## Summary of Undergraduate -Level Curriculum Proposals Related to New Majors/Programs Only – 2018-19

On August 23, 2017 the University Curriculum Committee (UCC) reviewed and approved the following new programs for their university-wide implications:

- 1. ENVRESMGMT-BA: Environmental Resource Management BA Interdisciplinary
- 2. ENVSCI-BS: Environmental Science BS Earth and Environmental Sciences

The entire packet was approved (pending any changes noted in UCC minutes).

## **Summary of Programs:**

- BA- Environmental Resource Management The Environmental Resource Management (ERM) major is targeted to students who are searching for career options in the broadly-defined 'outdoor environment' that is related to natural resources, environmental systems, and sustainable development. Students interested in the ERM program will be interested in the environmental and human management of public and private spaces across differing kinds of environmental systems - from public parks and lands to conservancy units managed by governmental and other nonprofit agencies and organizations.
  - a. Justification This major adds a programmatic focus that UNI currently lacks for the many, existing, environmentally-focused courses already offered in various departments and units. It is intended as an interdisciplinary and pan-university program that compliments the more localized environmental & sustainability programs offered here. Its' intended place in the curriculum is to offer students professional–level career options in management-oriented corporate, government, and non-profit organizations. The main objective is to offer undergraduate students a coherent multi-disciplinary major degree-program that encompasses.
  - **b.** Major Requirements

60-62 hour major that utilizes existing courses. Students are required to take the core requirements (30 hrs) and to choose one of the four specialization areas (30-32 hrs). Track Requirements

 <u>Ecosystems Track</u> - A total of 32 hours are needed for this track. There are 12 hours of required courses. In addition, student select courses from all three elective categories (A, B, & C) to accumulate to a minimum of 20 hours. At least one course must be taken from each elective category.

- <u>Geosystems Track</u> A total of 30 hours are needed for this track, with a minimum of 21 hours from the Primary Focus group and 9 hours from the Secondary Focus group.
- 3. <u>Resource Administration Track</u> A total of 30 hours are needed for this track, with a minimum of 21 hours from the Primary Focus group and 9 hours from the Secondary Focus group.
- Environmental Compliance Track A total of 32 hours are need for this focus area, with 15 hours of required courses, a minimum of 12 hours from the Primary Focus group and 5 hours from the Secondary Focus group
- 2. BS-Environmental Science The Environmental Science BS program will include two curricular paths for students, one with a biological emphasis and the other with a geosciences emphasis. The program will enable students to prepare for a graduate program in the environmental sciences or to directly enter industry in the public or private sector. All students will have a common core of courses providing a foundation in biology and geosciences, and will also be required to take part in a capstone research project. Upon completion of the Environmental Science BS program, students will be able to use the appropriate discipline specific tools to measure the level of environmental issues to the public and private sector in a concise manner; provide appropriate recommendations to the public and private sector to address environmental issues; conduct independent research in environmental issues resulting in a presentation of research results at a discipline specific venue.
  - a. Justification Currently an Environmental BA degree is being offered in the Department of Earth and Environmental Sciences, while the Department of Biology offers a Biology: Ecology, Evolution and Organismal Biology Emphasis BA degree. The Environmental Science BA degree has been available only since fall 2013, and by the end of spring 2016 had 48 continuing majors and 12 degrees awarded. The Biology BA degree in Ecology, Evolution and Organismal Biology has 34 continuing major (including those under the previous degree title of Biology: Ecology and Evolution) at the end of spring 2016. Each of these degree programs appeals to students with similar interests in understanding environmental issues. Both degree programs are limited in preparing majors for careers in the broader environmental science disciplines, providing content that shows the interrelationship between the physical and biological environments. The rapid growth of the Environmental Science BA degree, and interest for a similar degree program in Biology, with

a solid foundation in both biology and geoscience would make this a unique degree program in the state of Iowa, and would appeal to talented students with interest in both life and physical science exploration of the environment.

b. Major Requirements

65-hour major that utilizes existing courses. Students are required to take 32 hrs. of required course work and choose one of two tracks Environmental Life Sciences Track (33 hrs) or Environmental Earth Science Track (33 hrs.)

Track Requirements

1. Environmental Life Sciences Track

Total of 33 Hours: Required Hours (7), Electives (Minimum of 26 hours) Students pick courses from each of the three categories (A, B, & C) to accumulate to a minimum of 26 hours.

Category A - Content Policy Related Courses (select a minimum of 2 courses) Category B - Content Biology Related Courses (select a minimum of 2 courses) Category C - Cognates (select a minimum of 2 courses)

2. Environmental Earth Science Track

Total of 33 Hours: Required Hours (14), Electives (Minimum of 19 hours)
Pick courses from each of the Categories (A & B) to accumulate a minimum of 19 hours
Category A - Physical Environment Relate Courses (select a minimum of 4 courses)
Category B - Cognates (select a minimum of 2 courses)
This BS degree includes 10 credits that are also in the LAC (Category 1C, 4A, 4B)