programming	Prerequisite or co-requisite: Math 1910 or equivalent.
BEE	2220	Bioengineering Thermodynamics and Kinetics	Prerequisite: MATH 1920, PHYS 2213, and a chemistry course completed or concurrent.
BEE	2510	Engineering for a Sustainable Society	Prerequisite or corequisite: Math 2930.
BEE	2600	Principles of Biological Engineering	Prerequisite or co-requisite: MATH 2930, 2 semesters of core biology major classes and the investigative lab or BIOG 1445.
BEE	3299	Sustainable Development	Enrollment limited to: at least sophomore standing. Course is web based.
BEE	3310	Bio-Fluid Mechanics	Prerequisite: ENGRD 2020 and engineering math sequence.
BEE	3500	Biological and Bioenvironmental Transport Processes	Prerequisite or co-requisite: Math 2930 and fluid mechanics.
BEE	3600	Molecular and Cellular Bioengineering	Prerequisite: BEE 2600, biochemistry, linear algebra, ordinary differential equations, or permission of instructor.
BEE	3650	Properties of Biological Materials	Prerequisite or co-register: ENGRD 2020. Satisfies the BE laboratory experience requirement. If you are planning to use BEE 3650 in the Spring 2015 to satisfy your engineering lab requirement you need to email Brenda Marchewka at bls19 for a permission code before pre-enrollment opens in October/November. Enrollment in this course will reserve priority for seniors needing the course for lab requirements.
BEE	3710	Physical Hydrology for Ecosystems	Prerequisite: MATH 1920 or permission of instructor.
BEE	4010	Renewable Energy Systems	Prerequisite: BEE 2220 or ENGRD 2210, or BEE 3310 or CEE 3310.
BEE	4270	Water Measurement and Analysis Methods	Prerequisite: CEE 3310 or hydrology course.
BEE	4350	Principles of Aquaculture	Prerequisite: at least junior standing and one semester of physics and chemistry.
BEE	4500	Bioinstrumentation	Prerequisite: MATH 2940, introductory computing, two semesters of physics, statistics or permission of instructor. Satisfies both BE laboratory experience and BE capstone design requirement. If you are planning to use BEE 4500 in the Spring 2015 to satisfy your engineering lab requirement you need to email Brenda Marchewka at bls19 for a permission code before pre-enrollment opens in October/November. Enrollment in this course will reserve priority for seniors needing the course for lab (or, in this case, lab or capstone) requirements.
BEE	4530	Computer-Aided Engineering: Applications to Biomedical Processes	Satisfies BE capstone design requirement. Satisfies College of Engineering technical writing requirement. Prerequisite: heat and mass transfer (BEE 3500 or equivalent).
BEE	4550	Biologically Inspired Microsystems Engineering	Prerequisite: One year of biology, thermodynamics course, or co-registration in BEE 3500 or permission of instructor.
BEE	4590	Biosensors and Bioanalytical Techniques	Prerequisite: Biochemistry. Permission of instructor is required.
BEE	4600	Deterministic and Stochastic Modeling in Biological Engineering	Prerequisite: MATH 2930, MATH 2940, BEE 3500 or equivalent, MATLAB, Mass and Energy Balances, or permission of instructor.
BEE	4640	Bioseparation Processes	Pre-reqs: intro biochem, physics, calculus, BEE 2600 or equivalent or permission of instructor.
BEE	4710	Introduction to Groundwater	Prerequisites: fluid mechanics or hydrology course.
BEE	4730	Watershed Engineering	Prerequisite: CEE 3310 or hydrology course.

BEE	4740	Water and Landscape Engineering Applications	Prerequisite: CEE 3310 or hydrology course or permission of instructor. Satisfies BE and EnvE capstone design requirement.
BEE	4750	Environmental Systems Analysis	Prerequisite: BEE 2510 or BEE 2600 or permission of instructor.
BEE	4760	Solid Waste Engineering	Prerequisites: BEE 3500 or CEE 3510 or permission of instructor.
BEE	4800	Our Changing Atmosphere: Global Change and Atmospheric Chemistry	Prerequisites: CHEM 2070 or 2090, MATH 1920, PHYS 1112 or equivalent, or permission of instructor.
BEE	4810	LRFD - Based Engineering of Wood Structures	Prerequisite: ENGRD 2020. Satisfies BE capstone design requirement when co-registered in BEE 4960.
BEE	4860	Industrial Ecology of Agriculturally Based Bioindustries	Prerequisite: One year of calculus, some knowledge of MATLAB.
BEE	4890	Entrepreneurial Management for Engineers	Prerequisite: junior standing or higher.
BEE	4940	Special Topics in Biological and Environmental Engineering	Prerequisites: CSS 3650 or EAS 3030 (for undergrads only).
BEE	4940	Special Topics in Biological and Environmental Engineering	Prerequisite: thermodynamics. Pre or co-req: mass transport.
BEE	4960	Capstone Design in Biological and Environmental Engineering	Co-register: BEE 4810.
BEE	4970	Individual Study in Biological and Environmental Engineering	Written permission of instructor and adequate ability and training for work proposed. Students from all colleges must register using independent study form available at http://cals.cornell.edu/academics/registrar/policies/#independent-study .
BEE	4970	Individual Study in Biological and Environmental Engineering	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not enroll in section 601. You will be enrolled in the course after submitting the form online.
BEE	4971	Engineers Without Borders Independent Study	Students from all colleges must submit an independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study).
BEE	4980	Undergraduate Teaching	Students from all colleges must register using independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). See department office for course ID specific to your project advisor .
BEE	4980	Undergraduate Teaching	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not enroll in section 601. You will be enrolled in the course after submitting the form online.
BEE	4990	Undergraduate Research	Prerequisite: adequate training for work proposed and written permission of instructor. Students from all colleges must register using independent study form available at http://cals.cornell.edu/academics/registrar/policies/#independent-study .
BEE	4990	Undergraduate Research	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not enroll in section 701. You will be enrolled in the course after submitting the form online.

BEE	4993	Honors Thesis	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not enroll in section 701. You will be enrolled in the course after submitting the form online.
BEE	5010	Bioengineering Seminar	Enrollment limited to: juniors, seniors or graduate students. Students must attend 10 seminars in the broad field of Bioengineering. If you have added the course you are also required to sign up for the course on Blackboard - BME 5010 to receive additional announcements and link to seminars. Seminars attended at a scientific meeting or conference may also be included. In order to receive credit for the course a list of seminars attended (date, speaker, title of seminar) and a two-sentence summary for each will be due by the last day of class for the semester. This list must be uploaded to the course Blackboard assignment page. It will not be accepted in any other manner.
BEE	5010	Bioengineering Seminar	Enrollment limited to: juniors, seniors or graduate students. Students must attend 10 seminars in the broad field of Bioengineering. If you have added the course you are also required to sign up for the course on Blackboard - BME 5010 to receive additional announcements and link to seminars. Seminars attended at a scientific meeting or conference may also be included. In order to receive credit for the course a list of seminars attended (date, speaker, title of seminar) and a two-sentence summary for each will be due by the last day of classes on Saturday, December 1, 2011. This list must be uploaded to the course Blackboard assignment page. It will not be accepted in any other manner.
BEE	5330	Engineering Professionalism	Enrollment limited to: graduate students with accredited engineering degree or senior who will graduate with accredited engineering degree.
BEE	5400	Engineering Ethics and Professional Practice	Prerequisites: Graduate level or senior standing.
BEE	5901	M.P.S. Project	Requirement for: M.P.S. candidates in field.
BEE	5902	M.P.S. Project	Prerequisite: requirement of each M.P.S. candidate in the field.
BEE	5952	Master of Engineering Design Project	Enrollment limited to: students in M.Eng. degree program.
BEE	6550	Biologically Inspired Microsystems Engineering	Prerequisite: Thermodynamics course and permission of instructor.
BEE	6640	Sustainable Bioenergy Production on Marginal Lands of New York and the Northeast	Prerequisites: Open to graduate students and upper level undergraduate students.
BEE	6940	Graduate Special Topics in Biological and Environmental Engineering	Graduate standing or permission of instructor.
BEE	7000	Orientation to Graduate Study	Enrollment limited to: newly joining graduate students in BEE.
BEE	7540	Water Management in an Era of Growing Water Scarcity	Enrollment limited to: graduate students or permission of instructors.
BEE	7600	Nucleic Acid Engineering	Enrollment limited to: graduate students, seniors by permission of instructor.
BEE	7710	Soil and Water Engineering Seminar	Enrollment limited to: graduate students or permission of instructor. Co-meets with EAS 7990.
BEE	7710	Soil and Water Engineering Seminar	Enrollment limited to: graduate students or permission of instructor.
BIOAP	3110	Principles of Animal Physiology	Prerequisite: BIOG 1500 and BIOG 1440 or BIOG 1445 or one year of college biology; one year chemistry and mathematics or equivalent AP credit. Recommended prerequisite: previous or concurrent physics course.
BIOAP	3160	Cellular Physiology	Prerequisite: BIOMG 1350; or previous or concurrent enrollment in BIOMG 3300, BIOMG 3310 and BIOMG 3320, or BIOMG 3330.
BIOAP	3190	Animal Physiology Experimentation	Prerequisite or co-requisite: BIOAP 3110.
BIOAP	4130	Histology: The Biology of the Tissues	Prerequisite: BIOMG 1350. Recommended prerequisite: BIOMG 3300 or BIOMG 3310, or equivalent.

BIOAP	4140	Principles of Pharmacology	Prerequisites: Animal Physiology (BIOAP 3110) or Human Anatomy and Physiology (NS 3410).
BIOAP	4270	Fundamentals of Endocrinology	See Professor if class is full.
BIOAP	4580	Mammalian Physiology	Prerequisite: BIOAP 3110 or BIOG 1440 with permission of instructor. Recommended for biological sciences majors, pre-med and pre-vet students, and beginning graduate students in physiology, engineering, nutrition, and animal science.
BIOAP	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Students must register using individual study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study).
BIOAP	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Arts students may not count this course toward graduation but may, upon petition (one time only) to their class dean, carry fewer than 12 other credits and remain in good standing. This would affect Dean's List eligibility but not eligibility for graduating with distinction. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOAP	6100	By Scientific Design: Skill Building for a Career in the Life Sciences	
BIOAP	7200	Animal Physiology and Anatomy Seminar	Enrollment limited to: graduate students in the field of physiology.
BIOAP	7200	Animal Physiology and Anatomy Seminar	Enrollment is limited to: graduate students in the field of physiology.
BIOEE	1250	Biology Seminar	Shuttle pick-up to the Lab of Ornithology.
BIOEE	1780	An Introduction to Evolutionary Biology and Diversity	4 -5 credit class. 5 credit involves writing component and 2 discussion sections per week; limited to 15 students per section in 5 credit option; interested students complete application first day of class.
BIOEE	1780	An Introduction to Evolutionary Biology and Diversity	Biological sciences majors are required to take this course for a letter grade. Students interested in the 5-credit option must complete the application first day of class. 5 credit option involves writing component and a discussion section that meets twice per week; limited to 15 students in each section of the 5-credit option. Priority for enrollment given to freshmen, sophomores, and transfer students.
BIOEE	2070	Evolution	Intended for students with no background in college biology. May not be taken for credit after BIOEE 1780. Does not meet evolutionary biology requirement for biological sciences major.
BIOEE	2740	The Vertebrates: Structure, Function, and Evolution	Prerequisite: two majors-level biology courses. Course Fee: \$25.
BIOEE	3510	Conservation Oceanography	EMPTY
BIOEE	3610	Advanced Ecology	Prerequisite: One semester of calculus and BIOEE 1610 or equivalent, or permission of instructor. Biological sciences majors in the EEB concentration must take course for a letter grade.
BIOEE	3611	Field Ecology	Prerequisite or corequisite: BIOEE 1610. Limited to 22 students. One weekend field trip.
BIOEE	3620	Dynamic Models in Biology	Prerequisite: two majors-level biology courses and completion of mathematics requirements for biological sciences major or equivalent.
BIOEE	3690	Chemical Ecology	Prerequisite: one majors-level biology course and one semester introductory chemistry for majors or nonmajors or equivalents, or permission of instructor.
BIOEE	3750	The Vertebrates: Advanced Topics in Morphology, Development, and Evolution	Prerequisite or corequisite: BIOEE 2740 or equivalent.
BIOEE	4460	Plant Behavior - Induced Plant Responses to Biotic Stresses, Lectures	Prerequisite: BIOEE 1610 or permission of instructor.
BIOEE	4530	Speciation: Genetics, Ecology, and Behavior	Prerequisite: BIOEE 1780 and BIOMG 2800 or equivalents, or permission of instructor. Limited to 40 students.

BIOEE	4550	Insect Ecology	Recommended Prerequisite: ENTOM 2120 or BIOEE 1610 or permission of instructor.
BIOEE	4571	Limnology: Ecology of Lakes, Laboratory	Letter grades only; S-U grades by permission of instructor. Prerequisite or corequisite: BIOEE 4570. Fee for food on field trip: \$20. One weekend field trip. Optional vertebrate dissection (fish) during one laboratory exercise and during a portion of the weekend field trip.
BIOEE	4620	Marine Ecosystem Sustainability	Letter grades, S/U grades with permission of instructor. Limited to 50 students.
BIOEE	4690	Food, Agriculture, and Society	Prerequisite: introductory ecology course or permission of instructor. Limited to 20 students.
BIOEE	4700	Herpetology, Lectures	Recommended prerequisite: BIOEE 2740 or BIOSM 2740.
BIOEE	4701	Herpetology, Laboratory	Prerequisite or co-requisite: BIOEE 4700. Course fee: \$30.
BIOEE	4760	Biology of Fishes	Limited to 24 students. Recommended BIOEE 2740 or equivalent experience in vertebrate zoology. Letter grades, S-U by permission only. Small lab fee may be required. Two field trips, including one full-day weekend trip required. Live animals are studied in the field and are sometimes used in the lab for nondestructive demonstrations or experiments. The systematics and dissection labs used preserved specimens.
BIOEE	4780	Ecosystem Biology	Prerequisite: BIOEE 1610 or equivalent.
BIOEE	4790	Paleobiology	Prerequisite: two majors-level biology courses and either BIOEE 2740, BIOSM 3730, EAS 3010, or permission of instructor.
BIOEE	4920	Special Topics in Ocean Biodiversity: Ocean Biodiversity Research Apprenticeship	Prerequisites: Intro Biology or Intro Oceanography, and permission of instructor. This course is part of an off campus program at Friday Harbor Marine Labs that provides field research experience for advanced students in marine biology. You must apply to be accepted to the program by contacting the course coordinator Reyn Yoshioka (rmy27@cornell.edu).
BIOEE	4930	Marine Invertebrate Biodiversity	Prerequisites: Intro Biology or equivalent. This course is part of an off campus program at Friday Harbor Marine Labs that provides field research experience for advanced students in marine biology. You must apply to be accepted to the program by contacting the course coordinator Reyn Yoshioka (rmy27@cornell.edu).
BIOEE	4940	Special Topics in Ecology and Evolutionary Biology	Prerequisites: This course is part of an off campus program at Friday Harbor Marine Labs that provides field research experience for advanced students in marine biology. You must apply to be accepted to the program by contacting the course coordinator Reyn Yoshioka (rmy27@cornell.edu).
BIOEE	4980	Teaching Experience	Limited enrollment. Prerequisites: previous enrollment in course to be taught or equivalent. Students must register using individual study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study).
BIOEE	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Arts students may not count this course toward graduation but may, upon petition (one time only) to their class dean, carry fewer than 12 other credits and remain in good standing. This would affect Dean's List eligibility but not eligibility for graduating with distinction. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOEE	7570	Seminar in Spatial Population Ecology	Undergraduates must have permission of instructor.
BIOEE	7600	Special Topics in Evolution and Ecology	May be repeated for credit.
BIOEE	7640	Plant-Insect Interactions Seminar	Permission of instructor required for undergraduate students. May be repeated for credit.
BIOEE	7640	Plant-Insect Interactions Seminar	Permission of instructor is required for undergraduates. May be repeated for credit.
BIOEE	7670	Current Topics in Ecology and Evolutionary Biology	Permission of instructor is required for undergraduate students.
BIOEE	7800	Graduate Seminar in Ornithology	Permission of instructor required for undergraduate students. May be repeated for credit.

BIOEE	8990	M.S. Thesis Research	Enrollment limited to: students in the field of ecology and evolutionary biology.
BIOEE	8990	M.S. Thesis Research	Enrollment limited to: students in the field of ecology and evolutionary biology. Sign into your faculty member's section.
BIOEE	9990	Ph.D. Dissertation Research	Enrollment limited to: Ph.D. students in the field of ecology and evolutionary biology.
BIOEE	9990	Ph.D. Dissertation Research	Enrollment limited to: Ph.D. students in the field of ecology and evolutionary biology. Sign into your faculty section.
BIOG	1014	Academic Support for BIOG 1140: Foundations of Biology	Corequisite: BIOG 1140.
BIOG	1200	Biology Scholars Program Freshman Seminar	Enrollment is limited to: members of the biology scholars program.
BIOG	1200	Biology Scholars Program Freshman Seminar	Enrollment limited to: members of the Biology Scholars Program.
BIOG	1440	Introductory Biology: Comparative Physiology	Biological Science majors are required to take this course for a letter grade. Enroll through LEC and then choose your section. If you have questions concerning enrollment in this course please email slf42@cornell.edu. I will add you to the waitlist. Please send me in order of preference 3 section days and times that will work with your schedule. Continue to watch for an opening until Friday, November 14. On January 12, 2015, this course will be changed to instructor consent, this will require a permission code to enroll in this course. I will notify you if we can accommodate your request.
BIOG	1440	Introductory Biology: Comparative Physiology	Biological Science majors are required to take this course for a letter grade. Students enroll through the lecture then choose their discussion section. 1st Day of lecture this course will change to instructor consent and require a permission code to enroll.
BIOG	1445	Introduction to Comparative Physiology, Individualized Instruction	Course will change to instructor consent and require a permission code to enroll after first lecture. No admittance after first week. Alternate section for those with T 9:05-9:55AM course conflict. Contact course at biog1445@cornell.edu for consent to enroll.
BIOG	1445	Introduction to Comparative Physiology, Individualized Instruction	Course will change to instructor consent and require a permission code to enroll on Thursday, August 28. No admittance after first week.
BIOG	1500	Investigative Biology Laboratory	Biological sciences majors are required to take this course for a letter grade. First day of lecture is Tuesday 01/27/15. If you are 10 minutes late for your lab section you will forfeit your lab spot. First lab will be 1/27/15. If you are 10 minutes late for your lab section you will forfeit your lab spot. First lab will be 1/28/15. If you are 10 minutes late for your lab section you will forfeit your lab spot. First lab will be 1/29/15.
BIOG	1500	Investigative Biology Laboratory	Biological Sciences majors are required to take this course for a letter grade.
BIOG	2000	Special Studies in Biology	Written permission from Office of Undergraduate Biology, required. Students must register in 216 Stimson Hall.
BIOG	2200	Biology Scholars Program Sophomore Seminar	Enrollment limited to: members of the biology scholars program.
BIOG	2990	Introduction to Research Methods in Biology	Students from all colleges must register for course by completing an independent study form available online at http://biology.cornell.edu/forms-and-docs .
BIOG	2990	Introduction to Research Methods in Biology	Students from all colleges must register for course by completing an Independent Study Form on-line at http://biology.cornell.edu/forms-and-docs .
BIOG	4980	Teaching Experience	EMPTY

