

Saint Joseph's University

BS Environmental Science Major Curriculum Requirements (Updated May 2023)

Name _____

ID# _____

General Education Program (GEP)

Signature Core (6 courses)

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|----|--|---|--|
| 1. | | First Year Seminar (XXX150 or BIO 151L) | |
| 2. | | PHL 154 Moral Foundations | |
| 3. | | THE 154 Faith, Justice, & the Catholic Tradition | |
| 4. | | ENG 102 Texts and Contexts (pre-req: ENG 101) | |
| 5. | | HIS 154 Forging the Modern World | |
| 6. | | Faith and Reason Course (pre-reqs: THE154 & PHL154) | |
| | | INT 151 Inequality in American Society (Required for students entering Fall 2023 and later) | |

Variable Courses (# of courses varies, depending on language placement)

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|-----|--|--|--|
| 7. | | ENG 101 Craft of Language | |
| 8. | | Art, Music/Theatre/Film, or Lit | |
| 9. | | Math (Beauty) (MAT 155, MAT 161, or higher level calculus) | |
| 10. | | BIO 101 & 101L Bio I: Cells + Lab | |
| 11. | | Social/Behavioral Science | |
| 12. | | Non-Native Language I | |
| 13. | | Non-Native Language II | |
| 14. | | PHL Anthropology (pre-req: PHL 154) | |
| 15. | | Religious Difference (THE or REL) | |

Integrative Learning Courses (3 courses)

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|-----|--|-------------------------------------|--|
| 16. | | CHM 120/120L General Chem I + Lab | |
| 17. | | BIO 102/102L BIO II: Genetics + lab | |
| 18. | | MAT 128 Applied Statistics | |

Overlays (All students complete 3 overlays (EI, WI, DGNW) that may be combined with other GEP requirements, major courses, or electives. Class of 2025 forward must also complete the additional Diversity Overlay.)

	Diversity (Class of 2025 forward only)	
	Diversity or Global or Non-Western	
	Ethics-Intensive (pre-req: PHL 154)	
	Writing-Intensive (pre-req: ENG 101)	

Major Requirements (14 courses)

See reverse for additional information on ENV SCI Major electives.

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|-----|--|---|--|
| 19. | | BIO 201 & 201L Bio III: Organismic Biology + Lab | |
| 20. | | ENV 106 & 106L Exploring the Earth + Lab OR BIO 429 & 429L Environmental Science + Lab | |
| 21. | | ENV 102 Environmental Theory & Ethics Seminar | |
| 22. | | Group A: Biological Sciences (choose 1) | |
| 23. | | Group B: Physical Science (choose 1) | |
| 24. | | Group C: Environmental Studies (choose 1) | |
| 25. | | Upper-level Environmental Science elective | |
| 26. | | Upper-level Environmental Science elective | |
| 27. | | Upper-level Environmental Science elective | |
| 28. | | Upper-level Environmental Science elective | |
| 29. | | CHM 125 & 125L General Chemistry II + Lab | |
| 30. | | CHM 210 & 210L Organic Chemistry I + Lab | |
| 31. | | PHY 101 & 101L General Physics I + Lab OR PHY 105 & 105L University Physics + Lab | |
| 32. | | ENV 490 Environmental Science Internship | |

ENV 390 (non-credit seminar) is required each semester in (Total 8 semesters).

Electives (Minimum of 18 credits of electives are required for graduation.)

	Free Elective	
	Free Elective	
	Free Elective	
	Free Elective	
	Free Elective	
	Free Elective	
	Free Elective	
	Free Elective	

*See other page for additional notes on ENV SCI requirements

Environmental Science Contact Information:

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Science Center 127

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Environmental Science Major Electives

Group A: Biological Sciences

- BIO 401 Animal Behavior
- BIO 405 Biomechanics
- BIO 409 Ecology
- BIO 413 Plant Physiological Ecology
- BIO 414 Plant Systematics
- BIO 416 Microbiology
- BIO 419 Invertebrate Zoology
- BIO 422 Applied & Environmental Microbiology
- BIO 423 Evolution

