

# Microbiology, B.S.

## 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 below are for students who entered the University of Iowa during summer 2023 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:

- Diversity and Inclusion [p. 1]: a minimum of 3 s.h.
- Interpretation of Literature [p. 2]: a minimum of 3 s.h.
- Rhetoric [p. 3]: a minimum of 4 s.h.
- World Languages [p. 3]: required credit varies by language (see "World Languages" below)

### Sustainability:

Students complete this requirement by choosing an approved GE CLAS Core course that integrates Sustainability [p. 6] (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 [p. 6]: a minimum of 7 s.h.; must include one lab
- Quantitative or Formal Reasoning [p. 7]: a minimum of 3 s.h.
- Social Sciences [p. 8]: a minimum of 3 s.h.

### Culture, Society, and the Arts:

- Historical Perspectives [p. 9]: a minimum of 3 s.h.
- International and Global Issues [p. 10]: a minimum of 3 s.h.
- Literary, Visual, and Performing Arts [p. 10]: a minimum of 3 s.h.
- Values and Culture [p. 11]: 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 use of transfer credit, credit by exam, and other policies for how GE CLAS Core requirements may be fulfilled.

## Communication and Literacy

### Diversity and Inclusion

Courses in the Diversity and Inclusion area help to develop students' recognition of their positions in an increasingly pluralistic world while fostering an understanding of social and cultural differences. Students reflect critically on their own social and cultural perspectives while increasing their ability to engage with people who have backgrounds or ideas different from their own. Students also explore the historical and structural bases of inequality and the benefits and challenges of diversity.

Transfer credit is not accepted for the Diversity and Inclusion requirement; students must complete this requirement with coursework taken at the University of Iowa.

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

Code	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:2064/ SOC:2064	African American Families: Urban and Suburban	3
AFAM:2070/ COMM:2069	Black Television Culture	3
AFAM:2500	Black Culture and Experience: Contemporary Issues	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
ASIA:2222/ GWSS:2222/ WLLC:2222	Women in Premodern East Asian Literature	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	Ancient Origins of Religious Conflict	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	PHIL:2425	Sex, Marriage, Friendship, and the Law (GE status effective fall 2022; students with a first degree-seeking session of summer 2017 and beyond may use this course for the Diversity and Inclusion GE requirement)	3
COMM:1898/ LATS:1898	Introduction to Latina/o/x Communication and Culture	3			
DANC:2065	Performing Power/ Performing Protest: The Body, Identity, and the Image	3			
DANC:2085	Introduction to African Caribbean Dance Practices	3	POLI:1601	Introduction to Social Media and Politics	3
DST:1101	Introduction to Disability Studies	3	POLI:1800	Introduction to the Politics of Class and Inequality	3
EDTL:2670	Peacebuilding, Singing, and Writing in a Prison Choir	3	POLI:1900	Introduction to the Politics of Race	3
EDTL:4900	Foundations of Special Education	3	POLI:1950	Introduction to the Politics of Religion	3
EPLS:1240	Finding Your Path in Higher Education	3	PSY:1501	Everyone's a Little Bit Biased: The Science Behind Prejudice	3
GRMN:2600	Witch Hunts in Fact and Fiction: A Global History of Exclusion	3-4	RELS:1015	Global Religious Conflict and Diversity	3
GRMN:2620/ WLLC:2620	Anne Frank and Her Story	3-4	RELS:2000	Engaging Religious Diversity for Leadership and Entrepreneurship (GE status effective fall 2022)	3
GRMN:2675	The Politics of Memory: Holocaust, Genocide, and 9/11	3-4	RELS:2330	Wealth, Inequality, and Islam	3
GWSS:1001	Introduction to Gender, Women's, and Sexuality Studies	3	RHET:2135/ SJUS:2135	Rhetorics of Diversity and Inclusion	3
GWSS:1002	Diversity and Power in the U.S.	3	SJUS:1001/ GWSS:1003	Introduction to Social Justice	3
HHP:1045	Diversity and Inclusion in Healthy Living	3	SOC:1030	Contemporary Social Problems	3-4
HHP:2280	Cultural Competency and Health	3	SOC:2830	Race and Ethnicity	3
HIST:1040	Diversity in History	3	SPAN:2050	Spanish in the United States	3
HIST:2267/ AFAM:2267	African American History to 1877: From Slave Cabin to Senate Floor	3	SPST:1074/ AMST:1074/ GWSS:1074	Inequality in American Sport	3
HIST:2268/ AFAM:2268	African American History Since the Civil War	3	THTR:2320	Playwriting in a Global World	3
IS:2020	World Events Today!	3	THTR:2405	Staging Americans: U.S. Cultures Through Theatre and Performance	3
ITAL:2660	The Italian American Experience	3	THTR:2605/ EDTL:2963	Monsters, Victims, and Villains: Changing Perceptions	3
JMC:2500	Community Media	3	TRNS:2000	Translation and Global Society	3
JMC:2600	Freedom of Expression	3	WLLC:1200/ DST:1200/ GHS:1200/ GRMN:1200	Disabilities and Inclusion in Writing and Film Around the World	3
LATS:2280/ HIST:2280	Introduction to Latina/o/x Studies	3	WLLC:2001/ ASIA:2001/ FREN:2010/ RUSS:2001/ TRNS:2001	Global Science Fiction	3
LING:1070	Language Attitudes: Is How You Sound How You Are Seen?	3	WRIT:2100	Writing and Community Outreach	3
MATH:1210	Diverse Perspectives in the Mathematical Sciences	3			
NAIS:1290/ AMST:1290/ GHS:1290/ HIST:1290	Native American Foods and Foodways (GE status effective fall 2022; students with a first degree-seeking session of summer 2017 and beyond may use this course for the Diversity and Inclusion GE requirement)	3			

