

CROP SCIENCE

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Bachelor of Science in Agriculture

Effective Autumn 1998

General Education Curriculum

Revised July 1, 2002

The College of Food, Agricultural, and Environmental Sciences strives for excellence in fulfilling all three missions of a comprehensive land-grant institution: instruction, research, and extension. The college serves the entire state and is a national and international resource. Our fundamental purpose is to enhance the quality of human life in a constantly changing technical, economic, and social environment. To fulfill the instructional mission, the college is organized with seven departments in Agriculture, a School of Natural Resources, and an Agricultural Technical Institute. The College of Food, Agricultural, and Environmental Sciences provides the only public university agricultural degree programs in Ohio.

Your curricula in Agriculture provide a professional and general education designed to develop technical expertise and decision-making abilities. Upon graduation, you will find diverse career opportunities because of the broad-based education you have received. You may also prepare for admission to a professional program such as law, medicine, or veterinary medicine while pursuing the Bachelor of Science degree in the College of Food, Agricultural, and Environmental Sciences.

The College of Food, Agricultural, and Environmental Sciences offers the following majors leading to a Bachelor of Science in Agriculture: agribusiness and applied economics, agricultural communication, agricultural education, agricultural and construction systems management, animal sciences, crop science, food business management, landscape horticulture, plant health management, and turfgrass science. The objective of the major is to demonstrate breadth and depth in the principles appropriate to and expected for a career in a specialized area.

The systematic nature of problem solving, and higher-level cognitive thinking will be emphasized through quantitative/mathematical and qualitative/linear reasoning, both of which will be emphasized throughout the major. The major will provide for understanding the U.S. and world perspective of agriculture. In addition emphasis will be placed on enhancing a sensitivity to and practice in making discriminating, ethical judgments about critical issues. A capstone experience is required. It provides you the opportunity to debate and consider your major from a wider agricultural perspective and to integrate disparate concepts within agriculture and within the major. An internship of 3-5 hours is also required.

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, the College of Food, Agricultural, and Environmental Sciences Bulletin, and the quarterly Master Schedule of Classes. 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 most students entering The Ohio State University Autumn Quarter 1998 and thereafter.

■ A minimum of 190 total credit hours. (English 040, 050, 051, 052, 053, 060, 100.01, 100.02, 106, 107, 108, 109.01, and 109.02; Educ T & L 104, 105, 106, 107, 108; Mathematics 040, 050, 075, 076, 100, 102, 103, and 104; Speech and Hearing Science 035 and 040; do not count toward the 190-hour minimum requirement for the BS.)

■ **ALL STUDENTS MUST COMPLETE TWO INTERNATIONAL ISSUES COURSES**, one of which must be a non-western or global course designated with an asterisk (*). The other course may be another non-western or global course (*) or a western (non-US) course designated with a diamond (◆). List course when completed * _____, *or ◆ _____.

■ A minimum of 55 hours in the major with at least 20 hours taken from the department offering the major at OSU in the baccalaureate program.

■ A maximum of 65 hours of course work in the major may be applied toward the 190 hours necessary for the degree.

■ Courses in the major may **not** be taken pass/non-pass.

■ Course work may include a maximum of six credit hours of physical activity courses (all 100-level courses except for 102, 103, 122, 137, and 138), and a maximum of 6 credit hours of campus music organizations.

■ 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 the College of Food, Agricultural, and Environmental Sciences.

■ A transfer student (i.e., from another institution) must have on the major program at least 20 credit earned from the department offering the major courses at The Ohio State University.

■ A cumulative point-hour ratio of at least 2.00 on all course work completed at The Ohio State University.

■ The major consists of courses within the department offering the major and courses from allied departments as listed by the faculty of the major. You must receive a 2.00 cumulative point-hour ratio for all major course work.

■ A cumulative point-hour ratio of at least a 2.00 on all course work completed within the minor.

■ A college maximum of ten hours of individual studies courses (x93) can be applied toward graduation although some majors may have a lower maximum.

■ An internship of 3-5 hours is required. Any hours above five hours must count against the major. A college maximum of ten hours of internship credit can be applied toward graduation although some majors may have a lower maximum.

■ Double counting is allowed between major courses and foundations, natural sciences, arts and humanities and social sciences to a maximum of ten hours.

■ Double counting is **NOT** allowed between the minor and other categories.

■ An application for degree must be on file in the College Office at least two quarters prior to the granting of the degree.
Autumn Quarter Graduation - Third week of Winter Quarter.
Winter Quarter Graduation - Third week of Spring Quarter.
Spring Quarter Graduation - Third week of Autumn Quarter.
Summer Quarter Graduation - Third week of Winter Quarter.

General Education Curriculum Requirements

The curricular requirements are divided into six 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 which meet the spirit of the GEC for courses in the GEC. Students transferring from other colleges and universities may 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.