BIOG	4990	Independent Undergraduate Research in Biology	Prerequisite: one semester of BIOG 2990 or equivalent or permission of instructor and Office of Undergraduate Biology. Register for course by filling out the online enrollment form at http://biology.cornell.edu/forms-and-docs
BIOG	4990	Independent Undergraduate Research in Biology	Students from all colleges must register for course by completing an Independent Study Form on-line at http://biology.cornell.edu/forms-and-docs
BIOMG	1290	Personal Genomics and Medicine: Why Should You Care About What's in Your Genes	Everybody welcome, but freshman and sophomores particularly encouraged. No Auditors.
BIOMG	1320	Orientation Lectures in Molecular Biology and Genetics	Intended for freshmen, sophomores, and transfer students. Class will meet on January 24th, January 31st and February 7th.
BIOMG	1350	Introductory Biology: Cell and Developmental Biology	Biological science majors must take this course for a letter grade.
BIOMG	1350	Introductory Biology: Cell and Developmental Biology	Biological science majors must take this course for a letter grade. Questions about the course write to biomg1350@cornell.edu.
BIOMG	2800	Lectures in Genetics and Genomics	Highly recommended: problem-solving sessions.
BIOMG	2800	Lectures in Genetics and Genomics	Problem Solving Sessions are strongly recommended: Tuesday or Wednesday 8:30 - 10:00 AM. (3rd Session by arrangement with instructor).
BIOMG	2801	Laboratory in Genetics and Genomics	Prerequisite or co-requisite: BIOMG 2800; BIOG 1500 strongly recommended as pre-requisite. Not open to freshman, fall semester. Biological sciences majors must take course for a letter grade. Course has an evening prelim.
BIOMG	2801	Laboratory in Genetics and Genomics	Prerequisite or corequisite: BIOMG 2800; BIOG 1500 strongly recommended as pre-requisite. Not open to freshman, fall semester. Biological sciences majors must take course for a letter grade. Course has an evening prelim. Course may not be added after the 1st week of class.
BIOMG	3300	Principles of Biochemistry, Individualized Instruction	Prerequisite: one majors-level biology course and one year general chemistry and any of the following organic chemistry courses: CHEM 1570, or CHEM 3530, or CHEM 3570, or CHEM 3590, or equivalent, or permission of instructor. Recommended corequisite: BIOMG 3340. Biological sciences majors must take course for a letter grade. Organization meeting Wednesday, Jan. 21st, 4:30 P.M., BKL 200. Attendance is required.
BIOMG	3300	Principles of Biochemistry, Individualized Instruction	Prerequisite: one majors-level biology course and one year general chemistry and any of the following organic chemistry courses: CHEM 1570, or CHEM 3530, or CHEM 3570, or CHEM 3590, or equivalent, or permission of instructor. Recommended corequisite: BIOMG 3340. Biological sciences majors must take course for a letter grade. Organizational meeting: Tuesday, Aug 26th, 4:30-5:30 P.M., BKL 200. Attendance is required.
BIOMG	3310	Principles of Biochemistry: Proteins and Metabolism	Prerequisite: one majors-level biology course and one year general chemistry, and CHEM 1570, or CHEM 3530, or CHEM 3570, or CHEM 3590, or equivalent, or permission of instructor. The organic chem pre-requisite should be completed before taking BIOMG 3310. An optional discussion section is held on most Fridays from 2:55-3:45pm focusing on issues such as application to medical school or graduate school, and undergraduate research..Evening Prelim. View Prelim Schedule: http://registrar.sas.cornell.edu/Sched/exams.html
BIOMG	3320	Principles of Biochemistry: Molecular Biology	Prerequisite: one majors-level biology course; prerequisite or corequisite: one course in organic chemistry; or permission of instructor. May not be taken for credit after BIOMG 3300 or BIOMG 3330 or BIOMG 3350.
BIOMG	3340	Computer Graphics and Molecular Biology	Prerequisite: BIOMG 3330 , BIOMG 3350 , BIOMG 3310 /BIOMG 3320 (BIOMG 3320 may be taken concurrently), or corequisite: BIOMG 3300.
BIOMG	3340	Computer Graphics and Molecular Biology	Prerequisite: BIOMG 3330 , BIOMG 3350 , BIOMG 3310 /BIOMG 3320 (BIOMG 3320 may be taken concurrently), or corequisite: BIOMG 3300.
BIOMG	3350	Principles of Biochemistry: Proteins, Metabolism, and Molecular Biology	Prerequisite: one majors-level biology course; and one year general chemistry, and CHEM 1570, or CHEM 3570-3580; or equivalents, or permission of instructor. CHEM 3580 may be co-registration. May not be taken for credit after BIOMG 3300, BIOMG 3310, BIOMG 3320, BIOMG 3330 or NS 3200. Biological sciences majors must take course for a letter grade.

BIOMG	3800	Advanced Genetics and Genomics	EMPTY
BIOMG	3850	Developmental Biology	Prerequisite: BIOMG 2800 or permission of instructor.
BIOMG	4000	Genomics	Prerequisite: two majors-level biology courses and BIOMG 2800 or BIOMG 3300, or 3330, or 3350, or 3310/3320, or permission of instructor.
BIOMG	4320	Survey of Cell Biology	Prerequisite: BIOMG 3300 or BIOMG 3330 or BIOMG 3350 or BIOMG 3310; previous or co-registration in BIOMG 3320, or equivalent. Recommended prerequisite: BIOMG 2800 and 2801. Undergraduate students must enroll in this course for letter grade; graduate students may enroll either for letter grade or S-U option.
BIOMG	4330	Research Papers in Cell Biology	Concurrent enrollment in BIOMG 4320 (expected), or previous BIOMG 4320 with B grade or higher, or consent of instructor.
BIOMG	4350	Undergraduate Biochemistry Seminar	Enrollment is limited to: upper-classman. Prerequisite: BIOMG 3300, or 3330, or 3350 or 3310/3320, or written permission of instructor.
BIOMG	4350	Undergraduate Biochemistry Seminar	Prerequisite: BIOMG 3300, or 3330, or 3350, or 3310/3320, or written permission of instructor. Enrollment limited to: upper-classmen. Organizational meeting, first Tuesday of the semester, 4:30P 458 Biotech.
BIOMG	4370	Regulation of Cell Proliferation, Senescence, and Death	Prerequisite: two majors-level biology courses and BIOMG 3300, or 3330, or 3350, or 3310/3320. Recommended prerequisite: BIOMG 2800 and 4320.
BIOMG	4380	The RNA World	Prerequisite: BIOMG 3300, or 3330, or 3350, or 3310/3320 or permission of instructor.
BIOMG	4400	Laboratory in Biochemistry and Molecular Biology	Prerequisites: BIOMG 3300, or BIOMG 3330, or BIOMG 3350, or BIOMG 3310/BIOMG 3320 (at least one of BIOMG 3310 /BIOMG 3320 completed but one may be taken concurrently). Priority given to undergraduate biology majors in Biochemistry or Molecular and Cell Biology programs of study and to graduate students with a minor in field of biochemistry. Graduate students must enroll by permission only. Limited enrollment. (Please email instructor at htn2@cornell.edu to be placed on wait-list.)
BIOMG	4400	Laboratory in Biochemistry and Molecular Biology	Prerequisite: BIOMG 3300, or BIOMG 3330, or BIOMG 3350, or BIOMG 3310/BIOMG 3320 (at least one of BIOMG 3310 /BIOMG 3320 completed but one may be taken concurrently). Priority given to undergraduate biology majors in Biochemistry or Molecular and Cell Biology programs of study and to graduate students with a minor in field of biochemistry. Graduate students must enroll by permission only. Limited enrollment. Please email instructor to be placed on wait-list.
BIOMG	4450	Stem Cell Biology: Basic Science and Clinical Applications	Prerequisite: BIOMG 4320 or BIOMG 3850 or permission of instructor. S-U grades by permission of instructor.
BIOMG	4610	Development and Evolution	Prerequisite: BIOEE 1780, BIOMG 2810, BIOMG 3300, or 3330, or 3320, or 3350. Recommended prerequisite: BIOMG 3850.
BIOMG	4810	Population Genetics	Prerequisite: BIOMG 2800, BIOEE 1780, or equivalents.
BIOMG	4831	Concepts and Techniques in Plant Molecular Biology	Prerequisite: BIOMG 2800 and BIOMG 3300 or BIOMG 3320, or equivalents. Recommended prerequisite: BIOMG 3310.
BIOMG	4870	Human Genomics	Prerequisite: BIOMG 2800.
BIOMG	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Note: Arts students may not count this course toward graduation but may, upon petition (one time only) to their class dean, carry fewer than 12 other credits and remain in good standing. This would affect Dean's List eligibility but not eligibility for graduating with distinction. Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOMG	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Arts students may not count this course toward graduation but may, upon petition (one time only) to their class dean, carry fewer than 12 other credits and remain in good standing. This would affect Dean's List eligibility but not eligibility for graduating with distinction. S-U or letter grades by permission of the instructor. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOMG	6310	Protein Structure and Function	
BIOMG	6330	Biosynthesis of Macromolecules	Prerequisite: BIOMG 3300, or BIOMG 3330, or BIOMG 3350, or BIOMG 3310/BIOMG 3320. Recommended prerequisite: BIOMG 2800.

BIOMG	6360	Functional Organization of Eukaryotic Cells	Prerequisite: BIOMG 3300, or 3330, or 3350, or 3310/3320, and 4320, or equivalents.
BIOMG	6390	The Nucleus	Prerequisite: BIOMG 3300 or 3330 or 3350 or 3310/3320, or equivalent. Recommended prerequisite: BIOMG 2800.
BIOMG	6410	Laboratory in Plant Molecular Biology	Prerequisite: BIOMG 2800 or equivalent, BIOMG 3300 or BIOMG 3330 or BIOMG 3350 or BIOMG 3310 or equivalent, or permission of instructor.
BIOMG	7510	Ethical Issues and Professional Responsibilities	Enrollment limited to: graduate students beyond first year. Organizational meeting January, TBA.
BIOMG	7800	Current Topics in Genetics and Development	Organization meeting TBA. Enrollment limited to: graduate students in the Field of Genetics.
BIOMG	7800	Current Topics in Genetics and Development	Organization meeting TBA. Enrollment limited to: 1st year graduate students in the Field of Genetics. This class will be team-taught by multiple field faculty members.
BIOMG	7810	Problems in Genetics and Development	Enrollment limited to: first year graduate students in the field of Genetics & Development.
BIOMG	7860	Research Seminar in Genetics and Development	Enrollment limited to and required for: second-year and beyond graduate students in genetics and development.
BIOMG	7860	Research Seminar in Genetics and Development	Enrollment limited to: graduate students in Genetics & Development.
BIOMG	7870	Seminar in Genetics and Development	Enrollment limited to: graduate students in Genetics and Development.
BIOMG	7870	Seminar in Genetics and Development	Enrollment limited to: students in Genetics & Development.
BIOMG	7940	Current Topics in Biochemistry	Three 2-hour sessions to be held once a week. Day and time will be determined to accommodate participants' schedule. Organization meeting TBA.
BIOMG	7940	Current Topics in Biochemistry	Organization meeting TBA. Enrollment is limited to 1st year graduate students in the Field of Biochemistry, Molecular, and Cell Biology. This class will be team-taught by multiple field faculty members.
BIOMG	8300	Biochemistry Seminar	Enrollment limited to: graduate students majoring in field of biochemistry, molecular and cell Biology.
BIOMG	8300	Biochemistry Seminar	Enrollment limited to: students in Biochemistry, Molecular and Cell Biology(BMCB)
BIOMG	8310	Advanced Biochemical Methods I	Students must register for both labs. Enrollment only open to 1st year BMCB students. Organizational meeting: first Friday of the semester.
BIOMG	8320	Advanced Biochemical Methods II	Enrollment limited to and required for: first-year graduate students in field of biochemistry, molecular and cell biology.
BIOMG	8330	Research Seminar in Biochemistry	Enrollment limited to and required for: second-, third-, and fourth-year graduate students majoring in field of biochemistry, molecular and cell biology.
BIOMG	8340	Quantitative Biology for Molecular Biology and Genetics	Enrollment limited to: first-year Ph.D. students in the graduate fields of biochemistry, molecular and cell biology, or genetics and development. For all other students, permission of instructor is required.
BIOMG	8370	Problems in Biochemistry, Molecular, and Cell Biology	Enrollment limited to: first semester Ph.D. students in the Graduate Field of BMCB.
BIOMG	8380	Scientific Communication in BMCB	Enrollment limited to: second-year graduate students majoring in The Field of Biochemistry, Molecular and Cell Biology. All other students, permission of instructor is required. Organization meeting the first week of classes.
BIOMI	2600	Microbiology of Human Contagious Diseases	Prerequisites: One semester of introductory biology or equivalent.

BIOMI	2900	General Microbiology Lectures	Prerequisite: one year introductory biology for majors and one year college chemistry, or equivalent. Highly recommended prerequisite: co-requisite in BIOMI 2911.
BIOMI	2911	General Microbiology Laboratory	Prerequisite or co-requisite: BIOMI 2900.
BIOMI	2911	General Microbiology Laboratory	Prerequisite or corequisite: BIOMI 2900.
BIOMI	3310	General Parasitology	Prerequisite: one year introductory biology.
BIOMI	3500	Biological Oceanography and Ocean Biogeochemistry	Prerequisite: Introductory biology for majors; BIOG/BIOEE 1610; or permission of instructor.
BIOMI	3940	Applied and Food Microbiology	Prerequisite: BIOMI 2900 and BIOMI 2910 or BIOMI 2911.
BIOMI	4040	Pathogenic Bacteriology	Prerequisite: BIOMI 2900 and 2910.
BIOMI	4100	Introduction to Chemical and Environmental Toxicology	Prerequisites: Introductory Biology and General Chemistry. Organic chemistry recommended.
BIOMI	4140	Prokaryotic Diversity	Prerequisite: BIOMI 2900 and BIOMI 2910. Recommended prerequisite: BIOMG 3300 or BIOMG 3310 or BIOMG 3330.
BIOMI	4850	Bacterial Genetics	Prerequisite: BIOMG 2810. Recommended prerequisite: BIOMI 2900 and BIOMG 3300, 3330 or 3350, or 3310/3320. The optional 1 credit is for registered students with permission of instructor to review literature. Enrollment for 1 credit extra discussion option will occur at first lecture; Email jep48 with questions.
BIOMI	4900	Senior Seminar in Microbiology	BIOMI 2900 and 2911 and completion or concurrent enrollment in upper level Microbiology course or permission of instructor.
BIOMI	4980	Teaching Experience	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOMI	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Arts students may not count this course toward graduation but may, upon petition (one time only) to their class dean, carry fewer than 12 other credits and remain in good standing. This would affect Dean's List eligibility but not eligibility for graduating with distinction. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOMI	6100	Introduction to Chemical and Environmental Toxicology	Prerequisite: grad standing or permission of instructor.
BIOMI	6901	Prokaryotic Biology: Bacterial Structure and Function	Enrollment limited to: graduate students in Microbiology or a related discipline, or permission of instructor.
BIOMI	6902	Prokaryotic Biology: Environmental Microbiology	Enrollment limited to: graduate students in Microbiology or a related discipline, or permission of instructor.
BIOMI	6903	Prokaryotic Biology: Bacterial Physiology /Diversity	Enrollment limited to: graduate students in Microbiology or a related discipline or permission of the instructor.
BIOMI	6906	Prokaryotic Biology: Viral Diversity and Ecology	Prerequisite: introductory biology course.
BIOMI	7910	Advanced Topics in Microbiology	Enrollment limited to: graduate students in microbiology.
BIOMI	7910	Advanced Topics in Microbiology	Enrollment limited to: graduate students in microbiology.

BIOMI	7970	Scientific Communication Skills	Requirement for: graduate students in graduate field of microbiology for first two semesters; third semester optional.
BIOMI	7970	Scientific Communication Skills	Requirement for: graduate students in graduate field of microbiology for first two semesters. Third semester optional.
BIOMI	7980	Graduate Research Seminar in Microbiology	Requirement for graduate students in graduate field of microbiology.
BIOMI	7980	Graduate Research Seminar in Microbiology	Requirement for: graduate students in graduate field of microbiology.
BIOMI	7990	Microbiology Seminar	Requirement for all graduate students in graduate field of microbiology. Open to all who are interested.
BIOMI	7990	Microbiology Seminar	Requirement for: all graduate students in the field of microbiology. Open to all who are interested.
BIOMS	3110	Principles of Animal Physiology	Prerequisite: BIOG 1500 and BIOG 1440 or BIOG 1445 or one year of college biology; one year chemistry and mathematics or equivalent AP credit. Recommended prerequisite: previous or concurrent physics course.
BIOMS	3160	Cellular Physiology	Prerequisite: BIOMG 1350; or previous or concurrent enrollment in BIOMG 3300, BIOMG 3310 and BIOMG 3320, or BIOMG 3330.
BIOMS	3190	Animal Physiology Experimentation	Prerequisite or corequisite: BIOAP 3110.
BIOMS	3310	General Parasitology	Prerequisite: one year introductory biology.
BIOMS	4040	Pathogenic Bacteriology	Prerequisite: BIOMI 2900 and 2910.
BIOMS	4130	Histology: The Biology of the Tissues	Prerequisite: BIOMG 1350. Recommended prerequisite: BIOMG 3300 or BIOMG 3310, or equivalent.
BIOMS	4140	Principles of Pharmacology	Prerequisites: Animal Physiology (BIOAP 3110) or Human Anatomy and Physiology (NS 3410).
BIOMS	4311	Paleoparasitology - Very, Very Cold Cases	Prerequisite: An introductory Biology Course and General Parasitology (3310), Medical Parasitology (4310), or permission of instructor.
BIOMS	4340	Cellular and Molecular Microbial Pathogenesis: The Host /Pathogen Interplay	Recommended prerequisite: BIOMS/BIOMI 4040 or BIOMS/BIOMI/PLPA 4090 or BIOMS/BIOMI 4310 or BIOMS 3150 or permission of the instructor.
BIOMS	4400	Tools for a Lifelong Career in Research	Prerequisite: 20 credit hours in science and/or technology courses.
BIOMS	4580	Mammalian Physiology	Prerequisite: BIOAP 3110 or BIOG 1440 with permission of instructor. Recommended for biological sciences majors, pre-med and pre-vet students, and beginning graduate students in physiology, engineering, nutrition, and animal science.
BIOMS	4980	Undergraduate Supervised Teaching	EMPTY
BIOMS	4980	Undergraduate Supervised Teaching	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOMS	6110	Genome Maintenance Mechanisms	Prerequisites: BIOMG 2800 and BIOMG 2801 as well as BIOMG 3300, BIOMG 3310, BIOMG 3330, or BIOMG 3350.
BIONB	2210	Neurobiology and Behavior I: Introduction to Behavior	Prerequisite: two majors-level biology courses. Priority is given to students studying neurobiology and behavior. Not open to freshmen. May be taken independently of BIONB 2220. 3 credits with no discussion section; 4 credits with one disc per week; 5 credits with one or two disc per week and participation in Writing in the Majors program; 4- or 5-credit option required of students in neurobiology and behavior program of study. Limited to 15 students per 4-credit disc (contact Imm8 to choose disc section). Limited to 12 students in 5-credit option (students may not preregister for 5-credit option; interested students complete application form on first day of class).
BIONB	3220	Hormones and Behavior	Prerequisites: Any one of the following: Psych 2230, NB2210, NB 2220 or one year of introductory biology plus a course in psychology.