## Interpretation of Literature

Courses in the Interpretation of 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 Interpretation of Literature area. The following courses are approved for the area.

Code	Title	Hours
CLSA:1200	Interpretation of Ancient Literature	3
ENGL:1200	The Interpretation of Literature	3
FREN:1005	Texts and Contexts: French-Speaking World	3
FREN:1007	Nature/Ecology French Philosophy and Fiction	3
WLLC:1510/ ASIA:1510	Ghost Stories and Tales of the Weird in Premodern Chinese Literature	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 (4-5 s.h.). 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.

Students who have transfer credit in composition, speech, and argumentation but have not been granted an AA degree must complete the equivalent of RHET:1030 Rhetoric and often must take RHET:1040 Writing and Reading or RHET:1060 Speaking and Reading in addition to their transfer courses in composition and/or speech.

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.

Code	Title	Hours
RHET:1030	Rhetoric	4-5
RHET:1040	Writing and Reading	3
RHET:1060	Speaking 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 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;
- transfer students who have completed only composition I must complete RHET:1030 Rhetoric at the University of Iowa;

- transfer students who have completed composition I and speech must complete RHET:1040 Writing and Reading at the University of Iowa;
- transfer students who have completed only speech must complete RHET:1040 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 Speaking 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, the University of Iowa Office of Admissions examines the content of the course and decides on equivalency based on the content of that course, conferring with the Department of Rhetoric on the correct equivalency, if necessary.

## World Languages

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 as a whole 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 options:

- 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 Office of 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, 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 complete the GE World Language requirement by taking two or three courses. See "World Languages Placement Tests" under Placement Tests on the College of Liberal Arts and Sciences website.

Semester hours earned for these courses vary by language. 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. To avoid duplication or regression, consult the appropriate language department before registering for courses.

### American Sign Language

Courses in American Sign Language (ASL) are offered by the American Sign Language Program. The following sequence fulfills the GE CLAS Core World Languages requirement.

Code	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 ASL program for placement.

### Arabic

Courses in Arabic are offered by the Department of French and Italian. The following sequence fulfills the GE CLAS Core World Languages requirement.

Code	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.

### Chinese

Courses in Chinese are offered by the Department of Asian and Slavic Languages and Literatures. For students without previous knowledge of Chinese, the department recommends the following sequence to fulfill the GE CLAS Core World Languages requirement.

Code	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 fulfill the requirement by substituting CHIN:2103 Accelerated Second-Year Chinese: First Semester and CHIN:2104 Accelerated Second-Year

Chinese: Second Semester for CHIN:2101 and CHIN:2102. Consult the department for more information.

### French

Courses in French are offered by the Department of French and Italian. For students without previous knowledge of French, the department recommends the following sequence to fulfill the GE CLAS Core World Languages requirement.

Code	Title	Hours
FREN:1001	Elementary French I	5
FREN:1002	Elementary French II	5
FREN:2001	Intermediate French I	5
FREN:2002	Intermediate French II	5

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 fulfill the requirement by substituting FREN:1010 First-Year French Review for FREN:1001 and FREN:1002 in the sequence above. 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 German. For students without previous knowledge of German, the department recommends the following sequence to fulfill the GE CLAS Core World Languages requirement.

