

CLAS Committee on Curricula and Courses

Chair: Stephen Stifano

Agenda

October 26th, 2021

WebEx: <https://uconnvtc.webex.com/uconnvtc/j.php?MTID=m92fc6d6e91add607aa42884061019aff>

I. Chair Approvals:

<i>Agenda Item</i>	<i>Form</i>	<i>Course</i>	<i>Action (Syllabus linked)</i>
2021-241	585	HIST 3095	Special Topic: History of the Chinese Communist Party at 100, 1921-2021
2021-243	605	ANTH 3095	Special Topic: Technology and Society: Archaeological Perspectives
2021-255	625	SOCI 5895	Special Topic: Seminar in the Sociology of Health

II. Old Business:

<i>Agenda Item</i>	<i>CAR</i>	<i>Course/Discipline</i>	<i>Action (Syllabus or Form linked)</i>
2021-222	8904	POLS 5620	Revise Course

III. New Business:

<i>Agenda Item</i>	<i>CAR</i>	<i>Course/Discipline</i>	<i>Action (Syllabus or Form linked)</i>
2021-242	8905	POLS 5621	Revise Course
2021-249	9264	STAT 3215Q	Add Course (G)(S) (Guest: Elizabeth Schifano)
2021-246	9225	STAT 3255	Revise Course (Guest: Elizabeth Schifano)
2021-247	9244	STAT 4255	Revise Course (Guest: Elizabeth Schifano)
2021-248	9246	STAT 3115Q	Revise Course (G)(S) (Guest: Elizabeth Schifano)
2021-245		STAT	Revise Major (Guest: Elizabeth Schifano)
2021-250	9265	STAT 4915	Add Course (Guest: Elizabeth Schifano)
2021-251	9404	STAT 4916W	Add Course (G)(S) (Guest: Elizabeth Schifano)
2021-238	8645	MCB 4008	Revise Course
2021-239	8724	GEOG/URBN 1200	Revise Course (G)(S)
2021-240		URBN	Revise Major
2021-244		GSCI	Revise Major
2021-252	9384	EEB 2254W	Add Course (G)(S)
2021-253	9444	EEB 2256W	Add Course (G)(S)
2021-254	9445	EEB 2258W	Add Course (G)(S)
2021-256	9324	HIST 2845/ W	Add Course (G)(S)
2021-257	9484	ENGR/HRTS 2300	Add Course (S)

IV. Items for Discussion:

1. Update on the Core Curriculum for Leadership and Global Citizenship
2. Survey of C&C Membership Forthcoming
3. Graduate and Undergraduate combined courses ([discussion request from Knecht](#))

2021-222 [8904](#) **POLS 5620** Revise [Course](#)

Current Copy:

POLS 5620. Master's Project I
3.00 credits
Prerequisites: None.
Grading Basis: Graded

All master's students in Political Science must take this course in their penultimate semester.

Proposed Copy:

POLS 5620. **Research Design and Development I**
3.00 credits
Prerequisites: None.
Grading Basis: Graded

Introduction to research methods and designs in political science. Students will develop and conduct original research projects. Intended for master's students in their first semester.

[\[return to top\]](#)

2021-242 [8905](#) **POLS 5621** **Revise [Course](#)**

Current Copy:

POLS 5621. Master's Project II
3.00 credits
Prerequisites: POLS 5620.
Grading Basis: Graded

All master's students in Political Science must take this course in their final semester.

Proposed Copy:

POLS 5621. **Research Design and Development II**
3.00 credits
Prerequisites: POLS 5620.
Grading Basis: Graded

Advanced research methods and designs in political science. Students will develop and conduct original research projects. Intended for master's students in their second semester.

[\[return to top\]](#)

2021-249 [9264](#) **STAT 3215Q** **Add [Course \(G\)\(S\)](#)**

Proposed Copy:

STAT 3215Q. Applied Linear Regression in Data Science

3.00 credits.

Prerequisites: STAT 2215Q or STAT 3025Q or instructor consent. Credit may not be received for both STAT 3215Q and 5315. Not open to students who have passed STAT 3115Q.

