

# Chemistry, BA

## GE CLAS Core

The College of Liberal Arts and Sciences GE CLAS Core requirements provide students with a broad foundation of knowledge and a focused practice of transferable skills necessary for a lifetime of learning.

GE CLAS Core courses are particularly valuable for students making the transition into the University of Iowa. They help students understand the academic expectations of the College of Liberal Arts and Sciences while providing the knowledge and skills needed for more advanced work in the major.

All students in the College of Liberal Arts and Sciences who wish to earn an undergraduate degree—Bachelor of Arts (BA), Bachelor of Science (BS), Bachelor of Fine Arts (BFA), or Bachelor of Music (BM)—must complete the requirements of the GE CLAS Core.

## GE CLAS Core Areas and Requirements

The GE CLAS Core has 11 required areas, grouped into three categories. Students must fulfill the requirements in each GE CLAS Core area. The requirements that follow are for students who entered the University of Iowa during summer 2025 or after. Students who entered during a previous semester are held to different requirements as indicated on a student's degree audit.

### Communication and Literacy

- Understanding Cultural Perspectives: a minimum of 3 s.h.
- Interpreting Literature: a minimum of 3 s.h.
- Rhetoric: a minimum of 4 s.h.
- World Languages Pathways: required credit varies (see "World Languages Pathways" in this section of the catalog)

### Sustainability

Students complete this requirement by choosing an approved GE CLAS Core course that integrates Sustainability (with no additional semester hours) with a course from the Natural, Quantitative, and Social Sciences category or the Culture, Society, and the Arts category.

### Natural, Quantitative, and Social Sciences

- Natural Sciences: a minimum of 7 s.h.; must include one lab
- Quantitative or Formal Reasoning: a minimum of 3 s.h.
- Social Sciences: a minimum of 3 s.h.

### Culture, Society, and the Arts

- Historical Perspectives: a minimum of 3 s.h.
- International and Global Issues: a minimum of 3 s.h.
- Literary, Visual, and Performing Arts: a minimum of 3 s.h.
- Values and Society: a minimum of 3 s.h.

Students may count transfer credit and/or credit by exam toward some GE CLAS Core requirements. See CLAS Core Policies for details regarding the use of transfer credit,

credit by exam, and other policies for how GE CLAS Core requirements may be fulfilled.

## Communication and Literacy

### Understanding Cultural Perspectives

Courses in the Understanding Cultural Perspectives area help students better understand social and cultural differences. Students will reflect on their own social and cultural perspectives while increasing their ability to engage with people who have backgrounds different than their own.

All students must complete at least 3 s.h. of coursework in the Understanding Cultural Perspectives area. The following courses are approved for the area.

Course #	Title	Hours
AFAM:1020/ AMST:1030	Introduction to African American Culture	3
AFAM:1030	Introduction to African American Society	3
AFAM:1130	The History of African American Film	3
AFAM:1241/ MUS:1741	The Soundtrack of Black America	3
AFAM:1900	Diverse Topics in African American Studies	3
AFAM:2064/ SOC:2064	African American Families: Urban and Suburban	3
AFAM:2500	Black Culture and Experience: Contemporary Issues	3
AMST:1290/ GHS:1290/ HIST:1290/ NAIS:1290	Native American Foods and Foodways	3
AMST:2025	Diversity in American Culture	3
ANTH:2151/ GWSS:2151/IS:2151	Global Migration in the Contemporary World	3
ANTH:2165/ AMST:2165/ NAIS:2165	Native Peoples of North America	3
ARTS:2100	Printmaking and Politics of Protest	3
CCCC:2220	Foundations of Critical Cultural Competence	3
CINE:1195	Video Games and Identity	3
CINE:1625	Race, Gender, and Sexuality on Screen	3
CLSA:1415/ RELS:1415	Ancient Origins of Religious Conflict	3
CLSA:1910	Ancient and Modern Worlds: Common Problems	3
CLSA:2620/ RELS:2620	Sex and the Bible	3
CLSA:2800	Race and Ethnicity in the Ancient Mediterranean World	3
COMM:1168	Music and Social Change	3
COMM:1898/ LATS:1898	Introduction to Latina/o/x Communication and Culture	3
COMM:2069/ AFAM:2070	Black Television Culture	3

DANC:2065	Performing Power/ Performing Protest: The Body, Identity, and the Image	3	POLI:1601	Introduction to Social Media and Politics	3
DANC:2085	Introduction to African Caribbean Dance Practices	3	POLI:1800	Introduction to the Politics of Class and Inequality	3
DST:1101	Introduction to Disability Studies	3	POLI:1900	Introduction to the Politics of Race	3
EDTL:2670	Peacebuilding, Singing, and Writing in a Prison Choir	3	POLI:1950	Introduction to the Politics of Religion	3
EDTL:4900	Foundations of Special Education	3	PSQF:3104	Multicultural Issues in Counseling and Psychology	3
EPLS:1240	Student Success in College	3	RELS:1015	Global Religious Conflict and Diversity	3
FREN:2010/ ASIA:2001/ RUSS:2001/ TRNS:2001/ WLLC:2001	Global Science Fiction	3	RELS:2000	Engaging Religious Diversity for Leadership and Entrepreneurship	3
GHS:1200/ DST:1200/ GRMN:1200/ WLLC:1200	Disabilities and Inclusion in Writing and Film Around the World	3	RELS:2330	Wealth, Inequality, and Islam	3
GRMN:2600	Witch Hunts in Fact and Fiction: A Global History of Exclusion	3	RHET:2135/ SJUS:2135	Decoding Disability: Rhetoric of Access and Accommodations	3
GRMN:2620/ WLLC:2620	Anne Frank and Her Story	3	SJUS:1001/ GWSS:1003	Introduction to Social Justice	3
GRMN:2675/ MUSM:2675	The Politics of Memory: Holocaust, Genocide, and 9/11	3-4	SOC:1030	Contemporary Social Problems	3-4
GWSS:1001	Introduction to Gender, Women's, and Sexuality Studies	3	SOC:2830	Race and Ethnicity	3
GWSS:1002	Diversity and Power in the U.S.	3	SPAN:1070/ LING:1070	Language Attitudes: Is How You Sound How You Are Seen?	3
HHP:2280	Cultural Competency and Health	3	SPAN:2050	Spanish in the United States	3
HIST:1040	Diversity in History	3	SPST:1074/ AMST:1074/ GWSS:1074	Inequality in American Sport	3
HIST:2155/ JSTU:2155	Global Jewish History	3	SSW:1200	Mental Health Across the Lifespan	3
HIST:2156/ JSTU:2156	Arabs and Jews in Palestine and Israel	3	THTR:2320	Playwriting in a Global World	3
HIST:2267/ AFAM:2267	African American History to 1877	3	THTR:2405	Staging Americans: U.S. Cultures Through Theatre and Performance	3
HIST:2268/ AFAM:2268	African American History Since the Civil War	3	TRNS:2000	Translation and Global Society	3
IS:2020	World Events Today!	3	WLLC:2222/ ASIA:2222/ GWSS:2222	Women in Premodern East Asian Literature	3
ITAL:2660	The Italian American Experience	3	WRIT:2100	Writing and Community Outreach	3
JMC:2500	Community Media	3			
JMC:2600	Freedom of Expression	3			
JSTU:2149/ HIST:2149/ RELS:2240/ SJUS:2240	Introduction to Jewish Studies	3			
LATS:2280/ HIST:2280	Introduction to Latina/o/x Studies	3			
MATH:1210	Diverse Perspectives in the Mathematical Sciences	3			
PHIL:2425	Sex, Marriage, Friendship, and the Law	3			