BIONB	3690	Chemical Ecology	Prerequisite: one majors-level biology course and one semester introductory chemistry for majors or nonmajors or equivalents, or permission of instructor.
BIONB	3950	Molecular and Genetic Approaches to Neuroscience	Prerequisite: BIONB 2220 or BIOMG 3300 or BIOMG 3320.
BIONB	4140	Principles of Pharmacology	Prerequisites: Animal Physiology (BIOAP 3110) or Human Anatomy and Physiology (NS 3410).
BIONB	4200	Topics in Neurobiology and Behavior	Prerequisite: BIONB 2220 or permission of instructor. Prerequisite: BIONB 2210.
BIONB	4230	Cognitive Neuroscience	Prerequisite: two majors-level biology courses or; biopsychology or neurobiology (e.g., Psych 2230 or BIONB 2210, BIONB 2220); and an introductory course in perception, cognition, or language (e.g., Psych 1102, Psych 2090, Psych 2140, or Psych 2150).
BIONB	4250	Molecular Neurophysiology	Prerequisite: BIONB 2220 or permission of instructor.
BIONB	4280	Clinical Neurobiology	Prerequisites: two courses from BIONB 2220, BIOGD 2800, BIOBM 3300 or 3310; co-registration in one of the courses is acceptable by permission of instructor. Open to advanced undergraduates.
BIONB	4310	Genes and Behavior	Prerequisite: BIONB 2220.
BIONB	4320	Neural Circuits for Motor Control in Health and Disease	Prerequisite: BIONB 2220 or ECE 2100 or permission of instructor.
BIONB	4340	Advanced Behavioral Ecology	Prerequisites: BIONB 2210, BIOEE 1610 or BIOEE 1780 or permission of instructor.
BIONB	4370	Neural Circuits of Motivated Behavior	Prerequisite: BIONB 2220 and instructor consent.
BIONB	4530	Speciation: Genetics, Ecology, and Behavior	Prerequisite: BIOEE 1780 and BIOMG 2800 or equivalents, or permission of instructor. Limited to 40 students.
BIONB	4900	Molecular, Cellular, and Integrative Neurophysiology	Prerequisite: BIONB 2220 or equivalent, or permission of instructor.
BIONB	4910	Principles of Neurophysiology	Prerequisite: BIONB 2220 or written permission of instructor. S-U or letter grades for students outside Neurobiology and Behavior concentration and graduate students, by permission of instructor.
BIONB	4970	The Brain - Its Evolution and Development	Intended for juniors, seniors, and graduate students; BIONB 2220 or equivalent.
BIONB	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Students must register using individual study form. Enrollment form can be found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx .
BIONB	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Arts students may not count this course toward graduation but may, upon petition (one time only) to their class dean, carry fewer than 12 other credits and remain in good standing. This would affect Dean's List eligibility but not eligibility for graduating with distinction. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) . Do not sign into section 601. You will be put in the course after submitting form online.
BIONB	6702	Special Topics in Behavioral Ecology	This is a graduate course; undergraduates are welcome but must have taken BIONB 2210 or PSYCH 1101 and have permission of the instructor. Organizational meeting 5:15pm Thursday, 28 August 2014, A305 CMH (Rosenblatt).
BIONB	7201	Research Design in the Study of Animal Social Behavior	Enrollment limited to: graduate students.
BIONB	7201	Research Design in the Study of Animal Social Behavior	Permission of instructor is required for undergraduates.
BIONB	7202	Topics in Neural Basis of Behavior	Enrollment limited to: graduate students.

BIONB	7202	Topics in Neural Basis of Behavior	Permission of instructor is required for undergraduates.
BIONB	7210	Introductory Graduate Survey in Neurobiology and Behavior	Co-requisite: BIONB 2220. Requirement for first-year graduate students in the Field of Neurobiology and Behavior.
BIONB	7210	Introductory Graduate Survey in Neurobiology and Behavior	Requirement for: graduate students majoring in neurobiology and behavior. Corequisite: BIONB 2210 and 2220.
BIONB	7640	Plant-Insect Interactions Seminar	Permission of instructor required for undergraduate students. May be repeated for credit.
BIONB	7640	Plant-Insect Interactions Seminar	Permission of instructor is required for undergraduates. May be repeated for credit.
BIOPL	2210	Natural Remedies and Ethnohealth	Prerequisite: previous course work in biology and sociology and health or a related area or permission of instructor.
BIOPL	2410	Introductory Plant Biodiversity and Evolution	Two field trips are required.
BIOPL	2420	Plant Function and Growth Lectures	Prerequisite: one year introductory biology and/or BIOPL 2410. Co-register: BIOPL 2421, for plant science undergraduates (and highly recommended for other science majors). Recommended prerequisite: one year introductory chemistry. May not be taken for credit after BIOPL 3420 except by written permission of instructor.
BIOPL	2421	Plant Function and Growth, Laboratory	Co-requisite: BIOPL 2420. May not be taken for credit after BIOPL 3440.
BIOPL	2430	Taxonomy of Cultivated Plants	Prerequisite: one year introductory biology or written permission of instructor. May not be taken for credit after BIOPL 2480.
BIOPL	2484	Medical Ethnobotany of New World Cultures	EMPTY
BIOPL	3420	Plant Physiology, Lectures	Prerequisite: one year introductory biology. Co-requisite: BIOPL 3421 or written permission of instructor. May not be taken for credit after BIOPL 2420 unless written permission obtained from instructor.
BIOPL	3421	Plant Physiology, Laboratory	Co-register: BIOPL 3420. May not be taken for credit after BIOPL 2440.
BIOPL	3470	Histology of Plant Organisms	Prerequisite: introductory course in botany, or permission of instructor. May not be taken for credit after BIOPL 3450.
BIOPL	3590	Biology of Grasses	Prerequisites: A basic course in plant biology or permission of instructor.
BIOPL	3590	Biology of Grasses	Prerequisites: A course in plant systematics or permission of instructor.
BIOPL	3800	Strategies and Methods in Drug Discovery	Prerequisite: one year introductory biology and organic chemistry course or permission of instructor.
BIOPL	4070	Nutritional Quality Improvement of Food Crops	Prerequisite: one majors-level biology course or permission of instructors.
BIOPL	4220	Plant Development	Prerequisite: course work in molecular biology (e.g., BIOMG 3300, BIOMG 3310/BIOMG 3320, or BIOMG 3330), and genetics (e.g., BIOMG 2800), or permission of instructor.
BIOPL	4480	Plant Evolution and the Fossil Record	Prerequisite: BIOPL 2410 or equivalent, or permission of instructor.
BIOPL	4500	Light and Video Microscopy for Biologists	Prerequisites: Prerequisite: two majors-level biology courses.
BIOPL	4620	Plant Biochemistry	Prerequisite: BIOPL 2420 or 3420, or equivalent and BIOBM 3300 or 3310, or equivalent, or permission of instructor.
BIOPL	4831	Concepts and Techniques in Plant Molecular Biology	Prerequisite: BIOMG 2800 and BIOMG 3300 or BIOMG 3320, or equivalents. Recommended prerequisite: BIOMG 3310.

BIOPL	4832	Proteomics and Protein Mass Spectrometry in Biology	Prerequisite: BIOMG 2800 and BIOMG 3300 or BIOMG 3320, or equivalents. Recommended prerequisite: BIOMG 3310.
BIOPL	4841	Plant Form and Function: Anatomy, Cell Biology, and Development	Prerequisites: BIOPL 4831 or BIOMG 2800 or permission of the instructor.
BIOPL	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Students must register using individual study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study).
BIOPL	4980	Teaching Experience	Prerequisite: previous enrollment in course to be taught or equivalent. Arts students may not count this course toward graduation but may, upon petition (one time only) to their class dean, carry fewer than 12 other credits and remain in good standing. This would affect Dean's List eligibility but not eligibility for graduating with distinction. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BIOPL	6410	Laboratory in Plant Molecular Biology	Prerequisite: BIOMG 2800 or equivalent, BIOMG 3300 or BIOMG 3330 or BIOMG 3350 or BIOMG 3310 or equivalent, or permission of instructor.
BIOPL	6470	Systematic Biology Journal Club	Enrollment preference given to: graduate students and advanced undergraduates in systematic biology.
BIOPL	7400	Plant Biology Seminar	Requirement for graduate students doing work in plant biology.
BIOPL	7400	Plant Biology Seminar	Requirement for: graduate students doing work in plant biology.
BIOPL	7420	Current Papers in Plant Biology	Enrollment preference given to: graduate students with priority given to majors or minors in plant molecular biology. Prerequisite for undergraduates: written permission of instructor.
BIOPL	7430	Faculty Research in Plant Cell and Molecular Biology	Enrollment limited to: graduate students or written permission from member of Plant Cell and Molecular Biology Program or from coordinator for undergraduates.
BIOPL	7440	Graduate Research in Plant Biology	Enrollment limited to and required for: second-, third-, and fourth-year graduate students in Plant Cell and Molecular Biology.
BIOPL	7440	Graduate Research in Plant Biology	Enrollment limited to and required for: second-, third-, and fourth-year graduate students in Plant Biology.
BIOPL	7490	Graduate Research in Botany	Similar to BIOG 4990 but intended for graduate students who are working with faculty members on an individual basis. Sign into your faculty members section.
BIOPL	7490	Graduate Research in Botany	Enrollment preference given to: graduate students who are working with faculty members on an individual basis. Sign into your faculty members section.
BME	3010	Molecular Principles of Biomedical Engineering	Enrollment limited to: Juniors, Seniors and Grads. Preference given to students who have completed Fluid Mechanics.
BME	3600	Molecular and Cellular Bioengineering	Prerequisite: BEE 2600, biochemistry, linear algebra, ordinary differential equations, or permission of instructor.
BME	4010	Biomedical Engineering Analysis of Metabolic and Structural Systems	Prerequisite: Prior work in Basic Biology.
BME	4020	Electrical and Chemical Physiology	Prerequisite: BME 4010 or permission of instructor.
BME	4910	Principles of Neurophysiology	Prerequisite: BIONB 2220 or written permission of instructor. S/U or letter grades for students outside Neurobiology and Behavior concentration and graduate students, by permission of instructor.

BME	5010	Bioengineering Seminar	Enrollment limited to: juniors, seniors or graduate students. Students must attend 10 seminars in the broad field of Bioengineering. If you have added the course you are also required to sign up for the course on Blackboard - BME 5010 to receive additional announcements and link to seminars. Seminars attended at a scientific meeting or conference may also be included. In order to receive credit for the course a list of seminars attended (date, speaker, title of seminar) and a two-sentence summary for each will be due by the last day of class for the semester. This list must be uploaded to the course Blackboard assignment page. It will not be accepted in any other manner.
BME	5010	Bioengineering Seminar	Prerequisite: junior, senior or graduate standing. Students must attend 10 seminars in the broad field of Bioengineering. If you have added the course you are also required to sign up for the course on Blackboard - BME 5010 to receive additional announcements and link to seminars. Seminars attended at a scientific meeting or conference may also be included. In order to receive credit for the course a list of seminars attended (date, speaker, title of seminar) and a two-sentence summary for each will be due by the last day of classes on Saturday, December 3, 2011. This list must be uploaded to the course Blackboard assignment page. It will not be accepted in any other manner.
BME	6310	Engineering Principles for Drug Delivery	Enrollment limited to: Graduate standing and background in organic and polymer chemistry or permission of instructor.
BME	7110	Fundamentals of Biomedical Engineering Research	Enrollment limited to: BME MS/PHD students.
BME	7160	Immersion Experience in Medical Research and Clinical Practice	Enrollment limited to: BME PHD students.
BME	7600	Nucleic Acid Engineering	Enrollment limited to: graduate students, seniors by permission of instructor.
BME	7900	Biomedical Engineering Seminar	Enrollment limited to: Graduate students only.
BSOC	2051	Ethical Issues in Health and Medicine	University Common Course.
BSOC	3311	Environmental Governance	Enrollment limited to: juniors, seniors, or by permission of instructor.
BSOC	4291	Politics of Science	Government Seniors/Juniors given preference. This course fulfills the Government seminar requirement.
BSOC	4691	Food, Agriculture, and Society	Prerequisite: introductory ecology course or permission of instructor. Limited to 20 students.
BSOC	4991	Honors Project I	Prerequisite: Enrollment limited to Biology & Society seniors with an overall GPA of 3.3. Apply in 306 Rockefeller Hall.
BSOC	4992	Honors Project II	Prerequisite: Enrollment limited to Biology & Society seniors with an overall GPA of 3.3. Apply in 306 Rockefeller Hall.
BTRY	3010	Biological Statistics I	Prerequisite: one semester of calculus.
BTRY	3020	Biological Statistics II	Prerequisite: BTRY 3010 or 6010.
BTRY	3080	Probability Models and Inference	Prerequisites: BTRY 3010, Calculus II, or the equivalent.
BTRY	3100	Statistical Sampling	Prerequisite: two semesters of statistics.
BTRY	3520	Statistical Computing	Prerequisite: BTRY 3080 or Math 4710, enrollment in MATH 2220 and MATH 2240 or equivalents.
BTRY	4030	Linear Models with Matrices	A two-semester sequence on statistical methods (e.g. BTRY 3010-BTRY 3020), a course on probability and distribution theory (e.g. BTRY 3080 or Math 4710), multivariable calculus, and linear/matrix algebra.
BTRY	4090	Theory of Statistics	Prerequisites: BTRY 3080 or equivalent and at least one introductory statistics course.
BTRY	4100	Multivariate Analysis	Prerequisite: BTRY 3020, BTRY 6020, or equivalent with BTRY 3080 or Math 4710 also highly recommended.
BTRY	4110	Categorical Data	Prerequisite: BTRY 3020, BTRY 6020, or equivalent with BTRY 3080 or MATH 4710 also highly recommended.
BTRY	4270	Introduction to Survival Analysis	Prerequisites: BTRY 3080 or equivalent preparation; 3 semesters of calculus.
BTRY	4381	Bioinformatics Programming	Prerequisite: at least one introductory course in computer programming (any language) and one in statistical methods, or permission of instructor.

BTRY	4820	Statistical Genomics: Coalescent Theory and Human Population Genomics	Prerequisites: Math 1110 or equivalent. At least one previous course in statistical methods and at least one involving programming, or permission of instructor.
BTRY	4830	Quantitative Genomics and Genetics	Prerequisite: BTRY 3080 and Introductory Statistics or equivalent.
BTRY	4970	Undergraduate Individual Study in Biometry and Statistics	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BTRY	4970	Undergraduate Individual Study in Biometry and Statistics	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BTRY	4980	Undergraduate Supervised Teaching	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BTRY	4980	Undergraduate Supervised Teaching	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BTRY	4990	Undergraduate Research	Prerequisite: statistics and biometry undergraduates; permission of faculty member directing research. Students must register using independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study).
BTRY	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
BTRY	5080	Probability Models and Inference	Prerequisites: BTRY 3010, Calculus II, or the equivalent.
BTRY	6010	Statistical Methods I	Enrollment limited to: graduate students or permission of instructor.
BTRY	6020	Statistical Methods II	Prerequisite: BTRY 6010 or equivalent. Enrollment limited to: graduate students or permission of instructor.
BTRY	6381	Bioinformatics Programming	Prerequisite: at least one introductory course in computer programming (any language) and one in statistical methods, or permission of instructor.
BTRY	6520	Computationally Intensive Statistical Methods	Corequisites: ORIE 6700/Math 6730 (or equivalent) and at least one course in probability, or permission of instructor.
BTRY	6820	Statistical Genomics: Coalescent Theory and Human Population Genomics	Prerequisite: MATH 1110 or equivalent. At least one previous course in statistical methods and at least one involving programming, or permission of instructor. Co-meets with BTRY 4820.
BTRY	6830	Quantitative Genomics and Genetics	Prerequisites: BTRY 3080 and Introductory Statistics or equivalent.
BTRY	6970	Individual Graduate Study in Biometry and Statistics	Individual tutorial study selected by the faculty. Sign into your faculty advisor section.
BTRY	6970	Individual Graduate Study in Biometry and Statistics	Individual tutorial study selected by the faculty.

BTRY	7210	Topics in Quantitative Genomics	Prerequisite: BTRY 4830/6830 or permission of instructor.
BTRY	7900	Graduate-Level Dissertation Research	Enrollment limited to: Ph.D. candidates. Permission of graduate field member concerned is required.
BTRY	7900	Graduate-Level Dissertation Research	Enrollment limited to: Ph.D. candidates. Permission of graduate field member concerned is required.
BTRY	7950	Statistical Consulting	Prerequisite or Co-requisite: BTRY 6020 and 4090.
BTRY	7950	Statistical Consulting	Prerequisite or co-requisite: BTRY 6020 and 4090 and permission of instructor.
BTRY	7980	Graduate Supervised Teaching	Prerequisite: at least two advanced courses in statistics and biometry. Permission of instructor and chair of special committee is required.
BTRY	7980	Graduate Supervised Teaching	Prerequisite: at least two advanced courses in statistics and biometry. Permission of instructor and chair of special committee is required.
BTRY	8900	Master's Level Thesis Research	Enrollment limited to: M.S. candidates. Permission of graduate field member concerned is required.
BTRY	8900	Master's Level Thesis Research	Enrollment limited to: M.S. candidates. Permission of graduate field member concerned is required.
BTRY	9900	Doctoral-Level Dissertation Research	Permission of advisor is required.
BTRY	9900	Doctoral-Level Dissertation Research	Enrollment limited to: Ph.D. candidates. Permission of graduate field member concerned is required.
COMM	2760	Persuasion and Social Influence	Prerequisite: COMM 1101.
COMM	2840	Sex, Gender, and Communication	Enrollment not open to freshman.
COMM	2990	Directed Research Experience	Students from all colleges must register for course by completing an Independent Study Form (Available in 334 Kennedy). Forms must be returned to 334 Kennedy.
COMM	2990	Directed Research Experience	Students from all colleges must register for course by completing an Independent Study Form (Available in 334 Kennedy). Forms must be returned to 334 Kennedy.
COMM	3020	Science Writing for the Media	Not open to freshmen. Prerequisite: college-level writing course.
COMM	3030	Organizational Writing	Enrollment is limited to: juniors or seniors. Prerequisite: at least one college-level writing course.
COMM	3040	Writing and Editing for Magazines and Online Media	Enrollment is limited to: juniors or seniors. Prerequisite: COMM 2310 or equivalent. Preference given to COMM majors. Laptop required.
COMM	3040	Writing and Editing for Magazines and Online Media	Junior or Senior standing. COMM 2310 or equivalent. Preference given to COMM majors. Laptop required.
COMM	3100	Communication and Decision Making in Groups	Prerequisite or co-register: COMM 2760. Enrollment is limited to: juniors or seniors. Preference given to COMM majors.
COMM	3300	Media and Human Development	Prerequisite: COMM 2200.
COMM	3400	Personal Relationships and Technology	Prerequisites: COMM 2820, COMM 2450, must attend the first class
COMM	3450	Human-Computer Interaction Design	Prerequisite: COMM/INFO 2450. May be taken concurrently with COMM/INFO 2450.

