The Ohio State University

Colleges of the Arts and Sciences

Bachelor of Science Degree Requirements

Spring Quarter 2004 (May 4, 2004)

The Aim of the Arts and Sciences

Five colleges comprise the Colleges of the Arts and Sciences federation: Arts, Biological Sciences, Humanities, Mathematical and Physical Sciences, and Social and Behavioral Sciences.

The aim of the Arts and Sciences is to assist you in learning to develop your skills and abilities in a variety of areas. Students in the Arts and Sciences colleges learn about the ethical, emotional, and spiritual aspects of life as expressed in the history, the literature, and the art of the past and present. In addition to learning about the nature of human beings, their institutions, languages, and cultures, students also acquire knowledge of the physical environment, biological processes, and the abstract language of mathematics.

The purpose of the curriculum leading to the degree Bachelor of Science (BS) is to provide a broad scientific education with special training in one or more of the basic sciences, combined with a balanced program in those other disciplines which, with modern science, constitute the foundation of a liberal arts education.

In addition to the General Education Curriculum, students pursuing the Bachelor of Science degree complete general college and major requirements, and elective course work while accumulating a minimum of 191 credit hours.

Arts and Sciences BS Majors

The information contained in this curriculum sheet pertains to students following one of the majors listed below. In addition, each college offers the interdisciplinary honors contract and the personalized study program majors.

College of Biological Sciences BS Majors

Biochemistry
Biology
Entomology
Evolution and Ecology
Microbiology
Molecular Genetics
Plant Biology
Zoology

College of Mathematical and Physical Sciences BS Majors

Actuarial Science
Astronomy
Chemistry
Computer and Information Science

Geological Sciences
Mapping and Land Information Science
Mathematical Sciences
Mathematics
Physics
Vision Science

College of Social and Behavioral Sciences BS Majors

Aviation
Economics
Geography
Psychology

1 These majors also are available under the Bachelor of Arts (BA) degree. See the Arts and Sciences BA curriculum sheet for the BA degree requirements.
2 With the exception of astronomy and mapping and land information science, these majors also are available under the BA degree. See the Arts and Sciences BA curriculum sheet for the BA degree requirements.
3 Admission to this Arts and Sciences area is selective.
4 This major is open only to students enrolled in the College of Optometry.

Student Responsibility

You must assume responsibility for knowing the published policies governing the curriculum you are pursuing, as well as the regulations and procedures of the college and the University. This curriculum sheet should be used in conjunction with the Course Offerings Bulletin and the Colleges of the Arts and Sciences Bulletin.

Prerequisites

You are responsible for taking all prerequisites to courses in which you enroll. Failure to satisfactorily complete prerequisites may delay graduation.

General College Requirements

The following degree requirements apply to students entering The Ohio State University Autumn Quarter 1990 and thereafter. If four or more years have elapsed between any two successive quarters of enrollment at the University, the student must fulfill the requirements for the degree in effect at the time of reenrollment.

- A minimum of 191 credit hours. Courses at the 000 level (remedial course work); English 100.01, 100.02, 109.01, and 109.02; Mathematics 100, 102, and 103; and credit hours earned in repeated course work do not count toward the 191 hour minimum requirement for the BS.

The number of hours required to complete the Bachelor of Science degree with a given major will depend on your program and goals. Some students, including those who wish specific professional or studio training, those preparing for graduate study in certain disciplines, or those with multidisciplinary goals, may need to plan programs of more than 191 quarter hours. Other students may find that their chosen programs of study do not reach the minimum credit hour requirement. If the combination of course work for the GEC, prerequisites, the major program, and 15 hours of Free Electives does not add up to 191, you have many options to follow.
You could pursue a second major, a minor, or a combination degree program; set up a package of electives on a specific topic; do an internship; or study abroad. You are urged to meet with an Arts and Sciences counselor to work out a plan that best fits your needs and interests. In no case shall the number of hours required for graduation be fewer than 191.