Grading Basis. Graded

Applied multiple linear regression analysis in data science: simple linear regression and correlation analysis, multiple linear regression, analysis of variance, goodness of fit, comparing regression models through partial and sequential F tests, dummy variables, regression assumptions and diagnostics, model selection and penalized regression, prediction and model validation, principles of design of experiments, one-way and two-way analysis of variance.

[\[return to top\]](#)

2021-246 [9225](#) **STAT 3255**

Revise [Course](#)

Current Copy:

STAT 3255. Introduction to Data Science

3.00 credits

Prerequisites: STAT 2255 and STAT 3115Q, or instructor consent.

Grading Basis: Graded

Introduction to data science for effectively storing, processing, analyzing and making inferences from data. Topics include project management, data preparation, data visualization, statistical models, machine learning, distributed computing, and ethics.

Proposed Copy:

STAT 3255. Introduction to Data Science

3.00 credits

Prerequisites: : STAT 2255 and 3115Q **or 3215Q**, or instructor consent

Grading Basis: Graded

Introduction to data science for effectively storing, processing, analyzing and making inferences from data. Topics include project management, data preparation, data visualization, statistical models, machine learning, distributed computing, and ethics.

[\[return to top\]](#)

2021-247 [9244](#) **STAT 4255**

Revise [Course](#)

Current Copy:

STAT 4255. Introduction to Statistical Learning

3 credits.

Prerequisites: STAT 3115Q or instructor consent

Grading Basis. Graded

Modern statistical learning methods arising frequently in data science and machine learning with real-world applications: linear and logistic regression, generalized additive models, decision trees, boosting, support vector machines, and neural networks (deep learning).

Proposed Copy:

STAT 4255. Introduction to Statistical Learning

3 credits.

Prerequisites: STAT 3115Q or 3215Q or instructor consent

Grading Basis. Graded

Modern statistical learning methods arising frequently in data science and machine learning with real-world applications: linear and logistic regression, generalized additive models, decision trees, boosting, support vector machines, and neural networks (deep learning).

[\[return to top\]](#)

2021-248 [9246](#) **STAT 3115Q**

Revise [Course \(G\)\(S\)](#)

Current Copy:

STAT 3115Q. Analysis of Experiments

3 credits.

Prerequisites: STAT 2215Q or 3025Q or instructor consent. Credit may not be received for both STAT 3115Q and 5315.

Grading Basis. Graded

Straight-line regression, multiple regression, regression diagnostics, transformations, dummy variables, one-way and two-way analysis of variance, analysis of covariance, stepwise regression.

Proposed Copy:

STAT 3115Q. Analysis of Experiments

3 credits.

Prerequisites: STAT 2215Q or 3025Q or instructor consent. Credit may not be received for both STAT 3115Q and 5315. **Not open to students who have passed STAT 3215Q.**

Grading Basis. Graded

Straight-line regression, multiple regression, regression diagnostics, transformations, dummy variables, one-way and two-way analysis of variance, analysis of covariance, stepwise regression.

[\[return to top\]](#)

2021-245 **STAT**

Revise [Major](#)

Current Copy:

Statistics

The Department of Statistics offers work leading to degrees in theoretical and applied statistics.

The Department offers both Bachelor of Science and Bachelor of Arts degrees in Statistics and Mathematics-Statistics. The latter is offered jointly with the Mathematics Department.

The Statistics major requires 24 credits at the 2000-level or above in statistics, including [STAT 3115Q](#), [3375Q](#), [3445](#), and [3675Q](#). A maximum of three credits from each of [STAT 4190](#), [4299](#) and [4389](#) may count toward the 24-credit requirement. Since [STAT 3375Q](#) has [MATH 2110Q](#) or [2130Q](#) as a prerequisite, students should begin the calculus sequence as soon as possible. In addition, at least 12 credits at the 2000-level or above in approved related areas are required. [MATH 2210Q](#) or [3210](#) is strongly recommended and can count towards the related credits.

