

Brooks College of Interdisciplinary Studies

Environmental and Sustainability Studies Major, B.A., B.S. (2020-2021)

A total of 35-37 credits are required to complete the major in Environmental and Sustainability Studies

Name: _____ Date: _____ Advisor: _____

CORE COURSES: All required (9 credits needed)

- ____ ENS 201: Introduction to Environmental and Sustainability Studies (SFS)
- ____ ENS 300: Principles of Sustainability (req. ENS 201)
- ____ INT 301: Interdisciplinary Research Methods

TECHNICAL SKILLS (3-4 credits needed) Choose one course from the following:

- ____ ENS 305: Sustainability Assessment and Reporting (req. ENS 201)
- ____ GPY 307: Introduction to Geographic Information Systems (TS+BS)
- ____ GPY 370: Introduction to Remote Sensing (TS+BS)
- ____ NRM 250: Resource Measurement and Maps
- ____ PHO 171: Photography 1 (4 cr.)
- ____ STA 301: Questionnaire Design and Execution (req. STA 215 or 312) (TS+BS)
- ____ STA 311: Introduction To Survey Sampling (req. STA 216)
- ____ STA 341: Demographic Methods (req. Jr., STA 215 or 312) (I)
- ____ WRT 200: Introduction to Professional Writing (req. WRT 150)
- ____ WRT 253: Document Production and Design (req. WRT 150)
- ____ WRT 350: Business Communication (req. WRT 150)

Key

- GP=** Global Perspectives
- HP=** Foundation-Historical Perspectives
- I=** Issues
- NS=** Foundation-Natural Sciences
- SBS=** Foundation-Social and Behavioral Sciences
- SFS=** Sustainable Food Systems Certificate
- TS+BS=** Fulfills both Tech. Skills and BS requirements
- US=** U.S. Diversity

TRIPLE BOTTOM LINE OVERVIEW COURSES (9 credits needed) One course from each of the following three groups; No course may count toward both a Focus Area and the Triple Bottom Line Overview.

I. Social and Cultural Perspectives –

The arts, humanities, and social sciences create, interpret, and analyze cultural narratives that influence humans' interactions with their environments.

- ____ ANT 340: Culture/Environment (req. Jr., WRT 150, HP or US)(I,GP)
- ____ ART 423: Animals in Art (req. Jr.) (I)
- ____ BIO 338: Environmental Ethics (req. Jr., WRT 150) (I)
- ____ ENG 382: Literature and the Environment (req. Jr., WRT 150) (I)
- ____ ENS 311: To Bee or Not to Bee: Honey Bees and Social Impact
- ____ HST 323: Michigan History
- ____ INT 330: The Idea of Nature (req. Jr.) (I)
- ____ PA 360: Voluntarism and the Non-Profit Sector
- ____ PSY 362: Environmental Psychology

II. Physical and Life Science Perspectives –

Knowledge from the physical and life sciences defines the context and limits of humans' interactions with their environments.

- ____ BIO 105: Environmental Science (NS)
- ____ ENS 310: How Biosphere Works
(req. ENS 201, Jr., completion of NS)
- ____ GPY 100: Physical/Environmental Geography
- ____ NRM 330: Environmental Pollution
(req. CHM 109 or CHM 116)

III. Political and Economic Perspectives –

Policy studies, economics, and the social sciences describe and analyze social structures that influence humans' interactions with their environments.

- ____ ECO 345: Environmental and Resource Economics (req. Jr., ECO 200 or 211, Seidman permit) (I)
- ____ GPY 361: People, Environment, and Development in the Amazon (req. Jr.) (I)
- ____ INT 322: Wicked Problems of Sustainability (req. Jr.) (I)
- ____ NRM 150: Introduction to Natural Resources
- ____ NRM 451: Natural Resource Policy (req. Jr., completion of NS or permission) (I)
- ____ OSH 414: Environmental Safety and Health Regulations
- ____ PA 307: Local Politics and Administration (req. Jr.) (I)
- ____ PLS/ENS 303: Introduction to U.S. Environmental Policy (req. Jr.) (I)
- ____ PLS 314: International Law (req. Jr. or PLS 211)

SYNTHESIS AND APPLICATION (5 credits)

- ____ ENS 401: Environmental Problem Solving (Capstone) (3 cr.) (req. Jr., ENS 201)
- AND**
- ____ ENS 490: Internship (minimum 2 cr.) **OR** ____ ENS 491: Practicum (minimum 2 cr.)

