Fall 2024 Undergraduate Program Director (UPD) Report

Leah Kapps - 11/15/2024 2:34:40 PM -05:00

Received

Date:

By:

Comment:

Instructions

This is a form for SEBS Governing Council major representatives. The purpose of this form is to encourage student engagement with faculty/department representatives and to identify academic issues that may be addressed by the council.

1. Talk to students in your major, ask around if there are any current academic issues (ex: class conflicts within the major, issues with professors or department, lack of resources).

2. Look at Degree Navigator, write down the course requirements

3. Formulate a list of things you would like to know about the program (corporate connections with the university, current research projects, opportunities for students to get involved, recent changes to the program)

4. Email Undergraduate Program Director and Arrange Appointment

5. Fill out this form and submit by 11:59pm on November 17th, 2024.

> n/a

General Information

Your Name

> Leah Kapps

Your Email

> lmk243@scarletmail.rutgers.edu

Represented Major

> Ecology, Evolution, and Natural Resources

Date of Meeting with UPD

> 11/15/24

Class Year

> 2026

UPD Name

> Kimberly Russell

UPD Email

> kimrusse@sebs.rutgers.edu

Major/Departmental Website Link (if applicable)

> https://deenr.rutgers.edu/

Major Information

Major Options -- What options are offered within the major? How do they differ?

> EENR General Track, Natural Resources and Ecosystem Management Track, Urban Forestry Track. The general track allows students more choice in what classes they want to take and what path they want to follow within the major. The Natural Resources and Ecosystems Management Track is for students who want a career in natural resources and focuses on wildlife ecology, biology, and forestry. The Urban Forestry track is for students interested in a career in urban forestry and emphasizes hands-on forestry skills with courses like Urban Forestry and Arboriculture.

Total Number of Students within the Major (estimate if unknown from UPD)

> 150

Goals within the Major -- What are expectations of students post-graduation?

> Goal 1: Explain basic population, community ecology, and ecosystem-level concepts. Goal 2: Describe the evolutionary origins, processes, and patterns over geologic time. Goal 3: Create a natural resource management plan demonstrating an understanding of societal values and interests. Goal 4: Effectively utilize software, hardware, field, and laboratory techniques commonly used in the study of ecology, evolution, and natural resource management. Goal 5: Use quantitative methods to analyze and understand ecological systems, including interpretation of numeric and graphical data. Goal 6: Communicate effectively orally and through written text and graphics. Goal 7: Evaluate ecology, evolution, and natural resource management concepts in a global context. Natural Resources and Ecosystem Management Track Specific Learning Goals: Goal 8: Evaluate conflicts and dilemmas through a lens of professional ethics. Goal 9: Describe natural resource relevant laws and policies in New Jersey and at the national level. Urban Forestry Track Specific Learning Goals: Goal 10: Apply a fundamental knowledge of tree biology and professional ethics to tree care management and practice. Goal 11: Describe urban forestry relevant laws and policies in New Jersey and at the national level.

List Upper-Level major courses -- What is the goal of each course?

