THE UNIVERSITY OF NORTH CAROLINA ASHEVILLE
FACULTY SENATE

Senate Document Number SD2421S
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Statement of Faculty Senate Action:

APC Document 21 (ENVR): **Add two courses to the ENVR curriculum:**
ENVR 352, Plant-Animal Interactions
ENVR 397, Herbaceous Plants of Winter and Spring

Effective Date: Fall 2021

1. Add: On page 152, new course, **ENVR 352, Plant-Animal Interactions:**

352 Plant-Animal Interactions (4)
Explores some of the fascinating relationships between plants and animals, focusing on mammals, birds, and invertebrates in southern Appalachian ecosystems. Topics may include herbivory, pollination, galls, seed dispersal, and plant carnivory. Prerequisite: ENVR 241. Even years Fall.

Impact: There will be only minimal supply/equipment expenses related to this course. The Environmental Studies Department maintains a supply of field and lab equipment that has been used in many environmental studies field courses, and only minimal supplies will be needed to replenish the departmental inventory (e.g., occasional flagging tape, DBH tapes, tape measures, collecting bins).

There will be expenses for local field trips in university vehicles that will be paid for by the ENVR departmental budget. These expenses are typical for all our field courses, and are not unique to this course. If this course were not taught, another field course would be taught instead, with the same field trip expenses. If budgeting does not allow for field trips, all activities can be conducted on campus.

Dr. Irene Rossell taught this course each time it was offered in recent years as a Special Topics, and will continue to teach it as part of her regular teaching load. Dr. Andrew Laughlin is also qualified to teach the course. The course will have a lecture/lab format with an anticipated enrollment of 20 students, and will meet in even-year fall semesters (alternating with ENVR 346 Plant Ecology, which is taught in odd-year fall semesters).

Rationale: This course has been taught as a Special Topics course three times in recent years:
Fall 2016 –20 students enrolled (20 seats available);
Fall 2018 - 20 students enrolled (20 seats available);
Fall 2020 –20 students enrolled (20 seats available)

The course was fully enrolled each time it was offered, enrolling primarily ENVR majors in the Ecology concentration, but also a few students minoring in ENVR. The course counts as an advanced ecology elective in the Ecology concentration (students need to take 18 hours of advanced ecology electives, which generally means they need 5 courses). The Ecology concentration is the largest concentration in our department, and we need to provide ~100 seats in advanced ecology electives every semester. This is one of only a few advanced electives in ENVR and BIOL that focuses on plants, so it is of particular interest to students interested in learning plant identification. It is also of great interest to students interested in wildlife management and/or holistic approaches to ecology, as it incorporates elements of both plant ecology and animal ecology.

The course is taught as a 4-credit course (150 minutes of lecture and 3 hours of lab each week). Most labs are held outdoors, but some are indoors, in one of our teaching labs. This is an inquiry-based course; during labs, students learn standard methods for collecting data in the field. They work collaboratively in small groups to collect data, then gain proficiency analyzing their data for homework assignments and formal lab reports.

2. **Add:** On page 153, new course, **ENVR 397, Herbaceous Plants of Winter and Spring:**

> **397 Herbaceous Plants of Winter and Spring (4)**
> Field identification, natural history, and botanical classification of herbaceous plants with the changing of the season, including evergreens, winter annuals, biennials, spring ephemerals, and graminoids. Prerequisite: ENVR 241. Even years Spring.

Impact: There will be only minimal supply/equipment expenses related to this course. The main supplies used in the course are hand clippers and plastic bags for collecting specimens in the field.

There will be expenses for local field trips in university vehicles that will be paid for by the ENVR departmental budget. These expenses are typical for all our field courses, and are not unique to this course. If this course were not taught, another field course would be taught instead, with the same field trip expenses. If budgeting does not allow for field trips, all activities can be conducted on campus.

Dr. Irene Rossell taught this course each time it has been offered as a Special Topics, and will continue to teach it as part of her regular teaching load. The course will have a lecture/lab format with an anticipated enrollment of 20 students, and will meet in even-year spring semesters (alternating with ENVR 396 Woody Plants in Winter, which is taught in odd-year spring semesters).

Rationale: This course has been taught as a Special Topics course three times in recent years:
Spring 2016 – Taught as 373, 20 students enrolled (20 seats available);
Spring 2018– Taught as 374, 20 students enrolled (20 seats available);
Spring 2020 – Taught as 374, 20 students enrolled (20 seats available)

The course was fully enrolled each time it was offered, enrolling primarily ENVR majors in the Ecology concentration, but also a few students minoring in ENVR. It serves as a companion course to ENVR 396 Woody Plants in Winter, which is taught in alternating spring semesters. Many of our students have been taking both courses, to get a well-rounded background in plant identification. The course counts as an advanced ecology elective in the Ecology concentration (students need to take 18 hours of advanced ecology electives, which generally means they need 5 courses). The Ecology concentration is the largest concentration in our department, and we need to provide ~100 seats in advanced ecology electives every semester. This is one of only a few advanced electives in ENVR and BIOL that focuses on plants, so it is of particular interest to students interested in learning plant identification. The BIOL department has reduced the number of plant-oriented courses it offers in recent years, making it even more critical that our department provide relevant botanical training and field experiences for our majors and minors.

The course is taught as a 4-credit course (150 minutes of lecture and 3 hours of lab each week). Most labs are held outdoors, but some are indoors, in one of our teaching labs. In lecture, students learn botanical terminology, classification, plant life histories, and natural history. The focus of the lab is plant identification; students are responsible for learning family relationships, as well as the correct identification and spelling of scientific names for ~100 specimens.

3. **Delete:** On page 148, in the Concentration in Ecology and Environmental Biology listing:

> 18 hours of Ecology and Biology electives chosen from BIOL 210 or 211 (whichever is not selected above), 320, 322, 323, 331, 332, 333, 334, 335, 340, 350, 351, 356, 357, 360, 442; or ENVR 302, 312, 322, 323, 341, 343, 346, 347, 348, 349, 351, 358, 360, 390, 391, 396.

Add: On page 148, in place of deleted entry:

> 18 hours of Ecology and Biology electives chosen from BIOL 210 or 211 (whichever is not selected above), 320, 322, 323, 331, 332, 334, 335, 350, 351, 356, 357, 360, 442; or ENVR 302, 312, 322, 323, 341, 343, 346, 347, 348, 349, 351, 352, 358, 360, 390, 391, 396, 397.

Impact: ENVR students will have two additional advanced ecology electives from which to choose.

Rationale: This is an editorial change to incorporate ENVR 352 and 397 into the list of courses.