Within these minimum 191 credit hours, you must have:

- A minimum of 176 hours must be Arts and Sciences or Arts and Sciences-approved courses.
- Non-Arts and Sciences course work may include a maximum of six credit hours of education: physical activity and educational services courses (all 100 level courses except for 102, 103, 122, 137, and 138), a maximum of 12 credit hours of technical credit, or other non-Arts and Sciences hours, with the total not to exceed 15.
- A maximum of 80 credit hours (excluding 100-level courses) in a single area (registrar's listing) may be applied toward the minimum 191 hours for the BS degree.
- A minimum of 60 hours of Arts and Sciences or Arts and Sciences-approved upper-division course work. Upper-division courses are defined as all Arts and Sciences courses at the 300 level or above, Philosophy 250, all courses taught by the College of Mathematical and Physical Sciences at the 200 level, and foreign language courses taught in the language at the 200 level. These 60 upper-division hours include hours earned for the GEC, the major, and electives.
- A minimum of 45-quarter hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last quarter in one of the Arts and Sciences colleges.
- A cumulative point-hour ratio of at least 2.00 on all work attempted at The Ohio State University.
- An application for the degree on file in the Arts and Sciences Graduation Services Office (141 Denney Hall) one quarter prior to the granting of the degree.

Free Electives

The University requires that the undergraduate curricula in the Colleges of the Arts and Sciences provide for a minimum of 15 credit hours of Free Electives.

General Education Curriculum (GEC) Requirements

The curricular requirements are divided into seven categories for the Bachelor of Science degree. In fulfilling the GEC, students with junior or senior standing may petition (in advance) to substitute upper-division courses that meet the spirit of the GEC for courses on the GEC. Students transferring from other colleges and universities often can meet part of the GEC with approximately equivalent courses already taken. Courses for each transfer student shall be reviewed, and those that meet the spirit of the GEC shall be accepted. You must earn at least a D in a course for it to meet a GEC requirement. Courses taken on a pass/non-pass basis cannot be used to meet GEC requirements.

Courses Used to Meet More than One Requirement

You are permitted to double count the second writing course with another GEC requirement, or on the major, or on the minor [see courses designated with a dagger (†)]. Also, you may double count courses used to satisfy the Diversity Experiences Category with another GEC category or with the major.

Drop-a-GEC Course Option

If you are pursuing the Bachelor of Science degree with a major in astronomy, chemistry, computer and information science, geological sciences, or physics, you may elect to drop one course from your GEC requirements in order to accommodate the substantial size of your major program. The drop-a-course option may be used only as follows:

- in the Natural Science Category, if you have completed a sequence and have met the distribution and the laboratory experiences requirements;
- in the Social Science Category, if you have two courses from two of the sections;
- in the Historical Survey section of the Arts and Humanities Category, if you have the first course in the sequence;
- in the Analysis of Texts and Works of Art section of the Arts and Humanities Category, if you have one literature course and one visual/performing arts course; or
- in the Foreign Language Category, if you have proficiency through 103.

Group Studies and Individual Studies

Group studies (X94 courses) and individual studies (X93 courses) are not acceptable for meeting GEC requirements except when a specific experimental course has been approved by the Arts and Sciences Curriculum Committee.

Requirements for the Major

Your major program must consist of at least 40 hours of credit in courses numbered 200 or above as prescribed by your faculty adviser. Your major may consist either of courses offered in only one department or of courses from allied departments; however, at least 20 of the 40 hours are to be in courses offered by the department of the major. Your major may or may not include course work that fulfills the GEC third writing requirement. This requirement is not in effect for all majors; please consult with your faculty adviser.

You must earn at least a C- in a course in order for it to be listed on your major. However, you must receive a 2.00 cumulative point-hour ratio for all major course work. If you earn a D+, D, or an E in a course on your major program, the course cannot be counted toward the major. Your faculty adviser will decide if the course should be repeated or if another course should be substituted for it. Courses taken on a pass/non-pass basis cannot be used on the major.

Your faculty adviser must approve all courses comprising your major on a major program form. Changes in your major may occur only with the written approval of your faculty adviser. The major program form and any revisions must be filed in Arts and Sciences office at the time approval is given.
If you change from one major or curriculum to another, consult with an Arts and Sciences counselor. Such changes may result in modifying requirements to such an extent that your date of graduation might be delayed.

A transfer student (i.e., from another institution) must have on the major program at least 20 credit hours earned at The Ohio State University. The student’s faculty adviser, the chairperson of the department concerned, and the appropriate assistant dean must approve any request for a variation in this policy.