Code	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

Students may use varied combinations of German language courses approved to fulfill the GE CLAS Core World Languages requirement. Those with previous knowledge of German may be able to fulfill the requirement by substituting GRMN:1010 First-Year German Review for GRMN:1001 and GRMN:1002 in the sequence above. Some students may be evaluated as ready for GRMN:2001 or GRMN:2002. Consult the department for appropriate placement.

The department also offers GRMN:2020 Intensive Intermediate German, which may be appropriate for students with strong language learning abilities or experience. The intensive course may be combined with other courses to create other sequences that may be used to fulfill the GE CLAS Core World Languages requirement. Consult the department to identify an appropriate course sequence.

### Greek

Courses in Greek are offered by the Department of Classics. Students without previous knowledge of Greek should fulfill the GE CLAS Core World Languages requirement with the following sequence.

Code	Title	Hours
CLSG:1001	Classical and New Testament Greek I	5
CLSG:1002	Classical and New Testament Greek II	5
CLSG:2001	Second-Year Greek I	3
CLSG:2002	Second-Year Greek II	3



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

## Italian

Courses in Italian are offered by the Department of French and Italian. Students without previous knowledge of Italian should fulfill the GE CLAS Core World Languages requirement with the following sequence.

Code	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 another Romance language may be able to complete the requirement by substituting ITAL:1103 Intensive Elementary Italian for ITAL:1101 and ITAL:1102 in the sequence above. Consult the department for appropriate placement.

## Japanese

Courses in Japanese are offered by the Department of Asian and Slavic Languages and Literatures. For students without previous knowledge of Japanese, the department recommends the following sequence to fulfill the GE CLAS Core World Languages requirement.

Code	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 may use varied combinations of Japanese language courses approved to fulfill the GE CLAS Core World Languages requirement. Those with previous knowledge of Japanese should consult the department for appropriate placement.

## Korean

Courses in Korean are offered by the Department of Asian and Slavic Languages and Literatures. For students without previous knowledge of Korean, the department recommends the following sequence to fulfill the GE CLAS Core World Languages requirement.

Code	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. Students without previous knowledge of Latin should fulfill the GE CLAS Core World Languages requirement with the

following sequence. Students must take both CLSL:2001 and CLSL:2002 in order to fulfill 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 since the final course is more difficult than the previous ones. This is not true with the Latin sequence, and thus, both courses must be successfully completed.

Code	Title	Hours
CLSL:1001	Elementary Latin I	5
CLSL:1002	Elementary Latin II	5
CLSL:2001	World of Cicero	3
CLSL:2002	Golden Age of Roman Poetry	3

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 fulfill the GE CLAS Core World Languages requirement. All courses are open to entering first-year students.

Code	Title	Hours
PORT:2000	Accelerated Elementary Portuguese	5
PORT:2500	Accelerated Intermediate Portuguese	5

Students may also substitute PORT:2010 Elementary Portuguese I and PORT:2015 Elementary Portuguese II for PORT:2000 in the sequence above.

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

## Russian

Courses in Russian are offered by the Department of Asian and Slavic Languages and Literatures. Students without previous knowledge of Russian should fulfill the GE CLAS Core World Languages requirement with the following sequence.

Code	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. For students without previous knowledge of Spanish, the department recommends the following sequence to fulfill the GE CLAS Core World Languages requirement.

Code	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 fulfill the requirement by substituting SPAN:1003 Elementary Spanish Review for SPAN:1001 and SPAN:1002 in the sequence above.

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

The accelerated course SPAN:1505 Intermediate Spanish for Heritage Speakers 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 French and Italian. The following sequence fulfills the GE CLAS Core World Languages requirement. Each of these courses is open to entering first-year students.

Code	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.

## 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 Graduation Analysis 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

Code	Title	Hours
EES:1080/ ENVS:1080	Introduction to Environmental Science	3-4
EES:1085/ ENVS:1085	Fundamentals of Environmental Science	4
EES:1400	Natural Disasters	3
GEOG:1020	The Global Environment	3
GEOG:1030	Our Digital Earth	3

## Sustainability and Social Sciences

Code	Title	Hours
ANTH:2261	Human Impacts on the Environment	3
GEOG:2013/ BUS:2013/ SUST: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

Code	Title	Hours
EES:1115/ ENVS:1115/ GEOG:1115/ HIST:1115	The History of Oil	3

## Sustainability and International and Global Issues

Code	Title	Hours
GEOG:1070	Contemporary Environmental Issues	3
POLI:1510	International Politics of Environmental Issues	3
SPST:2170	Sport and Globalization	3

## Sustainability and Literary, Visual, and Performing Arts

Code	Title	Hours
TDSN:2210	Introduction to 3D Design	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)."

