

**KENNESAW STATE UNIVERSITY
PROGRAM PROPOSAL FOR THE BACHELOR OF SCIENCE DEGREE
IN THE INTERDISCIPLINARY STUDIES PROGRAM**

ENVIRONMENTAL STUDIES - "Science" Emphasis

This form must be typed and submitted to one of the Co-Coordinators of the Interdisciplinary Studies Program, Dr. Ed Chan or Dr. Liza Davis, in Library 423. Please note that all sections must be completed with the assistance of a pre-approved IDS advisor.

Today's date: _____ **KSU Catalog Year:** _____

Last Name	First Name	MI	KSU I.D. #

Street Address	Apt. #	City	State	Zip Code

Area Code	Telephone #	E-Mail Address	Graduation Date

Disciplinary areas to be combined:

Chemistry	Biology	Policy
Discipline I	Discipline II	Discipline III (if applicable)

Rationale for proposed program

(Please include in this section your reasons for choosing to pursue the Environmental Science rather than Environmental Policy track available to students seeking a B.S. in Environmental Studies, taking as much space as you need to provide a thorough and substantive rationale.)

I. General Education Courses¹ Completed or Projected for Completion (45-46 hours):

Area A – Essential Skills (9-10 hours)

ENGL 1101 ____

ENGL 1102 ____

MATH 1112 ____ or MATH 1113 ____ or MATH 1190 (4 hours, for advanced students) ____

Area B – Social Issues (Institutional Options) (6 hours)

GEOG 1101 ____ (required)

¹ Each course is 3 credit hours unless otherwise noted.

COM 1109 ___ or PHIL 2200 ___ or FL 1002 --___ (Language: _____) (strongly recommended)

Area C – Humanities and Fine Arts (6 hours)

ENGL 2110 ___

ART 1107 ___ or MUSI 1107 ___ or TPS 1107 ___

Area D – Science, Mathematics, and Technology (12 hours)

CHEM 1211/1211L (4 hours) ___ and CHEM 1212/1212L ___ (4 hours)

MATH 1190 (4 hours) ___ or MATH 2202 ___ (4 hours, for students who took Math 1190 to meet their Area I math requirement)

Area E – Social Sciences (12 hours)

POLS 1101 ___

Economics 2100 ___ (required)

HIST 1110 ___ and HIST 2112 ___

II. Fitness for Living Requirement (3 hours): HPS 1000 ___

III. Area F – LOWER DIVISION Courses related to the major discipline (22 hours):

Course Number	Course Title	Hrs.	Sem./Yr.	Rationale
BIOL 2107	Biological Principles I	4	CHEM 1211/L	Introduction to cell and molecular biology... foundation for upper-level biology courses
BIOL 2108	Biological Principles II	4	BIOL 2107	Introduction to ecology & evolution... foundation for upper-level biology courses
ECON 2200	Macroeconomics	3	ECON 2100 + 6 credit hrs. of math numbered 1101 or higher	Environmental policy decisions are often made in consideration of economic impact, so students must have a basic understanding of economic principles.
SOCI 2201 (Note: If this course was taken to satisfy the "Social Issues" requirement in the General Ed. curriculum, GEOG 1101 should be substituted here.)	Principles of Sociology	3	READ 0099 if required	Understanding the social nature of human behavior

GEOG 1112	Climate and Vegetation (w/ lab)	4	ENGL & READ 0099	Articulate the important concepts and components of earth-atmosphere relationships, weather and climate patterns, and vegetation patterns and dynamics.
GEOG 1113	Landforms and Landscapes	4		Knowing and understanding the principle concepts and fundamental processes that shape earth's weather and climate systems and to articulate climate system processes and patterns at varying geographic scales

IV. UPPER DIVISION Courses (52-53 hours):

You must take a minimum of **12 hours** of upper-division course work **in each of your chosen disciplines**. Each discipline must include **courses focusing on a single broad theme** and be consistent with your career and educational goals. At least **15 hours** of this 39-hour requirement must clearly satisfy **IDS areas of Writing/Communication; Theory/Culture; and Application/Integration** (to be listed separately in the chart below).