Summary of Degree Requirements

<table>
<thead>
<tr>
<th>GEC</th>
<th>85-105</th>
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<tbody>
<tr>
<td>Writing and Related Skills</td>
<td>10</td>
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<tr>
<td>Quantitative and Logical Skills</td>
<td>10</td>
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<tr>
<td>Natural Science</td>
<td>25</td>
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<tr>
<td>Social Science</td>
<td>15</td>
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<tr>
<td>Arts and Humanities</td>
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<tr>
<td>Diversity Experiences</td>
<td>00</td>
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<tr>
<td>Foreign Language</td>
<td>00-20</td>
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<tr>
<td>Major (minimum)</td>
<td>40</td>
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<tr>
<td>Free Electives</td>
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<tr>
<td>Survey Course</td>
<td>01</td>
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<tr>
<td>Electives</td>
<td>00-50</td>
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<tr>
<td>Minimum Hours Required</td>
<td>191</td>
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</tbody>
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1If the Drop-a-GEC Course Option is used in certain approved majors, the total for those majors would be 80-100. BS students may also overlap the second writing course with the major, another GEC category, or the minor.

2Hours vary with major program selected.

3Hours vary depending on a number of academic factors.

GEC Requirements

Symbols

- Social Diversity in the United States course that overlaps in another GEC category
- Second Writing course that overlaps in another GEC category
- Natural Science course that has a laboratory component
- International Issues non-western or global course that overlaps in another GEC category
- International Issues western (non-United States) course that overlaps in another GEC category

1. Writing and Related Skills

A. First Course 5 hours

English 110

B. Second Course 5 hours

Select one course from the following list.

- African-American and African Studies 367.02†, 367.03†, 367.04†
- Agricultural Communication 367*
- Arabic 367†
- Art Education 367.01†, 367.02
- Comparative Studies 367.01†, 367.02†, 367.03†, 367.04*
- Economics 367.01†, 367.02†
- Engineering 367
- English 367.01†, 367.02†, 367.03†, 367.04, 367.05*, 367.06, 367.07
- Human Development and Family Science 367
- Journalism and Communication 367
- Landscape Architecture 367†
- Modern Greek 367*
- Natural Resources 367†
- Philosophy 367*
- Physics 367†
- Political Science 367.01†
- Psychology 367.01†, 367.02†
- Slavic Languages and Literatures 367*
- Sociology H367.01†, 367.02†, H367.03†
- Theatre 367.01†, 367.02†
- Women's Studies 367.01†, 367.02†, 367.03†, 367.04†
- Yiddish 367†

C. Third Course

Course work is taken as part of the major program. Note that this requirement is not in effect for all majors; please consult with your faculty adviser.

- Astronomy (see Physics 596)
- Computer and Information Science 560
- Evolution, Ecology, and Organismal Biology 440, 630, 647, 654.02
- Molecular Genetics 503
- Physics 596 (for physics and astronomy majors)
- Psychology 500, 510, 520
2. Quantitative and Logical Skills

A. Basic Computational Skills

You must have Mathematics Placement Level R or higher, or complete Mathematics 104.

B. Mathematical and Logical Analysis 10 hours

Mathematics 151 – 152

C. Data Analysis

Course work is taken as part of the major program, or prerequisite work.

3. Natural Science 25 hours

Select one two-course sequence in either the biological or the physical sciences, and three other courses. At least one of the five courses must be from the biological sciences and one from the physical sciences. At least three of the five courses chosen must have a laboratory component.

1. Biological Science Sequences

Biology 113–114L, H115L–H116L

2. Physical Science Sequences

Astronomy 171–172
Geological Sciences 121L–122L, H121L–H294L (Sp Qtr 2000 and Sp Qtr 2001)
Physics 111L–112L, 131L–132L
Physics 111L–Architecture 426

3. Biological Science Courses

Animal Sciences 310
Anthropology 200
Biology 113L, 114L, H115L, H116L
Evolution, Ecology, and Organismal Biology 232, 235L
Food Science and Technology 201
Horticulture and Crop Science 200L, 300L
Microbiology 509
Natural Resources 201
Plant Biology 300L

4. Physical Science Courses

Astronomy 171, 172
Geography H294L (Sp Qtr 2003)L
Geological Sciences 121L, 122L, H294L (Sp Qtr 2000 and Sp Qtr 2001), H451L
Physics 111L, 112L, 113L, 131L, 132L, 133L, 367L
Soil Science 300.01 and 300.02L (both courses must be taken)

1Note that the course was approved for both the Natural Science and the Social Science categories; however, you can use the course in only one category, not both.

4. Social Science 15 hours

Select three courses from the following lists, with at least one course from two of the three sections. A maximum of five hours is permitted from the area of the major, but these hours may not be counted on the major.