Code	Title	Hours
ANTH:1301	Human Origins	3
ASTR:1060/ BIOL:1060/ EES: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	EES:1085/ ENVS:1085	Fundamentals of Environmental Science (lab; not for students who have taken EES:1080 or ENVS:1080)	4
ASTR:1085	Citizen Astronomy	3	EES:1290	Energy and the Environment	3
ASTR:1771	Fundamental Astronomy I: The Solar System and Exoplanets (lab)	4	EES:1400	Natural Disasters	3
ASTR:1772	Fundamental Astronomy II: Evolution of Stars, Galaxies, and the Universe (lab)	4	GEOG:1020	The Global Environment	3
BIOL:1140	Human Biology: Nonmajors (lab)	4	GEOG:1021	The Global Environment Lab (lab only)	1
BIOL:1141	Human Biology: Health Professions (lab)	4	HHP:1100	Human Anatomy	3
BIOL:1251	How the Brain Works (and Why it Doesn't)	3-4	HHP:1110	Human Anatomy Laboratory (lab only)	1
BIOL:1260	Plants and Human Affairs	2-3	HHP:1300	Fundamentals of Human Physiology	3
BIOL:1261	Introduction to Botany (lab)	4	HHP:1400	Human Anatomy and Physiology	3
BIOL:1370	Understanding Evolution (formerly Ecology and Evolution)	3	HHP:2310	Nutrition and Health	3
BIOL:1411	Foundations of Biology (lab)	4	PCOL:2220	Drug Use and Abuse	3
BIOL:1412	Diversity of Form and Function (lab)	4	PHYS:1200	Physics of Everyday Experience	3
BIOL:2120	Good Genes Gone Bad: Genetic Disorders of Notable Celebrities	3	PHYS:1400	Basic Physics (with lab 4 s.h.; without lab 3 s.h.)	3-4
CHEM:1050	Chemistry of Our World	3	PHYS:1409	Basic Physics Lab (lab only)	1
CHEM:1060	Technology and Society Laboratory (lab only)	1	PHYS:1410	Physics of Sound (with lab 4 s.h.; without lab 3 s.h.)	3-4
CHEM:1070	General Chemistry I	3	PHYS:1511	College Physics I (lab)	4
CHEM:1080	General Chemistry II	3	PHYS:1512	College Physics II (lab)	4
CHEM:1100	Chemistry in Industry and the Economy	3	PHYS:1611	Introductory Physics I (lab)	4
CHEM:1110	Principles of Chemistry I (lab)	4	PHYS:1612	Introductory Physics II (lab)	4
CHEM:1120	Principles of Chemistry II (lab)	4	PHYS:1619	Introductory Physics II Lab (lab only)	1
CHEM:1160	Principles of Chemistry Lab (lab only)	2	PHYS:1701	Physics I (lab)	4
EES:1030/CEE:1030	Introduction to Earth Science (with lab 4 s.h.; without lab 3 s.h.)	3-4	PHYS:1702	Physics II (lab)	4
EES:1031/CEE:1031	Introduction to Earth Science Laboratory (lab only; students must have previously completed EES:1030/CEE:1030 without the lab)	1	<b>Quantitative or Formal Reasoning</b>		
EES:1040	Evolution and the History of Life (with lab 4 s.h.; without lab 3 s.h.)	3-4	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.		
EES:1050	Introduction to Geology (lab)	4	All students must complete at least 3 s.h. of coursework in the Quantitative or Formal Reasoning area. Students also may 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.		
EES:1070	Age of Dinosaurs (lab)	4	<b>Code</b>	<b>Title</b>	<b>Hours</b>
EES:1080/ ENVS:1080	Introduction to Environmental Science (with lab 4 s.h.; without lab 3 s.h.; not for students who have taken EES:1085 or ENVS:1085)	3-4	COMM:1117	Advocacy and Argument	3
EES:1081/ ENVS:1081	Introduction to Environmental Sciences Laboratory (lab only)	1	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
			CS:1210	Computer Science I: Fundamentals	4
			GEOG:1030	Our Digital Earth	3