## Interpreting Literature

Courses in the Interpreting Literature area focus on the major genres of literature (short and long fiction, nonfiction, poetry, and drama), improving students' abilities to read and analyze a variety of texts. Small group discussions in these courses challenge students to think critically, to share insights, and to listen thoughtfully to the arguments of others.

All students must complete at least 3 s.h. of coursework in the Interpreting Literature area. The following courses are approved for the area.

Course #	Title	Hours
CHIN:1510/ ASIA:1510/ WLLC:1510	Ghost Stories and Tales of the Weird in Premodern Chinese Literature	3
CLSA:1200	Interpretation of Ancient Literature	3

ENGL:1200	Interpreting Literature	3
ENGL:2010	Foundation of the English Major: Histories, Literatures, Pleasures	3
FREN:1005	Texts and Contexts: French- Speaking World	3
FREN:1007	Nature/Ecology French Philosophy and Fiction	3

## Rhetoric

Rhetoric courses develop speaking, writing, listening, and critical reading skills and build competence in research, analysis, and argumentation.

All entering first-year students are required to complete RHET:1030 Rhetoric: Writing and Communication. Because rhetorical skills lay the foundation for further study at the University, most students register for RHET:1030 during their first year at Iowa.

Students who must enroll in English as a Second Language (ESL) courses as determined by their English proficiency evaluation must complete all ESL courses before they may register for RHET:1030 Rhetoric: Writing and Communication.

Students who have transfer credit in composition, speech, and argumentation but have not been granted an AA degree from an institution that has an articulation agreement with the University of Iowa often must take RHET:1040 College Writing and Reading or RHET:1060 College Communication and Reading in addition to their transfer courses in composition and/or speech to complete the equivalent of RHET:1030 Rhetoric: Writing and Communication.

Each entering student's degree audit shows the course(s) that must be completed in order to fulfill the Rhetoric requirement.

The following courses are approved for the Rhetoric area.

Course #	Title	Hours
RHET:1030	Rhetoric: Writing and Communication	4-5
RHET:1040	College Writing and Reading	3
RHET:1060	College Communication and Reading	3

## Transfer of Credit for Rhetoric

Transfer students who have been granted an Associate of Arts (AA) degree from an Iowa or Illinois community college or Waldorf College in Iowa have satisfied the Rhetoric requirement.

Transfer credit for students without an AA degree from an institution that has an articulation agreement with the University of Iowa is evaluated as follows:

- transfer students who have completed composition I, composition II, and speech at another institution have satisfied the GE CLAS Core Rhetoric requirement of RHET:1030 Rhetoric: Writing and Communication;
- transfer students who have completed only composition I must complete RHET:1030 Rhetoric: Writing and Communication at the University of Iowa;
- transfer students who have completed composition I and speech must complete RHET:1040 College Writing and Reading at the University of Iowa;
- transfer students who have completed only speech must complete RHET:1040 College Writing and Reading at the University of Iowa;

- transfer students who have completed composition I and II or only composition II must complete RHET:1060 College Communication and Reading at the University of Iowa;
- for transfer students who have completed any other course at another institution that may be equivalent to RHET:1030 Rhetoric: Writing and Communication, University of Iowa Admissions examines the content of the course and decides on equivalency based on the content of that course, conferring with the Department of Communication Studies on the correct equivalency, if necessary.

## World Languages Pathways

GE CLAS Core courses in World Languages provide the practice of important communication skills in a second language as well as the knowledge of the cultures in which the language is spoken. This in-depth study allows students to better understand how languages function, encouraging students to learn more about their own first language, including how it creates both inclusion and diversity. To fulfill the GE CLAS Core requirement in World Languages, students may choose one of the following pathways.

### Fourth Level

The fourth-level pathway requires students to:

- complete four years of a single world language in high school; or
- achieve the fourth level of proficiency in a world language by completing the appropriate sequence of courses offered at the University of Iowa; or
- achieve the fourth level of proficiency by completing appropriate courses at another college or university or through approved study abroad courses; or
- achieve an equivalent score on a related Advanced Placement, International Baccalaureate, or other approved college-level examination accepted by the University of Iowa and the College of Liberal Arts and Sciences (see Credit By Exam Options on the Admissions website); or
- earn an equivalent score on both a UI written placement test and on a UI oral proficiency exam in a language taught at the University of Iowa (see World Languages Placement Test (WLPT) on the New Student Services website); or
- earn an equivalent score on a proficiency exam in a language that is not taught at the University of Iowa (see Proficiency Examinations for Languages Not Taught at UI on the College of Liberal Arts and Sciences website).