FOCUS AREA COURSES (9-10 credits minimum)

*Students must complete the required coursework in at least one of the following Focus Areas:
Sustainable Food Systems, Energy, Water Resources, or Culture and the Built Environment*

Focus Area: Sustainable Food Systems

Complete the required food safety course and one course from each perspectives list; No course may count as both a Focus Area course and as a Triple Bottom Line course.

Requirement: Food Safety

__ HTM 201: Good Food Gone Bad- Food Safety (1 cr.) (SFS)

OR

__ HTM 250: Food Production and Kitchen Management (4 cr.) (SFS)

I. Social and Cultural Perspectives

__ ART 423: Animals in Art (req. Jr.) (I)

__ ENS 311: To Bee or Not to Bee; Honey Bees and Social Impact

__ GPY 362 Farmers, Crops, and Our Challenging Ag. World
(req. Jr.) (I, GP, SFS)

__ GPY 363: World Forests and Their Use (req. Jr.) (I, GP)

__ HNR 151: Food for Thought 1 (req. HNR College)

__ INT 342: Food Matters (req. Jr.) (I, SFS)

__ SOC 288: Sociology of Food (SFS)

II. Physical and Life Science Perspectives

__ BIO 319: Global Agricultural Sustainability

(req. Jr, completion of Gen. Ed. Life Sci) (I, SFS)

__ ENS 392: Sustainable Agriculture: Ideas/Tech. (req. Jr.) (SFS, I)

__ NRM 281: Principles of Soil Science (4 cr.)

(req. CHM 109 or 115) (SFS)

III. Political and Economic Perspectives

__ GPY 345: Geography/Land Use Management of MI /Great Lakes

__ GPY 361: People, Environment, & Dev. in the Amazon (req. Jr.)(I)

Focus Area: Energy

Complete one course from each perspectives list; No course may count as both a Focus Area course and a Triple Bottom Line course.

I. Social and Cultural Perspectives

__ GPY 363: World Forests and Their Use (req. Jr.) (I)

__ HST 323: Michigan History

__ INT 330: The Idea of Nature (req. Jr.) (I)

II. Physical and Life Science Perspectives

__ BIO 105: Environmental Science (NS)

__ BIO 215: General Ecology (4 cr.)

(req. BIO 120, or CMB 155 & CMB 156, BIO 121)

__ EGR 360: Thermodynamics (req. PHY 231 or 234, MTH 302,
and admitted to electrical, interdisciplinary, mechanical, or
product design/manufacturing engineering major)

__ GPY/ENS 412: Global Climate and Environmental Change

(req. Jr., either GPY 100 or ENS 201 or completed NS) (I, SFS)

III. Political and Economic Perspectives

__ ECO 345: Environmental and Resource Economics

(req. Jr., ECO 200 or 211, Seidman Permit) (I)

__ EGR 406: Renewable Energy Systems: Structure/Policy/Analysis
(req. Jr., STA 215 or 200 or 312) (I)

__ NRM 451: Natural Resource Policy

(req. Jr., completion of NS or permission) (I)

Focus Area: Water Resources

Complete one course from each perspectives list; No course may count as both a Focus Area course and as a Triple Bottom Line course.