Students without mathematical background who wish some skill in statistical methodology should take [STAT 1100Q](#) followed by [2215Q](#). Students interested in the statistical analysis of business and economic data should take [STAT 1000Q](#) followed by [2215Q](#). Students with the appropriate calculus prerequisite should take [STAT 3025Q](#) rather than [STAT 1000Q](#) or [1100Q](#) and [2215Q](#). [STAT 3115Q](#) and [3515Q](#) are appropriate continuations for each of these three introductory sequences. [STAT 3025Q](#) is recommended before [STAT 3375Q–3445](#).

To satisfy the information literacy competency and writing in the major requirement, statistics majors must take [STAT 3494W](#). [STAT 3494W](#) does not count towards the 24 required major credits in Statistics, nor the 40 required major credits in Mathematics-Statistics.

Bachelor of Science or Arts in Mathematics-Statistics

The requirements for the B.S. or B.A. in Mathematics-Statistics degree are 40 credits at the 2000-level or above in Mathematics and Statistics, with at least 12 credits in each department.

The required courses for the Mathematics-Statistics major are [MATH 2110Q](#) (or [2130Q](#) or [2143Q](#)); [MATH 2210Q](#) or [3210](#) or ([2143Q](#) and [2144Q](#)); [2410Q](#) or ([2420Q](#) or [2144Q](#)); and [STAT 3375Q](#) and [3445](#).

To satisfy the Writing in the Major and Information Literacy competencies, all students must pass one of the following courses: [MATH 2710W](#), [2720W](#), [2794W](#), [3670W](#), [3710W](#), [3796W](#), or [STAT 3494W](#).

A minor in [Statistics](#) is described in the Minors section.

Proposed Copy:

Statistics

The Department of Statistics offers work leading to degrees in theoretical and applied statistics.

The Department offers both Bachelor of Science and Bachelor of Arts degrees in Statistics and Mathematics-Statistics. The latter is offered jointly with the Mathematics Department.

The Statistics major requires 24 credits at the 2000-level or above in statistics, including [STAT 3115Q](#), [3375Q](#), [3445](#), and [3675Q](#). **Students who have taken STAT 3215Q instead of the required STAT 3115Q must additionally take STAT 3515Q.** A maximum of three credits from each of [STAT 4190](#), [4299](#) and [4389](#) may count toward the 24-credit requirement. Since [STAT 3375Q](#) has [MATH 2110Q](#) or [2130Q](#) as a prerequisite, students should begin the calculus sequence as soon as possible. In addition, at least 12 credits at the 2000-level or above in approved related areas are required. [MATH 2210Q](#) or [3210](#) is strongly recommended and can count towards the related credits.

Students without mathematical background who wish some skill in statistical methodology should take [STAT 1100Q](#) followed by [2215Q](#). Students interested in the statistical analysis of business and economic data should take [STAT 1000Q](#) followed by [2215Q](#). Students with the appropriate calculus prerequisite should take [STAT 3025Q](#) rather than [STAT 1000Q](#) or [1100Q](#) and [2215Q](#). [STAT 3115Q](#) and [3515Q](#) are appropriate continuations for each of these three introductory sequences. [STAT 3025Q](#) is recommended before [STAT 3375Q–3445](#).

To satisfy the information literacy competency and writing in the major requirement, statistics majors must take [STAT 3494W](#). [STAT 3494W](#) does not count towards the 24 required major credits in Statistics, nor the 40 required major credits in Mathematics-Statistics.

Bachelor of Science or Arts in Mathematics-Statistics

The requirements for the B.S. or B.A. in Mathematics-Statistics degree are 40 credits at the 2000-level or above in Mathematics and Statistics, with at least 12 credits in each department.

The required courses for the Mathematics-Statistics major are [MATH 2110Q](#) (or [2130Q](#) or [2143Q](#)); [MATH 2210Q](#) or [3210](#) or ([2143Q](#) and [2144Q](#)); [2410Q](#) or ([2420Q](#) or [2144Q](#)); and [STAT 3375Q](#) and [3445](#).

To satisfy the Writing in the Major and Information Literacy competencies, all students must pass one of the following courses: [MATH 2710W](#), [2720W](#), [2794W](#), [3670W](#), [3710W](#), [3796W](#), or [STAT 3494W](#).