A fourth level of proficiency is equivalent to the successful completion of an intermediate II language course (or of a second-year second-semester course, for example) as taught at the University of Iowa. Depending on a student's placement test results and the language taken, a student may need to take four semesters of a language to satisfy the requirement using this pathway, starting with a beginning course and ending with a second-semester intermediate course. Other students may be able to start elsewhere in the language sequence and reach fourth-level proficiency by taking one, two, or three courses. See "World Languages Placement Tests" under Placement Tests on the College of Liberal Arts and Sciences website.

## Third Level Plus a World Language and Cultural Exploration Course

The third-level plus a World Language and Cultural Exploration Course pathway requires students to:

- complete third-level coursework in a single world language in high school or college; and
- complete a World Language and Cultural Exploration course.

In courses approved for the World Language and Cultural Exploration GE area, students explore topics and issues through the lens of a world language (other than English) and/or culture, or multiple world languages and/or cultures. These courses help students expand their knowledge of language systems and structure, as well as the role of language in social interactions, cultural environments, and identity formation. The World Language and Cultural Exploration course may be taken at any time: before, concurrently, or after taking the three levels of world language coursework. The World Language and Cultural Exploration course may be taken in an area related to the world language coursework or in a different area. Suitable work may include a study abroad or experiential learning course. A minimum of 3 s.h. is required in this area for students who choose this pathway.

## Second Level of Two Languages

The second level of two languages pathway requires students to complete second-level coursework in each of two different world languages in high school or college.

### Course Information

World language courses for the third level plus a World Language and Cultural Exploration course pathway or the second level of two languages pathway may include any combination of high school and college-level coursework, including transfer courses.

Transfer students who have not sent an official high school transcript to UI Admissions must do so if they want to use high school courses to satisfy any portion of the GE CLAS Core World Languages requirement.

Semester hours earned for these courses vary by language and pathway. Students should be sure to take the placement test for the language of interest and should be aware of the course sequence required to fulfill the GE requirement in World Languages for that particular language.

Once the World Languages requirement is completed, a student may earn up to an additional 8 s.h. of college credit while studying a world language. See Furthering Language Incentive Program (FLIP) on the College of Liberal Arts and Sciences website.

Students may use the following language course sequences to fulfill the World Languages requirement using the fourth-level pathway. Completing part of one of the following sequences, finishing with the third or second level, would fulfill part of the third level plus a World Language and Cultural Exploration course pathway or the second level of two languages pathway. To avoid duplication or regression, and with questions about what qualifies as second or third level for a given language, consult the appropriate language department before registering for courses.

## American Sign Language

Courses in American Sign Language (ASL) are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence achieves fourth-level

proficiency and fulfills one of the ways to meet the GE CLAS Core World Languages requirement.

Course #	Title	Hours
ASL:1001	American Sign Language I	4
ASL:1002	American Sign Language II	4
ASL:2001	American Sign Language III	4
ASL:2002	American Sign Language IV	4

Students with previous knowledge of American Sign Language should consult the department for placement.

## Arabic

Courses in Arabic are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence achieves fourth-level proficiency and fulfills one of the ways to meet the GE CLAS Core World Languages requirement.

Course #	Title	Hours
ARAB:1001	Elementary Modern Standard Arabic I	5
ARAB:1002	Elementary Modern Standard Arabic II	5
ARAB:2001	Intermediate Modern Standard Arabic I	5
ARAB:2002	Intermediate Modern Standard Arabic II	5

Students with previous knowledge of Arabic should consult the department for appropriate placement.

## Biblical Hebrew

Courses in biblical Hebrew are offered by the Department of Classics and Religious Studies. The following sequence achieves second-level proficiency.

Course #	Title	Hours
CLSA:1401/ RELS:1401	Biblical Hebrew I	4
CLSA:1402/ RELS:1402	Biblical Hebrew II	4

## Chinese

Courses in Chinese are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Chinese.

Course #	Title	Hours
CHIN:1111	First-Year Chinese: First Semester	5
CHIN:1112	First-Year Chinese: Second Semester	5
CHIN:2101	Second-Year Chinese: First Semester	5
CHIN:2102	Second-Year Chinese: Second Semester	5

Students may use varied combinations of Chinese language courses approved to fulfill the GE CLAS Core World Languages requirement. Heritage learners and students who have studied Chinese abroad may be able to substitute CHIN:2103 Accelerated Second-Year Chinese: First Semester (3 s.h.) and CHIN:2104 Accelerated Second-Year Chinese: Second

Semester (3 s.h.) for CHIN:2101 and CHIN:2102. Consult the department for more information.

## French

Courses in French are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of French.

Course #	Title	Hours
FREN:1001	Elementary French I	4
FREN:1002	Elementary French II	4
FREN:2001	Intermediate French I	4
FREN:2002	Intermediate French II	4

Students may use varied combinations of French language courses approved to fulfill the GE CLAS Core World Languages requirement. Those with previous knowledge of French may be able to substitute FREN:1010 First-Year French Review (4 s.h.) for FREN:1001 and FREN:1002 in the preceding sequence. Some students may be evaluated as ready for FREN:2001 or FREN:2002. Consult the department for appropriate placement.

## German

Courses in German are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of German.

Course #	Title	Hours
GRMN:1001	Elementary German I	4
GRMN:1002	Elementary German II	4
GRMN:2001	Intermediate German I	4
GRMN:2002	Intermediate German II	4

Some students may be evaluated as ready for GRMN:2001 or GRMN:2002. Consult the department for appropriate placement.

## Greek

Courses in Greek are offered by the Department of Classics and Religious Studies. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Greek.