I. Social and Cultural Perspectives

__ BIO 338: Environmental Ethics (req. Jr., WRT 150) (I)

__ HST 323: Michigan History

__ INT 330: The Idea of Nature (req. Jr.) (I)

II. Physical and Life Science Perspectives

__ BIO 107: Great Lakes and Other Water Resources (4 cr.)

__ BIO 215: General Ecology (4 cr.) (req. BIO 120, or CMB 155 & CMB 156, BIO 121; BIO 120 may be taken concurrently)

__ GEO 105: Living with the Great Lakes (NS)

III. Political and Economic Perspectives

__ GPY 345: Geography and Land Use Management of MI and the Great Lakes Area

__ NRM 451: Natural Resource Policy (req. Jr., completion of NS or permission) (I)

__ OSH 414: Environmental Safety and Health Regulations

Focus Area: Culture and the Built Environment

Complete one course from each perspectives list; No course may count as both a Focus Area course and as a Triple Bottom Line course.

I. Social and Cultural Perspectives

- ___ ANT 340: Culture and Environment (*preq. Jr., WRT 150, and HP or US*) (I, GP)
- ___ ANT 380: Environmental Archeology
- ___ ENG 382: Literature and the Environment (*preq. Jr., WRT 150*) (I)
- ___ GPY 410: Landscape Analysis and Green Infrastructure (*preq. Jr.*) (I)
- ___ HST 320: American Indians
- ___ HST 327: History of United States Urban Society
- ___ SW 150: Intro to Social Work and Social Welfare (SBS)
- ___ WGS 335: Women, Health and the Environment (*preq. Jr.*) (I)

II. Physical and Life Science Perspectives

- ___ EGR 306: Urban Sustainability (*preq. Jr., MTH 110*) (I)
- ___ GPY 312: Urban and Regional Environmental Planning
- ___ NRM 330: Environmental Pollution (*preq. CHM 109 or 116*)

III. Political and Economic Perspectives

- ___ CJ 370: Environmental Crime and Justice (*preq. Jr.*)
- ___ GPY/PA 324: Urbanization (*preq. Jr.*) (I, GP)
- ___ GPY 335: Globalization and Development (*preq. Jr.*) (I)
- ___ GPY 361: People, Environment, and Development in the Amazon (*preq. Jr.*) (I)
- ___ HTM 368: Geotourism (*preq. Jr., HTM 202*) (I)
- ___ SOC 351: Urban Sociology (*preq. Jr., SOC 101*) (I)

DEGREE REQUIREMENTS (*Select from B.A. or B.S. Option*)

☐ **B.A.** 3rd semester proficiency in a foreign language:

___ 201 Course

OR

___ Pass Proficiency Exam

☐ **B.S.** Candidates for the B.S. must complete the following:

___ STA 215: Introductory Applied Statistics (3 cr.)
(*preq. MTH 110 or equivalent*)

AND one of the following (3 cr.):

- ___ AHS 301: Intro to Health Care Research (*preq. STA 215*)
- ___ GPY 307: Introduction to Geographic Info Systems (TS+BS)
- ___ HST 290: Research Methods in History (*preq. STA 215 or 312*)
- ___ PLS 300: Political Analysis (*preq. STA 215*)
- ___ PSY 300: Research Methods in Psychology
(*preq. PSY 101 and STA 215 or STA 312*)

AND one of the following (3 cr.):

- ___ GPY 370: Introduction to Remote Sensing (TS+BS)
- ___ GPY 407: Advanced GIS (4 cr.) (*preq. GPY 307*)
- ___ STA 216: Intermediate Applied Statistics (*preq. STA 215 or 312*)
- ___ STA 301: Questionnaire Design and Execution
(*preq. STA 215 or 312*) (TS+BS)
- ___ STA 314: Statistical Quality Methods (*preq. STA 215*)
- ___ STA 318: Statistical Computing (*preq. STA 215*)
- ___ STA 340: Statistics in the Media (*preq. Jr., STA 215*)

This form is a planning tool and does not constitute an agreement regarding program requirements.

It is imperative that you meet with an academic advisor early and often in your career.

TOTAL NUMBER OF CREDITS _____

Brooks College Office of Integrative Learning and Advising

133 Lake Michigan Hall, (616) 331-8200

brooksadvising@gvsu.edu

www.gvsu.edu/integrativelearning

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