Summary of Decisions – Undergraduate Programs – APRIL 2019

Undergraduate program and course issues are addressed throughout the academic year as needed. Our primary assessment exercise occurs during a one-day faculty in-service Planning and Assessment Workshop held at the end of the school year. This workshop was held 24 April 2019, 8:30a – 3:00p

Information used to support assessment and planning:

Instructor reporting on student performance in classes used to evaluate progress on the Learning Objectives for WATS majors.
IDEA surveys for individual courses and department summary
2019 Graduating Senior surveys and exit interviews with Department Head
Review of enrollment, graduation, and placement for WATS majors: 2005-2019
Degree requirements and 4-yr plan for revised major: Mgt. and Restoration of Aquatic Ecosystems
Revised degree requirements and 4-yr plan for major in Fisheries and Aquatic Sciences

Principal Decisions

1. Course Mapping

A specific focus in our April 2019 workshop was mapping course requirements for both MRAE and FAAS, paying particular attention to prerequisites, fall/spring timing, effective sequencing of topics, and the Learning Objectives for each major.

The faculty split into two groups, one of which evaluated Learning Objectives 1-3 and the other evaluated Learning Objectives 4-7.

Objective 1 Competence in applying computing and mathematical methods. An extended discussion was had regarding whether a specific programming language should be taught and whether a general introduction to modeling is needed. One or both might be presented in a 1-Cr. Course or as ‘boot-camp’ workshops. The suggestion was tabled to allow further discussion across departments in the college.

Objective 2 Functional knowledge of the physical, biological and chemical components of aquatic ecosystems was amended to include “and chemical”.

We discussed the need to add Chemistry II back as a required Science Foundation Course. After dropping the requirement, it became apparent that essential chemical principles needed to understand aquatic ecology are not covered in Chemistry I. Janice Brahney and Peter Wilcock will explore whether we should reinstate Chemistry 1220 as a requirement for both majors or to allow students to take Chemistry 1100, which covers the necessary range of topics but may not cover them with sufficient depth.

Objective 4: Ability to understand and apply the principles of aquatic ecosystem restoration / Ability to understand and apply the principles of fisheries conservation and management. The faculty agreed that WATS 5340 / WATS 5350 Capstone provided a good venue for assessing this objective.
Objective 5: *Effective oral, written, and visualization communication skills.* The faculty discussed creating a department-wide list of writing expectations to should be emphasized throughout students’ programs and to give to writing fellows, so they know what to look for when helping our students. This summary would establish that good writing would be expected in all of their WATS courses. It could highlight specific writing requirements for all required courses for WATS majors.

2. **Courses**

WATS 3600 *Geomorphology*: It was decided that WATS 3600 was a more appropriate requirement for MRAE students. This will replace WATS 5150 *Fluvial Geomorphology*, which will become an elective.

*Capstone I & II: Management and Restoration of Aquatic Ecosystems*: This two semester course was presented for the first time AY 2017-2018 to general success. This course provides an opportunity to evaluate a large number of learning objectives.

3. **Program Assessment**

The faculty reviewed Learning Objectives for MRAE and FAAS. The linkages between objectives and courses required for the major were updated. The current version of *Courses used for assessing learning objectives* is posted on the WATS Assessment web page.

Submitted by

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