LING:1050	Language and Formal Reasoning	3
MATH:1020	Elementary Functions	4
MATH:1120	Logic of Arithmetic	4
MATH:1250	Mathematics for Arts and Humanities	3
MATH:1260	PokeMath: The Mathematics of Pokemon Go	3
MATH:1340	Mathematics for Business	4
MATH:1350	Quantitative Reasoning for Business	4
MATH:1380	Calculus and Matrix Algebra for Business	4
MATH:1440	Mathematics for the Biological Sciences	4
MATH:1460	Calculus for the Biological Sciences	4
MATH:1550	Engineering Mathematics I: Single Variable Calculus	4
MATH:1850	Calculus I	4
PHIL:1636	Principles of Reasoning: Argument and Debate	3
POLI:1050/ RELS:1050	Big Ideas: Introduction to Information, Society, and Culture	3
POLI:1700	Introduction to Political Analysis	3
PSY:2811	Research Methods and Data Analysis in Psychology I	3
STAT:1010	Statistics and Society	3
STAT:1015/ DATA:1015	Introduction to Data Science	3
STAT:1020/ PSQF:1020	Elementary Statistics and Inference	3
STAT:1030	Statistics for Business	4
STAT:2010	Statistical Methods and Computing	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.

Code	Title	Hours
ANTH:1101/IS:1101	Cultural Anthropology	3
ANTH:1401	Language, Culture, and Communication	3
ANTH:2100	Anthropology and Contemporary World Problems	3
ANTH:2136	Race, Place, and Power: Urban Anthropology	3
ANTH:2261	Human Impacts on the Environment	3

ASP:1800/ CSD:1800/ NURS:1800/ SSW:1800/TR:1800	Aging Matters: Introduction to Gerontology	3
COMM:1170	Communication Theory in Everyday Life	3
COMM:1174	Media and Society	3
CPH:1400	Fundamentals of Public Health	3
CRIM:1410	Introduction to Criminology	3
CSD:3117/ LING:3117	Psychology of Language	3
CSD:3118/ LING:3118	Language Acquisition	1-3
ECON:1100	Principles of Microeconomics	4
ECON:1200	Principles of Macroeconomics	4
EDTL:2630	Introduction to the Psychology of Music	3
GEOG:1090	Globalization and Geographic Diversity	3
GEOG:2013/ BUS:2013/ SUST:2013/ URP:2013	Introduction to Sustainability (GE status effective summer 2022; students with a first degree-seeking session of summer 2011 and beyond may use this course for the Social Sciences GE requirement)	3
GEOG:2110/ GHS:2110	Eight Billion and Counting: Introduction to Population Dynamics	3
GEOG:2910	The Global Economy	3
JMC:1100	Introduction to Media Effects	3
LING:1010	Language and Society	3
LING:1060	Languages of the World	3
MUSM:3001/ ANTH:3001/ EDTL:3001/ SIED:3001	Introduction to Museum Studies	3
POLI:1100	Introduction to American Politics	3
POLI:1200	Introduction to Political Behavior	3
POLI:1300	Introduction to Political Thought and Action	3
POLI:1400	Introduction to Comparative Politics	3
POLI:1401	Introduction to Russian Politics	3
POLI:1445	Introduction to Asian Politics: China	3
POLI:1449	Introduction to European Politics	3
POLI:1500	Introduction to International Relations	3
POLI:1501	Introduction to American Foreign Policy	3
POLI:1600	Introduction to Political Communication	3
POLI:2415/ LAS:2415	Latin American Politics	3



PSQF:2115	Introduction to Counseling Psychology	3	HIST:1262	American History 1877-Present	3
PSY:1001	Elementary Psychology	3	HIST:1401	The West and the World: Ancient	3
PSY:2301	Introduction to Clinical Psychology	3	HIST:1402	The West and the World: Medieval	3
PSY:2401	Introduction to Developmental Science	3	HIST:1403	The West and the World: Modern	3
PSY:2601	Introduction to Cognitive Psychology	3	HIST:1601/ ASIA:1601	Civilizations of Asia: China from Origins to the 17th Century	3
SOC:1010	Introduction to Sociology	3-4	HIST:1602/ ASIA:1602	Civilizations of Asia: China from the 17th Century to the Present	3
SOC:1040	Energy, Sustainability, and Society	3	HIST:1604/ ASIA:1604	Civilizations of Asia: Japan	3-4
SOC:1220	Principles of Social Psychology	3-4	HIST:1606/ ASIA:1606/ RELS:1606	Civilizations of Asia: South Asia	3-4
TR:1070	Perspectives on Leisure and Play	3	HIST:1607/ ASIA:1607	Civilizations of Asia: Korea	3-4
URP:2020/ PBAF:2020	Environment and Society: Sustainability, Policy, and Politics	3	HIST:2461/ CLSA:2461/ RELS:2361	Middle East and Mediterranean: Alexander to Suleiman	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.