Group B: Physical Science

- ENV 302 Environmental Geology
- ENV 440 Environmental Toxicology
- CHM 420 Atmospheric Environmental Chemistry
- CHM 460 Water Chemistry
- CHM 215 & 215L Organic Chemistry II and Organic Chemistry Lab II
- PHY 102 & 102L General Physics II and General Physics Laboratory II **OR** PHY 106 & 106L University Physics II and University Physics Lab II

Group C: Environmental Studies

- ART 146 Sculpture and the Environment
- ART 177 Photography & Climate Crisis
- BIO 360 God and Evolution
- COM 473-D01 The Cloud is a Computer
- ECN 370 Economic Development
- ECN 372/GIS 172 Urban Economics
- ECN 375/GIS 175 Environmental Economics
- ENG 426 Nature & Environmental Writing
- ENG 433 Environmental Justice
- ENG 434 Climate Change Stories
- ENV 471 Environmental Law
- GIS 101 Introduction to GIS
- GIS 201 Intermediate GIS
- GIS 370 Special Topics in GIS
- HIS 386 American Environmental History
- MGT 212 Organizational Sustainability (formerly LEO 212)
- MKT 150 People, Planet and Profit (other first year seminar topics relevant to Environmental Science will be considered. Program Director approval is required)
- PHL 295 Philosophy of the Environment
- PHL 316 Food and Justice
- SOC 316 Fair Trade: Coffee-Co-Op to Cup
- THE 339 Darwin, Dogma, and Ecology

Environmental Science Major - Typical Course Sequence

Below is listed the typical curriculum for an Environmental Science major. This schedule presumes that the student enters as a first-year student, without advanced placement in mathematics, English, etc. Students interested in declaring a major in Environmental Science or changing their major to Environmental Science from a different major should consult with Dr. John Braverman, Program Director. Note that many courses have prerequisites which affect the sequence.

When to take Environmental Science: ENV 106/106L OR BIO 429 & 429L: Students may count only one of these two courses for the major. ENV 106 can be taken anytime, so a student strongly motivated to enter the material of their major could start this in Spring of the first year. BIO 429 can only be taken after BIO 201 (Organismic) and CHM 125. In general, it is preferred that Environmental Science majors take BIO 429 & 429L.

FIRST YEAR	Fall	Spring
	<ul style="list-style-type: none"> BIO 101/101L Bio I: Cells + lab First-Year Seminar or PHL 154 Math Beauty (MAT 155, 161, or higher, based on placement, or MAT 120 based on lower placement) ENG 101 Craft of Language Non-Native Language I 	<ul style="list-style-type: none"> BIO 102 & 102L Bio II: Genetics + lab (ILC) Non-Native Language II English 102 Texts and Contexts Options: ENV 102, ENV 106/106L 5th course (such as THE 5xx)
SOPHOMORE	Fall	Spring
	<ul style="list-style-type: none"> CHM 120/120L Gen Chemistry I (ILC) BIO 201/201L Bio III: Organismic Biology ENV Elective PHL 154 Moral Foundations MAT 128 Statistics 	<ul style="list-style-type: none"> CHM 125/125L Gen Chemistry II ENV 102 Environmental Theory and Ethics Seminar THE 15x Catholic Theol Trad Social/Behavioral Science* BIO 429 & 429L or ENV Elective
JUNIOR	Fall	Spring
	<ul style="list-style-type: none"> CHM 210/210L Organic Chemistry I ENV Elective PHL Anthropology Elective HIS 154 Forging the Modern World 	<ul style="list-style-type: none"> Elective or overlay Religious Difference Art/Lit Elective or BIO 429 & 429L ENV Elective
SENIOR	Fall	Spring
	<ul style="list-style-type: none"> ENV 490 ENV SCI Internship PHY 101/101L General Physics I +lab or PHY 105/105L University Physics + lab ENV Elective Faith and Reason Elective 	<ul style="list-style-type: none"> ENV Elective Elective or overlay ENV Elective Elective Elective or overlay [Ethics-intensive overlay to be met by ENV 102]

ENV 390 Seminar. In addition to the courses listed above, the ENV 390 is required for eight semesters. This is a non-credit course which does not meet every week.

*If a GEP social science is being recommended, prioritize ECN 101.