A. Individuals and Groups

African-American and African Studies 101, 218
Anthropology 201L, 202L, 421.08
Human Development and Family Science 360, 361, 364
Journalism and Communication 101, 200, 431
Linguistics 170L, 202L, 361L, 365L, 371
Political Science 201
Psychology 100L, 367.01L, 367.02L, 371
Rural Sociology 378L
Social Work 230
Sociology 210, 370, 380
Speech and Hearing Science 430
Textiles and Clothing 372
Women's Studies 110L

B. Organizations and Polities

Economics 201, 367.01L, 367.02L
Family Resource Management 243
Geography 460, 643L
Natural Resources 400
Political Science 100L, 101L, 165L, 210, 245L, 367.01L
Rural Sociology 105L
Sociology 101L, 345L, H367.01L, 367.02L, H367.03L

C. Human, Natural, and Economic Resources

Agricultural, Environmental, and Development Economics 200
Economics 110, 200
Family Resource Management 340
Geography 200L, 240L, H294L (Sp Qtr 2003)L, 430
International Studies 210L, 215L, 240L
Political Science 145L
Sociology 463, 466

1Note that the course was approved for both the Natural Science and the Social Science categories; however, you can use the course in only one category, not both.

5. Arts and Humanities 25 hours

A. Historical Survey 10 hours

Select one two-course sequence.

African-American and African Studies 121L–122L
Economics 515L–516L
Philosophy H111L–H112L

B. Analysis of Texts and Works of Art 15 hours

Select 15 credit hours from the following lists, with at least five credit hours from the literature section and five credit hours from the visual/performing arts section. A maximum of five
hours is permitted from the area of the major, but these hours may not be counted on the major.

1. Literature 5 hours

African-American and African Studies 154, 251, 254, 271, 345, 367.02†, 367.03†, 367.04†, 452, 453, 551
Arabic 371, 372
Chinese 251, 501, 502, 503, 504
Classics 101, 102, 222
Comparative Studies 100, 201, 202.01, 202.02, 203, 204, 205, H240, 273, 294, 301, 306, 308, 314
English 201, 202, 220, 260, 261, 262, 275, 280, 281†, 290, 291, 294 (Wi Qtr 2004) 367.02†, 367.03†
French 150, 151, 152
German 250, 260.01, 260.02, 260.03, H263, 291, 292, 399
Hebrew 370, 372, 373, 374, 378
Italian 151, 152
Japanese 250
Korean 251
Modern Greek 371
Near Eastern Languages and Cultures 271, 371, 372, 374
Persian 370, 371
Philosophy 215, 301, 302, 303, 304, 305, 306, 307
Russian 250
Scandinavian 222
Slavic Languages and Literatures 245
Spanish 320, 321, 520
Theatre 367.02†
Turkish 371, 372
Women's Studies 215, 367.01†, 367.02†, 367.04†, 372
Yiddish 371, 399

2. Visual/Performing Arts 5 hours

Architecture 271
Art 205 (170), 206 (172), 300 (201), 340 (240), H455
Art Education 160, 252, 367.01†
Comparative Studies 358∗
Dance 161, 200
East Asian Languages and Literatures 346
English 263
History of Art 210, 211, 212, 213, 216, 250, 260, 505, 515, 519, 520, 525, 530, 576
Italian 221
Landscape Architecture 201
Medieval and Renaissance Studies 219
Modern Greek 268
Music 140, 141, 142, 150, 341, 345.01, 347†, 349
Philosophy 240, H242
Physics H455
Scandinavian 520
Spanish 322, 330, 380
Theatre 100, H101 161, H230, 271, 280
Women's Studies 317

†Note that this is a three credit-hour course and by itself does not meet the minimum credit-hour requirement for the VPA in Arts and Sciences.

†Note that these cross-listed courses are repeatable; however, only one five-credit-hour version can count toward the GEC.