Code	Title	Hours			
ANTH:1201	World Archaeology	3	HONR:1610	Honors Seminar in Historical Perspectives	3
ARTH:1010	Art and Visual Culture	3	ITAL:2550	Images of Modern Italy	3-4
ARTH:1050	From Cave Paintings to Cathedrals: Survey of Western Art I	3	JMC:1200	Introduction to Media and Culture	3
ARTH:1060	From Mona Lisa to Modernism: Survey of Western Art II	3	JPNS:2127/ ASIA:2127/ CLSA:2127	Global Manuscript Cultures	3
ARTH:1070	Asian Art and Culture	3	MUS:1303	Roots, Rock, and Rap: A History of Popular Music	3
ARTH:1090	Earthly Paradises: A Global History of Gardens	3	MUS:2301	History of Western Music I	3
ARTH:2320/ CLSA:2226	Ancient Art from the Great Pyramids of Egypt to the Colosseum in Rome	3	MUS:2302	History of Western Music II	3
ARTH:2920	Introduction to American Art	3	PHIL:1033	The Meaning of Life	3
CLSA:1181/ GHS:1181	Ancient Medicine	3	PHIL:1034	Liberty and the Pursuit of Happiness	3
CLSA:1830	Greek Civilization	3	RELS:1001	Judaism, Christianity, and Islam	3
CLSA:1840	Roman Civilization	3	RELS:1225/ HIST:1025	Medieval Religion and Culture	3
EES:1115/ ENVS:1115/ GEOG:1115/ HIST:1115	The History of Oil	3	RELS:1250/ HIST:1050	Modern Religion and Culture	3
FREN:3120	French Civilization	3	RELS:2930/ COMM:2079	Digital Media and Religion	3
HIST:1010	History Matters	3	RUSS:1531	Slavic Folklore	3
HIST:1016	The History That Made Our World	3	RUSS:1532	Traces of Ancient Russian Culture (IX-XVII Centuries): Vikings, Mongols, and Tsars	3
HIST:1101	The Modern World	3	THTR:1400	Theatre and Society: Ancients and Moderns	3
HIST:1261	American History to 1877	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
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## 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.

Code	Title	Hours
ANTH:1046/ GEOG:1046/ GWSS:1046/ SJUS:1046	Environmental Politics in India	3
ANTH:2100	Anthropology and Contemporary World Problems	3
ANTH:2136	Race, Place, and Power: Urban Anthropology	3
ARTH:1040	Arts of Africa	3
FREN:1006	Global Sports and National Cultures	3
FREN:1510	Cultural Misunderstandings: France and U.S.A.	3
GEOG:1060	Geography of Asia: From Japan to Pakistan	3
GEOG:1070	Contemporary Environmental Issues	3
GEOG:1090	Globalization and Geographic Diversity	3
GEOG:2910	The Global Economy	3
GHS:2000/ ANTH:2103	Introduction to Global Health Studies	3
GRMN:2720/ HIST:2420	Germany in the World	3-4
HIST:1016	The History That Made Our World	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
IS:2000	Introduction to International Studies	3
IS:2560	Global Food Migrations	3

ITAL:2770	The Mafia and the Movies	3
LING:1040/ ANTH:1040	Language Rights	3
POLI:1400	Introduction to Comparative Politics	3
POLI:1401	Introduction to Russian Politics	3
POLI:1445	Introduction to Asian Politics: China	3
POLI:1449	Introduction to European Politics	3
POLI:1500	Introduction to International Relations	3
POLI:1501	Introduction to American Foreign Policy	3
POLI:1510	International Politics of Environmental Issues	3
POLI:2415/ LAS:2415	Latin American Politics	3
RELS:1130/ HIST:1030	Introduction to Islamic Civilization	3
RELS:2852/ GWSS:2052	Women in Islam and the Middle East	3
RUSS:1132	Russia Today	3
RELS:2955/IS:2955	Human Rights and Islam	3
RUSS:2050/ WLLC:2050	Women from an Unknown Land: The Fight for Independence	3
SPST:2170	Sport and Globalization	3

## Literary, Visual, and Performing Arts

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.