Course #	Title	Hours
CLSG:1001	Classical and New Testament Greek I	4
CLSG:1002	Classical and New Testament Greek II	4
CLSG:2001	Intermediate Greek I	4
CLSG:2002	Intermediate Greek II	4

Students with previous knowledge of Greek should consult the department for appropriate placement.

## Italian

Courses in Italian are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Italian.

Course #	Title	Hours
ITAL:1101	Elementary Italian I	5
ITAL:1102	Elementary Italian II	5
ITAL:2203	Intermediate Italian I	4
ITAL:2204	Intermediate Italian II	4

Students with strong language learning abilities or a background in Italian or another Romance language may be able to substitute ITAL:1103 Intensive Elementary Italian (4,6 s.h.) for ITAL:1101 and ITAL:1102 in the preceding sequence. Consult the department for appropriate placement.

## Japanese

Courses in Japanese are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Japanese.

Course #	Title	Hours
JPNS:1001	First-Year Japanese: First Semester	5
JPNS:1002	First-Year Japanese: Second Semester	5
JPNS:2001	Second-Year Japanese: First Semester	5
JPNS:2002	Second-Year Japanese: Second Semester	5

Students with previous knowledge of Japanese should consult the department for appropriate placement.

## Korean

Courses in Korean are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Korean.

Course #	Title	Hours
KORE:1101	First-Year Korean: First Semester	4
KORE:1102	First-Year Korean: Second Semester	4
KORE:2101	Second-Year Korean: First Semester	4
KORE:2102	Second-Year Korean: Second Semester	4

Students with previous knowledge of Korean should consult the department for appropriate placement.

## Latin

Courses in Latin are offered by the Department of Classics and Religious Studies. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Latin. Students must take both CLSL:2001 and CLSL:2002 in order to fulfill the fourth-level pathway of the World Languages requirement. These courses require a similar knowledge of Latin, but one focuses on poetry and the other on prose. Other world languages permit a student to complete the last courses in the sequence to meet the GE CLAS Core requirement because the final course is more difficult than the previous ones. This is not true with the Latin sequence, and therefore, both courses must be successfully completed.

Course #	Title	Hours
CLSL:1001	Elementary Latin I	4
CLSL:1002	Elementary Latin II	4
CLSL:2001	World of Cicero	4
CLSL:2002	Golden Age of Roman Poetry	4

Students with previous knowledge of Latin should consult the department for appropriate placement.

## Portuguese

Courses in Portuguese are offered by the Department of Spanish and Portuguese. Two sequences in Portuguese are approved to achieve fourth-level proficiency. All courses are open to entering first-year students.

Course #	Title	Hours
PORT:2000	Accelerated Elementary Portuguese	5
PORT:2500	Accelerated Intermediate Portuguese	5

Students with previous knowledge of Portuguese should consult the department for appropriate placement.

## Russian

Courses in Russian are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Russian.

Course #	Title	Hours
RUSS:1111	First-Year Russian I	5
RUSS:1112	First-Year Russian II	5
RUSS:2111	Second-Year Russian I	4
RUSS:2112	Second-Year Russian II	4

Students with previous knowledge of Russian should consult the department for appropriate placement.

## Spanish

Courses in Spanish are offered by the Department of Spanish and Portuguese. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Spanish.

Course #	Title	Hours
SPAN:1001	Elementary Spanish I	4
SPAN:1002	Elementary Spanish II	4
SPAN:1501	Intermediate Spanish I	4
SPAN:1502	Intermediate Spanish II	4

Students may use varied combinations of Spanish language courses to fulfill the GE CLAS Core World Languages requirement. Those with previous knowledge of Spanish may be able to substitute SPAN:1003 Elementary Spanish Review (5 s.h.) for SPAN:1001 and SPAN:1002 in the preceding sequence.

The accelerated course SPAN:1503 Accelerated Intermediate Spanish (6 s.h.), which combines SPAN:1501 and SPAN:1502, may be appropriate for some students.

The accelerated course SPAN:1505 Intermediate Spanish for Heritage Speakers (5 s.h.) may be appropriate for other students.

Students with previous knowledge of Spanish should take the language placement test in Spanish to help determine proper placement.

## Swahili

Courses in Swahili are offered by the Department of Languages, Linguistics, Literatures, and Cultures. The following sequence is one way to fulfill the GE CLAS Core World Languages requirement and is appropriate for students without previous knowledge of Swahili. Each of these courses is open to entering first-year students.

Course #	Title	Hours
SWAH:1001	Elementary Swahili I	4
SWAH:1002	Elementary Swahili II	4
SWAH:2001	Intermediate Swahili I	4
SWAH:2002	Intermediate Swahili II	4

Students with previous knowledge of Swahili should consult the department for appropriate placement.

## World Language and Cultural Exploration

The following courses are approved for the World Language and Cultural Exploration area.

Course #	Title	Hours
ARAB:2525	We Are What We Eat: Food Culture in the Middle East and North Africa	3
ASIA:1005	Scripts and Trips: A Journey Through East Asia	3
ASL:1500	Exploring the Deaf World	3
EDTL:4410	Language, Power, and Multilingual Education	3
FREN:1500	Trip to Belgium, France, and Switzerland	3
GRMN:1550	German Food, History, and Culture: Beyond Bier and Bratwurst	3
GRMN:1685	German Cultural History	3
ITAL:2205	Exploring Italy: Culture, Society, and Communication	3
JPNS:2127/ ASIA:2127/ CLSA:2127	Books of the Silk Roads	3
KORE:1135	Cultural Fusion: Korean Pop Culture in a Globalized World	3
LING:1075	World Englishes	3
LING:1080	Communicating Across Linguistic Differences	3
RUSS:1200	Growing Up Russian: A Cultural History of Russian Childhood	3
SPAN:1800	Writing and Writers From Latin America	3
SPAN:1810	Writing and Writers From Spain	3
SPAN:2700/ IS:2700/LAS:2700/ PORT:2700	Introduction to Latin American Studies	3
SPAN:2905	Ecotourism and Culture in Costa Rica	3
SWAH:2100	Exploring East African Languages and Cultures	3

TRNS:2578	Translation in the Humanities: Modes and Approaches	3
-----------	---	---

### Other Course Sequences

A student who successfully completes a four-semester world language sequence that has not been approved for the GE CLAS Core may have the sequence substituted for a proficiency test to fulfill the GE CLAS Core requirement.

