

Advising for the UES Major: A guide for advisors and UES students.

(Updated Spring 2009—see course catalog for a description of the major and required courses:

<http://www.bsc.edu/academics/catalog/catalog2008-09/pages/section2/courses/interdisc.htm>

Advising Guidelines for UES Core Courses (10-11 units):

- Several of the UES core courses also satisfy disciplinary foundations requirements for graduation.
 - ES 150 satisfies lab science requirement
 - BI 225 satisfies additional unit in BI
 - EC 202, EC 340, PS 250, PY 220, and SO 376 satisfy the requirement of 2 units in social science (from two different disciplines)
 - PL 307 satisfies the requirement of 1 unit in philosophy
- Several UES core courses are offered every second or third year, and it is important that students are prepared to enter these courses when they are offered. Several of these courses are paired as an either/or option with another course in a related discipline.
 - PL 307 is offered every third year, next offering is spring 2012.
 - PL 307 has the prerequisite of another PL course (excluding PL 241 Logic).
 - RE 320 is offered approximately every other fall. It was last offered fall 2008.
 - Note that it is requested by the PL/RE/CL department that students not take both courses since space is limited and they service several programs.
 - EC 340 is offered approximately every other spring. It was last offered spring 2009.
 - EC 340 has the prerequisite of EC 202, another UES core course.
 - PY 220 is offered approximately every other spring. It was last offered spring 2009.
 - SO 376 is offered approximately every other year. It will be offered fall 2009.
- If possible, first-year UES majors should be enrolled in ES 150 in the fall and UES 160 in the spring. These introductory courses build an important conceptual foundation for the major. ES 150 is a prerequisite for BI 225, another core requirement. Already matriculated students who newly declare the UES major should take ES 150 and UES 160 as soon as possible.
- Enrollment in UES 470 needs to be carefully planned with the director during the semester prior to when the student needs this seminar course. UES 470 will be offered as a regular course beginning fall 2010.
- General Education Requirements: Need to take the two 1Y courses and EH 102/208 freshman year. Taking an interim 1Y frees a slot in freshman spring semester. Try to take 1Y courses that satisfy graduation requirements that are not satisfied as part of the UES major. Foreign language fits nicely during freshman year.

UES Core Courses	Pattern of offering	Prerequisites
ES 150 Environmental Studies	every fall	None
UES 160 Environmental Earth Sciences*	every spring	None
BI 225 Evolutionary Ecology	every term	ES 150 ; or BI 115 and 125; soph. standing
EC 202 Principles of Economics II	every term	None
EC 340 Economics of Natural Resources and the Environment	spring odd-numbered years	EC 202
PL 307 Environmental Ethics	spring every 3rd year	One PL course, but not PL 241
<i>or</i> RE 320 Religion and the Natural World	fall even-numbered years	Sophomore standing
PS 250 Public Policy Process	every spring	None
<i>or</i> PS/UES 210 Env. Problems and Policy**	every fall	\ None
PY 220 Environment and Behavior	spring odd-numbered years	PY 101 or ES 150
<i>or</i> SO 376 Environmental Sociology	fall odd-numbered years	SO 101 or 102, or ES 150
UES 470 Senior Seminar in Environmental Studies	as needed until fall 2010, every fall thereafter	
UES 472 Senior Research in Environmental Studies	as needed until fall 2010, every spring thereafter	

*UES 160 is currently under C&S/faculty consideration as a disciplinary foundations lab science course

**PS/UES 210 is currently under C&S/faculty consideration and will be included as a core course (alternative to PS 250) in proposed changes to the major in 2009-2010

Advising Guidelines for UES Natural Science Concentration (6-7 units)

- BI 115 should be taken freshman year as it is a prerequisite for many of the BI electives. BI 115 will most likely be taken spring freshman year since we won't know the student's preferred concentration until they are here in their fall.
- BI 225 should be taken sophomore year, preferably in the fall since it is a prerequisite for some of the other BI electives.
- CH 121 can be taken the fall of freshman year, especially if the student had a strong science background in high school. Otherwise, taking it fall sophomore year is advisable given that it is a prerequisite for CH electives.
- The electives taken should be selected in light of the student's career interests.
- If the student must take MA 115, they should take it freshman year since one natural science required courses requires it or its equivalency.

UES Natural Science Concentration Courses	Pattern of offering	Prerequisites
Required Courses:		
BI 115 Organismal Biology	every term	none
CH 121 General Chemistry I or CH 149 Chemical Principles	every fall	none for CH 121; AP = 4 for 149
MA 207 General Statistics	every term	MA 115 or equivalent
Three of the following:		
CS 170 Introduction to Computing	every term	MA 115 or equivalent
CH 122 General Chemistry II	every spring	CH 121
CH 211 Organic Chemistry I	every fall	CH 122 or 149
CH 304 Quantitative Analysis	every spring	CH 122
BI 125 Cell and Molecular Biology	every term	BI 115
BI 206 Field Botany	spring of even-numbered years	BI 115
BI 232 Invertebrate Zoology	fall of even-numbered years	BI 115
BI 314 Conservation Biology	fall of odd-numbered years	BI 115 and 225; or ES 150
BI 315 Animal Behavior	every spring	BI 225 and PY 101
BI 332 Vertebrate Field Zoology	spring of odd-numbered years	BI 115 and 225
BI 411 General Ecology	fall of even-numbered years	BI 225, or BI 115 and ES 150
BI 363 Current Topics in Biology	rarely offered	variable