1. AGR INT 100 1 hour

2. Writing and Related Skills

A. First Course 5 hours

English 110C

B. Second Course 0-5 hours

Select one course from the following list. The course may double count toward another **GEC** category. Courses which double count toward another GEC category are noted with a †.
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
Family and Consumer Sciences Education 367
Journalism & 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†, 367.04†

Yiddish 367†

C. Third Course

Course work is taken as part of the major program. See your major requirements for your option(s).

3. Oral Expression

Agr Comm 390

4. Quantitative and Logical Skills

A. Mathematical and Logical Analysis 4 hours

Math 148

B. Data Analysis 5 hours

Course work is taken as part of the major program. See your major requirements for your option(s).

5. Natural Science 25 hours

Biology 113 or H115

Chemistry 121 or H201

Physics 111 or 131

Select one course from: Biology 114 or H116; Chemistry 122 or H202; Physics 112 or 132

Select one course from:

Animal Science 310

Microbiology 509

Anthropology 200

Physics 112, 113, 132, 133

Biology 114, H116

Soil Sci 300.01 or 300.02

Chemistry 122, 123, H202, H203

EEOB 232, 235

Fd Sc&Te 201

H&CS 200, 300

Math 151

6. Social Science 15 hours

Select AEd Econ 200 or Econ 200 and Rural Sociology 105 or Sociology 101 and one additional course from the list below:

African-American and African Studies 101, 218

Anthropology 201*, 202*, 421.08

Economics 110, 201, 367.01†, 367.02†

Family Resource Management 243, 340

Geography 200*, 240*, 460, 643*

Human Development and Family Science 360, 361, 364

International Studies 201*, 210♦, 215*, 230*, 231*, 235*, 240*, 245*, 250*

Journalism and Communication 101, 200, 431

Linguistics 202, 361 (261), 365* (265), 371

Natural Resources 400

Political Science 100*, 101, 145*, 165, 201, 210, 245*, 367.01†

Psychology 100, 367.01†, 367.02†, 371

Rural Sociology 378*

Social Work 230

Sociology 210, 345, H367.01†, 367.02†, H367.03†, 370, 380,
463, 466

Textiles and Clothing 372

Women's Studies 110 (210)

7. Arts and Humanities 20 hours

A. Historical Survey 5 hours

Select one course from:

African-American and African Studies 121*

Economics 515*

History 111◆, 121*, 131*, 151, 171*, 181*

Philosophy H111◆

B. Analysis of Texts and Works of Art 15 hours

Select three courses from the following lists, with at least one course from the literature section and one course from the visual/performing arts section. The remaining course may come from literature, visual/performing arts, cultures and ideas or an additional history.

1. Literature (Select at least one) 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◆, 301*, 306*, 308*, 314*

English 201◆, 202◆, 220◆, 260, 261, 262, 275, 280, 281,
290, 291, 367.02 †, 367.03 †

French 150◆, 151◆, 152*

German 260.01◆, 260.02◆, 260.03◆, H263◆, 291◆, 292◆,
399◆

Hebrew 370*, 372*, 373*, 374*, 378*

Italian 151◆, 152◆

Japanese 251*, 252*

Korean 251*

Modern Greek 371◆

Near Eastern, Judaic, and Hellenic Lang and Lit 271*, 371*
372*, 374*

Persian 370*, 371*

Philosophy 215*, 301◆, 302◆, 303◆, 304◆, 305◆, 306,
307◆

Russian 250*

Scandinavian 222◆

Slavic Languages and Literature 245◆

Spanish 320◆, 321◆, 520*

Theatre 367.02 †

Turkish 371*, 372*

Women's Studies 367.01 †, 367.04 †, 372*

Yiddish 371◆, 399◆

2. Visual/Performing Arts (Select at least one) 5 hours

Architecture 271¹

Art 170, 172, 201, 240

Art Education 160, 252, 367.01†

Comparative Studies 358◆

Dance 161, 200

East Asian Lang and Lit 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 & Renaissance Studies 219◆

Music 140*, 141◆, 142, 150, 341, 342◆, 343, 345.01, 347◆¹
349¹

Philosophy 240, H242

Scandinavian 520◆

Spanish 322◆, 330◆

Theatre 100, 161, H230, 271, 280¹

Women's Studies 317

¹Note that this is a three credit course and by itself does not meet the minimum credit hour requirement for the Visual and Performing Arts.