Students who complete a world language sequence this way should notify the department that offers the sequence; the department will contact Degree Services in the Office of the Registrar, which will update a student's degree audit to show fulfillment of the World Languages requirement.

### Sustainability

Courses in the Sustainability area focus on identifying concepts and terminology associated with sustainability and systems-thinking, investigating the interconnectedness of human and natural systems, and evaluating how students' own actions affect and are affected by society's ability to meet sustainability goals. Students also investigate institutional and/or cultural processes or natural systems processes.

Sustainability learning outcomes are integrated with the outcomes for another GE CLAS Core area so that one approved course satisfies this requirement without adding semester hours. Students complete this requirement by choosing one of the following courses that have been approved for Sustainability and another GE CLAS Core area.

### Sustainability and Natural Sciences

Course #	Title	Hours
CHEM:1050	Chemistry of Our World	3
SEES:1020	The Global Environment	3
SEES:1080	Introduction to Environmental Science (with lab 4 s.h.; without lab 3 s.h.)	3-4
SEES:1085	Fundamentals of Environmental Science (lab)	4
SEES:1400	Natural Disasters	3
SIED:3164	Introduction to Science in Society	3
SIED:4110	Exploring the Geology, Mining History, and Environmental Issues of the Colorado Rockies (lab)	4

### Sustainability and Quantitative or Formal Reasoning

Course #	Title	Hours
SEES:1035	Our Digital Earth	3

### Sustainability and Social Sciences

Course #	Title	Hours
ANTH:2261	Human Impacts on the Environment	3
SEES:2013/ BUS:2013/ URP:2013	Introduction to Sustainability	3
SOC:1040	Energy, Sustainability, and Society	3

URP:2020/ PBAF:2020	Environment and Society: Sustainability, Policy, and Politics	3
------------------------	---	---

### Sustainability and Historical Perspectives

Course #	Title	Hours
HIST:1115/ SEES:1115	The History of Oil	3

### Sustainability and International and Global Issues

Course #	Title	Hours
ANTH:1046/ GWSS:1046/ SEES:1046/ SJUS:1046	Environmental Politics in India	3
CPH:2200	Climageddon: Understanding Climate Change and Associated Impacts on Health	3
POLI:1510	International Politics of Environmental Issues	3
POLI:2500	Politics of Natural Disasters	3
SEES:1070	Contemporary Environmental Issues	3
SPST:2170	Sport and Globalization	3

### Sustainability and Literary, Visual, and Performing Arts

Course #	Title	Hours
TDSN:2210	Introduction to 3D Design	3

### Sustainability and Values and Society

Course #	Title	Hours
GRMN:1300	The Tree as Cultural Signifier and Global Storyteller	3
JMC:1800	Environmental Communication	3
SRM:1049	Foundations for Sport and Physical Activity: Catalyst for Sustainable Communities	3

### Natural, Quantitative, and Social Sciences

#### Natural Sciences

Courses in the Natural Sciences area explore the scope and major concepts of a scientific discipline. Students learn the attitudes and practices of scientific investigators: logic, precision, experimentation, tentativeness, and objectivity. In courses with a laboratory component, students gain experience in the methods of scientific inquiry.

All students must complete at least 7 s.h. of coursework in the Natural Sciences area, including at least one natural science lab component. The following courses are approved for the area; courses with a lab component are noted "(lab)."

Course #	Title	Hours
ANTH:1301	Human Origins	3
ASTR:1060/ BIOL:1060/ SEES:1060	Big Ideas: Origins of the Universe, Earth, and Life	3
ASTR:1070	Stars, Galaxies, and the Universe (with lab 4 s.h.; without lab 3 s.h.)	3-4
ASTR:1079	Introductory Astronomy Laboratory (lab only)	1
ASTR:1080	Exploration of the Solar System (lab)	4
ASTR:1085	Citizen Astronomy	3
ASTR:1771	Fundamental Astronomy I: The Solar System and Exoplanets (lab)	4
ASTR:1772	Fundamental Astronomy II: Evolution of Stars, Galaxies, and the Universe (lab)	4
BIOL:1140	Human Biology: Nonmajors (lab)	4
BIOL:1141	Human Biology: Health Professions (lab)	4
BIOL:1251	How the Brain Works (and Why it Doesn't)	3-4
BIOL:1261	Introduction to Botany (lab)	4
BIOL:1370	Understanding Evolution	3
BIOL:1411	Foundations of Biology (lab)	4
BIOL:1412	Diversity of Form and Function (lab)	4
BIOL:2120	Good Genes Gone Bad: Genetic Disorders of Notable Celebrities	3
CHEM:1050	Chemistry of Our World	3
CHEM:1060	Technology and Society Laboratory (lab only)	1
CHEM:1070	General Chemistry I	3
CHEM:1080	General Chemistry II	3
CHEM:1100	Chemistry in Industry and the Economy	3
CHEM:1110	Principles of Chemistry I (lab)	4
CHEM:1120	Principles of Chemistry II (lab)	4
CHEM:1160	Principles of Chemistry Lab (lab only)	2
HHP:1400	Human Anatomy and Physiology	3
HHP:2110	Human Anatomy Laboratory (lab only)	1
HHP:2310	Nutrition and Health	3
PCOL:2220	Drug Use and Abuse	3
PHYS:1200	Physics of Everyday Experience	3
PHYS:1400	Basic Physics (with lab 4 s.h.; without lab 3 s.h.)	3-4
PHYS:1409	Basic Physics Lab (lab only)	1
PHYS:1410	Physics of Sound (with lab 4 s.h.; without lab 3 s.h.)	3-4
PHYS:1511	College Physics I (lab)	4
PHYS:1512	College Physics II (lab)	4
PHYS:1611	Introductory Physics I (lab)	4
PHYS:1612	Introductory Physics II (lab)	4
PHYS:1701	Physics I (lab)	4
PHYS:1702	Physics II (lab)	4
SEES:1020	The Global Environment	3
SEES:1021	The Global Environment Lab (lab only)	1
SEES:1030/ CEE:1030	Introduction to Earth Science (with lab 4 s.h.; without lab 3 s.h.)	3-4
SEES:1031/ CEE:1031	Introduction to Earth Science Laboratory (lab only; students must have previously completed CEE:1030/SEES:1030 without the lab)	1
SEES:1040	Evolution and the History of Life (with lab 4 s.h.; without lab 3 s.h.)	3-4
SEES:1050	Introduction to Geology (lab)	4
SEES:1080	Introduction to Environmental Science (with lab 4 s.h.; without lab 3 s.h.; not for students who have taken SEES:1085)	3-4
SEES:1081	Introduction to Environmental Sciences Laboratory (lab only)	1
SEES:1085	Fundamentals of Environmental Science (lab; not for students who have taken SEES:1080)	4
SEES:1100	Age of Dinosaurs (lab)	4
SEES:1290	Energy and the Environment	3
SEES:1400	Natural Disasters	3
SIED:3164	Introduction to Science in Society	3
SIED:4110	Exploring the Geology, Mining History, and Environmental Issues of the Colorado Rockies (lab)	4

