UAF
UNIVERSITY OF ALASKA FAIRBANKS

Governance Office
(907) 474-7964 • 474-7056
Fax (907) 474-5213
www.uaf.edu/uafgov

America's Arctic University

MEMORANDUM

March 12, 2012

To: UAF Faculty Senate, Department Chairs, Deans, and Directors

From: Cathy Cahill, President, UAF Faculty Senate

Re: Draft Policy from UA Distance Science Labs Task Force

On behalf of the UA Faculty Alliance and faculty at the three MAUs, representatives from UAF, UAS, and UAA met in January to develop a recommended review process for distance-delivered science labs. They focused on laboratory science courses in the Core or General Education Requirements. The Task Force addressed the issues of access and quality for both distance and face-to-face laboratory science courses in their deliberations. They created a "draft recommended policy" for consideration by the faculty senates at UAF, UAA, and UAS.

The UAF Faculty Senate requests that you please distribute this document to your constituencies for their comments and recommendations. Any feedback should be sent by March 27, 2012 to the UAF Faculty Senate Office (jbharvie@alaska.edu) where it will be collected and prepared for discussion at the Faculty Senate meeting of April 2.

After discussion, the UAF Faculty Senate will forward a summary of UAF's comments and recommendations to Faculty Alliance. UAA and UAS will do the same. Faculty Alliance will return a final version to the three senates for a vote on whether each will adopt the proposed policy.

Thank you for your assistance.

Attachment

UA Distance Science Labs Task Force

Adopted by Faculty Alliance February 24, 2012, for Review and Approval by Faculty Senates

Chair: Daniel B Monteith
Task Force Members: John M Petraitis, Andy Veh, James T Pantaleone, Mark A Fitch,
      Jacqueline E Cason, Rich Collins, Rainer Newberry, Orion Lawlor, Michael S Stekoll,
      Deborah K Barnett, Cathy L Connor

Instruction methods are changing and evolving rapidly, with exciting opportunities but serious challenges, and this requires a more open and inclusive university-wide discussion including students, instructors, faculty, adjuncts, and administration. The University of Alaska has a mission to provide Alaskan students access to higher education. Laboratory natural science courses, which are a vital part of our bachelor's GER/core, pose particular challenges to ensure both **access** and **quality**.   Crucially, lab science is about sensing and interacting with the physical environment, with the complexities as found in nature.

This policy defines a <u>RECOMMENDED</u> **review process** for GER/core lab science courses as defined below. WE RECOMMEND THAT existing lab science courses, distance or not, that have not been reviewed by this process **can no longer be offered** as GER/Core lab science courses starting Fall 2013.

This RECOMMENDED policy applies only to **lab science** courses accepted for the lab science requirement of the bachelor's GER/core at any MAU. Policies vary widely between the <u>UAA GER /L lab</u> courses, <u>UAF natural science core</u> courses, and <u>UAS GERS lab natural science</u> courses. Lab science courses affect every baccalaureate major, touching every department.

Principle: just as course content is governed by the department that controls the prefix (e.g., BIOL), **instructional method** for lab sciences is also a substantive issue that must be approved by that department. Disciplines can best determine content; disciplines are in the best position to judge instructional methods. However, Faculty Senate oversight is important to maintain overall quality control.

In addition to review of existing GER/core lab science courses, this RECOMMENDED policy requires review for GER/core lab science courses that **add or change primary delivery method** between:
- Hands-on in-classroom equipment.
- Take-home physical kits.
- Remotely operated equipment.
- Virtual/simulation, purely software onscreen.

When a new or existing GER/core lab science course changes primary delivery method, this modification **requires course approval** from the MAU department. Courses may be delivered experimentally using a new method up to two times prior to full review, with notification to and monitoring by the MAU department. Review is also needed via the ordinary MAU faculty senate curriculum process. Ongoing assessment and review is highly recommended.

Issues for **faculty to address** in proposing a lab course (see also: *Supplemental Questions for Online Course Approval Requests*, Berkeley Division of Academic Senate Committee on Courses of Instruction)

1. What are the goals and outcomes of the existing face-to-face sections?
2. What delivery methods will be used from the list above, and in what proportions?
3. What are the goals and outcomes of the lab sections? Are the goals and outcomes different for different modes of lab instruction? How will the goals and outcomes be achieved, and assessed?
4. If a new mode of delivery for an existing lab course is proposed, how will the new lab section be different from existing lab sections?
5. Is there a population of students identified that need this course?
6. Student preparation: How will students be advised and screened for technology proficiency? Do they have the prerequisite knowledge and preparation? Do they have the self-pacing skills needed for distance delivery? Are technologies introduced at an appropriate pace?
7. How will students and instructors interact? How will students and other students interact? Will the technology support a "community of learning"?
8. Will a fully asynchronous course include some synchronous time for students to ask and answer questions? Are synchronous sessions required (lecture/discussion) or optional (office hours)?
9. What are the expectations for student-faculty communications, such as email latency and frequency, and how will they be met?
10. What internet connection (bandwidth) will be required for students? For instructors?
11. Specific technology questions:
    a. For take-home kits, how will the kits be purchased? Maintained? Are there safety concerns? How does the equipment in the kits compare with in-classroom lab equipment?
    b. For simulations, how will they be used in this course, and how do they compare with reality? How do they compare with professional methods or practices in the field? What software will be required?
12. How will plagiarism and academic integrity issues be addressed?

Issues for departments to discuss during the lab course review process (see also: *Best Practices for E-Labs*, Southern Association of Colleges and Schools, substituting "e-labs" for "programs")

1. What are students supposed to be learning in the existing face-to-face sections? Are they learning that, and how is it assessed?

2. Will distance courses affect face-to-face enrollment? Will distance courses draw students away from existing courses, eventually replacing them, or primarily draw in new students?
3. What impacts will this course have on the program's professional accreditation? What effect will the course have on downstream courses, using it as a prerequisite?
4. How will the course design work be supported, for the significant effort to develop a new distance course or convert an existing course? How much effort is it? Will it appear in faculty workloads?
5. Who will choose instructors for the course? How will instructors be trained in the changing technology for distance learning?
6. How is the enrollment cap determined for each distance section?
7. Will there be teaching assistants for additional distance sections?
8. How will the department validate the domain knowledge for the courses in their discipline? Who will be responsible for that validation?

Issues for the Faculty Senate curriculum council to address for a reviewed lab course:
1. How will coordination be maintained between campuses?
2. How will intellectual property issues be handled? Who owns the course content--the faculty who develop the course, the department, the university, the book publisher?
3. How will software, servers, and information technology be vetted, supported and standardized? How will these be maintained for the entire lifetime of the course?

Issues the UA Task Force decided not address:
- Non-GER/core science labs. Individual departments should choose how their own 300 and 400 level lab courses are designed and delivered. Further, their choices, will--in the vast bulk of cases--only impact their department and those equivalent ones of the other MAUs.
- Transferability of distance delivered courses, both between MAUs and from other institutions. UA Board of Regents Policy addresses transferability of credit both in general and for GER courses in particular (See sections P10.04.060 and P 10.04.062).

The UA Task Force recommends a annual or semi-annual inter-MAU faculty meeting would be useful to integrate the university system, which will assist with issues like transferability.