A minor in [Statistics](#) is described in the Minors section.

[\[return to top\]](#)

2021-250 [9265](#) **STAT 4915**

Add [Course](#)

Proposed Copy:

STAT 4915. Data Science in Action
3.00 credits.

Prerequisites: STAT 3255; STAT 3025Q or 3375Q; ENGL 1007 or 1010 or 1011 or 2011 or instructor consent.

Corequisites: STAT 4916W.

Grading Basis. Graded

Theory and applications of biophysical methods for the analysis of the size, shape and interactions of proteins and nucleic acids. Topics include analytical ultracentrifugation, light scattering, X-ray scattering, calorimetry, surface plasmon resonance and single molecule approaches.

[\[return to top\]](#)

2021-239 **8724** **GEOG/URBN 1200** **Revise [Course \(G\)\(S\)](#)**

Current Copy:

GEOG 1200: The City in the Western Tradition

Also offered as: URBN 1200

3.00 credits

Prerequisites: RHAG students cannot take more than 22 credits of 1000 level courses

Grading Basis: Graded

A broad discussion of the role and structure of the city in the western tradition from the Classical period to contemporary America. Special emphasis will be placed on the mechanisms by which cities and ideas about them have been diffused from one place to another and on the changing forces that have shaped the western city. CA 1.

Proposed Copy:

GEOG 1200: **Global Urbanization**

Also offered as: URBN 1200

3.00 credits

Prerequisites: RHAG students cannot take more than 22 credits of 1000 level courses

Grading Basis: Graded

A broad discussion of the role and structure of cities around the world from the first cities to contemporary times. Special emphasis will be placed on the mechanisms by which cities and ideas about them have been diffused from one place to another and on the changing forces that have shaped cities over time and across space. CA 1. **CA 4.**

[\[return to top\]](#)

2021-240 **URBN** **Revise [Major](#)**

Current Copy:

Urban and Community Studies

[Course descriptions](#)

The undergraduate major in Urban and Community Studies is an interdisciplinary program in the College of Liberal Arts and Sciences with a focus on educating citizens on the multiple dimensions of urban and

community life and preparing students for careers in public and community service as well as graduate study in social work, public administration, law, planning, public health, or other related areas.

The major has three parts. First, students receive a broad education in the study of cities, suburbs, neighborhoods and communities through core courses in three fields drawn from Economics, Geography, History, Political Science, Public Policy, Sociology, and Urban and Community Studies. Second, students acquire a solid foundation in analytical techniques such as statistical analysis, survey research, geographic information systems, qualitative methods, or archival research. Finally, students take additional electives in order to broaden their academic training or to develop a deeper specialization in selected areas.

Requirements of the major

1. [URBN 2000/W](#) and either [URBN 4000](#) or [URBN 4497W](#) or [INTD 3594](#).
2. Three of the following with no more than one per department (crosslisted courses count towards the non-URBN department): [ECON 2439, 2456](#); [GEOG/URBN 3200/W](#); [GEOG 2000, 2400E, 4210](#); [HIST/URBN 2541/W](#); [HIST 3554](#); [HIST/AFRA 3564](#); [HIST 3674/LLAS 3220](#); [POLS 3842](#) or [PP 3031](#); [POLS/URBN 3632/W](#); [PP 4034](#); [SOC/URBN 3901/W](#); [SOC 3425](#).
3. One of the following: [CE/GEOG 2500](#); [ECON 2327](#); [GEOG 2410, 2510, 3500Q](#); [POLS 2072Q](#); [PP/URBN 2100](#); [SOC 3201](#); [STAT 2215Q](#); [URBN 2301Q, 2302](#).
4. Two additional courses selected from Group 2, Group 3, or the following list: [ANTH 3150/W](#); [ECON 2328/W, 2431, 3431/W](#); [ECON 3439/W/URBN 3439](#); [EDLR 3547/W](#); [ENGL 3235W](#); [GEOG 3000, 4200W](#); [HIST/URBN 2650](#); [HIST 2810, 3102, 3520](#); [HIST/AAAS 2530](#); [HIST/AFRA/HRTS 3563](#); [HIST/AFRA 3568](#); [HDFS 2001, 3110, 3510, 3530, 3540/W](#); [INTD 3584](#); [NRE 3265](#); [POLS 3240E](#); [POLS 3662/LLAS 3270](#); [POLS/AFRA 3642](#); [POLS/HRTS 3212](#); [POLS 2622, 3406/W, 3617, 3847](#); [PP 3020/W](#); [PP/AFRA 3033/POLS 3633](#); [SOC 3459/W/HDFS 3240/W](#); [SOC 2301/W, 2651/W, 2705, 2709WE, 2907/W, 3429/W, 3521/W, 3601/W](#); [SOC 3501/W/AFRA 3501](#); [SOC/AFRA/HRTS 3825](#); [SOC 3903/W/URBN 3276/W](#); [SOC/WGSS 3621/W](#); [URBN 3981/3991](#) (three credits combined) or [INTD 3594](#); [AMST/URBN 2400](#); [URBN 3993, 3995, 3998, 4497W, 4999](#). [INTD 3594](#) and [URBN 4497W](#) can be counted if not used to fulfill requirement number one above.