## Quantitative or Formal Reasoning

Courses in the Quantitative or Formal Reasoning area help develop analytical skills through the practice of quantitative or formal symbolic reasoning. Courses focus on presentation and evaluation of evidence and argument; understanding the use and misuse of data; and organization of information in quantitative or other formal symbolic systems, including those used in computer science, linguistics, mathematics, philosophy, and statistics.

All students must complete at least 3 s.h. of coursework in the Quantitative or Formal Reasoning area. Students may also fulfill this GE CLAS Core requirement by completing a course that lists an approved GE CLAS Core course as a prerequisite. The following courses are approved for the area.

Course #	Title	Hours
COMM:1117	Advocacy and Argument	3
CPH:1600	Public Health Science: Inquiry and Investigation in Public Health	3
CS:1020	Principles of Computing	3

CS:1110	Introduction to Computer Science	3	ASP:1800/ CSD:1800/ NURS:1800/ SSW:1800/TR:1800	Aging Matters: Introduction to Gerontology	3
CS:1210	Computer Science I: Fundamentals	4	COMM:1170	Communication Theory in Everyday Life	3
LING:1050	Language and Formal Reasoning	3	COMM:1174	Media and Society	3
MATH:1020	Elementary Functions	4	CPH:1400	Fundamentals of Public Health	3
MATH:1120	Logic of Arithmetic	4	CRIM:1410	Introduction to Criminology	3
MATH:1260	PokeMath: The Mathematics of Pokemon Go	3	CSD:3117/ LING:3117	Psychology of Language	3
MATH:1350	Quantitative Reasoning for Business	4	CSD:3118/ LING:3118	Language Acquisition	3
MATH:1440	Mathematics for the Biological Sciences	4	ECON:1100	Principles of Microeconomics	4
MATH:1460	Calculus for the Biological Sciences	4	ECON:1200	Principles of Macroeconomics	4
MATH:1550	Engineering Calculus I	4	EDTL:2630/ MUS:2630	Introduction to the Psychology of Music	3
MATH:1850	Calculus I	4	JMC:1100	Introduction to Media Effects	3
MUS:2800/ ARTS:2800/ CINE:2800/CS:2800/ DANC:2800/ DIGA:2800/ THTR:2800	Introduction to Coding for Interactive Arts	3	LAW:1010	Introduction to the Legal System and Practice	3
PHIL:1636	Principles of Reasoning: Argument and Debate	3	LING:1010	Language and Society	3
POLI:1700	Introduction to Political Analysis	3	LING:1060	Languages of the World	3
PSY:2811	Research Methods and Data Analysis in Psychology I	3	MUSM:2001/ ANTH:2010	Introduction to Museum Studies	3
RELS:1050/ POLI:1050	Big Ideas: Introduction to Information, Society, and Culture	3	POLI:1100	Introduction to American Politics	3
SEES:1035	Our Digital Earth	3	POLI:1200	Introduction to Political Behavior	3
STAT:1010	Statistics and Society	3	POLI:1300	Introduction to Political Thought and Action	3
STAT:1015/ DATA:1015	Introduction to Data Science	3	POLI:1600	Introduction to Political Communication	3
STAT:1020/ PSQF:1020	Elementary Statistics and Inference	3	PSQF:2115	Introduction to Counseling Psychology	3
STAT:1030	Statistics for Business	4	PSY:1001	Elementary Psychology	3
STAT:2010	Statistical Methods and Computing	3	PSY:2301	Introduction to Clinical Psychology	3
			PSY:2601	Introduction to Cognitive Psychology	3
			SEES:2013/ BUS:2013/ URP:2013	Introduction to Sustainability	3
			SEES:2110/ GHS:2110	Eight Billion and Counting: Introduction to Population Dynamics	3
			SOC:1010	Introduction to Sociology	3-4
			SOC:1040	Energy, Sustainability, and Society	3
			SOC:1220	Principles of Social Psychology	3-4
			URP:1001/ PBAF:1001	How to Change the World	3
			URP:2020/ PBAF:2020	Environment and Society: Sustainability, Policy, and Politics	3

## Social Sciences

Courses in the Social Sciences area focus on human behavior and the institutions and social systems that shape and are shaped by that behavior. Courses provide an overview of one or more social science disciplines, their theories, and their methods.

All students must complete at least 3 s.h. of coursework in the Social Sciences area. The following courses are approved for the area.

Course #	Title	Hours
ANTH:1101/IS:1101	Cultural Anthropology	3
ANTH:2136	Race, Place, and Power: Urban Anthropology	3
ANTH:2261	Human Impacts on the Environment	3

## Culture, Society, and the Arts

### Historical Perspectives

Courses in the Historical Perspectives area help students comprehend the historical processes of change and continuity; develop the ability to generalize, explain, and interpret historical change; and understand the past in its own terms.