3. Cultures and Ideas

African-American and African Studies 342, 385.01
Anthropology 241
Arabic 241, 367†, 377
Arts and Sciences 494 (Au Qtr 2001, Sp Qtr 2002, Au Qtr 2002, and Sp Qtr 2003), 500
Chinese 231, 232
Classics 224, 225, 226, 230, 240
Comparative Studies 234, 241, 242, 270, 272, 274, 294 (Sp Qtr 1998), 294 (Sp Qtr 2000), 305, 335, 336, 339, 345, 367.01†, 367.02†, 367.03†, 377
Dance 357
East Asian Languages and Literatures 131, 341
English H167, 270, 271, 276, 277
French 153
German 275, 299
Hebrew 261, 241, 376
History 306, 330.01, 346
History of Art 240
Japanese 231
Jewish Studies 201
Korean 231
Landscape Architecture 367
Linguistics 201, 311
Medieval and Renaissance Studies 210, 211, 212, 213, 214, 215, 216, 217, 218, 226, 240
Modern Greek 241
Natural Resources 367
Near Eastern Languages and Cultures 241, 244, 294 (Au Qtr 2000), 311, 314, 341, 344, 345, 351, 370
Persian 241
Philosophy 101, 130, 230, 270, 336
Portuguese 330
Religious Studies 270, 376
Romanian 235
Russian 135, 235
Slavic Languages and Literatures 130
Spanish 150, 151, 331
Turkish 241
Women's Studies 101
Yiddish 241, 367

6. Diversity Experiences 0 hours

You should plan to overlap these courses with another GEC category or your major. If you do not plan such overlap, the diversity experiences requirement must still be met.

A. Social Diversity in the United States

Select one course.

African-American and African Studies 230, 367.02†, 367.03†, 367.04†, 551
Agricultural Communication 367
Arabic 367†
Art Education 367.01†
Biology 597
Comparative Studies 205, 234, 241, 242, 336, 367.01†, 367.02†, 367.03†, 367.04†
Dance 357†
English 281, 367.01†, 367.02†, 367.03†, 367.05†
Family Resource Management 362
Geography 400
History 325, 346
Linguistics 330, 361
Modern Greek 367
Philosophy 100, 336, 367
Psychology 100, 375
Rural Sociology 105
Slavic Languages and Literatures 367
As you complete the Natural Science, the Social Science, and the Arts and Humanities categories (or your major), ensure that your selection includes courses that fulfill the international issues requirement. You are required to complete two international issues courses, one of which must be a non-western or global course. The other course may be another non-western or global course, or a western (non-US) course.

Non-Western or Global GEC Courses (∗)
African-American and African Studies 121, 122, 251, 342, 385.01, 452, 453
Anthropology 201, 202, 241
Arabic 241, 371, 372, 377
Chinese 231, 232, 251, 501, 502, 503, 504
Comparative Studies 100, 202.01, 202.02, 270, 294 (Sp Qtr 1998), 294 (Sp Qtr 2000), 294 (Wi Qtr 2004), 301, 306, 308, 314, 335, 377
East Asian Languages and Literatures 131, 341
Economics 515, 516
French 152
Geography 200, 240, H294 (Sp Qtr 2003), 643
Geological Sciences H294 (Sp 2000 and Sp Qtr 2001)
Hebrew 216, 241, 370, 372, 373, 374, 376, 378
History 121, 122, 141, 142, 171, 172, 181, 182, 330.01
History of Art 213, 216, 260, 505, 576
Japanese 231, 251, 252
Korean 231, 251
Linguistics 170, 365
Medieval and Renaissance Studies 211, 213, 214, 216, 218
Music 140
Near Eastern Languages and Cultures 241, 244, 271, 294 (Au Qtr 2000), 314, 344, 345, 351, 370, 371, 372, 374
Persian 241, 370, 371
Philosophy 215
Political Science 100, 145, 245
Portuguese 330
Religious Studies 270, 376
Rural Sociology 378
Russian 135, 235, 250
Spanish 151, 330, 331, 380, 520
Turkish 241, 371, 372
Women’s Studies 372

Non-GEC Non-Western or Global Course
Women’s Studies 505

Western (non-United States) Courses (•)
Classics 101, 102, 222, 224, 225, 226, 230, 240
Comparative Studies 201, 203, 204, H240, 272, 273, 305, 358
English 201, 202, 220
French 150, 151
German 260.01, 260.02, 260.03, H263, 275, 291, 292, 299, 399
History 111, 112, 306
History of Art 210, 211, 212, 240, 250, 515, 519, 520, 525
International Studies 210
Italian 151, 152, 221

7. Foreign Language

Course work or proficiency through the fourth language course (104) is required.

Foreign languages
American Sign Language, Arabic, Bulgarian, Chinese, Czech, French, German, Greek, Hausa, Hebrew, Hungarian, Italian, Japanese, Korean, Latin, Modern Greek, Persian, Polish, Portuguese, Romanian, Russian, Serbo-Croatian, Shona, Spanish, Swahili, Swedish, Turkish, Twi, Ukrainian, Yiddish, Yoruba, Zulu

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