In order to assure a breadth of experience, students are encouraged to take courses that include content in each of the following areas: change over time, structural and spatial dimensions, diversity, power and decision-making, and political and social processes. One unique option for students is to enroll in the 15 credit Urban Semester Program, which provides major credit for two courses: [INTD 3584](#) and [3594](#).

Students interested in pursuing a program in Urban and Community Studies are advised to complete 1000-level courses in the social sciences, which may be prerequisites for courses in Urban and Community Studies. These include, but are not limited to: [GEOG/URBN 1200](#); [ECON 1201](#); [POLS 1602](#); [PP 1001](#); [SOC 1001, 1251](#); [STAT 1000Q/1100Q](#); and [URBN 1300W](#). They should also plan on enrolling in [URBN 2000](#) as soon as possible.

The writing in the major requirement can be met by taking any 2000-level or above W course approved for this major. Students should be aware, however, that availability of specific W courses varies by campus. The information literacy requirements are met by successfully completing [URBN 2000](#).

Proposed Copy:

Urban and Community Studies

Course descriptions

The undergraduate major in Urban and Community Studies is an interdisciplinary program in the College of Liberal Arts and Sciences with a focus on educating citizens on the multiple dimensions of urban and community life and preparing students for careers in public and community service as well as graduate study in social work, public administration, law, planning, public health, or other related areas.

The major has three parts. First, students receive a broad education in the study of cities, suburbs, neighborhoods and communities through core courses in three fields drawn from Economics, Geography, History, Political Science, Public Policy, Sociology, and Urban and Community Studies. Second, students acquire a solid foundation in analytical techniques such as statistical analysis, survey research, geographic information systems, qualitative methods, or archival research. Finally, students take additional electives in order to broaden their academic training or to develop a deeper specialization in selected areas.