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.

Code	Title	Hours
AFAM:1240/ MUS:1740	The Art of Listening to Jazz	3
AMST:1800	American Gothic: Film, Literature, and Popular Culture	3
ARTH:1010	Art and Visual Culture	3
ARTH:1020	Masterpieces: Art in Historical and Cultural Perspectives	3
ARTH:1030	Themes in Global Art	3
ARTH:1040	Arts of Africa	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:1095/ NAIS:1095	Native American Art	3

ARTH:2920	Introduction to American Art	3	MUS:1012	Creativity in Music	3
ARTS:1010	Elements of Art	3	MUS:1020	Performance Instruction for Nonmajors	1
ARTS:1030	Elements of Jewelry and Metal Arts	3	MUS:1066	Introduction to Film Music	3
ARTS:1050	Elements of Printmaking	3	MUS:1301	Concepts and Contexts of Western Music	3
ARTS:1080	Elements of Sculpture	3	MUS:1302	Great Musicians	3
CERM:2010	Ceramics I: Handbuilding	3	MUS:1310	World Music	3
CHIN:1702	Chinese Popular Culture	3	MUS:1720	History of Jazz	3
CINE:1100	The Art of Smartphone Filmmaking	3	MUS:1800	World of the Beatles	3
CINE:1602	Introduction to Film Studies	3	MUS:2005	Issues in Popular Music: Women Who Rock	3
CINE:1610	Contemporary Cinema	3	MUS:2301	History of Western Music I	3
CLSA:1010	Hero, God, Mortal: Literature of Greece	3	MUS:2302	History of Western Music II	3
CLSA:1020	Love and Glory: The Literature of Rome	3	MUS:2311/ LAS:2311	Music of Latin America and the Caribbean	3
CLSA:1740/ WRIT:1740	Writing Strategies: Word Origins and Word Choice	3	PORT:2850/ LAS:2850/ SPAN:2850	Brazilian Narrative in Translation	3
CLSA:1809	Ancient World on the Modern Screen	3	SCLP:2810	Undergraduate Sculpture I	3
CLSA:2016	Classical Mythology	3	SPAN:1700/ LATS:1700	Latina/o/x Literature in the United States	3
CNW:1620	Introduction to Creative Nonfiction	3	SPAN:1800	Contemporary Spanish American Narrative	3
CW:1800	Creative Writing Studio Workshop	3	TDSN:2210	Introduction to 3D Design	3
DANC:1010	Beginning Tap	3	THTR:1140	Basic Acting	3
DANC:1020	Beginning Jazz	3	THTR:1400	Theatre and Society: Ancients and Moderns	3
DANC:1025	Beginning Hip Hop Dance	3	THTR:1401	Theatre and Society: Romantics and Rebels	3
DANC:1030	Beginning Ballet	3	THTR:1412/ DANC:1412	The Arts in Performance	3
DANC:1040	Beginning Modern Dance	3	THTR:2301	Playwriting I	3
DANC:1110	Continuing Tap	3	THTR:2410	History of Theatre and Drama I	3
DANC:1120	Continuing Jazz	3	THTR:2411	History of Theatre and Drama II	3
DANC:1125	Continuing Hip Hop Dance	3	TRNS:1240/ CLSA:1040	World Literature in Translation I	3
DANC:1130	Continuing Ballet	3	TRNS:1241	World Literature: 1700 to Present	3
DANC:1140	Continuing Modern Dance	3			
DANC:2020	Intermediate Jazz	3			
DANC:2025	Intermediate Hip Hop Dance	3			
DANC:2029	Intermediate Ballet for Nonmajors	2			
DANC:2060	Dance and Society in Global Contexts	3			
EDTL:2122	Creativity, Imagination, Play, and Human Development through the Arts	3			
ENGL:1100	City of Literature	3			
FREN:4100	French Cinema	3-4			
GRMN:2275	Scandinavian Crime Fiction	3			
GRMN:2630	German Cinema: Greatest Hits	3-4			
GRMN:2666/ WLLC:2666	Pact with the Devil	3			
GRMN:2785	Cyborgs, Monsters, and the Uncanny	3			
HONR:2992	Classic Cult Cinema	3			
ITAL:2440	Italian Arts for International Success	3			
MUS:1001	Group Piano I: Non-Music Majors	1			
MUS:1009	Jazz Cultures in America and Abroad	3			

## Values and Culture

Courses in the Values and Culture area focus on how culture shapes the human experience and the role of values in society, with students asking fundamental questions regarding the human experience while exploring their own values and beliefs.