COMM	3460	Crowds, Communities, and Technology	Prerequisite: COMM 2450.
COMM	3760	Planning Communication Campaigns	Prerequisite or co-requisite: COMM 2820 or equivalent, social research course, and one semester of introductory statistics. Mann 210 is the Bissett Collaborative Center
COMM	4200	Public Opinion and Social Processes	Prerequisite: COMM 2820.
COMM	4220	Psychology of Entertainment Media	Prerequisite: introductory psychology or COMM 1101 or 2200.
COMM	4280	Communication Law	Enrollment is limited to: juniors, seniors, or graduate students or permission of instructor.
COMM	4360	Communication Networks and Social Capital	Prerequisites: COMM/INFO 2450 OR INFO 2040
COMM	4400	Advanced Human-Computer Interaction Design	Prerequisite: COMM/INFO 3450 or permission of instructor.
COMM	4410	Communicating Self in Social Media	Prerequisites: Comm 2450.
COMM	4450	Computer-Mediated Communication	Prerequisite: COMM 2450 and COMM 2820 or equivalent.
COMM	4550	Deception in the Networked Age	Prerequisites: COMM 2450 or instructor's permission.
COMM	4580	The Science of Social Behavior	Enrollment limited to: seniors who major in Sociology, Psychology, Human Development, Communications, ILRLR, and Economics. Capstone seminar for seniors who are interested in graduate study in scientific disciplines that focus on human behavior. Course is designed to mirror the introductory course SOC/HD/COM/ILRLR 1840 Six Pretty Good Books. Seniors are expected to attend both the weekly seminar on Wednesday afternoons (4:30-6:00) and the Wednesday evening lecture (7:30-9:30).
COMM	4960	Communication Internship	Enrollment limited to: COMM majors or minors (first-, second-, third-, or fourth-year) for 1 credit (minimum 60 hours). May be repeated once for a total of 2 credits. Enroll online: http://cals.cornell.edu/academics/registrar/policies/#independent-study .
COMM	4960	Communication Internship	Enrollment limited to: COMM majors or minors (first-, second-, third-, or fourth-year) for 1 credit (minimum 60 hours). May be repeated once for a total of 2 credits. submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) . Do not sign into section 601. You will be put in the course after submitting form online.
COMM	4970	Individual Study in Communication	Prerequisite: 3.0 GPA. May be repeated up to 6 credits with different supervising faculty member. Students must register using independent study form Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study .
COMM	4970	Individual Study in Communication	Prerequisite: 3.0 GPA. May be repeated up to 6 credits with different supervising faculty member. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) . Do not sign into section 601. You will be put in the course after submitting form online.
COMM	4980	Communication Teaching Experience	1-3 credits; may be repeated to 6 credits with different courses. Intended for undergraduates desiring classroom teaching experience. Prerequisite: junior or senior standing; 3.0 GPA (2.7 if teaching assistant for skills development course); permission of faculty member who supervises work and assigns grade. Students must register using independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) .

COMM	4980	Communication Teaching Experience	1-3 credits; may be repeated to 6 credits with different courses. Intended for undergraduates desiring classroom teaching experience. Prerequisite: junior or senior standing; 3.0 GPA (2.7 if teaching assistant for skills development course); permission of faculty member who supervises work and assigns grade. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
COMM	4990	Independent Research	Prerequisite: 3.0 GPA. Enrollment limited to: seniors. May be repeated to 6 credits. Students must register using independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study).
COMM	4990	Independent Research	Prerequisite: 3.0 GPA. Enrollment limited to: seniors. May be repeated to 6 credits. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
COMM	5660	Science Communication Workshop	Enrollment limited to: graduate students.
COMM	6400	Advanced Human-Computer Interaction Design	Enrollment limited to: graduate students.
COMM	6710	Revolutions of the Mind: Media, Technology and Epistemological Change	Prerequisite: Enrollment limited to seniors (with instructor permission) and grad students.
COMM	6800	Studies in Communication	Enrollment limited to: communication graduate students or permission of instructor.
COMM	6810	Advanced Communication Theory	Prerequisite: COMM 6800 or graduate standing.
COMM	6820	Methods of Communication Research	Recommended prerequisite: familiarity with basic statistical concepts.
COMM	7970	Graduate Independent Study	Permission of instructor is required.
COMM	7970	Graduate Independent Study	Permission of instructor is required.
COMM	7980	Communication Teaching Laboratory	Enrollment limited to: graduate students. Permission of faculty member who will supervise work and assign grade is required. (Students must use faculty member's section number to register)
COMM	7980	Communication Teaching Laboratory	Enrollment limited to: graduate students and permission of faculty member who will supervise work and assign grade. (Students must use faculty member's section number to register)
COMM	7990	Graduate Research	Prerequisite: appropriate communication graduate course work or permission of instructor.
COMM	7990	Graduate Research	Prerequisite: appropriate communication graduate course work or permission of instructor.
COMM	8900	Master's-Level Thesis Research	Permission of committee chair is required.
COMM	9900	Doctoral-Level Dissertation Research	Enrollment limited to: students who have completed "A" exam. Permission of committee chair is required.
COMM	9900	Doctoral-Level Dissertation Research	Enrollment limited to: students who have completed A exam. Permission of committee chair is required.
CSS	1125	Career Exploration in the Agricultural Sciences	First semester freshman or transfer. Agricultural Sciences students or permission of instructor.
CSS	2110	Field Crop Systems	Required for: Agriculture Science majors. Credit for both CSS 4050 and CSS 2110 (or CSS 3110) not permitted.

CSS	2940	Introduction to Agricultural Machinery	To enroll, contact Bob Schindelbeck (rrs3@cornell.edu). The dates and times of the four lecture periods will be determined during the first lab. Most labs will involve working with farm equipment or touring farm environments so students should wear boots or sturdy shoes and casual clothes.
CSS	3150	Weed Biology and Management	Prerequisite: introductory course in biology or botany.
CSS	3210	Soil and Crop Management for Sustainability	Prerequisites: CSS 1900
CSS	3630	Soil Genesis, Classification, and Survey	Prerequisite: CSS 2600.
CSS	3650	Environmental Chemistry: Soil, Air, and Water	Prerequisite: CHEM 2070-2080 or CHEM 1560.
CSS	4050	Field Crop Systems	Enrollment limited to: undergraduate and graduate students in the Crop Science, Plant Science, or International Agriculture curricula or by students in other majors and minors. Enrollment preference given to: advanced undergraduates and graduate students.
CSS	4130	Physiology and Ecology of Yield	Prerequisite: coursework in plant physiology or molecular biology or biochemistry, or advanced plant science.
CSS	4500	Master Composter Training and Extension Internship	Junior, Senior or Graduate Student standing. Class held at Cornell Cooperative Extension, 615 Willow Avenue. Admission to this class requires that you complete an application and an interview. If you are selected to participate, then you will be provided the permission code needed to register. Email Janice Thies for more information at janice.thies@cornell.edu
CSS	4650	Global Navigation Satellite Systems	Prerequisite: CSS 4110 or 4200, or equivalent, or permission of instructor; mtg times will be arranged at first organizational mtg. TBA by instructor.
CSS	4660	Soil Ecology	Prerequisite: one year of biology or ecology and CSS 2600 or permission of instructor.
CSS	4720	Nutrient Management in Agro-Ecosystems	Prerequisite: CSS 2600 or permission of instructor.
CSS	4910	Food, Farming, and Personal Beliefs	Recommended prerequisite: Sustainable Agriculture (CSS 1900) or equivalent.
CSS	4940	Special Topics in Crop and Soil Sciences	The department offers "trial" courses under this number.
CSS	4940	Special Topics in Crop and Soil Sciences	The department teaches trial courses under this number.
CSS	4970	Individual Study in Crop and Soil Sciences	Students from all colleges must submit a Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
CSS	4970	Individual Study in Crop and Soil Sciences	Students from all colleges must submit a Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
CSS	4980	Teaching Experience in Crop and Soil Sciences	Students from all colleges must submit a Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
CSS	4980	Teaching Experience in Crop and Soil Sciences	Students from all colleges must submit a Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
CSS	4990	Undergraduate Research	Students from all colleges must submit a Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 701. You will be put in the course after submitting form online.
CSS	4990	Undergraduate Research	Students from all colleges must submit a Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 701. You will be put in the course after submitting form online.

CSS	6140	Weed Ecology and Management	Prerequisite: CSS 3150 or equivalent.
CSS	6200	Spatial Modeling and Analysis	Prerequisite: CSS 4100, CSS 4200, or equivalent, or permission of instructor.
CSS	6210	Applications of Space-Time Statistics	Time to be decided at organizational meeting.
CSS	6630	Pedology	Prerequisite: CSS 3630 or permission of instructor.
CSS	6900	Scientific Method in Practice	Enrollment limited to: Junior, senior, or graduate standing.
CSS	6900	Scientific Method in Practice	Enrollment limited to: juniors, seniors, or graduates.
CSS	6980	Graduate Teaching or Extension Experience	Permission of instructor is required. Enrollment limited to: graduate students. Sign into your faculty member's section. Undergraduate students should register under CSS 4980.
CSS	6980	Graduate Teaching or Extension Experience	Enrollment limited to: graduate students. Permission of instructor is required. Sign into your faculty member's section. Undergraduates should register under CSS 4980.
CSS	7900	Graduate-Level Dissertation Research in Soil Science	Dissertation research for Ph.D. students before A exam has been passed.
CSS	7900	Graduate-Level Dissertation Research in Soil Science	Dissertation research for Ph.D. students before A exam has been passed. Sign into your faculty advisor section.
CSS	7910	Graduate-Level Thesis Research in Crop Science	Thesis research for Ph.D. students before A exam has been passed.
CSS	7910	Graduate-Level Thesis Research in Crop Science	Dissertation research for Ph.D. students before A exam has been passed. Sign into your faculty advisor section.
CSS	7920	Graduate-Level Dissertation Research in Environmental Information Science	Dissertation research for Ph.D. students before A exam has been passed.
CSS	7920	Graduate-Level Dissertation Research in Environmental Information Science	Dissertation research for Ph.D. students before A exam has been passed. Sign into your advisor section.
CSS	7930	Graduate Research in Agronomy	Sign into your faculty section.
CSS	7930	Graduate Research in Agronomy	Sign into your faculty section.
CSS	7970	Graduate Individual Study in Crop and Soil Science	Please sign into your faculty member section.
CSS	7970	Graduate Individual Study in Crop and Soil Science	Sign into your faculty member section.
CSS	8900	Master's Level Thesis Research in Crop Science	Thesis research for M.S. candidates.
CSS	8900	Master's Level Thesis Research in Crop Science	Thesis research for master's students. Sign into your faculty advisor section.

CSS	8910	Master's Level Thesis Research in Environmental Information Science	Thesis research for M.S. candidates.
CSS	8910	Master's Level Thesis Research in Environmental Information Science	Thesis research for master's students. Sign into your faculty advisor section.
CSS	8920	Master's Level Thesis Research in Soil Science	Thesis research for master's students.
CSS	8920	Master's Level Thesis Research in Soil Science	Enrollment limited to thesis research master's students. Sign into your faculty advisor section.
CSS	8930	Master's Research in Agronomy	Sign into your faculty section.
CSS	8930	Master's Research in Agronomy	Sign into your faculty section.
CSS	9900	Doctoral-Level Dissertation Research in Soil Science	Dissertation research for Ph.D. candidates after A exam has been passed.
CSS	9900	Doctoral-Level Dissertation Research in Soil Science	Dissertation research for Ph.D. candidates after A exam has been passed. Sign into your advisor section.
CSS	9910	Doctoral-Level Dissertation Research in Crop Science	Dissertation research for Ph.D. candidates after A exam has been passed.
CSS	9910	Doctoral-Level Dissertation Research in Crop Science	Dissertation research for Ph.D. candidates after A exam has been passed. Sign into the section with your advisor.
CSS	9920	Doctoral-Level Dissertation Research in Environmental Information Science	Dissertation research for Ph.D. candidates after A exam has been passed.
CSS	9920	Doctoral-Level Dissertation Research in Environmental Information Science	Dissertation research for Ph.D. candidates after A exam has been passed. Sign into the section with your advisor.
CSS	9930	Doctoral Research in Agronomy	Sign into your faculty section.
CSS	9930	Doctoral Research in Agronomy	Sign into your faculty section.
DEA	1101	Visual Literacy and Design Studio	Permission of instructor is required for non-DEA majors. Enrollment limited to 20 students. Priority given to DEA majors. Cost of materials: approx. \$200.
DEA	1101	Visual Literacy and Design Studio	Permission of instructor is required for non-DEA majors. Enrollment limited to 20 students. Priority given to DEA majors. Cost of materials: approx. \$200.
DEA	1110	Making a Difference by Design	Lab fee: \$15.00 (charged to bursar bill).
DEA	1150	Design Graphics and Visualization	Prerequisite: DEA majors must earn B- or higher in DEA 1150 to enroll in subsequent studios. Minimum cost of materials: \$200; technology fee: \$10.
DEA	2201	Magnifying Small Spaces Studio	Prerequisite: Completion of DEA 1101 and DEA 1150 with B- or higher or instructor permission. Cost of materials: approx. \$50 for field trips, supplies.

DEA	3030	Interior Materials and Sustainable Elements	Prerequisite: Recommended for juniors and seniors. Cost of materials: approx. \$30.
DEA	3050	Construction Documentation: CAD and BIM	Prerequisite: completion of DEA 1150 with B- or higher or permission of instructor. Minimum cost of materials: \$50; required field trips: \$10.
DEA	3302	Sustainable Consumerism: The New Retail Studio	Prerequisite: DEA Majors only. Students must have 1) completed two studio courses at the 2000 or 3000 level and 2) be experienced with AutoCAD, Illustrator, Photoshop and In-Design software applications. Minimum cost of materials: \$50 field trip fee, supplies.
DEA	3304	Health and Healing Studio	Prerequisite: Completion of DEA 1101 and DEA 1150 with B- or higher or permission of instructor. Minimum cost of materials: \$50 field trip, supplies.
DEA	3510	Ergonomics and Anthropometrics	Recommended prerequisite: DEA 1500.
DEA	3590	Problem-Seeking through Programming	Cost of materials: approx. \$100.
DEA	3600	Design City	Enrollment limited to DEA majors and minors. Not open to freshmen for credit, however course may be repeated for credit up to 4 times (during sophomore, junior, senior, or graduate years). Please note: last date to add/drop: September 2. Field trip to NYC: September 11-12. Cost of materials: approx. \$200 (charged to bursar bill) covers cost of hotel and chartered bus.
DEA	4040	Professional Practice, Ethics and Entrepreneurship	Prerequisite: seniors only or permission of instructor. Cost of field trip: \$100.
DEA	4300	Furniture as a Social Art Studio	Prerequisite: Completion of DEA 1101 and DEA 1150 with B- or higher or permission of instructor. Cost of building materials: \$150.
DEA	4401	Adaptive Reuse Studio: Recycling the Built Environment	Prerequisite: Students must have completed two DEA studio courses at 2000 or 3000 level and DEA 3050. Cost of materials: approx. \$150; field trip: \$50-150.
DEA	4402	Disruptive Design: Competitions Studio	Prerequisite: completion of DEA 3030, and one of the following studios DEA 3301, DEA 3302, DEA 4401, or permission of instructor. Course competition registration fee \$75 (charged to bursar bill).
DEA	4500	Policy Meets Design: High-Impact Facilities of the 21st Century	Graduate students and seniors have priority; others are welcome to attend if there is room.
DEA	4520	Applied Anatomy and Biomechanics for Ergonomic Design	Prerequisite: DEA 1500 or permission of instructor. Recommended prerequisite: DEA 2900, 3510; Calculus and basic physics.
DEA	5540	Workplace Strategies Studio	Prerequisite: DEA 3590 or permission of instructor. Minimum cost of materials: \$100.
DEA	6200	Studies in Human-Environment Relations	Enrollment limited to: Graduate students. (Undergraduate seniors outside of DEA with permission of instructor.)
DEA	6250	Human Dimensions of Sustainable Building	Recommended prerequisite: DEA 2040. Cost of materials other than books: approx. \$50.
DEA	6500	Problem-Seeking through Programming	Cost of materials: approx. \$100.
DEA	6510	Ergonomics and Anthropometrics	Recommended prerequisite: DEA 1500.
DSOC	1101	Introduction to Sociology	Students may not take both DSOC 1101 and SOC 1101 for credit.
DSOC	1101	Introduction to Sociology	Students may not take both DSOC 1101 and SOC 1101 for credit.
DSOC	2010	Population Dynamics	If this course is full, please contact the course instructor to be placed on a waitlist.
DSOC	2050	International Development	Juniors and Seniors may choose to take course for 1 additional credit if selected from applicant pool during first week of class. To earn 1 additional credit student must attend ADDITIONAL section meeting on Friday immediately following regular class discussion time. All students must initially enroll in LEC 1, DIS 1 for 3 credits. If course full, contact ct259@cornell.edu to be placed on waitlist. This does NOT guarantee enrollment.

DSOC	3010	Theories of Society and Development	Prerequisite: development sociology or previous sociology course.
DSOC	3050	Education, Inequality, and Development	Prerequisite: introductory social science course or permission of instructor.
DSOC	3060	Farmworkers: Contemporary Issues and Their Implications	Enrollment limited to: students in summer Farmworker program.
DSOC	3200	Rethinking Global Development: New Frameworks for Understanding Poverty, Inequality & Growth in 21C	Prerequisite: DSOC 2050, International Development or permission of instructor.
DSOC	3290	Comparative Politics of Latin America	Sections will be scheduled during the first day of class.
DSOC	3311	Environmental Governance	Enrollment limited to: juniors, seniors, or by permission of instructor.
DSOC	3700	Comparative Social Inequalities	Prerequisite: introductory social science course.
DSOC	4080	Demographic Techniques II	Prerequisites: Permission of instructor. A background in statistics will be helpful.
DSOC	4200	CALS NYS Internship Program Preparation and Community Orientation	Course will be limited to CALS students who have successfully applied (i.e., been accepted) to the CALS NYS Internship Program for the following summer.
DSOC	4300	Human Migration: Internal and International	Prereq: One demography course or permission of instructor.
DSOC	4970	Independent Study in Development Sociology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
DSOC	4970	Independent Study in Development Sociology	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
DSOC	4971	CALS NYS Internship Program Independent Study	Course is limited to CALS students who participated in the CALS NYS Internship Program the preceding summer.
DSOC	4980	Teaching Experience in Development Sociology	Previous enrollment in the course to be taught or other appropriate previous training and experience. Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
DSOC	4980	Teaching Experience in Development Sociology	Previous enrollment in the course to be taught or other appropriate previous training and experience. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
DSOC	4990	Independent Research in Development Sociology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 701. You will be put in the course after submitting form online.

DSOC	4990	Independent Research in Development Sociology	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
DSOC	5200	Rethinking Global Development: New Frameworks for Understanding Poverty, Inequality and Growth in 21C	Prerequisite: DSOC 2050 or permission of instructor.
DSOC	6001	The Empirics of Development and Social Change	Graduate students only.
DSOC	6030	Classical Sociological Theory	Enrollment limited to: graduate students.
DSOC	6060	Sociological Theories of Development	Enrollment limited to: graduate students.
DSOC	6080	Demographic Techniques II	Prerequisites: Graduate standing. A background in statistics will be helpful.
DSOC	6150	Qualitative Research Methods	Enrollment limited to: graduate students.
DSOC	6170	Foundations in Social Research: Comparative Epistemologies	Enrollment limited to: graduate students.
DSOC	6190	Quantitative Research Methods	Prerequisite: previous course in statistics. Enrollment limited to: graduate students.
DSOC	6300	Human Migration: Internal and International	Prereq: one demography course or permission of instructor.
DSOC	6720	Demography Proseminar	Enrollment limited to: at least 2nd-year graduate student.
DSOC	7001	Historical Sociology of Modernity	Prerequisites: Graduate students only.
DSOC	7500	Food, Ecology, and Agrarian Change	Enrollment limited to: graduate students.
DSOC	7900	Graduate-Level Thesis Research	Enrollment limited to: DSOC graduate students. Permission of instructor is required.
DSOC	7900	Graduate-Level Thesis Research	Enrollment limited to: DSOC graduate students. Permission of instructor is required.
INFO	5310	Psychological and Social Aspects of Connective Media	Enrollment limited to students enrolled at the Cornell Tech campus. Offered in NYC.
INFO	6400	Advanced Human-Computer Interaction Design	Enrollment limited to: graduate students.
INFO	6410	User Interface Design, Prototyping, and Evaluation	Enrollment limited to: students enrolled at Cornell Tech.
INFO	6710	Revolutions of the Mind: Media, Technology and Epistemological Change	Prerequisites: Enrollment limited to seniors (with instructor permission) and grad students.