Requirements of the major

1. [URBN 2000/W](#) and either [URBN 4000](#) or [URBN 4497W](#) or [INTD 3594](#).
2. Three of the following with no more than one per department (crosslisted courses count towards the non-URBN department): [ECON 2439, 2456](#); [GEOG/URBN 3200/W](#); [GEOG 2000, 2400E, 4210](#); [HIST/URBN 2541/W](#); [HIST 3554](#); [HIST/AFRA 3564](#); [HIST 3674/LLAS 3220](#); [POLS 3842](#) or [PP 3031](#); [POLS/URBN 3632/W](#); [PP 4034](#); [SOC/URBN 3901/W](#); [SOC 3425, 3429/W](#).
3. One of the following: [CE/GEOG 2500](#); [ECON 2327](#); [GEOG 2410, 2510, 3500Q](#); [POLS 2072Q](#); [PP/URBN 2100](#); [SOC 3201](#); [STAT 2215Q](#); [URBN 2301Q, 2302](#).
4. Two additional courses selected from Group 2, Group 3, or the following list: [ANTH 3150/W](#); [ECON 2328/W, 2431, 3431/W](#); [ECON 3439/W/URBN 3439](#); [EDLR 3547/W](#); [ENGL 3235W](#); [GEOG 3000, 4200W](#); [HIST/URBN 2650](#); [HIST 2810, 3102, 3520](#); [HIST/AAAS 2530](#); [HIST/AFRA/HRTS 3563](#); [HIST/AFRA 3568](#); [HDFS 2001, 3110, 3510, 3530, 3540/W](#); [INTD 3584](#); [NRE 3265](#); [POLS 3240E](#); [POLS 3662/LLAS 3270](#); [POLS/AFRA 3642](#); [POLS/HRTS 3212](#); [POLS 2622, 3406/W, 3617, 3847](#); [PP 3020/W](#); [PP/AFRA 3033/POLS 3633](#); [SOC 3459/W/HDFS 3240/W](#); [SOC 2301/W, 2651/W, 2705, 2709WE, 2907/W, 3429/W, 3521/W, 3601/W](#); [SOC 3501/W/AFRA 3501](#); [SOC/AFRA/HRTS 3825](#); [SOC 3903/W/URBN 3276/W](#); [SOC/WGSS 3621/W](#); [URBN 3981/3991](#) (three credits combined) or [INTD 3594](#); [AMST/URBN 2400](#); [URBN 3993, 3995, 3998, 4497W, 4999](#). [INTD 3594](#) and [URBN 4497W](#) can be counted if not used to fulfill requirement number one above.

In order to assure a breadth of experience, students are encouraged to take courses that include content in each of the following areas: change over time, structural and spatial dimensions, diversity, power and decision-making, and political and social processes. One unique option for students is to enroll in the 15 credit Urban Semester Program, which provides major credit for two courses: [INTD 3584](#) and [3594](#).

Students interested in pursuing a program in Urban and Community Studies are advised to complete 1000-level courses in the social sciences, which may be prerequisites for courses in Urban and Community Studies. These include, but are not limited to: [GEOG/URBN 1200](#); [ECON 1201](#); [POLS 1602](#); [PP 1001](#); [SOCI 1001](#), [1251](#); [STAT 1000Q/1100Q](#); and [URBN 1300W](#). They should also plan on enrolling in [URBN 2000](#) as soon as possible.

The writing in the major requirement can be met by taking any 2000-level or above W course approved for this major. Students should be aware, however, that availability of specific W courses varies by campus. The information literacy requirements are met by successfully completing [URBN 2000](#).

[\[return to top\]](#)

2021-244

GSCI

Revise [Major](#)

Current Copy:

Geoscience

[Course descriptions](#)

Majors in Geoscience focus on the materials, processes, and histories of Earth as a planetary system, with a special emphasis on environmental change at geologic time scales. Interest areas include global change, climate adaptation, water resources, planetary science, tectonics, paleontology and evolution, natural hazards, mineral and energy resources, surface processes, geophysics, and paleoclimatology.

Students may obtain a Bachelor of Science degree or a Bachelor of Arts degree. The Bachelor of Science degree has three tracks.

Bachelor of Science

At least 30 credits of Geoscience courses at the 2000 level and above and at least 12 credits of related courses at the 2000 level and above must be successfully completed for the Bachelor of Science in Geoscience in addition to the college B.S. requirements. Courses cross-listed with Geoscience courses cannot be used to fulfill the related courses requirement.

All Students must complete [GSCI 2500](#), a 2000 level or above GSCI W course, and a concentration listed below. No more than three credits in the major can be from [GSCI 4989](#), [4990](#), [4991](#), [4999](#).

Earth Track

1. All of the following: [GSCI 3010](#), [3030](#), [3040](#).
2. At least 14 additional credits of Geoscience courses at the 3000 level and above.

Environment Track

1. All of the following: [GSCI 3020](#), [3030](#), [3040](#).
2. Three courses chosen from [GSCI 3710](#), [4150](#), [4210](#), [4230](#), [4240](#), [4430](#), [4710](#), [4720](#), [4735](#).
3. At least five additional credits of Geoscience courses at the 3000 level and above.

