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: |
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| CORE COURSES: All required (9 credits needed) ENS 201: Introduction to Environmental and Sustainability Studies ENS 300: Principles of Sustainability (preq. ENS 201) INT 301: Interdisciplinary Research Methods | es (SFS) |
| TECHNICAL SKILLS (3-4 credits needed) Choose one course from ENS 305: Sustainability Assessment and Reporting (preq. ENS 201) GPY 307: Introduction to Geographic Information Systems GPY 370: Introduction to Remote Sensing NRM 250: Resource Measurement and Maps PHO 171: Photography 1 (4 cr.) STA 301: Questionnaire Design and Execution (preq. STA 215 or 3 STA 311: Introduction To Survey Sampling (preq. STA 216) STA 341: Demographic Methods (preq. Jr., STA 215 or 312) (I) WRT 200: Introduction to Professional Writing (preq. WRT 150) WRT 253: Document Production and Design (preq. WRT 150) WRT 350: Business Communication (preq. WRT 150) TRIPLE BOTTOM LINE OVERVIEW COURSES (9 credits needed No course may count toward both a Focus Area and the Triple Bottom | SBS= Foundation-Social and Behavioral Sciences GP= Global Perspectives HP= Foundation-Historical Perspectives I= Issues NS= Foundation-Natural Sciences SFS= Sustainable Food Systems Certificate US= U.S. Diversity |
| 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 (preq Jr, WRT 150, HP or US)(I, GP)ART 423: Animals in Art (preq. Jr.) (I)BIO 338: Environmental Ethics (preq. Jr., WRT 150) (I)ENG 382: Literature and the Environment (preq. Jr., WRT 150) (I)ENS 311: To Bee or Not to Bee: Honey Bees and Social ImpactHST 323: Michigan HistoryINT 330: The Idea of Nature (preq. Jr.) (I)PA 360: Voluntarism and the Non-Profit SectorPSY 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 (preq. ENS 201, Jr., completion of NS)GPY 100: Physical & Environmental GeographyNRM 330: Environmental Pollution (preq. CHM 109 or CHM 116) |
| III. Political and Economic Perspectives — Policy studies, economics, and the social sciences describe and analyze social structure ECO 345: Environmental and Resource Economics (preq. Jr., ECO GPY 361: People, Environment, and Development in the Amazon INT 322: Wicked Problems of Sustainability (preq. Jr.) (I) NRM 150: Introduction to Natural Resources NRM 451: Natural Resource Policy (preq. Jr., completion of NS or people of NS 414: Environmental Safety and Health Regulations PA 307: Local Politics and Administration (preq. Jr.) (I) PLS/ENS 303: Introduction to U.S. Environmental Policy (preq. Jr. PLS 314: International Law (preq. Jr. or PLS 211) | ermission) (I) |
| SYNTHESIS AND APPLICATE ENS 401: Environmental Problem Solving (Capstone) (3 cr.) (prequency AND ENS 490: Internship (minimum 2 cr.) ORENS 491: Property AndENS 491: Property And | |

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 for Everyone (1 cr.)
- HTM 250: Food Production and Kitchen Management (4 cr.)

I. Social and Cultural Perspectives

- ART 423: Animals in Art (preg. Jr.) (I)
- ENS 311: To Bee or Not to Bee; Honey Bees and Social Impact
- GPY 362 Farmers, Crops, and Our Challenging Ag. World
 - (preq. Jr.) (I, GP, SFS)
- GPY 363: World Forests and Their Use (preg. Jr.) (I, GP)
- HNR 151: Food for Thought I (preg. HNR College)
- INT 342: Food Matters (preq. Jr.) (I, SFS)
- SOC 288: Sociology of Food (SFS)

II. Physical and Life Science Perspectives

- BIO 319: Global Agricultural Sustainability
- (preq. Jr, completion of gen. ed. Life Sci) (I, SFS)
- ENS 392: Sustainable Agriculture: Ideas/Tech. (preq. Jr.) (SFS, I)
- NRM 281: Principles of Soil Science (4 cr.)
 - (preq. 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 (preg. 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 (preg. Jr.) (I)
- HST 323: Michigan History
- INT 330: The Idea of Nature (preg. Jr.) (I)

II. Physical and Life Science Perspectives

- BIO 105: Environmental Science (NS)
- BIO 215: General Ecology (4 cr.)
- (preq. BIO 120, or CMB 155 & CMB 156, BIO 121)
- EGR 360: Thermodynamics (preg. 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
- (preg. Jr., either GPY 100 or ENS 201 or completed NS) (I, SFS)

III. Political and Economic Perspectives

- ECO 345: Environmental and Resource Economics
 - (preg. Jr., ECO 200 or 211, Seidman Permit) (I)
- EGR 406: Renewable Energy Systems: Structure/Policy/Analysis
- (preg. Jr., STA 215 or 200 or 312) (I)
- NRM 451: Natural Resource Policy
- (preq. 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 (preg. Jr., WRT 150) (I)
- HST 323: Michigan History
- INT 330: The Idea of Nature (preg. Jr.) (I)

II. Physical and Life Science Perspectives

- BIO 107: Great Lakes and Other Water Resources (4 cr.)
- BIO 215: General Ecology (4 cr.) (preq. 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 (preg. Jr., completion of NS or permission) (I)
- OSH 414: Environmental Safety and Health Regulations

| Focus Area: Culture and the Built Environment | | |
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| Complete one course from each perspectives list; No course m | nay 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) | | |
| GPY 410: Landscape Analysis and Green Infrastructure (pro | eq Jr.) (l) | |
| HST 320: American Indians HST 327: History of United States Urban Society | | |
| 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 (preg. Jr.) (I) | | |
| HTM 368: Geotourism (preq. Jr., HTM 202) (I) | | |
| SOC 351: Urban Sociology (preq. Jr., SOC 101) (I) | | |
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| DEGREE REQUIREMENTS (Select from B.A. or B.S. Option) | | |
| □ B.A 3rd semester proficiency in a foreign language: | □ B.S. Candidates for the B.S. must complete the following: | |
| 201 Course | STA 215: Introductory Applied Statistics (3 cr.) | |
| OR | (preq. MTH 110 or equivalent) | |
| Pass Proficiency Exam | AND one of the following (3 cr.): | |
| 1 ass I folicioney Exam | AHS 301: Intro to Health Care Research (preg. STA 215) | |
| | GPY 307: Introduction to Geographic Info Systems | |
| | HST 290: Research Methods in History (preg. STA 215 or 312) | |
| | DI C 200. Delitical Applying (sum of CTA 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_____

| ٠ | D.S. Candidates for the D.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 |
| | 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 |
| | 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) |
| | 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) |

Brooks College Office of Integrative Learning and Advising

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www.gvsu.edu/integrativelearning