NS	6600	Special Topics in Nutrition	Enrollment is limited to: Graduate students. Students must use a paper ADD form to add course. This form requires obtaining the instructor's signature/permission.
NS	6600	Special Topics in Nutrition	Enrollment is limited to: graduate students. Students must use a paper ADD form to add course. This form requires obtaining the instructor's signature/permission.
NS	6900	Trace Element and Isotopic Analysis	Prerequisite: CHEM 2080 or CHEM 2880 or CHEM 3020 or CHEM 3900; PHYS 2208 and MATH 1120, or permission of instructor. Primarily for graduate students and advanced undergraduates.
NS	6980	Community and International Nutrition Seminar	Permission of instructor required. Enrollment limited to graduate standing.
NS	6980	Community and International Nutrition Seminar	Permission of instructor required. Enrollment limited to graduate standing.
NS	7020	Seminar in Toxicology	This course is now being enrolled via Permission Numbers only. For a PIN, please contact Andrea Elmore at ace23@cornell.edu.
NS	7035	Predoctoral Fellowship Proposal and Review	Enrollment limited to: First-year graduate students in Nutrition. Please note that this is a 10-week course.
NS	7040	Grant Writing	Prerequisite: NS 7030. Enrollment limited to: DNS graduate students. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	8990	Master's Thesis and Research	Enrollment is limited to: Graduate students. Students must use a paper ADD form to add course. This form requires obtaining the instructor's signature/permission.
NS	8990	Master's Thesis and Research	Enrollment is limited to: graduate students. Students must use a paper ADD form to add course. This form requires obtaining the instructor's signature/permission.
NS	9990	Doctoral Thesis and Research	Enrollment is limited to: Graduate students. Students must use a paper ADD form to add course. This form requires obtaining the instructor's signature/permission.
NS	9990	Doctoral Thesis and Research	Enrollment is limited to: graduate students. Students must use a paper ADD form to add course. This form requires obtaining the instructor's signature/permission.
NTRES	2100	Introductory Field Biology	Enrollment is restricted students in Natural Resources and Environmental Science & Sustainability majors, as this is a required course.
NTRES	2300	Field Methods in Bird Banding	Permission of instructor required; contact Dr. Bonter at dnb23@cornell.edu. This course is held at the Lab of Ornithology with shuttle service provided from Corson-Mudd. Students spend significant time outdoors so warm clothing is required.
NTRES	2830	DNA, Genes and Genetic Diversity	Note Prerequisite: BIOEE 1780; preference is given to NTRES and SNES (ESS) majors.
NTRES	3030	Introduction to Biogeochemistry	Prerequisite: Chem 2070 or equivalent, Math 1120, and a course in biology and/or geology.
NTRES	3100	Applied Population Ecology	Prerequisite: calculus (MATH 1106 or MATH 1110). Recommended prerequisite: Background in Ecology or Biology. Enrollment preference given to NTRES, SNES and ESS majors.
NTRES	3130	Biological Statistics I	Prerequisite: one semester of calculus.
NTRES	3220	Global Ecology and Management	Prerequisite: college-level biology and a general exology course.
NTRES	3240	Sustainable, Ecologically Based Management of Water Resources	Prerequisite: introduction to ecology and introduction to chemistry or permission of instructor.
NTRES	3260	Applied Conservation Ecology	Enrollment limited to: Seniors and juniors who have taken BIOEE 3610. All others need permission. If class is full, students can contact Dr. Morreale (sjm11@cornell.edu) to inquire about being waitlisted.
NTRES	3311	Environmental Governance	Enrollment limited to: juniors, seniors, or by permission of instructor.
NTRES	3320	Introduction to Ethics and Environment	Discussion session time will be arranged in class.
NTRES	3330	Ways of Knowing: Indigenous and Local Ecological Knowledge	Enrollment limited to: Juniors, seniors, and grad students. Sophomores require permission of instructor (ksk28@cornell.edu).

NTRES	4100	Advanced Conservation Biology: Concepts and Techniques	Prerequisite: CALS math requirements, NTRES 2830, NTRES 3100 or equivalent, or permission of instructor.
NTRES	4130	Biological Statistics II	Prerequisite: NTRES 3130 or BTRY 3010.
NTRES	4200	Forest Ecology	Prerequisite: introductory biology.
NTRES	4201	Forest Ecology Laboratory	Co-requisite: NTRES 4200.
NTRES	4221	Wetland Ecology Laboratory	Co-requisite: NTRES 4220. One all-day Saturday field trip required.
NTRES	4280	Principles and Practices of Applied Wildlife Science	Pre-requisites: NTRES 3100 or equivalent, or permission of instructor.
NTRES	4300	Environmental Policy Processes	Seniors and Grad students (Juniors if space allows). In addition to intensive ten day seminar in Washington, DC, there are required preparation meetings in Ithaca during November and December and follow up meetings in February/March 2015. Enrollment is by application only due by 4:00 PM on October 17th: check website for details and application forms: http://www.cals.cornell.edu/cals/dnr/undergraduate/courses/4300.cfm
DSOC	7910	Teaching Experience	Enrollment limited to: DSOC graduate students.
DSOC	7910	Teaching Experience	Enrollment limited to: DSOC graduate students.
DSOC	8720	Development Sociology	Enrollment limited to: master's and doctoral degree candidates. Permission of graduate field member concerned is required.
DSOC	8720	Development Sociology	Enrollment limited to: master's and doctoral degree candidates. Permission of graduate field member concerned is required.
DSOC	8900	Master's Level Thesis Research	Permission of instructor is required.
DSOC	8900	Master's Level Thesis Research	Enrollment limited to: thesis research for Master's students. Permission of instructor is required.
DSOC	9900	Doctoral-Level Thesis Research	Enrollment limited to: DSOC graduate students. Permission of instructor is required.
DSOC	9900	Doctoral-Level Thesis Research	Enrollment limited to: DSOC graduate students. Permission of instructor is required.
EAS	1190	Fossil Preparation	Class will meet at PRI. Prerequisite: EAS 1109 or related EAS course.
EAS	1310	Basic Principles of Meteorology	Optional 1 credit lab offered as EAS 1330.
EAS	1330	Basic Meteorology Lab	Concurrent enrollment in EAS 1310 required.
EAS	1340	Introductory Weather Analysis and Forecasting	Prerequisite: EAS 1310 and EAS 1330.
EAS	1600	Environmental Physics	Prerequisite: one semester of college calculus.
EAS	2200	The Earth System	Prerequisite: MATH 1110 or MATH 1910. The fall offering of this course does not fulfill an ENGRD requirement for students in the College of Engineering. Students who wish to take this course to fulfill an ENGRD requirement should sign up for the spring offering instead.
EAS	2250	The Earth System	Prerequisite: MATH 1110 or MATH 1910.
EAS	2500	Meteorological Observations and Instruments	Prerequisite: EAS 1310
EAS	2900	Computer Programming and Meteorology Software	Prerequisite: EAS 1310, MATH 1110, or equivalent.
EAS	2960	Forecast Competition	Enrollment limited to: undergraduate students in the Atmospheric Science major or those with permission of the instructor.

EAS	2960	Forecast Competition	Enrollment limited to: undergraduate students in the Atmospheric Science major or those with permission of the instructor.
EAS	3010	Evolution of the Earth System	Prerequisite: EAS 2200, MATH 1110 or MATH 1910, and one course in chemistry (high school or college).
EAS	3030	Introduction to Biogeochemistry	Prerequisite: Chem 2070 or equivalent, Math 1120, and a course in biology and/or geology.
EAS	3050	Climate Dynamics	Prerequisite: two semesters of calculus and one semester of physics.
EAS	3220	Biogeochemistry of the Hawaiian Islands	EMPTY
EAS	3400	Field Study of the Earth System	EMPTY
EAS	3410	Atmospheric Thermodynamics and Hydrostatics	Prerequisite: one year of calculus, one semester of physics.
EAS	3420	Atmospheric Dynamics	Prerequisite: Familiarity with multivariate calculus (MATH 2930, MATH 2130, or MATH 2220 or equivalent); one semester of university physics.
EAS	3510	Conservation Oceanography	EMPTY
EAS	3520	Synoptic Meteorology I	Prerequisite: EAS 3410; Co-requisite: EAS 3420.
EAS	3530	Physical Oceanography	Prerequisite: EAS/BIOEE 1540 or EAS/BIOEE 1560 or equivalent, MATH 1120 or MATH 1920, and PHYS 2207 or PHYS 1112, or permission of instructor.
EAS	3880	Global Geophysics	Prerequisite: MATH 1120 or MATH 1920, and PHYS 2208 or PHYS 2213.
EAS	4010	Fundamentals of Energy and Mineral Resources	Prerequisite: previous course in geology.
EAS	4040	Geodynamics	Prerequisite: calculus and calculus-based physics courses, or permission of instructor.
EAS	4260	Structural Geology	Prerequisite: one semester of calculus, plus an introductory geology course, or permission of instructor.
EAS	4350	Statistical Methods in Meteorology and Climatology	Prerequisite: one introductory course each in statistics (e.g. AEM 2100) and calculus.
EAS	4510	Synoptic Meteorology II	Prerequisite: EAS 3410, EAS 3420.
EAS	4530	Mineralogy	Prerequisite: CHEM 2070 or CHEM 2090 or permission of instructor.
EAS	4540	Petrology and Geochemistry	Prerequisite: EAS 4530 or permission of instructor.
EAS	4561	Isotope Geochemistry	Prerequisite: EAS 4550 or permission of instructor.
EAS	4570	Atmospheric Air Pollution	Prerequisite: EAS 3410 or thermodynamics course, and one semester of chemistry, or permission of instructor.
EAS	4620	Marine Ecosystem Sustainability	Letter grades, S/U grades with permission of instructor. Limited to 50 students.
EAS	4700	Advanced Weather Forecasting and Analysis	Prerequisite: EAS 3520 and 4510.
EAS	4710	Introduction to Groundwater	Prerequisites: fluid mechanics or hydrology course.
EAS	4750	Special Topics in Oceanography	Enrollment limited to: students enrolled in the Ocean Biodiversity Research Apprenticeship program. Taught in Friday Harbor, WA.
EAS	4760	Sedimentary Basins	Prerequisite: EAS 3010 or permission of instructor.
EAS	4790	Paleobiology	Prerequisite: two majors-level biology courses and either BIOEE 2740, BIOSM 3730, EAS 3010, or permission of instructor.

EAS	4800	Our Changing Atmosphere: Global Change and Atmospheric Chemistry	Prerequisites: CHEM 2070 or 2090, MATH 1920, PHYS 1112 or equivalent, or permission of instructor.
EAS	4820	Seismology	Prerequisite: one year of calculus, one year of physics. Recommended prerequisite: structural geology.
EAS	4850	Climate Information and Management	Prerequisite: statistics and at least one physical science or calculus course.
EAS	4860	Understanding Tropical Meteorology on Hourly to Interannual Timescales	Prerequisite: climate dynamics (equivalent to EAS 3050 or permission of instructor), multivariate calculus (e.g. MATH 2130, MATH 2220, or MATH 2930), and one semester of university physics. Atmospheric thermodynamics (EAS 3410) and atmospheric dynamics (EAS 3420) are recommended, although the latter may be taken concurrently.
EAS	4870	Introduction to Radar Remote Sensing	Prerequisite: PHYS 2208 or 2213 or equivalent, or permission of instructor.
EAS	4910	Undergraduate Research	Students must complete form in 2124 Snee Hall.
EAS	4940	Special Topics in Earth and Atmospheric Sciences (Undergraduate Level)	Enrollment limited to: students with junior or higher standing.
EAS	4960	Internship Experience	A&S students receive transcript credit only; cannot be used toward graduation.
EAS	4980	Teaching Experience in Earth and Atmospheric Sciences	A&S students receive transcript credit only; cannot be used toward graduation
EAS	5010	Fundamentals of Energy and Mineral Resources	Prerequisite: previous course in geology.
EAS	5011	Evolution of the Earth System	Prerequisite: EAS 2200, MATH 1110 or MATH 1910, and one course in chemistry (high school or college).
EAS	5041	Geodynamics	Prerequisite: calculus and calculus-based physics courses, or permission of instructor.
EAS	5051	Climate Dynamics	Prerequisite: two semesters of calculus and one semester of physics.
EAS	5240	Advanced Structural Geology	Prerequisite: EAS 4260 or permission of instructor.
EAS	5350	Statistical Methods in Meteorology and Climatology	Prerequisite: one introductory course each in statistics (e.g. AEM 2100) and calculus.
EAS	5620	Marine Ecosystem Sustainability	Prerequisite: BIOEE 1610.
EAS	6520	Advanced Atmospheric Dynamics	Prerequisite: EAS 3410 and EAS 3420 or equivalent.
EAS	6560	Isotope Geochemistry	Prerequisite: EAS 4550 or permission of instructor.
EAS	6660	Applied Multivariate Statistics	Prerequisite: multivariate calculus, matrix algebra, and two statistics courses.
EAS	6668	Earth System Behavior and Resources	Prerequisite: CHEME 6660 or permission of instructor. Enrollment limited to: seniors and graduate students or those with permission of the instructor. Not open to Science of Earth Systems majors.
EAS	6820	Seismology	Prerequisite: one year of calculus, one year of physics. Recommended prerequisite: structural geology.

EAS	6860	Understanding Tropical Meteorology on Hourly to Interannual Timescales	Prerequisite: climate dynamics (equivalent to EAS 3050 or permission of instructor), multivariate calculus (e.g. MATH 2130, MATH 2220, or MATH 2930), and one semester of university physics. Atmospheric thermodynamics (EAS 3410) and atmospheric dynamics (EAS 3420) are recommended, although the latter may be taken concurrently.
EAS	7010	Thesis Research	ATMOS SCI students use EAS 8500, 9500 or 9510.
EAS	8500	Master's Level Thesis Research in Atmospheric Science	GEOL SCI students use EAS 7010 or 7020.
EAS	9500	Graduate-Level Dissertation Research in Atmospheric Science	GEOL SCI students use EAS 7010 or 7020.
EAS	9510	Doctoral-Level Dissertation Research in Atmospheric Science	GEOL SCI students use EAS 7010 or 7020.
EDUC	2410	The Art of Teaching	Sophomores and Juniors given preference. Freshman encouraged for spring semester. Enrollment preference given to Education minors. Please contact Jeff Perry (jap255) to be added to waitlist.
EDUC	2610	The Intergroup Dialogue Project	Please email Amber E. George (aeg234@cornell.edu) for information on enrolling in this class.
EDUC	3610	Advanced Intergroup Dialogue	Prerequisites: EDUC 2610 or equivalent experience. Please email aeg234@cornell.edu for permission code.
EDUC	3610	Advanced Intergroup Dialogue	Prerequisite: EDUC 2610 Intergroup Dialogue
EDUC	4940	Special Topics in Education	Open only to students who participated in January 2015 trip to Taos, New Mexico.
EDUC	4940	Special Topics in Education	Prerequisite: Priority enrollment for students who will be first-years in Fall 2014. Course will meet at Belle Sherman Elementary. Instructor consent required. Contact Bryan Duff (bpd38) for more info and permission to enroll.
EDUC	4960	Undergraduate Internship In Education	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
EDUC	4960	Undergraduate Internship In Education	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
EDUC	4970	Individual Study in Education	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
EDUC	4970	Individual Study in Education	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
EDUC	4980	Undergraduate Teaching	Students from all colleges must submit an Independent Study Form (Available online: https://dust.cals.cornell.edu/IndStudyPolicy.aspx). You must select an instructor (Candace Chow or Troy Richardson) when completing the form in order to ensure that it is processed in a timely manner. Do not sign into section 601. You will be put in the course after submitting form online.
EDUC	4980	Undergraduate Teaching	Prerequisite: GPA of at least 2.7. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
EDUC	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.

EDUC	4990	Undergraduate Research	Prerequisite: GPA at least 2.7. Enrollment limited to: juniors or seniors. Not open to students who have earned 6 or more undergraduate research credits elsewhere in the college. Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
EDUC	5440	Curriculum and Instruction	Prereqs: EDUC 2410 (Art of Teaching) or permission of instructor.
EDUC	6970	Graduate Individual Study in Education	Please sign into your faculty section.
EDUC	6970	Graduate Individual Study in Education	Sign into your faculty member's section.
EDUC	6980	Graduate Supervised Teaching in Education	Please sign into your faculty section.
EDUC	6980	Graduate Supervised Teaching in Education	Sign into your faculty member's section.
EDUC	7000	Directed Readings	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7000	Directed Readings	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7010	Empirical Research	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7010	Empirical Research	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7020	Practicum	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7020	Practicum	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7030	Teaching Assistantship	Prerequisite: graduate standing; permission of instructor.
EDUC	7030	Teaching Assistantship	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7040	Research Assistantship	Prerequisite: graduate standing; permission of instructor.
EDUC	7040	Research Assistantship	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	7050	Extension Assistantship	Prerequisite: graduate standing; permission of instructor.
EDUC	7050	Extension Assistantship	Enrollment limited to: graduate students. Permission of instructor is required.
EDUC	8900	Master's Level Thesis Research	Each student, before course enrollment, must obtain approval of faculty member who will assume responsibility for guiding work.
EDUC	8900	Master's Level Thesis Research	Before course enrollment, students must obtain approval of faculty member who will assume responsibility for guiding work.
EDUC	9900	Doctoral-Level Thesis Research	Each student, before course enrollment, must obtain approval of faculty member who will assume responsibility for guiding work.
EDUC	9900	Doctoral-Level Thesis Research	Before course enrollment, students must obtain approval of faculty member who will assume responsibility for guiding work.
ENTOM	2100	Plagues and People	Prerequisite: Introductory biology or permission of instructor. Lecture 001 is offered for 2 credits. Lecture 002 is 3 credits with a discussion.
ENTOM	2120	Insect Biology	Prerequisite or co-requisite: one semester of college biology or permission of instructor. Course lab fee: \$25.
ENTOM	2150	Spider Biology: Life on a Silken Thread	Prerequisite: introductory life science course or permission of instructor.
ENTOM	3030	Applied Statistics: Biological Experiments in Practice	Prerequisite: background in statistics is highly recommended.

ENTOM	3070	Pesticides, the Environment, and Human Health	Permission of instructor or sophomore standing required.
ENTOM	3150	Spider Biology	Prerequisite: introductory life science course or permission of instructor.
ENTOM	3350	Naturalist Outreach Practicum	
ENTOM	3360	Naturalist Outreach Continued	Naturalist Outreach Practicum is an unusual course for students who want to improve their scientific outreach skills and speak in school classrooms. You must obtain Dr. Rayor's permission to participate in this class by 1) Reading the Natural Outreach Web sites: http://www.entomology.cornell.edu/naturalistoutreach.html and http://blackboard.cornell.edu for Entom 3350 and 2) Contact Dr. Rayor (LSR1, 255-8406) with information about your motivation for taking the class and pertinent experience. This permission process will improve the match between students with a desire for civic engagement in science and this practical course. Dr. Rayor will rapidly inform you of her decision and provide you with an enrollment code.
ENTOM	3690	Chemical Ecology	Prerequisite: one majors-level biology course and one semester introductory chemistry for majors or nonmajors or equivalents, or permission of instructor.
ENTOM	4190	Agricultural Application of Plant Health Concepts	Taught at Geneva Campus. Prerequisite: PLPA3010.
ENTOM	4501	Comparative Immunology: Innate Immunity in Action, Lab	Prerequisites: One year of college biology or permission of instructor. Pre/Co-requisite - ENTOM 4500.
ENTOM	4550	Insect Ecology	Recommended Prerequisite: ENTOM 2120 or BIOEE 1610 or permission of instructor.
ENTOM	4610	Model-Based Phylogenetics and Hypothesis Testing	Prerequisites: Prerequisite: BIOEE 1780 or BIOMG 2800 or equivalent, or permission of instructor
ENTOM	4940	Special Topics in Entomology	This course is held for "Trial" classes in the department.
ENTOM	4970	Individual Study in Entomology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ENTOM	4970	Individual Study in Entomology	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ENTOM	4980	Undergraduate Teaching	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ENTOM	4980	Undergraduate Teaching	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ENTOM	4990	Undergraduate Research in Entomology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ENTOM	4990	Undergraduate Research in Entomology	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
ENTOM	7070	Individual Study for Graduate Students	Permission of instructor is required. Not for thesis research.