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

Code	Title	Hours
AMST:1010	Understanding American Cultures	3
AMST:1154	Food in America	3
AMST:2000	Introduction to American Studies	3
ANTH:1101/IS:1101	Cultural Anthropology	3
ARTH:1030	Themes in Global Art	3
ARTH:1045	Race and Art in America	3

ARTH:1095/ NAIS:1095	Native American Art	3	RELS:1130/ HIST:1030	Introduction to Islamic Civilization	3
ARTS:2000/ ASP:2000/ EDTL:2000/ RHET:2000	Big Ideas: Creativity for a Lifetime	3	RELS:1350/ AFAM:1250	Introduction to African American Religions	3
ASIA:2450	India Beat: The Aesthetics and Politics of India Today	3	RELS:1404/ ASIA:1040/ HIST:1610	Introduction to Asian Religions	3
CHIN:1504	Asian Humanities: China	3	RELS:1506/ ASIA:1060/ HIST:1612	Introduction to Buddhism	3
CHIN:1800	Chinese Calligraphy and Culture	3	RELS:1702	Religion in America Today	3
CLSA:1340	Magic in the Ancient World	3	RELS:1810	Happiness in a Difficult World	3
CLSA:1875	Ancient Sports and Leisure	3	RELS:1903	Quest for Human Destiny	3
CLSA:2016	Classical Mythology	3	RELS:2852/ GWSS:2052	Women in Islam and the Middle East	3
CLSA:2482/ RELS:2182	Ancient Mediterranean Religions	3	RELS:2986	Religion and Women	3
CLSA:2651/ GWSS:2651	Gender and Sexuality in the Ancient World	3	RHET:2070	Persuasive Stories	3
COMM:1174	Media and Society	3	RUSS:1082	Youth Subcultures After Socialism	3
DANC:1150/ LAS:1150	Brazilian Culture and Carnival	3	RUSS:1131/ WLLC:1131	Introduction to Russian Culture	3
EPLS:4180	Human Relations for the Classroom Teacher	3	RUSS:1132	Russia Today	3
GRMN:2550/ WLLC:2550	Mardi Gras and More: Cultures of Carnival	3-4	RUSS:1531	Slavic Folklore	3
GRMN:2618/ WLLC:2618	Film and Literature of the Holocaust	3	RUSS:1532	Traces of Ancient Russian Culture (IX-XVII Centuries): Vikings, Mongols, and Tsars	3
GWSS:1060/ AMST:1060/ ENGL:1410	Sex and Popular Culture in America	3	RUSS:2100	Russian Mindset: Sex, Business, and Politics	3
HHP:2200	Physical Activity and Health	3	SOAS:1502/ ASIA:1502/ RELS:1502	Asian Humanities: India	3
HIST:1609/ ASIA:1609	India Now! Surveying the World's Largest Democracy	3-4	SOC:1310/ GWSS:1310	Gender and Society	3
HIST:1708	Civilizations of Africa	3	SOC:2710	The American Family	3
HONR:1670	Values and Culture	3	SOC:2810	Social Inequality	3
ITAL:2550	Images of Modern Italy	3	SPAN:2901	Diversity and Cultures in Spain	3
ITAL:2880	Italian Food Culture	3	SRM:1070	Recreation and Parks in the United States: Foundations and Impact	3
JMC:1500	Introduction to Social Media	3	SRM:1072	Leisure and the Liberal Arts	3
JPNS:1506	Ghostly Japan	3	SSW:1022/ SOC:1022	Social Justice and Social Welfare in the United States	3
LATS:1700/ SPAN:1700	Latina/o/x Literature in the United States	3	THTR:1411	Comedy and Society	3
LING:2900	Language, Gender, and Sexuality	3	THTR:1412/ DANC:1412	The Arts in Performance	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			
NAIS:1049/ AMST:1049/ HIST:1049	Introduction to Native American and Indigenous Studies	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	Introduction to the Hebrew Bible/Old Testament	3			
RELS:1080	Introduction to the New Testament	3			