DRAFT Five-Year Academic Plan

Drafted by dpf

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1 Introduction

- **This is a living, flexible document. It will be reviewed formally by the faculty meeting and the Academic Affairs Committee every winter term.**
- This document is based on discussions at faculty meetings, the Fall 2004 faculty retreat, and resource area discussions.

2 Numbers, Growth, and Faculty Positions

- We expect to grow to around 300 FTE students in around five years.
- To meet course and advising needs we need to add a bare minimum of 4.5 FTE faculty. I believe that a more comfortable increase in faculty FTE is 7 to 8.
- Increasing faculty by 7.5 will decrease the percentage of courses offered visiting faculty to around 18%. This percentage is currently at 25%.
- For details on FTE and visiting class percentages, including comparisons with other schools, see appendix A. I would be happy to discuss the details of my calculations with anyone who is interested.

3 Top Priorities

The following are top priorities for academic growth, assuming growth to 300 students. Within this category, items are *not* prioritized.

- Foreign Languages
- Wiggins chair in government and polity (starts at 0.5 time)
- Geology
- Food Systems (0.6 time teaching)

- Add visiting instructorships (ensemble directors and music specialists) in music and other areas of arts and design
- Regularize visiting course offerings in areas in which we know there will be ongoing need. (See section 6 below.)
- Asian or African Studies
- Additional arts and design position, details to be determined

3.1 Discussion

1. All existing faculty positions should continue, with the exception of the position currently held by Elmer Beal. Elmer's contributions to the curriculum can be viewed as being "replaced" by the Food Systems and the Asian Studies hires.

2. We should seek to endow as many of these new positions as possible. We will also continue to seek to endowment to support existing positions and programs.

3. Regularizing visitors in arts and design is the number two priority in the recently completed strategic plan for the arts and design area. (The first priority is improved studio teaching space; the third concerns plans for the gallery.)

4. John Cooper has prepared a detailed list needs associated with music as part of the arts and design plan.

5. We will continue to expand opportunities for students to work on writing across the curriculum and will seek additional training and support for faculty who wish to teach writing-focused classed.

6. See also the list of questions below in Section 5.

4 Lower priorities

Of this next set of priorities I propose dividing them into two tiers. The second tire strikes me as ideas for which there is considerable support and/or need. My sense is that ideas in the third tier are less broadly supported at present.

Second Tier

1. Geography
2. Health Sciences/Public Health

3. Religion

Third Tier

1. Art History
2. Computer Sciences/Mathematics
3. Media Studies
4. U.S. History
5. Writing

5 Questions for Discussion

I would like to discuss the first four of these questions this Wednesday.

1. Are these various priorities listed above ok?
2. Which is higher priority: Asian Studies or Religion?
3. What should an additional hire in arts be? If we grow to 300, it seems certain to me that we'll need an additional arts and design faculty member.
4. The trustees are, so far as I can tell, certain that we will keep Beech Hill Farm, and wish very much to do fundraising to support it. So I think the question for discussion isn't whether or not we have a farm. We do have farm and will continue to have one. Given this, I believe that we need to increase the use of the farm as part of our academic program. The question is, how do we wish to do this? Do we want to explore the possibility of a hire in food systems?
5. What is the role of taxidermy in the curriculum?

6 Lectureships and Visiting Courses

We should arrange for lectureships and other, more regularized visiting classes in the following areas:

1. Business (via Organizational Stewardship)
2. Music
3. Maintain lectureship in Ecology/Natural History and Ornithology
4. Photography

5. Writing
6. Spanish language instruction
7. Taxidermy

Additionally, we will have ongoing visiting class needs in the following:

1. Dance
2. Education
3. Mathematics and Physics
4. Multimedia and Digital Design
5. Theater
6. U.S. History
7. Writing and Literature

Remaining visiting classes should be used opportunistically to enrich and enhance the curriculum. Areas of particular interest include, but are most certainly not limited to: Asian, African, and Middle East studies; astronomy; meteorology; bryophytes and lichens.

A Numerical observations and thoughts on visiting classes

1. We currently have 25.51 faculty FTE and a student-faculty ratio of almost exactly 10.

2. This (and subsequent) student-faculty ratios are based on treating fractional appointments as fractions. (E.g., I count Chris as 0.5 because he technically has a half-time appointment.) However, the standard way that colleges report these numbers is different. The standard reporting will make our student faculty ratio appear lower.

3. To maintain a 10:1 student-faculty ratio we will need to add at least 4.5 new faculty.

4. Over the past six terms (F03–S05), 25% of our classes have been taught by non-permanent faculty. This percentage is quite constant; it ranged from 22 to 28 over the six-term period. This statistic does not include tutorials.