ENTOM	7070	Individual Study for Graduate Students	Permission of instructor is required. Not for thesis research.
ENTOM	7090	Teaching Entomology	Teaching entomology or for extension training.
ENTOM	7090	Teaching Entomology	Teaching entomology or for extension training.
ENTOM	7100	Mastering the Craft of Scientific Writing	Prerequisite: ENTOM 7670 or instructor consent.
ENTOM	7570	Seminar in Spatial Population Ecology	Prerequisite: Open to anyone (undergraduates with prior permission).
ENTOM	7640	Plant-Insect Interactions Seminar	Permission of instructor required for undergraduate students. May be repeated for credit.
ENTOM	7640	Plant-Insect Interactions Seminar	Permission of instructor is required for undergraduates. May be repeated for credit.
ENTOM	8900	Master's Level Thesis Research	Permission of instructor is required. 15 credits per semester if taking no classes; if taking other courses, use ENTOM 8900 to bring yourself up to a total of 15 credits.
ENTOM	8900	Master's Level Thesis Research	Permission of instructor is required. 15 credits per semester if taking no classes; if taking other courses, use ENTOM 8900 to bring yourself up to a total of 15 credits.
ENTOM	9900	Doctoral Level Thesis Research	Permission of instructor is required. 15 credits per semester if taking no classes; if taking other courses, use ENTOM 9900 to bring yourself up to a total of 15 credits.
ENTOM	9900	Doctoral Level Thesis Research	Permission of instructor is required. 15 credits per semester if taking no classes; if taking other courses, use ENTOM 9900 to bring yourself up to a total of 15 credits.
FDSC	1102	Leadership and Career Skills in Food Science	Enrollment is limited to: freshman Food Science majors.
FDSC	1104	Introduction to Wines and Vines	Lec and lab required for undergraduate enology and viticulture students. Students who do not attend first class or provide prior notice to instructor of their absence from first class will be dropped from the instructors' roster. Student is then responsible for dropping course through their college. Students must purchase four approved wine glasses and pay a \$50 tasting fee by the second class session.
FDSC	1104	Introduction to Wines and Vines	Lec and lab required for undergraduate enology and viticulture students. Students who do not attend first class or provide prior notice to instructor of their absence from first class will be dropped from the instructors' roster. Student is then responsible for dropping course through their college. Students must purchase four approved wine glasses and pay a \$50 tasting fee by the second class session.
FDSC	2000	Introduction to Physiochemical and Biological Aspects of Food	Prerequisite: college-level courses in chemistry and biology; organic chemistry or concurrent registration. DNS/FDSC majors get priority for spaces in class.
FDSC	2204	Principles and Practices of Growing Grapes and Making Wines	
FDSC	2205	Growing Grapes and Making Wines Laboratory	FDSC/HORT/VIEN 1105 and 2204 (may be taken concurrently with 2204).
FDSC	2300	Chef's Chemistry	Enrollment is limited to: freshmen and sophomores in Food Science, Nutrition, and possibly Hotel. To enroll, please contact Professor Regenstein (JMR9) for a permission code. Freshman and Sophomores in Food Science and in Nutrition will be accepted. All others will be put on a waitlist. Please identify your academic advisor before emailing Professor Regenstein.
FDSC	2400	Wines and Grapes: Composition and Analysis	Prerequisite: one semester of chemistry. Enrollment preference given to: Enology & Viticulture and Food Science Majors.
FDSC	3100	Introduction to Animal Welfare for Food Scientists	Enrollment limited to: sophomores.
FDSC	3290	International Agribusiness Study Trip	Prerequisite: previous business management or applied economics courses necessary. Course fee: Field study co-payment \$750, scholarships available based on financial need. Students are selected with priority given to juniors and seniors in CALS. Open by application by October 24th.
FDSC	3940	Applied and Food Microbiology	Prerequisite: BIOMI 2900 and BIOMI 2910.

FDSC	3960	Food Safety Assurance	Prerequisite: BIOMI 2900 or permission of instructor.
FDSC	4010	Concepts of Product Development	Prerequisite: FDSC 3940, FDSC 4170, and FDSC 4210, or permission of instructor.
FDSC	4170	Food Chemistry I	Prerequisite: CHEM 1570 or BIOBM 3300 or BIOBM 3310.
FDSC	4180	Food Chemistry II	Prerequisite: FDSC 4170.
FDSC	4190	Food Chemistry Laboratory	Prerequisite: BIOBM 3300 or BIOBM 3310 or CHEM 1570 and FDSC 4170.
FDSC	4220	Functional Foods and Dietary Supplements For Health	Prerequisite: Basic biochemistry course or permission of instructor.
FDSC	4230	Physical Principles of Food Preservation and Manufacturing	Prerequisite: FDSC 3210.
FDSC	4250	Unit Operations and Dairy Foods Processing	Prerequisite: 3210, 4180, or permission of instructor.
FDSC	4300	The Science and Technology of Beer	Prerequisites: Introductory biology and chemistry or permission of instructor. A \$50 tasting fee will be applied to student bursar bill. Students must bring 4 appropriate glasses to each class, starting in the second week. Students need to be 21 by first day of class unless course is counting towards major requirements
FDSC	4350	Introduction to Aquaculture for Food Scientists	Enrollment is limited to: at least junior standing.
FDSC	4600	Wine and Food Fermentations	Prerequisite: BIOMI 2900. Recommended prerequisite: FDSC 1104.
FDSC	4700	Winemaking Theory and Practice II	Prerequisite: FDSC 2204, FDSC 2205, FDSC 2400, and BIOMI 2900 or permission of instructor.
FDSC	4710	Winemaking Theory and Practice II Laboratory	Prerequisite: FDSC 2204, FDSC 2205, FDSC 2400, and BIOMI 2900 or permission of instructor.
FDSC	4910	Undergraduate Viticulture and Enology Research Practices	Prerequisite: FDSC/HORT/VIEN 2205
FDSC	4940	Special Topics in Food Science	Class enrollment is limited to two students. Students interested in enrolling in this class must submit an application. Please contact Louie Felker (lmf226) for details.
FDSC	4960	Undergraduate Internship in Food Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
FDSC	4960	Undergraduate Internship in Food Science	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
FDSC	4970	Individual Study in Food Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
FDSC	4970	Individual Study in Food Science	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
FDSC	4980	Undergraduate Teaching Experience	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.

FDSC	4980	Undergraduate Teaching Experience	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
FDSC	4990	Undergraduate Research in Food Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 701. You will be put in the course after submitting form online.
FDSC	4990	Undergraduate Research in Food Science	Students from all Colleges must submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
FDSC	5000	Master of Professional Studies (Agriculture) Project	Enrollment limited to: MPS candidate.
FDSC	5000	Master of Professional Studies (Agriculture) Project	Enrollment limited to: MPS candidates.
FDSC	5990	Research for Lausanne Exchange Students	Prerequisite: permission of instructor.
FDSC	6000	Seminar in Food Science	Requirement for all graduate students in the field of Food Science and Technology. Strongly recommended for graduate students minoring in Food Science and Technology.
FDSC	6000	Seminar in Food Science	Requirement for: all graduate students in field of food science and technology. Highly recommended for graduate students minoring in food science and technology.
FDSC	6020	International Agriculture in Developing Nations	EMPTY
FDSC	6220	Functional Foods and Dietary Supplements For Health	Prerequisite: Basic biochemistry course or permission of instructor.
FDSC	6650	Food and Bioprocessing Systems	Prerequisite: FDSC 4230.
FDSC	6940	Special Topics in Food Science	Enrollment limited to 24 students. Priority given to MPS students and seniors in Food Science.
FDSC	6960	Graduate Internship in Food Science	Permission of instructor is required.
FDSC	6960	Graduate Internship in Food Science	Permission of instructor is required.
FDSC	6970	Graduate Individual Study in Food Science	Please sign into your faculty section.
FDSC	6970	Graduate Individual Study in Food Science	Sign into your faculty section.
FDSC	8900	Master's Level Thesis Research	Enrollment limited to: Master's candidates. Permission of Special Committee chair is required.
FDSC	8900	Master's Level Thesis Research	Enrollment limited to: master's candidates. Permission of Special Committee chair is required.
FDSC	9900	Doctoral-Level Thesis Research	Enrollment limited to: PhD students.
FSAD	3770	Collections for the Fashion Industries	Prerequisite: FSAD 3460.
HD	1160	Section for Infancy and Childhood	You cannot preregister for HD 1160; you can sign up when you come to the first class of HD 1150 in the fall.

HD	2200	The Human Brain and Mind: An Introduction to Cognitive Neuroscience	Prerequisites: HD 1150 or PSYCH 1101 required; BIONB 2220 or PSCH 2230 recommended.
HD	2830	Research Methods in Human Development	Enrollment limited to: Human Development majors.
HD	3300	Developmental Psychopathology	Prerequisites: HD 1150 or PSYCH 1101.
HD	3510	Racial and Ethnic Identity Development	Required prerequisites: HD 1150 OR HD 1170. Recommended Prerequisites: PSYCH 1101.
HD	3620	Human Bonding	Please feel free to add your name to the wait list. You will be contacted directly if a space opens up for you.
HD	4240	Stress, Emotion, and Health	Preference given to HD majors.
HD	4250	Translational Research on Decision Making	Prerequisites: HD 1150 or 1170 or Psych 1101; also HD 2830 and HD/PSYCH 4750 and HD/PSYCH 4760.
HD	4440	The Nature of Human Intelligence	Preference given to Human Development majors.
HD	4580	The Science of Social Behavior	Enrollment limited to: seniors who major in Sociology, Psychology, Human Development, Communications, ILRLR, and Economics. Capstone seminar for seniors who are interested in graduate study in scientific disciplines that focus on human behavior. Course is designed to mirror the introductory course SOC/HD/COM/ILRLR 1840 Six Pretty Good Books. Seniors are expected to attend both the weekly seminar on Wednesday afternoons (4:30-6:00) and the Wednesday evening lecture (7:30-9:30).
HD	4690	Lab Research on Adult Attachment Phenomena	Prerequisite: HD 3620.
HD	4720	Research in Emotion, Cognition, & Brain	Preference given to Human Development majors.
HD	4730	Network Neuroscience: Selected Topics	Preference given to Human Development majors.
HD	4770	Psychopathology in Great Works of Literature	Students who would like to be in this class should add themselves to the wait list.
HD	4780	Attention Deficit /Hyperactivity Disorder in Children	Prerequisites: HD 1150 or equivalent, introductory biology, statistics course.
HD	4980	Senior Honors Seminar	Enrollment limited to: HD Honors program students.
HD	6660	Genetic, Environmental, and Epigenetic Processes in the Development of Individual Differences	Prerequisites: HD 2220 and 3660, NBB 2210, or PSYCH 2230.
HE	2222	Global Citizenship	Prerequisites: sophomore standing or above. Limited to 16.
HE	4901	Medical Anthropology	Taught in NYC.
HE	4901	Medical Anthropology	Taught in NYC.
HE	4902	Professional Practice and the World of Medicine	Taught in NYC.
HE	4902	Professional Practice and the World of Medicine	Taught in NYC.

HE	4903	Community Participation and Service in North Brooklyn	Taught in NYC.
HE	4903	Community Participation and Service in North Brooklyn	Taught in NYC.
HE	4921	Experienced Based Learning in Private and Public Sectors	Taught in NYC.
HE	4921	Experienced Based Learning in Private and Public Sectors	Taught in NYC.
HE	4922	Action Inquiry in Service with Community	Taught in NYC.
HE	4922	Action Inquiry in Service with Community	Taught in NYC.
HE	4923	Service, Professional Practice and Leadership	Taught in NYC.
HE	4923	Service, Professional Practice and Leadership	Taught in NYC.
HE	4991	Honors Project I	Prerequisite: Enrollment limited to Biology & Society seniors with an overall GPA of 3.3. Apply in 306 Rockefeller Hall.
HE	6011	International Public and NGO Management	MPA Students or Instructor Permission.
HE	6012	Introduction to Evaluation	MPA Students may enroll; all other students need Instructor Permission.
HE	6015	Public Finance: Project Management and Planning	MPA student or by permission of instructor.
HE	6050	Planning Externships	Enrollment limited to: MPA students. Recommended Prerequisites: HE 6010: Public Administration.
HORT	1102	Hands-On Horticulture for Gardeners	Not intended for seniors or Plant Science majors. Students who do not attend the first class or provide prior notice to instructor of their absence from first class will be dropped from the instructor's roster. Students are then responsible for dropping course through their college.
HORT	1104	Introduction to Wines and Vines	Lec and lab required for undergraduate enology and viticulture students. Students who do not attend first class or provide prior notice to instructor of their absence from first class will be dropped from the instructors' roster. Student is then responsible for dropping course through their college. Students must purchase four approved wine glasses and pay a \$50 tasting fee by the second class session.
HORT	1104	Introduction to Wines and Vines	Lec and lab required for undergraduate enology and viticulture students. Students who do not attend first class or provide prior notice to instructor of their absence from first class will be dropped from the instructors' roster. Student is then responsible for dropping course through their college. Students must purchase four approved wine glasses and pay a \$50 tasting fee by the second class session.
HORT	2204	Principles and Practices of Growing Grapes and Making Wines	
HORT	2205	Growing Grapes and Making Wines Laboratory	FDSC/HORT/VIEN 1105 and 2204 (may be taken concurrently with 2204).
HORT	2430	Taxonomy of Cultivated Plants	Prerequisite: one year introductory biology or written permission of instructor. May not be taken for credit after BIOPL 2480.
HORT	2940	Introduction to Agricultural Machinery	To enroll, contact Bob Schindelbeck (rrs3@cornell.edu). The dates and times of the four lecture periods will be determined during the first lab. Most labs will involve working with farm equipment or touring farm environments so students should wear boots or sturdy shoes and casual clothes.
HORT	3050	Arboriculture: Applied Tree Care	Prerequisites: Recommended: Creating the Urban Eden (HORT 4910)

HORT	3100	Production and Marketing of Greenhouse Crops	Prerequisite: HORT 1101 and any other horticulture course. Junior standing is preferred. Cost of required three-day field trip: approx. \$90.
HORT	3330	Permaculture Design Certification	Prerequisites: CSS 2600 or permission of instructor.
HORT	3440	Viticulture and Vineyard Management	Prerequisite: HORT/FDSC/VIEN 2204.
HORT	3500	Principles of Vegetable Production	Prerequisites: HORT 1101, CSS 2600 or equivalent. 3 Saturday field trips are planned early in the semester.
HORT	3910	Woody Plant Identification and Use I	Contact Nina Bassuk (nlb2) to obtain a permission code.
HORT	3920	Woody Plant Identification and Use II	Prerequisite: passing grade in HORT 3910 or HORT 4910, or permission of instructor.
HORT	4000	Principles of Plant Propagation	Prereq: BIOPL 2410 or permission of instructor. field trips are once a month on Saturdays.
HORT	4070	Nutritional Quality Improvement of Food Crops	Prerequisite: one majors-level biology course or permission of instructors.
HORT	4251	Postharvest Biology of Horticultural Crops Lab	Prerequisite or Corequisite: HORT 4250.
HORT	4400	Restoration Ecology	Enrollment limited to: upperclassmen or graduate students, or permission of instructor.
HORT	4450	Ecological Orchard Management	Prerequisite: two college-level biology courses. Recommended prerequisite: previous horticulture/plant science courses.
HORT	4660	Soil Ecology	Prerequisite: one year of biology or ecology and CSS 2600 or permission of instructor.
HORT	4730	Ecology of Agricultural Systems	Prerequisite: BIOEE 1610 or permission of instructor.
HORT	4850	Public Garden Management	Prerequisite: HORT 4910 or 4920, or permission of instructor. Two-and-a-half-day field trip to botanical gardens and arboreta: approx. \$100.
HORT	4910	Creating the Urban Eden: Woody Plant Selection, Design, and Landscape Establishment	Enrollment limited to: Plant Science and Landscape Architecture majors or permission of instructor. Pre-registration is required.
HORT	4920	Creating the Urban Eden: Woody Plant Selection, Design, and Landscape Establishment	Prerequisite: passing grade in LA/HORT 4910. Enrollment is limited to plant sciences or landscape architecture majors or permission of instructors.
HORT	4931	Grassing the Urban Eden	Prerequisite: HORT 4920/LA 4920 recommended but not required.
HORT	4940	Special Topics in Horticulture	Obligatory trip to Belize, 01/06-01/18, during winter break. Trip fees: airfare and departure tax only. Application required.
HORT	4940	Special Topics in Horticulture	First class meets on 09/08.
HORT	4950	Undergraduate Seminar - Current Topics in Horticulture	Graduate students should enroll in HORT 6000.
HORT	4960	Internship in Horticulture	Permission of student's advisor in advance of participation in internship programs. Students must register using individual study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) signed by faculty member who will supervise study and assign grade.

HORT	4960	Internship in Horticulture	Permission of student's advisor in advance of participation in internship program is required. Students must register using independent study form, available online at http://cals.cornell.edu/academics/registrar/policies/#independent-study, and get approval from faculty member who will supervise study and assign grade.
HORT	4970	Undergraduate Individual Study in Horticulture	Students from all colleges must submit an independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study).
HORT	4970	Undergraduate Individual Study in Horticulture	Permission of student's advisor in advance of participation of programs is required. Students must register using individual study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) signed by faculty member who will supervise study and assign grade.
HORT	4975	Hortus Forum Officer Leadership Development	Prerequisite: Must be an elected Hortus Forum Officer to enroll. To enroll fill out the Special Studies form available here: http://cals.cornell.edu/academics/registrar/policies/#special-studies.
HORT	4975	Hortus Forum Officer Leadership Development	Prerequisite: Must be an elected Hortus Forum Officer to enroll. To enroll fill out the Special Studies form available here: http://cals.cornell.edu/academics/registrar/policies/#special-studies.
HORT	4980	Undergraduate Teaching Experience	Students from all colleges must submit an independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Students will be put in course after submitting the form to 140 Roberts Hall.
HORT	4980	Undergraduate Teaching Experience	Permission of student's advisor in advance of participation of programs is required. Students must register using individual study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study) signed by faculty member who will supervise study and assign grade.
HORT	4990	Undergraduate Research	Students from all colleges must submit an independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). You will be put in course after submitting the form to 140 Roberts Hall.
HORT	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
HORT	5900	Master of Professional Studies (Agriculture) Project	Requirement for M.P.S. (agriculture) candidates in respective grad fields of horticulture.
HORT	5900	Master of Professional Studies (Agriculture) Project	Requirement for: M.P.S. (agriculture) candidates in respective graduate fields of horticulture.
HORT	6000	Seminar in Horticulture	Requirement for grad students majoring or minoring in horticulture.
HORT	6000	Seminar in Horticulture	Requirement for: graduate students majoring or minoring in horticulture. Undergraduate students enroll in HORT 4950.
HORT	6170	Advanced Analytical Methods for Plant Systems	Prerequisite: 1 year of general chemistry, one semester of organic chemistry, plant physiology.
HORT	6252	Advanced Postharvest Biology: Plant Senescence	Prerequisite: HORT 4250 or permission of instructor.
HORT	6253	Advanced Postharvest Biology: Postharvest Technology	Prerequisite: HORT 4250 or permission of instructor.