Thematic Course Work in Discipline I (12 hours): CHEMISTRY

Course Number	Course Title	Hrs.	Pre-reqs.	Learning Outcomes
CHEM 2800/L	Quantative Analytical Chemistry & lab	4	CHEM 1212/L	Principles of gravimetric and volumetric analysis and introduction to statistics
CHEM 3361/L	Organic I & lab	4	CHEM 1212/L	An understanding of elements of the structure, properties, synthesis and reactions of basic organic compounds. For the lab, experience with separation and purification as well as an understanding of single functional group transformations.
CHEM 3700	Environmental Chemistry	3	CHEM 3362/L	A chemical understanding of the earth, water and atmosphere and the chemical effect of our interaction with them.
CHEM 3710L	Environmental Chemistry Lab	1	CHEM 3362/L	Hands-on understanding of sampling, environmental analysis, data handling, systems modeling, specialized instrumental techniques, and field techniques appropriate for environmental studies.

Thematic Course Work in Discipline II (13-14 hours): BIOLOGY*

Course Number	Course Title	Hrs.	Pre-reqs.	Learning Outcomes
BIOL 3370	Ecology	4	BIOL 2107	A deeper understanding of the relationships among living organisms and their environments; field activities included.
BIOL 3XXX or BIOL 4XXX or SCI 3360	Select from menu of options* Earth Science	3-4	Any core lab science	A deeper understanding of the relationships among living organisms and their environments and the methods used to study them; field activities included
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* Course Number	Course Title
BIOL 3300 (4 hours)	Genetics
BIOL 3310 (4 hours)	Invertebrate Zoology
BIOL 3315 (4 hours)	Vertebrate Zoology
BIOL 3320 (4 hours)	Plant Morphology
BIOL 3335 (4 hours)	Natural History of Georgia
BIOL 3340 (4 hours)	Microbiology
BIOL 3371 (4 hours)	Limnology
BIOL 3372 (4 hours)	Aquatic Biodiversity
BIOL 3373 (4 hours)	Methods in Aquatic Ecology
BIOL 3375 (4 hours)	Behavioral Biology
BIOL 3380	Evolutionary Biology
BIOL 4450 (4 hours)	Team Research
BIOL 4486	Bioethics
BIOL 4620 (4 hours)	Advanced Topics in Ecology and Evolution
BTEC 3301	Introduction to Biotechnology
BIOL /BTEC 4400 (1-4 hours)	Directed Study (must have environmental focus)
BIOL /BTEC 4490 (1-4 hours)	Special Topics (must have environmental focus)

Thematic Course Work in Discipline III (12 hours): “CHSS Courses”

Course Number	Course Title	Hrs.	Pre-reqs.	Learning Outcomes
GEOG 3305	Introduction to Cartographic Processes	3	GEOG 1101	Understanding the processes and technology of cartography from theoretical and applied perspectives
GEOG 3340	Cultural Geography	3	GEOG 1101	Learning to analyze human cultures through the lenses of region, diffusion, ecology, integration, and landscape
GEOG 3700	Introduction to Environmental Studies	3	Any gen. ed. science lab sequence	Understanding the human dimensions of environmental issues in the United States
POLS 4456	International Environmental Policy	3	POLS 1101	Understanding the basic elements of environmental policy making in an international arena

Course Work Satisfying IDS Areas of Writing/Communication; Theory/Culture; and Application/Integration (15 hours distinct from hours in disciplinary thematic courses):

Course Number	Course Title	Hrs.	Pre-reqs.	Learning Outcomes
GEOG 3315	Introduction to Geographic Information Systems	3	GEOG 3305 or perm. of instructor	Understanding the basic design of state-of-the-art GIS and its analytical capabilities
GEOG 3800	Climatology	3	GEOG 1112 and any GE lab sequence	Theory/Application: Knowing and understanding the principle concepts and fundamental processes that shape earth's weather and climate systems and articulating climate system processes and patterns at varying geographic scales
SCI 4700L	Applied Environmental Studies	3		Applying environmental knowledge in an interdisciplinary, field-based capstone course
STAT 3125	Biostatistics (currently Math 2107)	3		Theory/Application Students will use statistical tools to analyze and interpret data.
STAT 3130	Statistical Methods II	3		Theory/Application Students will use statistical tools to analyze and interpret data.

Total units of upper-division course work: 52-53

Total degree units: 123

APPROVALS:

I understand and approve this proposed plan of study for an interdisciplinary degree at Kennesaw State University:

Department of _____ (from CHSS) _____
Date

Department of _____ (from CSM) _____
Date

Dr. Rebecca Casey, Chair
Department of University Studies _____
Date

Dr. Ed Chan or Dr. Liza Davis, Co-Coordinator
of the IDS Program _____
Date

I agree to complete the plan of study proposed above (with appropriate modifications approved by my IDS advisors, where necessary) or notify Dr. Chan or Dr. Davis in writing of my decision to withdraw from the major:

Ms./Mr _____ Program Applicant _____
Date