Atmosphere Track

1. [GSCI 3010](#).
2. One course chosen from the following: [GSCI 3020](#), [3030](#), [3040](#).

3. Three courses chosen from [GSCI 2800, 4150, 4230, 4430, 4810, 4850](#).
4. At least nine additional credits of Geoscience courses at the 3000 level and above.

Bachelor of Arts

At least 24 credits of Geoscience courses at the 2000 level and above and at least 12 credits of related courses at the 2000 level and above must be successfully completed for the Bachelor of Arts in Geoscience in addition to the college B.A. requirements. Courses cross-listed with Geoscience courses cannot be used to fulfill the related courses requirement.

The requirements include the following:

1. [GSCI 2500](#).
2. A 2000 level or above GSCI W course.
3. Two courses chosen from: [GSCI 3010, 3020, 3030, 3040](#).
4. At least 12 additional credits of Geoscience courses at the 2000 level and above.

No more than three credits can be from [GSCI 4989, 4990, 4991, 4999](#). No more than six credits at the 2000 level can count toward the 24 credit total.

Geoscience majors satisfy the writing in the major and information literacy competency requirements by passing a 2000 level or above GSCI W course.

A minor in Geoscience is described in the [Minors](#) section.

Proposed Copy:

Geoscience

[Course descriptions](#)

Majors in Geoscience focus on the materials, processes, and histories of Earth as a planetary system, with a special emphasis on environmental change at geologic time scales. Interest areas include global change, climate adaptation, water resources, planetary science, tectonics, paleontology and evolution, natural hazards, mineral and energy resources, surface processes, geophysics, and paleoclimatology.

Students may obtain a Bachelor of Science degree or a Bachelor of Arts degree. The Bachelor of Science degree has three tracks.

Bachelor of Science

At least 30 credits of Geoscience courses at the 2000 level and above and at least 12 credits of related courses at the 2000 level and above must be successfully completed for the Bachelor of Science in Geoscience in addition to the college B.S. requirements. Courses cross-listed with Geoscience courses cannot be used to fulfill the related courses requirement.

All Students must complete [GSCI 2500](#), a 2000 level or above GSCI W course, and a concentration listed below. No more than three credits in the major can be from [GSCI 4989, 4990, 4991, 4999](#).

Earth Track

1. All of the following: [GSCI 3010, 3030, 3040](#).
2. At least **15** additional credits of Geoscience courses at the 3000 level and above.

Environment Track

1. All of the following: [GSCI 3020, 3030, 3040](#).
2. Three courses chosen from [GSCI 3710, 4150, 4210, 4230, 4240, 4430, 4710, 4720, 4735](#).
3. At least **six** additional credits of Geoscience courses at the 3000 level and above.

Atmosphere Track

1. [GSCI 3010](#).
2. One course chosen from the following: [GSCI 3020, 3030, 3040](#).
3. Three courses chosen from [GSCI 2800, 4150, 4230, 4430, 4810, 4850](#).
4. At least nine additional credits of Geoscience courses at the 3000 level and above.

Bachelor of Arts

At least 24 credits of Geoscience courses at the 2000 level and above and at least 12 credits of related courses at the 2000 level and above must be successfully completed for the Bachelor of Arts in Geoscience in addition to the college B.A. requirements. Courses cross-listed with Geoscience courses cannot be used to fulfill the related courses requirement.

The requirements include the following:

1. [GSCI 2500](#).
2. A 2000 level or above GSCI W course.
3. Two courses chosen from: [GSCI 3010](#), [3020](#), [3030](#), [3040](#).
4. At least 12 additional credits of Geoscience courses at the 2000 level and above.

No more than three credits can be from [GSCI 4989](#), [4990](#), [4991](#), [4999](#). No more than six credits at the 2000 level can count toward the 24 credit total.

Geoscience majors satisfy the writing in the major and information literacy competency requirements by passing a 2000 level or above GSCI W course.

A minor in Geoscience is described in the [Minors](#) section.

[\[return to top\]](#)

2021-252 [9384](#) EEB 2254W Add [Course \(G\)\(S\)](#)

Proposed Copy:

EEB 2254W Current Research Topics in Ecology and Evolutionary Biology

3.00 credits

Prerequisites: ENGL 1007 or 1010 or 1011 or 2011. At least three credits of college-level courses in biology.