> Goal 1: Explain basic population, community ecology, and ecosystem-level concepts. - 11:216:451 Global Change & Eco - 11:216:464 Wildlife Eco and Conserv - 11:216:317 Conservation Ecology - 11:216:325 Vertebrate Zoology - 11:216:441 Animal Behavior - 11:216:351 Principles of Ecology (EENR Core Course) - 11:216:403 Urban Forestry - 11:216:431 Fund Eco Evo Model (EENR Core Course) - 11:216:450 Landscape Ecology - 11:216:471 Silviculture - 11:216:487 Urban Ecology - 11:216:475 Winter Field Ecology Goal 2: Describe the evolutionary origins, processes, and patterns over geologic time. - 11:216:332 Plant Ecology - 11:216:317 Conservation Ecology - 11:216:325 Vertebrate Zoology - 11:216:441 Animal Behavior - 11:216:351 Principles of Ecology (EENR Core Course) - 11:216:324 Invertebrate Zoology - 11:216:411 Plant Diversity and Evolution - 11:216:412 Plant Diversity Lab - 11:216:405 Evolution of Infectious Disease - 11:216:486 Princ of Evolution Goal 3: Create a natural resource management plan demonstrating an understanding of societal values and interests. - 11:216:464 Wildlife Eco and Conserv - 11:216:403 Urban Forestry - 11:216:471 Silviculture - 11:216:320 Controversies In Sustainability Goal 4: Effectively utilize software, hardware, field, and laboratory techniques commonly used in the study of ecology, evolution, and natural resources management. - 11:216:464 Wildlife Eco and Conserv - 11:216:403 Urban Forestry - 11:216:332 Plant Ecology - 11:216:324 Invertebrate Zoology - 11:216:411 Plant Diversity and Evolution - 11:216:450 Landscape Ecology - 11:216:475 Winter Field Ecology - 11:216:369 Anal MTDS ECL EVL NR (EENR Core Course) - 11:216:371 Into to Remote Sensing - 11:216:352 Principles of Ecology lab (EENR Core Course) - 11:216:474 Advance remote sensing Goal 5: Use quantitative methods to analyze and understand ecological systems, including interpretation of numeric and graphical data. - 11:216:464 Wildlife Eco and Conserv - 11:216:403 Urban Forestry - 11:216:332 Plant Ecology - 11:216:450 Landscape Ecology - 11:216:475 Winter Field Ecology - 11:216:369 Anal MTDS ECL EVL NR (EENR Core Course) - 11:216:371 Into to Remote Sensing - 11:216:352 Principles of Ecology lab (EENR Core Course) - 11:216:474 Advance remote sensing - 11:216:471 Silviculture - 11:216:317 Conservation Ecology -11:216:325 Vertebrate Zoology - 11:216:351 Principles of Ecology (EENR Core Course) - 11:216:405 Evolution of Infectious Disease - 11:216:486 Princ of Evolution - 11:216:451 Global Change & Eco - 11:216:431 Fund Eco Evo Model (EENR Core Course) - 11:216:360 Animal Phys Ecol Goal 6: Communicate effectively orally and through written text and graphics. - 11:216:464 Wildlife Eco and Conserv - 11:216:403 Urban Forestry - 11:216:332 Plant Ecology - 11:216:475 Winter Field Ecology - 11:216:369 Anal MTDS ECL EVL NR (EENR Core Course) - 11:216:371 Intro to Remote Sensing - 11:216:352 Principles of Ecology lab (EENR Core Course) - 11:216:474 Advance remote sensing - 11:216:471 Silviculture - 11:216:317 Conservation Ecology - 11:216:405 Evolution of Infectious Disease - 11:216:486 Princ of Evolution - 11:216:431 Fund Eco Evo Model (EENR Core Course) - 11:216:324 Invertebrate Zoology - 11:216:320 Controversies In Sustainability - 11:216:487 Urban Ecology - 11:216:499 Senior Capstone-EE (EENR Core Course) Goal 7: Evaluate ecology, evolution, and natural resource management concepts in a global context. - 11:216:464 Wildlife Eco and Conserv - 11:216:475 Winter Field Ecology - 11:216:317 Conservation Ecology - 11:216:431 Fund Eco Evo Model (EENR Core Course) - 11:216:320 Controversies In Sustainability - 11:216:487 Urban Ecology - 11:216:351 Principles of Ecology (EENR Core Course) - 11:216:451 Global Change & Eco - 11:216:360 Animal Phys Ecol - 11:216:411 Plant Diversity and Evolution - 11:216:412 Plant Diversity Lab

Student Issues

Are there concerns with classes within the major? Are there any suggestions for solutions to these concerns?

> For students taking Environmental Geomatics, there is sometimes an overlap between the geomatics classes and ecology classes, making it harder for them to complete the certificate/minor on time. It would be nice if the two departments could coordinate better. Another issue is that many of the ecology courses are held in the fall, which leaves not many options for the spring, and it makes it less possible to take all of the desired courses before graduating and less possible to do things in a timely manner. This problem is intensified by classes getting taken by biology majors which take ecology courses as electives. This could maybe be fixed by having a section of the course just for ecology majors, letting ecology majors sign up for the class first, or making the class bigger/ having more sections.

From the perspective of the UPD or other major faculty members, what can currently be improved upon in the major or department? Are there any suggestions for solutions to these issues?

> There has been difficulty getting students into the classes they want because of the loss of faculty, having more courses in the fall for weather reasons, and the major is growing. Some of the fall courses that don't need to be in the fall for data collection reasons could start getting moved to the spring for better options. A particular course students have struggled with is Fundamentals of Evolution Lab which the department is working on. Something Dr. Russell wants to start doing is working with the Rutgers Global Department to streamline study abroad opportunities for ecology majors and work on creating more opportunities especially for semester-long study abroad programs.

Are there any Visitor Events/Talks/Seminars/etc. going on within the major?

> Graduate student seminars are on Fridays, and general student seminars are on Thursdays. These events are posted to the Ecology major instagram.

Suggestions for students in this major (ex: organizations to join, news to pay attention to)

> Join Rutgers Chapter: The Wildlife Society, Forestry Club, and the Bird Watching Club. Get as much hands-on experience as possible by volunteering, working or volunteering for ecology labs, and getting internships.

Changes within the major for the upcoming year

> Last year the Urban Forestry and Natural Resources and Ecosystem Management tracks were added to the major and were recently accredited by the Society of American Foresters so the only change this year is to promote to and inform new students about these tracks. In addition to this is making changes to course offerings to make scheduling better for students.

Any other suggestions, comments, concerns?

> EENR majors should monitor the Canvas and EENR emails as much as possible. Another concern is that it seems to be hard to get into the workforce after college for ecology students and it would be nice if the ecology department or SEBS offered more courses or optional events where we could learn more practical skills that employers are looking for.