HORT	6350	Tools for Thought	Prerequisite: graduate standing.
HORT	6970	Graduate Individual Study in Horticulture	Sign into your faculty advisor section.
HORT	6970	Graduate Individual Study in Horticulture	Sign into your faculty advisor section.
HORT	7000	Graduate Teaching Experience	Enrollment limited to: graduate students. Permission of instructor is required. Undergraduate students should enroll in HORT 4980.
HORT	7000	Graduate Teaching Experience	Enrollment limited to: graduate students. Permission of instructor is required. Undergraduates should enroll in HORT 4980.
IARD	4000	Feeding the World: The Biological and Quantitative Analyses of Livestock and Crop Systems	Recommended prerequisite: at least one course in biology, in agriculture or in economics.
IARD	4010	Experience Latin America: Rural and Urban Realities I	There is an optional Spanish language discussion section offered for IARD/LATA 4010.
IARD	4011	Student-Community Partnerships in Ecuador I	Prerequisites: Junior, Senior or Graduate students. International Experience and some conversational Spanish preferred.
IARD	4140	Tropical Cropping Systems: Biodiversity, Social, and Environmental Impacts	Prerequisite: interest in agriculture and tropical cropping systems.
IARD	4850	Case Studies in International Ecoagriculture and Environmental Conservation	Enrollment limited to: senior standing in IARD, SNES, or NTRES and International Experience; others by permission of the instructors.
IARD	4910	Food, Farming, and Personal Beliefs	Recommended prerequisite: Sustainable Agriculture (CSS 1900) or equivalent.
IARD	4960	International Internship in International Agriculture	See CALS internship policies and submit approved submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
IARD	4960	International Internship in International Agriculture	See CALS internship policies and submit approved submit a CALS Special Studies Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#special-studies). Do not sign into section 601. You will be put in the course after submitting form online.
IARD	4970	Independent Study in IARD	Students must register using the independent study form Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study .
IARD	4970	Independent Study in IARD	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
IARD	4980	Teaching Experience in International Agriculture and Rural Development	Previous enrollment in the course to be taught or other appropriate previous training and experience. Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.

IARD	4980	Teaching Experience in International Agriculture and Rural Development	Previous enrollment in the course to be taught or other appropriate previous training and experience. Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
IARD	5970	Independent Study in IARD (for M.P.S. Students)	Sign into your faculty section.
IARD	5980	International Development M. P.S. Project Paper	Enrollment limited to: candidates in the field of International Development. A maximum of 6 credits may be applied toward MPS degree requirements.
IARD	5980	International Development M. P.S. Project Paper	Enrollment limited to: M.P.S. candidates in field of international development (ID). 6 credits may be applied toward M.P.S. degree.
IARD	5990	International Agriculture and Rural Development M. P.S. Project Paper	Enrollment limited to: candidates in the field of international agriculture and rural development. A maximum of 6 credits may be applied toward MPS degree requirements.
IARD	5990	International Agriculture and Rural Development M. P.S. Project Paper	Enrollment limited to: M.P.S. candidates in field of international agriculture and rural development (IARD). Maximum of 6 credits may be applied toward M.P.S. degree requirements.
IARD	6011	Student-Community Partnerships in Ecuador II	Prerequisites: Junior, Senior or Graduate students. International Experience and some conversational Spanish preferred. Students have to take IARD4011 as a pre-requisite to taking 6011.
IARD	6020	International Agriculture in Developing Nations	EMPTY
IARD	6940	Graduate Special Topics in IARD	The department teaches étrialé courses under this number. Offerings vary by semester and are advertised by the department before the semester starts. Courses offered under the number will be approved by the department curriculum committee, and the same course is not offered more than twice under this number.
IARD	6970	International Development M. P.S. Seminar	Enrollment limited to and required for: MPS ID students or permission of instructor.
IARD	6970	International Development M. P.S. Seminar	Enrollment limited to: M.P.S. students.
IARD	6980	Teaching Experience for MPS in International Agriculture and Rural Development	Students must have the needed experience to help assist with the teaching of the course.
IARD	6980	Teaching Experience for MPS in International Agriculture and Rural Development	Sign into your faculty member's section.
INFO	2300	Intermediate Design and Programming for the Web	Priority will be given to Information Science majors and pre-majors.
INFO	3152	Introduction to Computer Game Design	Admittance to CS/INFO 3152 is by instructor permission only. Students who would like to obtain permission must submit an application. The application is available online at http://gdiac.cs.cornell.edu/courses/application
INFO	3400	Personal Relationships and Technology	Prerequisites: COMM 2820, COMM 2450, must attend the first class

INFO	3450	Human-Computer Interaction Design	Prerequisite: COMM/INFO 2450. May be taken concurrently with COMM/INFO 2450.
INFO	3460	Crowds, Communities, and Technology	Prerequisites: COMM 2450.
INFO	4152	Advanced Topics in Computer Game Design	Admittance to CS/INFO 4152 is by instructor permission only. Students who would like to obtain permission must submit an application. The application is available online at http://gdiac.cs.cornell.edu/courses/application
INFO	4400	Advanced Human-Computer Interaction Design	Prerequisite: COMM/INFO 3450 or permission of instructor.
INFO	4450	Computer-Mediated Communication	Prerequisite: COMM 2450 and COMM 2820 or equivalent.
INFO	4550	Deception in the Networked Age	Prerequisites: COMM 2450 or instructor's permission.
INFO	5100	Visual Data Analytics for the Web	Enrollment limited to: graduate students.
INFO	5302	Introduction to Connective Media	Enrollment limited to students enrolled at Cornell Tech. Taught in NYC.
LA	1420	Grounding in Landscape Architecture	Enrollment is limited to: freshman landscape architecture majors or permission of instructor.
LA	2010	Medium of the Landscape	Enrollment limited to: Landscape Architecture majors. Course fee (drafting equipment, supplies, and other fees): approx. \$200; field trip: approx. \$250.
LA	2610	Fieldwork in Urban Archaeology	Three 8-hour Saturday field labs.
LA	2620	Laboratory in Landscape Archaeology	Recommended prerequisite: LA 2610 or ARKEO 2610 or permission of instructor.
LA	3180	Site Construction	Permission of instructor required.
LA	4030	Directed Study: The Concentration	Enrollment is limited to: Landscape Architecture undergrads in final year of study.
LA	4100	Computer Applications in Landscape Architecture	Enrollment is limited to: Landscape Architecture students.
LA	4100	Computer Applications in Landscape Architecture	Enrollment limited to: Landscape Architecture students.
LA	4910	Creating the Urban Eden: Woody Plant Selection, Design, and Landscape Establishment	Enrollment limited to: Plant Science and Landscape Architecture majors or permission of instructor. Pre-registration is required.
LA	4920	Creating the Urban Eden: Woody Plant Selection, Design, and Landscape Establishment	Prerequisite: passing grade in LA/HORT 4910. Enrollment is limited to plant sciences or landscape architecture majors or permission of instructors.
LA	4970	Individual Study in Landscape Architecture	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.

LA	4970	Individual Study in Landscape Architecture	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
LA	4980	Undergraduate Teaching	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
LA	4980	Undergraduate Teaching	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
LA	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
LA	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
LA	5090	Master of Professional Studies Project	Please sign in to the appropriate faculty section.
LA	5970	Graduate Individual Study in Landscape Architecture	Enrollment limited to: graduate students. Undergraduates, enroll in LA 4970. Please sign into your faculty section.
LA	5970	Graduate Individual Study in Landscape Architecture	Enrollment limited to: graduate students. Please sign into your faculty member's section.
LA	5980	Graduate Teaching	Permission of instructor is required.
LA	5980	Graduate Teaching	Permission of instructor is required.
LA	6010	Integrating Theory and Practice I	Enrollment limited to: graduate students or permission of instructor.
LA	6030	Directed Study: The Concentration	Enrollment limited to: Landscape Architecture graduate students in final year of study.
LA	6180	Site Construction	Permission of instructor is required.
LA	8900	Master's Thesis in Landscape Architecture	Independent research, under faculty guidance leading to the development of a comprehensive and defensible design or study related to the field of landscape architecture. Work is expected to be completed in final semester of residency.
NS	1200	Nutrition and Health: Issues, Outlooks, and Opportunities	Enrollment limited to freshman, sophomore, or junior standing or permission of instructor. Priority given to NS, NS/CALS & HBHS majors. NOT an introductory nutrition course for nonmajors. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	1220	Nutrition and the Life Cycle	Prerequisite: one semester college biology or NS 1150 . Limited enrollment. If you are not able to enroll, please contact Terry Mingle (tpm2) for a PIN number. Overlaps with NS 3310 are forbidden.
NS	2450	Social Science Perspectives on Food and Nutrition	Prerequisite: NS 1150. Must be enrolled by third class meeting. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	2470	Food for Contemporary Living	DPD (Dietetics) Students may open enroll. All others will be placed on a wait list. Registered students must attend first lab or placement is forfeited; Lab coat required. Non-DPD students, please contact Terry Mingle (tpm2) for a PIN number/placement on the wait list.
NS	2470	Food for Contemporary Living	DPD (Dietetics) Students may open enroll. All others will be placed on a wait list. Registered students must attend first lab or placement is forfeited; Lab coat required. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	2600	Introduction to Global Health	Enrollment is limited. COURSE IS OPEN ENROLL FOR SOPHOMORES. Freshmen may be permitted to enroll if space allows. Juniors completing the Global Health Minor should request placement on the course wait list. Seniors are not permitted to enroll. Non-Sophomores, please contact Terry Mingle (tpm2) for placement on the wait list. For general course inquiries, please contact the primary course instructor, Jeanne Moseley. NOTE: NO EXCEPTIONS WILL BE MADE FOR TIME OVERLAPS OR SCHEDULING CONFLICTS - THESE WILL NO LONGER BE ALLOWED.

NS	2750	Human Biology and Evolution	If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	3030	Nutrition, Health and Vegetarian Diets	Prerequisite: Organic Chemistry. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	3200	Introduction to Human Biochemistry	Prerequisite: Two semesters of organic chemistry.
NS	3310	Nutrient Metabolism	Prerequisite: BIOMG 3300 or BIOMG 3310, or NS 3200, or equivalent. Enrollment limited to: senior, junior, or sophomore standing. If you are not able to enroll, please contact Terry Mingle (tpm2) for a PIN number. Overlaps with NS 1220 are forbidden.
NS	3320	Methods in Nutritional Sciences	Prerequisites: Undergraduate biochemistry; NS 3450, NS 3310 preferred or (where possible) concurrent registration. Enrollment priority given to DNS Seniors. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	3410	Human Anatomy and Physiology	Prerequisite: One year introductory biology (BIOG 1440 or BIOG 1445 strongly recommended). Enrollment limited to: senior, junior, or sophomore students. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	3420	Human Anatomy and Physiology Laboratory	Prerequisite/Co-requisite: NS 3410; Enrollment limited to: college biology; senior, junior, or sophomore standing, priority to DNS majors; No admittance after 1st week. Please contact Terry Mingle (tpm2) for a PIN number/placement on the wait list.
NS	3450	Introduction to Physiochemical and Biological Aspects of Food	Prerequisite: college-level courses in chemistry and biology; organic chemistry or concurrent registration. DNS/FDSC majors get priority for spaces in class.
NS	3500	Epidemiology in Context	Prerequisite: Introductory Statistics (e.g., PAM 2100 , AEM 2100 , ILRST 2100). If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	3980	Research in Human Nutrition and Health	Open to all students. Requirement for students in NS Honors Research Program.
NS	4000	Directed Readings	To take NS 4000 for a letter grade (1-4 credits), you must first take/pass NS 4000 for at least 2 credits, S/U. This is a DNS requirement. To enroll, students must fill out the CHE Special Study form online. See: http://www.human.cornell.edu/registrar/forms-and-petitions.cfm
NS	4000	Directed Readings	To take NS 4000 for a letter grade (1-4 credits), you must first take/pass NS 4000 for 2 credits, S/U. Enrollment forms are now online. To enroll, please visit: https://registrar.human.cornell.edu/ARSS/Student/STUhome.cfm
NS	4010	Empirical Research	To take NS 4010 for a letter grade (1-4 credits), you must first take/pass NS 4010 for at least 2 credits, S/U. This is a DNS requirement. To enroll, students must fill out the CHE Special Study form online. See: http://www.human.cornell.edu/registrar/forms-and-petitions.cfm
NS	4010	Empirical Research	To take NS 4010 for a letter grade (1-4 credits), you must first take/pass NS 4010 for 2 credits, S/U. Enrollment forms are now online. To enroll, please visit: https://registrar.human.cornell.edu/ARSS/Student/STUhome.cfm
NS	4020	Supervised Fieldwork	To take NS 4020 for a letter grade (1-4 credits), you must first take/pass NS 4020 for at least 2 credits, S/U. This is a DNS requirement. To enroll, students must fill out the CHE Special Study form online. See: http://www.human.cornell.edu/registrar/forms-and-petitions.cfm
NS	4020	Supervised Fieldwork	To take NS 4020 for a letter grade (1-4 credits), you must first take/pass NS 4020 for 2 credits, S/U. Enrollment forms are now online. To enroll, please visit: https://registrar.human.cornell.edu/ARSS/Student/STUhome.cfm
NS	4030	Teaching Apprenticeship	To enroll, students must fill out the Undergraduate TAs form: http://www.human.cornell.edu/registrar/forms-and-petitions.cfm NOTE: Unofficial transcript no longer required for DNS Ugrad TAs.

NS	4030	Teaching Apprenticeship	To enroll, students must fill out the Undergraduate TAsip form: http://www.human.cornell.edu/registrar/upload/HE-4030-TA-form-0412-2.pdf - NOTE: Unofficial transcript copies no longer required for DNS Ugrad TAs.
NS	4250	Nutrition Communications and Counseling	Prerequisites: NS 1150 , NS 1220 , and NS 2450. Enrollment limited to: junior or senior standing; priority given to senior dietetics/nutrition majors. Please contact Terry Mingle (tpm2) for a PIN number/placement on the wait list.
NS	4310	Mineral Nutrition and Chronic Disease	Preferred prerequisite: NS 3310.
NS	4315	Nutrient Requirements and Recommendation s: Biological Aspects	Enrollment limited to: junior or senior standing. Prerequisite: Introductory Biochemistry and NS 3310 (or concurrent registration) or permission of the instructor.
NS	4410	Nutrition and Disease	Prerequisite: Biochemistry.
NS	4420	Implementation of Nutrition Care	Enrollment preference given to DPD (Dietetics) Students. Prerequisite: NS 1150, NS 1220, NS 2470, NS 4410, or concurrent registration. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	4444	Sports Nutrition and Supplements, Concepts and Evidence	Prerequisites: NS 1150 and NS 3200 , BIOMG 3300 , or BIOMG 3310 and concurrent registration in NS 3410 or BIOAP 3110, or permission of instructor. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	4450	Toward a Sustainable Global Food System: Food Policy for Developing Countries	Preferred prerequisite: 6 credits in economics, applied econ, or sociology; and 6 credits in nutrition and/or agricultural sciences. Attendance to first lecture is required; no shows will be dropped. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	4500	Public Health Nutrition	Enrollment limited primarily to seniors and juniors. Prerequisite: NS 1150. Students MUST attend first lecture or placement is forfeited. When course is full, please contact Terry Mingle (tpm2) for a PIN number/placement on the wait list.
NS	4600	Explorations in Global and Public Health	Enrollment is limited to seniors with completion of all requirements for the global health minor or permission of instructor. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	4620	Global Service Learning Pre-Departure Seminar	Enrollment limited to students accepted into a Cornell Global Service Learning Program during the Summer that follows the Spring semester in which this course is being offered. Please contact Terry Mingle (tpm2) for a PIN number/placement on the wait list.
NS	4880	Applied Dietetics in Food Service Systems	Prerequisite: HADM 1360 and BIOMI 2900. Enrollment is limited to: DPD (Dietetics) seniors only; DPD (Dietetics) juniors with permission. Lab coat required; Fee for supplies & training: approx \$100. Please contact Terry Mingle (tpm2) for a PIN number /placement on the wait list.
NS	4900	Manipulating the Mouse Genome	Prerequisites: BIOMG 2800, BIOMG 2810, BIOMG 3300, BIOMG 3320 or BIOMG 3330, or NS 3200. Meets during first half of semester and provides background information for VTBMS 7010/TOX 7010 Mouse Pathology and Transgenesis, which meets during second half. Students interested in both courses must register for them separately.
NS	4990	Honors Problem	Enrollment limited to: Students who have been accepted into the DNS Honors Research Program.
NS	4990	Honors Problem	Enrollment limited to: NS Honors Research Program students.
NS	5100	Preparation for Professional Study	Enrollment is limited to students in the DNS post-baccalaureate program.
NS	5200	Health and the Humanities	Enrollment limited to: Students in the DNS post-baccalaureate program.
NS	5411	Integrative Health Sciences II	Enrollment limited to: Students in the DNS post-baccalaureate program.
NS	5550	Leadership in Dietetics Practice	Prerequisite: Completion of ACEND-accredited Didactic Program in Dietetics. Limited enrollment.
NS	6000	Special Problems for Graduate Students	Enrollment is limited to: Graduate students. Students must use a paper ADD form to add course. This form requires obtaining the instructor's signature/permission.
NS	6000	Special Problems for Graduate Students	Enrollment is limited to: graduate students.
NS	6080	Epigenetics	Prerequisite: BIOMG 2810 and BIOMG 3300, BIOMG 3320 or BIOMG 3330 or NS 3200.

NS	6140	Topics in Maternal and Child Nutrition	Undergraduate students can enroll with permission of Instructor.
NS	6200	Translational Research and Evidence-based Policy and Practice in Nutrition	Enrollment limited to: DNS graduate students. If you are not able to enroll, please contact Terry Mingle (tpm2).
NS	6250	Community Nutrition in Action	Enrollment is limited to: Dietetic Interns.
NS	6320	Regulation of Macronutrient Metabolism	Prerequisite: NS 3310 or permission of instructor.
NS	6350	Introduction to Community Nutrition Research for Dietetic Interns	Enrollment is limited to: Dietetic Interns.
NS	6520	The Foundations of Epidemiology	Prerequisite: BTRY 6010 or equivalent. Enrollment limited to: graduate standing. Class meets 3:30-4:45pm. Offered in Ithaca and Weill Cornell.
NS	6580	Advanced Epidemiology: Theory and Practice	Prerequisite: NS 6520 and all other requirements of obtaining a minor in Epidemiology, namely BTRY 6010, BTRY 6020. Recommended: BTRY 6030 or equivalent.
NTRES	4850	Case Studies in International Ecoagriculture and Environmental Conservation	Enrollment limited to: senior standing in IARD, SNES, or NTRES and International Experience. Others by permission of the instructors.
NTRES	4870	Undergraduate Research Methods	Enrollment limited to: seniors doing an honors research project in Natural Resources or juniors considering the program.
NTRES	4870	Undergraduate Research Methods	Only students enrolled in the Honors Research Program should enroll in this course.
NTRES	4940	Special Topics in Natural Resources	Please contact course instructor for application if you are interested in enrolling in this course.
NTRES	4940	Special Topics in Natural Resources	Prerequisite: An application is required; contact Teaching Support Specialist, Amy Kuo at ayk3@cornell.edu, for info. Applications are due March 17, 2014. Class notes: 3 field trips required outside of the normal class time.
NTRES	4960	Internship in Natural Resources	Permission of instructor required (academic staff in major). Students must register via the online enrollment form found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx
NTRES	4960	Internship in Natural Resources	Permission of instructor required (academic staff in major). Students must register via the online enrollment form found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx
NTRES	4970	Individual Study in Environmental Social Science and Resource Policy	Permission of instructor required (academic staff in major). Students must register via the online enrollment form found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx
NTRES	4970	Individual Study in Environmental Social Science and Resource Policy	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
NTRES	4971	Individual Study in Applied Ecology and Conservation Ecology	Permission of instructor required (academic staff in major). Students must register via the online enrollment form found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx
NTRES	4971	Individual Study in Applied Ecology and Conservation Ecology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.