All students must complete at least 3 s.h. of coursework in the Historical Perspectives area. The following courses are approved for the area.

Course #	Title	Hours
ANTH:1201	World Archaeology	3
ARTH:1010	Art and Visual Culture	3
ARTH:1050	From Cave Paintings to Cathedrals: Survey of Western Art I	3
ARTH:1060	From Mona Lisa to Modernism: Survey of Western Art II	3
ARTH:1070	Asian Art and Culture	3
ARTH:2320/ CLSA:2226	Ancient Art From the Great Pyramids of Egypt to the Colosseum in Rome	3
CLSA:1181/ GHS:1181	Ancient Medicine	3
CLSA:1830	Greek Civilization	3
CLSA:1840	Roman Civilization	3
CLSA:2444/ RELS:2444	Cities of the Bible	3
EPLS:4250/ AFAM:4250	Education In Black America	3
HIST:1010	History Matters	3
HIST:1101	The Modern World	3
HIST:1115/ SEES:1115	The History of Oil	3
HIST:1261	American History to 1877	3
HIST:1262	American History 1877-Present	3
HIST:1401	The West and the World: Ancient	3
HIST:1402	The West and the World: Medieval	3
HIST:1403	The West and the World: Modern	3
HIST:1601/ ASIA:1601	Civilizations of Asia: China From Origins to the 17th Century	3
HIST:1602/ ASIA:1602	Civilizations of Asia: China from the 17th Century to the Present	3
HIST:1604/ ASIA:1604	Civilizations of Asia: Japan	3-4
HIST:1606/ ASIA:1606/ RELS:1606	Civilizations of Asia: South Asia	3-4
HIST:1607/ ASIA:1607	Civilizations of Asia: Korea	3-4
HIST:2133	Science, Technology, and Society in the Modern World	3

HIST:2461/ CLSA:2461/ RELS:2361	Middle East and Mediterranean: Alexander to Suleiman	3
ITAL:2550	Images of Modern Italy	3-4
JMC:1200	Introduction to Media and Culture	3
MUS:1303	Roots, Rock, and Rap: A History of Popular Music	3
MUS:2301	History of Western Music I	3
MUS:2302	History of Western Music II	3
PHIL:1033	The Meaning of Life	3
PHIL:1034	Liberty and the Pursuit of Happiness	3
RELS:1001/ CLSA:1001/ JSTU:1001	Judaism, Christianity, and Islam	3
RELS:1225/ HIST:1025	Medieval Religion and Culture	3
RELS:1250/ HIST:1050	Modern Religion and Culture	3
RELS:2930/ COMM:2079	Digital Media and Religion	3
RUSS:1531	Slavic Folklore	3
RUSS:1532	Traces of Ancient Russian Culture (IX-XVII Centuries): Vikings, Mongols, and Tsars	3
RUSS:2110	Russian Sports: Politics, Scandal, Glory	3
THTR:1400	Theatre and Society: Ancients and Moderns	3
THTR:1401	Theatre and Society: Romantics and Rebels	3
THTR:2410	History of Theatre and Drama I	3
THTR:2411	History of Theatre and Drama II	3
UICB:2190/ ENGL:2901/ HIST:2190	The Book in Global History	3

### International and Global Issues

Courses in the International and Global Issues area focus predominantly on countries or issues outside the United States, encouraging students to understand contemporary issues from an international perspective. Students develop knowledge of one or more contemporary global or international issues, gain a greater awareness of varied international perspectives, and improve their skills of analysis and critical inquiry.

All students must complete at least 3 s.h. of coursework in the International and Global Issues area. The following courses are approved for the area.

Course #	Title	Hours
ANTH:1046/ GWSS:1046/ SEES:1046/ SJUS:1046	Environmental Politics in India	3
ANTH:2100	Anthropology and Contemporary World Problems	3
ARTH:1040	Arts of Africa	3