Grading Basis: Graded

Engagement with primary research literature in ecology and evolutionary biology and development of written communication skills through writing, editing, revising, and peer feedback.

[\[return to top\]](#)

2021-253 [9444](#) EEB 2256W Add [Course \(G\)\(S\)](#)

Proposed Copy:

EEB 2256W Current Research Topics in Evolutionary Medicine and Disease Ecology

3.00 credits

Prerequisites: ENGL 1007 or 1010 or 1011 or 2011. At least three credits of college-level courses in biology.

Grading Basis: Graded

Engagement with primary research literature in evolutionary medicine and disease ecology and development of written communication skills through writing, editing, revising, and peer feedback.

[\[return to top\]](#)

2021-254 [9445](#) **EEB 2258W**

Add [Course](#) (G)(S)

Proposed Copy:

EEB 2258W Current Research Topics in Conservation and Climate Change Biology

3.00 credits

Prerequisites: ENGL 1007 or 1010 or 1011 or 2011. At least three credits of college-level courses in biology.

Grading Basis: Graded

Engagement with primary research literature in conservation and climate change biology and development of written communication skills through writing, editing, revising, and peer feedback.

[\[return to top\]](#)

2021-256 [9324](#) **HIST 2845/W**

Add [Course](#) (G)(S)

Proposed Copy:

HIST 2845. Global History of Capitalism

3.00 credits

Prerequisites: None.

Grading Basis: Graded

What does capitalism mean? Where did it originate and when did it evolve? What are its different forms and manifestations? How did capitalism change throughout time and space? Why are some individuals and countries rich while others are poor? This and similar questions will be examined to shed light on the impact of capitalism on global history, notions of time, slavery, class, race, gender, law and the contemporary world.

HIST 2845W. Global History of Capitalism

3.00 credits

Prerequisites: ENGL 1007 or 1010 or 1011 or 2011.

Grading Basis: Graded

[\[return to top\]](#)

2021-257 [9484](#) **ENGR/HRTS 2300**

Add [Course](#) (S)

Proposed Copy:

ENGR 2300 - Engineering for Human Rights

Also Offered as HRTS 2300

3.00 Credits

Prerequisites: None

Grading Basis; Graded

Foundational concepts of human rights and engineering ethics from a global perspective. Discussions of the role of engineering in society from human rights and different ethical perspectives. Principles of “Engineering for human rights” on distributive justice, participation, consideration of duty bearers, accountability, and indivisibility of rights. Case study analysis of engineering projects for human rights impacts.

[\[return to top\]](#)

Discussion: Graduate and Undergraduate Combined Courses

from David Knecht:

My department has some combined courses that meet with undergrads and graduate students. They register for different numbers but have the same lectures. The graduate students are assigned some extra work or papers or exam questions to justify the different course numbers. I fundamentally do not support this type of situation and discourage it when new courses like this are proposed in my department for the following reasons:

1. My philosophy of teaching at the graduate vs. undergraduate level is that undergraduate courses, whether introductory or advanced, tend to be more centered on textbook information and the overview of a field, while graduate courses are centered on the primary literature, with all its inconsistencies, disagreements and emerging ideas. Thus I think it is difficult to combine the two into one course.
2. My experience with our graduate students is that they are no more capable than our advanced undergraduates (especially honors students) and in many cases, significantly less capable. In our department, honors undergraduates routinely get the top grades in combined classes. Therefore, expecting graduate students to perform at a higher level is not based in reality.
3. Undergraduates can take graduate courses. Honors students can take them with no approvals and advanced undergraduates with approval.
4. Graduate students who need remediation can take 6 credits of undergraduate courses and count them toward their degree.

Given especially points 3 and 4, what is the incentive or justification for offering the same course in both levels? I believe courses should either be developed for graduate students or developed for undergraduate students, but allow each to take both.

I am approaching this as a scientist. I don't know how well it applies across disciplines. Thoughts? Counterarguments?

[\[return to top\]](#)