NTRES	4972	Individual Study in Ecosystem Science and Biochemistry	Permission of instructor required (academic staff in major). Students must register via the online enrollment form found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx .
NTRES	4972	Individual Study in Ecosystem Science and Biochemistry	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
NTRES	4980	Undergraduate Teaching in Natural Resources	Permission of instructor required (academic staff in major). Students must register via the online enrollment form found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx .
NTRES	4980	Undergraduate Teaching in Natural Resources	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
NTRES	4990	Undergraduate Research	May be repeated for credit. Permission of instructor required (academic staff in major). Students must register via the online enrollment form found here: https://dust.cals.cornell.edu/IndStudyPolicy.aspx or in D.U.S.T.
NTRES	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
NTRES	5900	Professional Projects - M.P.S	Enrollment limited to: MPS graduate students working on professional master's projects.
NTRES	5900	Professional Projects - M.P.S	Enrollment limited to: M.P.S. graduate students working on professional master's projects.
NTRES	6000	Introduction to Graduate Study in Natural Resources	Enrollment limited to: beginning graduate students whose faculty advisors are in Natural Resources. Check with department (12 Fernow) for organizational meeting.
NTRES	6040	Seminar on Selected Topics in Resource Policy and Management	Check with departments for availability.
NTRES	6160	Seminar on Selected Topics in Ecosystem Science and Biogeochemistry	Enrollment limited to: upper-level undergraduates or graduate students. Check with department (12 Fernow) for organizational meeting.
NTRES	6200	Spatial Modeling and Analysis	Prerequisite: CSS 4100, CSS 4200, or equivalent, or permission of instructor.
NTRES	6240	Sustainable Water Resource Management in the Face of Climate Change	Prerequisites: Graduate standing or permission of instructor. Students are required to meet one additional day each week outside of lecture to participate in a collaborative graduate group project. See course description.
NTRES	6280	Principles and Practices of Applied Wildlife Science	Pre-requisite: NTRES 3100 or equivalent; or permission of instructor.
NTRES	6702	Special Topics in Behavioral Ecology	This is a graduate course; undergraduates are welcome but must have taken BIONB 2210 or PSYCH 1101 and have permission of the instructor. Organizational meeting 5:15pm Thursday, 28 August 2014, A305 CMH (Rosenblatt).
NTRES	6940	Special Topics in Natural Resources	Enrollment limited to: graduate standing or permission of instructor. Seniors should enroll in NTRES 4940 with same topic name.
NTRES	6970	Graduate Individual Study in Natural Resources	Permission of instructor is required. Sign into the faculty section you are working with.

NTRES	6970	Graduate Individual Study in Natural Resources	Permission of instructor is required.
NTRES	7283	Molecular Genetic Approaches to the Study of Ecology and Evolution	Prerequisites: Introductory genetics required; population genetics or ecological genetics or permission of instructor. Contact Matt Hare (mph75) for organizational meeting day/time.
NTRES	7800	Graduate Seminar in Ornithology	Permission of instructor required for undergraduate students. May be repeated for credit.
NTRES	7900	Graduate-Level Thesis Research	Enrollment limited to: PhD students before "A" exam has been passed. Sign into your faculty section.
NTRES	7900	Graduate-Level Thesis Research	Enrollment limited to: Ph.D. students, before A exam has been passed.
NTRES	8900	Master's Thesis Research	Enrollment limited to: graduate students working on master's thesis research. Sign into your faculty member's section.
NTRES	8900	Master's Thesis Research	Enrollment limited to: graduate students working on masters thesis research.
NTRES	9900	Doctoral-Level Thesis Research	Enrollment limited to: PhD candidates after "A" exam has been passed. Sign into your faculty member's section.
NTRES	9900	Doctoral-Level Thesis Research	Enrollment limited to: Ph.D. candidates after A exam has been passed.
PAM	2040	Economics of the Public Sector	Prerequisite: PAM 2000.
PAM	3780	Sick Around the World? Comparing Health Care Systems Around the World	Required Prerequisites: Introductory statistics (PAM 2100, 2101; AEM 2100; ECON 3190; ILRST 2100; MATH 1102; SOC 3010; STSCI 2100). Recommended Prerequisite: US Health Care System (PAM 2350).
PAM	3800	Human Sexuality	Discussion enrollment will occur during the first week of class by the instructor. Enroll in lecture only.
PAM	4080	Demographic Techniques II	Prerequisites: Permission of instructor. A background in statistics will be helpful.
PAM	5470	Microeconomics for Management and Policy	Enrollment limited to Sloan students only.
PAM	5520	Health Care Services: Consumer and Ethical Perspectives	Enrollment limited to Sloan students only.
PAM	5570	Health Care Organizations	Enrollment limited to Sloan students only.
PAM	5620	Finance	Prerequisite: AEM 2100, AEM 1200 and AEM 2210 or equivalent. Enrollment limited to: Sloan Health Administration Masters Students only.
PAM	5630	Health Care Financial Management II	Enrollment limited to Sloan students only or permission of instructor.
PAM	5641	Health Information Technology and Quality	Enrollment limited to: Sloan students only.
PAM	5660	Strategic Management and Organizational Design of Health Care Systems	Enrollment limited to: Sloan students.
PAM	5670	Health Policy	Enrollment limited to: Sloan students only.
PAM	5679	Desktop & Modeling Solutions	Enrollment limited to: PAM majors.

PAM	5690	Regression Analysis and Managerial Forecasting	Enrollment limited to Sloan students only.
PAM	5700	Health Care Accounting	Enrollment limited to Sloan students only.
PAM	5710	Organizational Development /Human Resource Management in Health Care Organization	Enrollment limited to Sloan students only.
PAM	5760	Long-Term Care and Lifestyle Alternatives for the Older Adult	Friday meeting held in Kendal at Ithaca. Saturday's class will be held on campus.
PAM	5900	Special Topics in Health Administration and Finance	Enrollment limited to Sloan and Johnson graduate students or with permission of Julie Carmalt (JHC48@cornell.edu). Class will meet every Wednesday for 2 credits.
PAM	5900	Special Topics in Health Administration and Finance	Enrollment limited to second year Sloan students. First year Sloan students and those outside of the program may request consideration by emailing jhc48@cornell.edu. Additional web-based hours will be assigned to this class.
PAM	5951	Field Studies in Health Administration and Planning	Enrollment limited to Sloan students only.
PAM	5990	Challenges and Trends in the Health Services Industry	Enrollment limited to: Sloan students only.
PAM	6060	Demographic Techniques II	Prerequisites: Graduate standing. A background in statistics will be helpful.
PAM	6720	Demography Proseminar	Enrollment limited to: at least 2nd-year graduate student.
PLBR	2250	Plant Genetics	Prerequisite: one year of introductory biology or equivalent; permission of instructor for students who have taken BIOGD 2810.
PLBR	2253	Lectures in Plant Genetics	Prerequisite: One year of majors-level biology course or equivalent.
PLBR	2500	Fundamentals and Applications of Genetics	Taught in Auburn.
PLBR	2990	Introduction to Research Methods in Plant Breeding and Genetics	Enrollment preference given to: students who are new to undergraduate research.
PLBR	4030	Genetic Improvement of Crop Plants	Prerequisite: BIOMG 2810, PLBR 2250, or other standard genetics course and course in crops or horticulture.
PLBR	4050	Patents, Plants, and Profits: Intellectual Property Management for Scientists and Entrepreneurs	Enrollment is limited to: seniors and graduate students.
PLBR	4060	Methods of Plant Breeding Laboratory	Prerequisite or co-requisite: PLBR 4030 or equivalent.
PLBR	4070	Nutritional Quality Improvement of Food Crops	Prerequisite: one majors-level biology course or permission of instructors.
PLBR	4831	Concepts and Techniques in Plant Molecular Biology	Prerequisite: BIOMG 2800 and BIOMG 3300 or BIOMG 3320, or equivalents. Recommended prerequisite: BIOMG 3310.

PLBR	4832	Proteomics and Protein Mass Spectrometry in Biology	Prerequisite: BIOMG 2800 and BIOMG 3300 or BIOMG 3320, or equivalents. Recommended prerequisite: BIOMG 3310.
PLBR	4940	Special Topics in Plant Breeding	The department teaches trial courses under this number.
PLBR	4960	Internship in Plant Breeding	Permission of advisor and enrollment during the pre-enrollment period of the semester before the internship is required. Enrollment is limited to: plant breeding juniors or seniors with a minimum 3.0 average in plant breeding courses. Students must attach to their course enrollment materials a CALS Independent Study, Research, Teaching, or Internship form signed by the faculty member who will supervise their study and assign their credits and grade. ndependent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLBR	4960	Internship in Plant Breeding	Prerequisite: minimum GPA of 3.0 in plant breeding courses. Enrollment limited to: juniors or seniors in plant breeding. Enrollment during pre-enrollment period of semester before internship is required. Students from all colleges must submit an independent study form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). A minimum 60 on-the-job hours per credit granted.
PLBR	4970	Individual Study in Plant Breeding	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLBR	4970	Individual Study in Plant Breeding	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLBR	4980	Undergraduate Teaching	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLBR	4980	Undergraduate Teaching	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLBR	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLBR	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLBR	5990	Plant Breeding M. P.S. Project Paper	Enrollment limited to: M.P.S. candidates in Field of Plant Breeding.
PLBR	5990	Plant Breeding M. P.S. Project Paper	Enrollment limited to: M.P.S. candidates in Field of Plant Breeding.
PLBR	6100	Practicum in Plant Breeding	Prerequisite: PLBR 4030. Permission of instructor is required.
PLBR	6500	Special Problems in Research and Teaching	Permission of instructor supervising research or teaching is required.
PLBR	6500	Special Problems in Research and Teaching	Permission of instructor supervising research or teaching is required.
PLBR	6940	Special Topics in Plant Breeding	The department teaches trial courses under this number.
PLBR	7900	Graduate-Level Dissertation	Enrollment limited to: doctoral students who have not passed A exam. Permission of instructor is required.

PLBR	7900	Graduate-Level Dissertation	Enrollment limited to: doctoral students who have not passed A exam. Permission of instructor is required.
PLBR	8900	Master's Level Thesis Research	Enrollment limited to: master's candidates. Permission of instructor is required.
PLBR	8900	Master's Level Thesis Research	Enrollment limited to: master's candidates. Permission of instructor is required.
PLBR	9900	Doctoral-Level Dissertation Research	Enrollment limited to: doctoral students who have passed A exam. Permission of instructor is required.
PLBR	9900	Doctoral-Level Dissertation Research	Enrollment limited to: doctoral students who have passed A exam. Permission of instructor is required.
PLPA	2900	Celebrating Inquiry - The Wonder of Willow	Prerequisites: Second year student or higher.
PLPA	2950	Biology of Infectious Disease: From Molecules to Ecosystems	At least sophomore standing and two of the three core undergraduate biology courses or the equivalent.
PLPA	3010	Biology and Management of Plant Diseases	Prerequisite: one year of biology.
PLPA	3190	Mushrooms of Field and Forest	Classes begin 2nd week of classes and go for 8 weeks.
PLPA	4010	Microbial Pathogens Versus Plants: Molecular Weapons, Defenses, and Rules of Engagement	Prerequisite: Introductory Genetics(BIOMG2810 or equivalent) or Biochemistry (BIOMG3300, or 3310 and 3320, or equivalent) or PLPA3010 or permission of instructor.
PLPA	4020	Biology of Plant Pathogens	Prerequisite: PLPA 3010 or consent of instructor.
PLPA	4190	Agricultural Application of Plant Health Concepts	Taught at Geneva Campus. Prerequisite: PLPA3010.
PLPA	4250	DNA Targeting: Applications, Reagents, and Impact	Prerequisites: BIOMG 3300, BIOMG 3310 and BIOMG 3320, BIOMG 3330, or BIOMG 3350, and BIOMG 2810, or permission of instructor. Recommended: BIOMG 4860; BIOMG 4000
PLPA	4330	Infectious Disease Ecology and Evolution	Prerequisite: Prior enrollment in PLPA 2950 is recommended.
PLPA	4490	Advanced Mycology	Prerequisite: Two semesters of general biology.
PLPA	4831	Concepts and Techniques in Plant Molecular Biology	Prerequisite: BIOMG 2800 and BIOMG 3300 or BIOMG 3320, or equivalents. Recommended prerequisite: BIOMG 3310.
PLPA	4832	Proteomics and Protein Mass Spectrometry in Biology	Prerequisite: BIOMG 2800 and BIOMG 3300 or BIOMG 3320, or equivalents. Recommended prerequisite: BIOMG 3310.
PLPA	4940	Undergraduate Special Topics in Plant Pathology and Plant-Microbe Biology	This is an advanced undergraduate course that is presented online and consists of 2 two-hour lectures per week for 10 weeks (January 2 - March 15) conducted by Prof. Larry Madden from Ohio State University. Students will view the lectures on their own time, but will be responsible for submitting class assignments and written tests (mid-term and final). The course will be supervised locally by Prof. Robert Seem (rcs4@cornell.edu); a full syllabus can be found at http://www.oardc.ohio-state.edu/pp702/index.html Please contact Prof. Seem before enrolling.
PLPA	4970	Independent Study in Plant Pathology and Plant-Microbe Biology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.

PLPA	4970	Independent Study in Plant Pathology and Plant-Microbe Biology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLPA	4980	Undergraduate Teaching Experience	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLPA	4980	Undergraduate Teaching Experience	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLPA	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLPA	4990	Undergraduate Research	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
PLPA	6600	Special Topics in Plant Disease Management	Taught distance learning from Geneva, NY.
PLPA	6810	Plant Pathology and Plant-Microbe Biology Seminar	Requirement for: all plant pathology majors.
PLPA	6811	PPPMB Seminar Series II	Taught in Geneva and broadcasted to Ithaca by request.
PLPA	7980	Graduate Teaching Experience	Enrollment limited to: Graduate teaching assistance in a mycology or plant pathology course by mutual agreement with the instructor.
PLPA	7980	Graduate Teaching Experience	Graduate teaching assistance in a mycology or plant pathology course by mutual agreement with the instructor.
PLPA	7990	Graduate-Level Thesis Research	Permission of advisor is required.
PLPA	7990	Graduate-Level Thesis Research	Permission of advisor is required.
PLPA	8900	Master's Level Thesis Research	Permission of advisor is required.
PLPA	8900	Master's Level Thesis Research	Permission of advisor is required.
PLPA	9900	Doctoral-Level Thesis Research	Permission of advisor is required.
PLPA	9900	Doctoral-Level Thesis Research	Permission of advisor is required.
SEA	3665	The Ocean and Global Change	Taught at Shoals Marine Lab. Corequisites required. Refer to SEA Semester program descriptions at www.sea.edu .
SEA	3685	Leadership in a Dynamic Environment	Taught at Shoals Marine Lab. Corequisites required. Refer to SEA Semester program descriptions at www.sea.edu .
SEA	3730	Toward a Sustainable Ocean: Conservation and Management	Taught at Shoals Marine Lab. Corequisites required. Refer to SEA Semester program descriptions at www.sea.edu .
SEA	3740	Cultural Landscapes and Seascapes: A Sense of Place	Taught at Shoals Marine Lab. Corequisites required. Refer to SEA Semester program descriptions at www.sea.edu .
SEA	3810	Data Communication and Visualization	Taught at Shoals Marine Lab. Corequisites required. Refer to SEA Semester program descriptions at www.sea.edu .

SEA	4971	Independent Study in Oceanography	Taught at Shoals Marine Lab. Corequisites: SEA Semester. Junior standing, proposal approval and consent of instructor.
SEA	4972	Independent Study in Environmental Policy	Taught at Shoals Marine Lab. Corequisites: SEA Semester. Junior standing, proposal approval and consent of instructor.
SEA	4973	Independent Study in Maritime Humanities	Taught at Shoals Marine Lab. Corequisites: SEA Semester. Junior standing, proposal approval and consent of instructor.
SNES	1101	Introduction to Environmental Science and Sustainability	
SNES	4850	Case Studies in International Ecoagriculture and Environmental Conservation	Enrollment limited to: senior standing in IARD, SNES, or NTRES and International Experience; others by permission of the instructors.
SNES	4940	Special Topics in Science of Natural and Environmental Systems	Enrollment limited to: senior standing in IARD, SNES, or NTRES and international experience; others by permission of instructors.
SNES	4960	Internships in Environmental Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
SNES	4960	Internships in Environmental Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
SNES	4970	Individual Study in Environmental Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
SNES	4970	Individual Study in Environmental Science	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
STS	2051	Ethical Issues in Health and Medicine	University Common Course.
STS	2131	Science Fiction	To be placed on a provisional waitlist, please email Professor Banerjee, ab425@cornell.edu.
STS	2871	Evolution	Intended for students with no background in college biology. May not be taken for credit after BIOEE 1780 Does not meet evolutionary biology requirement for biological sciences major.
STS	3020	Science Writing for the Media	Not open to freshmen. Prerequisite: college-level writing course.
STS	3111	Sociology of Medicine	Not open to Freshmen
STS	3311	Environmental Governance	Enrollment limited to: juniors, seniors, or by permission of instructor.
STS	4291	Politics of Science	Government Seniors/Juniors given preference. This course fulfills the Government seminar requirement.
STS	4691	Food, Agriculture, and Society	Prerequisite: introductory ecology course or permission of instructor. Limited to 20 students.
VIEN	2204	Principles and Practices of Growing Grapes and Making Wines	
VIEN	2205	Growing Grapes and Making Wines Laboratory	FDSC/HORT/VIEN 1105 and 2204 (may be taken concurrently with 2204).

VIEN	2400	Wines and Grapes: Composition and Analysis	Prerequisite: one semester of chemistry. Enrollment preference given to: Enology & Viticulture and Food Science majors.
VIEN	3440	Viticulture and Vineyard Management	Prerequisite: HORT/FDSC/VIEN 2204.
VIEN	4000	Capstone Project in Viticulture and Enology	
VIEN	4300	The Science and Technology of Beer	Prerequisites: Introductory biology and chemistry or permission of instructor. A \$50 tasting fee will be applied to student bursar bill. Students must bring 4 appropriate glasses to each class, starting in the second week. Students need to be 21 by first day of class unless course is counting towards major requirements
VIEN	4600	Wine and Food Fermentations	Prerequisite: BIOMI 2900. Recommended prerequisite: FDSC 1104.
VIEN	4700	Winemaking Theory and Practice II	Prerequisite: FDSC 2204, FDSC 2205, FDSC 2400, and BIOMI 2900 or permission of instructor.
VIEN	4710	Winemaking Theory and Practice II Laboratory	Prerequisite: FDSC 2204, FDSC 2205, FDSC 2400, and BIOMI 2900 or permission of instructor.
VIEN	4910	Undergraduate Viticulture and Enology Research Practices	Prerequisites: FDSC/HORT/VIEN 2205
VIEN	4960	Viticulture and Enology Internship	Prerequisite: VIEN/FDSC 1105. Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
VIEN	4960	Viticulture and Enology Internship	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
VIEN	4970	Individual Study in Viticulture and Enology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
VIEN	4970	Individual Study in Viticulture and Enology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
VIEN	4980	Undergraduate Teaching Experience	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
VIEN	4980	Undergraduate Teaching Experience	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
VIEN	4990	Undergraduate Research in Viticulture and Enology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.
VIEN	4990	Undergraduate Research in Viticulture and Enology	Students from all colleges must submit an Independent Study Form (Available online: http://cals.cornell.edu/academics/registrar/policies/#independent-study). Do not sign into section 601. You will be put in the course after submitting form online.