CPH:2200	Climageddon: Understanding Climate Change and Associated Impacts on Health	3	RUSS:2050/ WLLC:2050	Women From an Unknown Land: The Fight for Independence	3
FREN:1006	Global Sports and National Cultures	3	SEES:1070	Contemporary Environmental Issues	3
FREN:1510	Cultural Misunderstandings: France and U.S.A.	3	SEES:1090	Globalization and Geographic Diversity	3
GHS:2000/ ANTH:2103	Introduction to Global Health Studies	3	SEES:2910	The Global Economy	3
GRMN:2720/ HIST:2420	Germany in the World	3-4	SPST:2170	Sport and Globalization	3
GRMN:2949/ WLLC:2949	Accountability, War Crimes, and Justice	3	URP:2056/ PBAF:2056	Cities Across the World	3
HIST:1016	The History That Made Our World	3	<b>Literary, Visual, and Performing Arts</b>		
HIST:1403	The West and the World: Modern	3	Courses in the Literary, Visual, and Performing Arts area provide students with opportunities to appreciate the arts and to analyze them within their historical and theoretical contexts. They also help students develop the analytic, expressive, and imaginative abilities necessary for understanding, appreciating, and creating art.		
HIST:1602/ ASIA:1602	Civilizations of Asia: China from the 17th Century to the Present	3	All students must complete at least 3 s.h. of coursework in the Literary, Visual, and Performing Arts area. The following courses are approved for the area.		
HIST:1604/ ASIA:1604	Civilizations of Asia: Japan	3-4	<b>Course #</b>	<b>Title</b>	<b>Hours</b>
HIST:1606/ ASIA:1606/ RELS:1606	Civilizations of Asia: South Asia	3-4	AFAM:1240/ MUS:1740	The Art of Listening to Jazz	3
HIST:1607/ ASIA:1607	Civilizations of Asia: Korea	3-4	ARTH:1010	Art and Visual Culture	3
IS:2000	Introduction to International Studies	3	ARTH:1020	Masterpieces: Art in Historical and Cultural Perspectives	3
IS:2400	Global Citizenship and the College Student	3	ARTH:1030	Themes in Global Art	3
IS:2560/JSTU:2560	Food and Identity in the Modern World: The Secular and Sacred	3	ARTH:1040	Arts of Africa	3
ITAL:2770	The Mafia and the Movies	3	ARTH:1050	From Cave Paintings to Cathedrals: Survey of Western Art I	3
JMC:1700	Introduction to Global Media	3	ARTH:1060	From Mona Lisa to Modernism: Survey of Western Art II	3
LING:1040/ ANTH:1040	Language Rights	3	ARTH:1070	Asian Art and Culture	3
LING:1090	Language and Globalization	3	ARTH:1095/ NAIS:1095	Native American Art	3
MUS:1310	World Music	3	ARTS:1010	Elements of Art	3
POLI:1400	Introduction to Comparative Politics	3	ARTS:1030	Elements of Jewelry and Metal Arts	3
POLI:1401	Introduction to Russian Politics	3	ARTS:1050	Elements of Printmaking	3
POLI:1449	Introduction to European Politics	3	ARTS:1080	Elements of Sculpture	3
POLI:1500	Introduction to International Relations	3	CERM:2010	Ceramics I: Handbuilding	3
POLI:1501	Introduction to American Foreign Policy	3	CHIN:1702/ WLLC:1702	Chinese Popular Culture	3
POLI:1510	International Politics of Environmental Issues	3	CINE:1100	The Art of Smartphone Filmmaking	3
POLI:2415/ LAS:2415	Latin American Politics	3	CINE:1300	Foundations of Screenwriting	3
POLI:2500	Politics of Natural Disasters	3	CINE:1602	Introduction to Film Studies	3
RELS:1130/ HIST:1030	Introduction to Islamic Civilization	3	CINE:1610	Contemporary Cinema	3
RELS:2852/ GWSS:2052	Women in Islam and the Middle East	3	CINE:2626	History of Animation	3
RELS:2955/IS:2955	Human Rights and Islam	3	CLSA:1010	Hero, God, Mortal: Literature of Greece	3
RUSS:1132	Russia Today	3	CLSA:1016	Classical Mythology	3
			CLSA:1020	Love and Glory: The Literature of Rome	3



ASIA:2450/ MUS:2450	India Beat: The Aesthetics and Politics of India Today	3	RELS:1810	Happiness in a Difficult World	3
CHIN:1504/ WLLC:1504	China Beyond Walls	3	RELS:1903	Quest for Human Destiny	3
CHIN:1800/ WLLC:1800	Chinese Calligraphy and Culture	3	RELS:2986/ CLSA:2986	Religion and Women	3
CLSA:1016	Classical Mythology	3	RHET:2070/ COMM:2073	Persuasive Stories	3
CLSA:1875	Ancient Sports and Leisure	3	RUSS:1082	Youth Subcultures After Socialism	3
CLSA:2300	Magic in the Ancient World	3	RUSS:1131/ WLLC:1131	Introduction to Russian Culture	3
CLSA:2482/ RELS:2182	Ancient Mediterranean Religions	3	RUSS:1531	Slavic Folklore	3
CLSA:2651/ GWSS:2651	Gender and Sexuality in the Ancient World	3	RUSS:1532	Traces of Ancient Russian Culture (IX-XVII Centuries): Vikings, Mongols, and Tsars	3
COMM:1174	Media and Society	3	RUSS:2100	Russian Mindset	3
DANC:1150/ LAS:1150	Brazilian Culture and Carnival	3	SMC:1050/JMC:1050	Sport and the Media	3
EPLS:4020	Being in Civic Dialogues	3	SOC:1310/ GWSS:1310	Gender and Society	3
EPLS:4180	Human Relations for the Classroom Teacher	3	SOC:2710	The American Family	3
GHS:2100/ GWSS:2100	Foundations of Health Humanities	3	SOC:2810	Social Inequality	3
GRMN:1300	The Tree as Cultural Signifier and Global Storyteller	3	SPAN:2901	Diversity and Cultures in Spain	3
GRMN:2618/ WLLC:2618	Film and Literature of the Holocaust	3	SRM:1049	Foundations for Sport and Physical Activity: Catalyst for Sustainable Communities	3
GWSS:1060/ AMST:1060/ ENGL:1410	Sex and Popular Culture in America	3	SRM:1070	Recreation and Parks in the United States: Foundations and Impact	3
HIST:1708	Civilizations of Africa	3	SSW:1022/ SOC:1022	Social Justice and Social Welfare in the United States	3
ITAL:2550	Images of Modern Italy	3	THTR:1411	Comedy and Society	3
ITAL:2880	Italian Food Culture	3	THTR:1412/ DANC:1412	The Arts in Performance	3
JMC:1500	Introduction to Social Media	3	TR:1070	Leisure, Play, and the Human Experience	3
JMC:1800	Environmental Communication	3			
JPNS:1506	Ghostly Japan	3			
LATS:1700/ SPAN:1700	Latina/o/x Literature in the United States	3			
LING:2900	Language and Gender	3			
MUS:1009	Jazz Cultures in America and Abroad	3			
MUS:1720	History of Jazz	3			
MUS:2311/ LAS:2311	Music of Latin America and the Caribbean	3			
PHIL:1401	Matters of Life and Death	3			
PHIL:1861	Introduction to Philosophy	3			
PHIL:2402	Introduction to Ethics	3			
POLI:1300	Introduction to Political Thought and Action	3			
RELS:1070/ CLSA:1070	Introduction to the Hebrew Bible/Old Testament	3			
RELS:1080/ CLSA:1080	Introduction to the New Testament	3			
RELS:1350/ AFAM:1250	Introduction to African American Religions	3			
RELS:1404/ ASIA:1040/ HIST:1610	Introduction to Asian Religions	3			
RELS:1506/ ASIA:1060/ HIST:1612	Introduction to Buddhism	3			
RELS:1702	Religion in America Today	3			