3. Cultures and Ideas

African-American & African Studies 342*, 385*

Anthropology 241*

Arabic 241*, 367 †, 377*

Arts and Sciences 494 (Au Qtr 2001, Sp Qtr 2002, and Au Qtr
2002)

Chinese 231*, 232*

Classics 224◆, 225◆, 226◆, 230◆, 240◆

Comparative Studies 234, 241, 242, 270*, 272◆, 274, 294
(Sp Qtr 2000), 305◆, 335◆, 336, 339, 345, 367.01†,
367.02 †, 367.03 †, 377*

East Asian Languages and Literatures 131*, 341*

English H167, 270, 271, 276

German 275◆, 299◆

Hebrew 216*, 241*, 376*

History 306◆ (240), 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◆, 212◆, 213*, 214*,
215◆, 216*, 217◆, 218*, 226◆

Modern Greek 241◆

Natural Resources 367†

Near Eastern Language and Culture 241*, 244*, 311, 314*,
341, 344*, 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 (201)

Yiddish 241◆, 367 †

4. Additional History

African-American and African Studies 121*, 122*

Economics 515*, 516*

History 111◆, 112◆, 121*, 122*, 131*, 132*, 151, 152,
171*, 172*, 181*, 182*

8. Contemporary Issues 5 hours

AEd Econ 597.01
Animal Sciences 597 (formerly Agr Int 597)
Anthropology 597.01, 597.02 597.03, 597.04
Biology 597 ⁺
City and Regional Planning 597
Comparative Studies 597.01, 597.02
Evolution, Ecology & Org Bio 597.02 (formerly Zoology)
Family and Consumer Sciences Education 597.01, 597.02
Geodetic Science 597
Geography 597.01, 597.02
History 597
Horticulture and Crop Science 597
International Studies 597.01, 597.02
Landscape Architecture 597
Natural Resources 597.02
Plant Pathology 597
Political Science 597.01, 597.02
Social Work 597
Sociology 597.01, 597.02

9. Internship 5 hours

Meet with your adviser to discuss expectations.

10. Minor 20-25 hours

Students majoring in Crop Science **may not** select a minor in Crop Science, Horticulture, Landscape Horticulture, Soil Resources & Turfgrass Management.

11. Major Requirements 55-65 hours

Required:

H&CS 200	Crop Science	5
H&CS 260 or Other ² Data Analysis and Interpretation		5
H&CS 300	General Plant Biology	5
H&CS 310	Control of Crop Development	4
H&CS 325	Crop Genetic Resources	4
H&CS 601	Issues in Crop Science	5

Electives:

27-37

Select a minimum of 16 hours in H&CS coursework from Agronomy, Vegetable/fruit Crops and Greenhouse/nursery crops listed below. Remaining electives for the major may be taken in H&CS at the 400 -level or above and/or from the Supporting Courses category.

Agronomy

H&CS 411	Grain Crops	3
H&CS 412	Forage Crops	3
H&CS 414	Crop Sci. Lab	2
H&CS 420	Seed Sci.	4
H&CS 422	Weed Sci.	4
H&CS 510	Crop Prod. Dev. Count.	5

Vegetable/fruit crops

H&CS 450	Veg. Crop Prod	5
H&CS 460	Fruit Crop Phys.	5
H&CS 420	Seed Sci.	4
H&CS 422	Weed Sci.	4

H&CS 521	Grnhouse Env. Contr.	5
H&CS 560	Comp. In Hort. Mgmt.	4
H&CS 605	Adv. Veg. Prod.	5
Greenhouse/nursery crops		
H&CS 401.01, .02	Ind./Org.	1-6
H&CS 430	Indoor Plants	3
H&CS 431	Herb. Orn. Plants	5
H&CS 435	Dec Shd. Trees/Everg.	6
H&CS 436	Dec. Fl. Trees/B leaf Everg.	6
H&CS 521	Grnhouse Env. Contr.	5
H&CS 522	Com/ Prod. Flor. Crops	5
H&CS 533	Mgmt. Com Nurs. Op.	5
H&CS 560	Comp. In Hort. Mgmt.	4
H&CS 609	Posthvst. Princ/Pract.	4

Supporting Courses

AG&CONSM 320	Facil. For Agr. & Grnhouse Prod.	5
AG&CONSM 370	Hydrology	3
ENTOMOL 460.01	Econ. Enotmol. (Lecture) 3	
ENTOMOL 460.02	Econ. Entomol. (Lab)	2
	or 460.03	
SOIL SCI 300.01	Soil Sci.	3
SOIL SCI 300.02	Soil Sci. Lab	2
SOIL SCI 580.01	Soil Fert. & Fertilizers	3
MOL GEN 140	Intro. To Genetics	5
MICROBIOL 509	Basic & Prac. Microbiol.	5
PLNT BIO 436	Intro. Plant Phys.	5
PLNT PATH 401	Gen. Plant Path.	5
PLNT PATH 501	Diseases of Orn. Plants	3

Maximum of 65 hours in the major will count toward graduation.

12. Free Electives 10-31 hours

GRAND TOTAL

190 hours

²Data Analysis course requirement may also be met by Anim. Sci. 260, AEd Econ. 205, Agr. Educ. 387, Nat. Res. 222, or Stat. 145.

Note that up to five hours of H&CS 200, H&CS 300, Plant Biol. 300, Microbiol. 509, or Soil Sci. 300.01, 300.02 can also be counted as a GEC Natural Science requirement.