5. I have not been able to find reliable data on the percentage of classes taught by adjunct faculty at other colleges and universities. The reason for this is that it's not clear how other colleges calculate this. (In particular, it's unclear how they count graduate student instructors.) So far as I can tell, most don't report this statistic at all. The best overview of this question

that I found is Ernst Benjamin, How Over-Reliance on Contingent Appointments Diminishes Faculty Involvement in Student Learning[1]

6. Here are some somewhat fragmentary data. At baccalaureate (i.e., non-doctoral) institutions, around 25% introductory calculus classes are taught by a non-tenure-track faculty member[2] Nationally, the percentage of classes offered by non-permanent faculty in history departments is around 35%[3]. The percentage at Iowa State[4] is 24.4 across all disciplines, although I'm not sure how they determined this statistic. In some departments at Iowa State, the percentage is much higher—e.g. 39.5% in Ecology, evolution and organismal biology and 33% in English.

7. What is clear is that nationally the trend is that the use of adjunct instructors is on the rise. Several studies have found that the use of adjunct instructors has roughly doubled from 1970 to the mid 1990s.

8. Although our percentage of classes taught by visiting faculty is well below the national average, many professional societies suggest that the ideal percentage of classes taught by visitors is lower than what ours currently is. For example, the American Historical Association[5] recommends that at four-year institutions between 10% and 20% of classes be offered by visitors. The American Association of University Professors[6] recommends that no more than 15% of a college or university's instructional load be carried by non-tenure-track faculty.

9. If we stay at 10:1 and still have 25% of our classes taught by visitors, we will need to have between 17 and 23 visiting courses every fall. This strikes me as a number that is close to unmanagably large.

10. If we decrease the fraction of courses taught by visitors I estimate that we could very easily add up to 7.5 faculty.

11. For example, with 33 faculty (and a 9.1:1 ratio) we would still need around between 13 and 18 visiting classes each fall. This is essentially the same number of visiting classes we currently need each fall.

12. If we have 300 students I expect that some of the largest classes will grow by up to 20%. This means that, for example, calculus would be around 30 students instead of 25.

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[1] `http://www.aacu-edu.org/peerreview/pr-fa02/pr-fa02feature1.cfm`, accessed 02.13.05.
[2] *ibid.*
[3] `http://www.theaha.org/perspectives/issues/2000/0010/pt_survey.htm`, accessed 2.13.05.
[4] `http://www.iastate.edu/Inside/04/0521/senate.shtml`, accessed 2.13.05.
[5] `http://www.historians.org/press/2003_05_05_Council_Parttime.htm`, accessed 2.13.05.
[6] `http://www.aaup.org/Issues/part-time/Ptguide.htm`, accessed 2.13.05.

B Notes on Possible Science Hires

At the science resource area meeting of 02.09.05, we spoke at some length about possible hires and curricular directions. All ES faculty members were in attendance, except for Suzanne Morse, who is currently in Mexico. The following were key points of our discussion:

1. There was a clear consensus that our top priority for an additional hire is in geology. We feel this will fill in gaps in our curriculum and help form bridges to other areas of the college. This hire could also give Don and Dave some much needed help in physical sciences and quantitative reasoning.

2. There wasn't a clear consensus on our next highest priority, although the group was leaning toward a position in health.

3. There is some confusion about the future role of GIS in the curriculum.

4. There was consensus that we wish to continue affiliation with The Jackson Lab and MDIBL in genetics and medical research. However, we do not see ourselves as a pre-med school. While students can attend here at go on to medical or veterinary school, we should not make this a advertising focus of the college, nor should we structure our curriculum around preparing students for medical school.

5. We did not discuss Beech Hill Farm and Food Systems.

B.1 Rough Descriptions for Possible Science Hires

These are very, very rough, and are designed to give a flavor of what we're thinking about in these positions.

Geologist: We seek a broadly-trained earth scientist/geologist with wide-ranging intellectual interests. Possible areas of expertise include: Hydrology/Hydro-geology, Geology of Rivers and rivers restoration, Water Quality and/or water use issues, Desertification, Oceanography, Erosion. We are particularly interested in candidates who have studied the interactions between human activity and the physical environment, (e.g. erosion, climate change, desertification). We are also interested in someone who has experience or expertise in a number of policy and related areas. For example, the following experiences are highly desirable: Work on government or non-governmental restoration projects; familiarity with US or international regulatory agencies; experience conveying environmental issues to the public; experience with community-based research projects. In addition to courses in appropriate areas of geology, we expect that the new hire will be able to teach some of the following courses: Intro to Chemistry, Physical Chemistry, Statistics, Scientific Programming, Introduction to Physics. This will

Health Sciences: We are looking for someone who could offer courses in some of the following areas: Community Health, Public Health, Nutrition, Epidemiology, International Public Health, Environmental Health, Toxicology, Human Genetics, Biostatistics, Public Health Research Methods and Data Analysis. We do not see this as a position in anatomy or one geared toward medical students.

Computer Sciences/Mathematics: Interested in a broadly trained computer scientist who can teach classes in the following areas: Introduction to Computer Science; Introduction to Programming; Intermediate Programming and Data Structures; other areas of mathematics. Other areas of interest include: computer-human interactions; artificial intelligence; applications of computational approaches to biology, economics, physics, chemistry; scientific programming and numerical analysis; technology and society. This is not a position in The Web or using particular programs. The emphasis is on teaching students to write their own programs. This position will also provide additional mathematics classes.