Advising Guidelines for UES Society and Policy Concentration (6-10 units)

- **First Year**
 - PS 101, SO 101/102, or PY 101 should be taken freshman year as they are prerequisites for the required units in social science research.
 - PS 101, SO 101/102, EC 201/202 and PY 101 are prerequisites for many of the upper-level Society and Policy electives; select these courses in anticipation of particular upper-level electives.
 - Generally, PS 101 is the prerequisite for all PS courses in American government, and PS 238 is the prerequisite for all PS courses in comparative government.
- **Second Year**
 - It is recommended that the required units in social science research be completed consecutively and preferably during a student's sophomore year.
 - If a student plans to take the SO/PS/EC social science research sequence and they must take MA 115, they should take it freshman year since SO204/PS 204/EC 204 requires it or its equivalency.
- **General**
 - No more than two electives can be at the 100-level; at least two disciplines must be represented.
 - The electives taken should be selected in light of the student's career interests.
 - CS 170 Introduction to Computing is recommended.

UES Society and Policy Concentration Courses	Pattern of offering	Prerequisites
Required Courses:		
SO 204/PS 204/EC 204 Survey Data Analysis and Statistics and SO 304/PS 304/EC 304 Research Methodology	SO 204/PS 204/EC 204 every fall; SO 304/PS 304/EC 204 every spring	SO 304/PS 304/EC 204: SO 101 or PS 101 or EC 201 or EC 202 and MA 115 or above SO 304/PS 304/EC 204: SO 204 or PS 204 or EC 204
<i>or</i> PY 204 Statistics for Research and PY 304 Research Methods for Psychology	PY 204 every fall; PY 304 every spring	PY 204: none PY 304: PY 101 and 204
Four of the following (in at least 2 disciplines):		
PS 101 Introduction to American Government and Politics	every term	none
PS 325 Contemporary Southern Politics	spring even-numbered years	none
PS 335 Organizational Behavior and Public Administration	infrequently	PS 101
PS 340 Comparative Elite Behavior	fall odd-numbered years	none
PS 365 Metropolitan Government and Politics	infrequently	PS 101
PS 366 Politics of Mexico and Central America	infrequently	PS 238 or 240
PS 400 International Political Economy	infrequently	PS 235, 238, and at least junior standing
PS 410 Development in the Americas	infrequently	senior standing
EC 312 Trade in the Americas		EC 201 and 202
EC 402 Public Choice		EC 201 and 202
EC 410 International Trade		EC 201 and 202
EC 430 Economic Growth and Development		EC 201 and 202
PY 101 Introduction to Psychology	every term	none
PY 203 Group Dynamics		PY 101 or LS 200
PY 220 Environment and Behavior (when not used for the core requirements)	spring odd-numbered years	PY 101 or ES 150
PY 303/SO 303 Social Psychology	every spring	PY 101, SO 101, or SO 102
PY 315/BI 315 Animal Behavior		PY 101, and BI 115 and 225
PY 324 Developmental Psychology		PY 101

SO 102 Contemporary Social Problems	every term	none
SO 337 Social Movements and Politics	approx. every 3rd year	SO 101 or 102
SO 373 Urban Sociology	fall even-numbered years	SO 101 or 102
SO 376 Environmental Sociology (when not used for the core requirements)	approx. every other year	SO 101 or 102, or ES 150
SO 370 Sociology of Medicine	approx. every other year	SO 101 or 102

Advising Guidelines for Environmental Education Concentration:

- Students pursuing a career in agencies with broad outreach to the public and private sectors are encouraged to complete BA 201 Foundations of Business Thought, BA 350 Principles of Marketing, and SP 101 Introduction to Speech.

UES Environmental Education Concentration Courses	Pattern of offering	Prerequisites
Required Courses:		
ED 210 Curriculum Design		at least one year college coursework
EPy 260 Survey of Exceptional Children		
ED 324 Teaching Science and Health		admission to Teacher Education Program
ED 470 Seminar in Teaching Technology		at least three years college coursework, and admission to Teacher Education Program
Two of the following:		
EPy 223 Human Growth and Development		
EPy 320 Educational Psychology		Admission to Teacher Education Program
ED 323 Teaching Secondary Subjects (0.75 unit) and ED 345 Methods for Teaching Science in Secondary Schools (0.25 unit)		ED 323 requires enrollment in subject field methods course (ED 340-346) and admission to Teacher Education Program. ED 345 is to be taken simultaneously.

Advising the Pre-health UES major:

Some students may be interested in earning the UES major in preparation for a career in the health professions. Planning a career in the health professions should be done with the pre-health advisor, Dr. Jeannette Runquist, in the Biology Department. Planning should begin as soon as possible in the student's time at BSC. With careful planning, it may be possible to earn the UES major and be prepared for entry into a health professional field. Much depends on the type of professional school a student would be entering.

Pre-med students that earn a UES major with a concentration in the Natural Sciences would have to take several additional courses to prepare them for medical school including Physics I and II, Calculus, and Organic Chemistry I and II. These or other courses may be required to enter other health professional schools. Pre-health/UES students should also take other courses that most pre-health students take including Cell and Molecular Biology, Genetics, Comparative Vertebrate Anatomy, Physiology and others.