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The New Program: Introduction

With thanks to the many colleagues from the Bates community who have contributed to the work of our official committee structure, we present to you the next iteration of a proposal for a Bates General Education curriculum.

While we have been gradually working to hone our proposal—from an array of nine models and approaches presented in December of last year to the three designs in May that resulted in this singular proposal—this is not a final product. Say this not out of timidity but rather to invite responses at every step. Strategy all along has been to avoid an “up or down” vote on a program that contains (or lacks) elements of significant impact that have not been reviewed and assessed by as many of you as possible. Proposal comes to you with a calendar of five open meetings over the next two weeks at which we can engage with each other about the structure, the rationale and the feasibility of its design.

This proposal stems from a previous design (Design II) with some significant modifications. This design appealed to a great number of you. For those of you for whom this was not the preferred design, we have tried to proceed with your cautions and concerns in mind. This is not a final product but a work in progress, comes with the weight of many hours of conversation and rumination with a great number of you, and the process will proceed best with your continued collegial engagement and response.

In order to afford the greatest transparency to a process that, to be sure, involved a great deal of sequestered rumination and myriad emails and conversations with so many of you individually, we put forth the following observations in order to characterize and explicate our thinking.

Goals-based.

Time and again the committee has been pulled out of the quagmire of discussions tied to distribution—to “counting” and “not counting”—and to the endless accretion of required content courses by returning to the basic goals of a Bates education so eloquently and consistently voiced during the first year of our process. Thus the plan is predicated less on the administrative or divisional framework of the college (Divisions, Departments, Programs) than on some generally-accepted goals that may guide and determine a Bates student’s academic experience.

The wisdom of the group of faculty and administrators who attended the initial conference on General Education at Asheville a year ago and a half ago was that Bates already has a number of distinctive experiences and programs in place that contribute to a well-rounded student. Detaching the general education program from divisions, departments, and programs grounds the new design in a broader intellectual and pedagogical underpinning, based on—but certainly not limited to—goals such as the following: critical thinking and sustained study in particular disciplines and across areas of inquiry; reflective and meaningful engagement with how differing approaches or ways of knowing illuminate and amplify knowledge of the world; facility with various modes of investigation, quantification, analysis and expression of knowledge and experience.

We hope that recasting a Bates Education within the distinctive strengths and talents of the Bates community will invite and inspire participation in the broad education of our students in new ways.
Faculty driven and maintained.

Within a structure created and sustained by faculty, we aim to provide flexibility and choice for students. This proposal depends on the wisdom of the faculty and requires their ongoing oversight. A member of the faculty opined at an open forum that whatever we put in place—and she was favorably pre-disposed to a number of the plans—there should be a sunset clause for a five-year revisitation. We concur, conscious attention to the process of general education in which we are engaged might go far to mitigate the monumental amounts of time and energy that are required to revise a program left unattended and entrenched for twenty-five years.

Invitation to Innovation.

Without resorting to a menu of required courses, i.e. a distribution model, the proposal invites you into the process in various other ways, many of which are already in place but may find more official expression in this scheme. you imagine courses or experiences that you provide that educate students with respect to writing? you imagine a group of courses within your major that provides students with a meaningful, coherent base of knowledge as a field outside their actual or potential major? you imagine collaborating with colleagues from across the faculty population in order to formulate a menu of courses (and perhaps some non-course-based experiences) that might constitute an area of inquiry? you imagine ways in which your lab courses, or courses that are suffused with quantitative skills and knowledge, might best acquaint students with these important aspects of learning and communicating? you see opportunities in this system for inspiring, directing or redirecting participation in your corner of the Bates landscape that provides coherence and excitement for you and your students?
The Proposed Plan

A Bates Education consists of:

32 COURSES + 2 SHORT TERMS: Bates students complete 32 courses (for at least 64 quality points) and 2 Short Term units.

RATIONALE
The course load at Bates should be challenging enough to keep studying and learning as the primary occupation for students, while allowing for sustained focus in individual courses.

The Curriculum consists of 4 components:

I. A Major
II. Writing
III. Formal, Quantitative, and Scientific Reasoning (FQSR)
IV. Two General Education Concentrations (GEC)

I. MAJOR

Students complete all prescribed work in a major, including a senior thesis or a comprehensive exam, as determined by the major department or program.

Rationale
One of the goals of a Bates education is that students achieve a depth of knowledge within a discipline or area of study and become acquainted with its scope and methods. Specialization provides the opportunity for students to work intensively on a particular topic within their major field, an experience that not only fosters academic confidence but also provides an understanding of the nature and limits of expertise.

II. WRITING

W-designated courses have as a major focus the development of students' writing expertise. Students must successfully complete three W-designated courses, one at the first-year level, one at the sophomore or junior level, and one at the senior level. A W-designated course can take the form of an entire course, a section of a course, or a subset of a course that is not otherwise writing attentive.

First-year level writing:
The primary purpose of first-year level W-designated courses is to enhance students' ability to research and pre-think a topic, organize and present their ideas, and refine their writing through a series of revisions. Assignments typically consist of several short papers with opportunities for revisions. First Year Seminars, most of which will retain a strong focus on writing, may prove an ideal experience for the first year level course. Completion of a first-year level writing course is a prerequisite for enrolling in a sophomore or junior level W-designated course.*[Footnote]
Second-level writing (sophomore or junior year):
The primary purpose of sophomore or junior level W-designated courses is to offer an experience of the scholarship that fuels upper level courses. The goal is to prepare students to choose and narrow a topic, identify and evaluate scholarly sources, draft, revise, and edit a research paper. These courses continue an emphasis on crafting cohesive arguments and developing a felicitous style. W-designated courses at this level need not be in the English language.

Senior-level writing:
As a culminating writing experience, seniors write a thesis or complete a writing-attentive senior capstone course, as determined by their major department or program.

*[Footnote]: This proposal does not address the problem of students who have difficulties with writing mechanics. This is an issue that needs further attention, and we solicit your suggestions for dealing with the population of students who are least well prepared for college-level writing. We have some ideas, and are eager to discuss them with you.

Rationale
An essential part of a Bates education is the development of a student’s ability to convey ideas and information logically and clearly and to evaluate critically the ideas of others. This is a process that requires attention at increasingly more sophisticated levels throughout a student’s academic career. Because the careful production and refinement of written work is an excellent way to cultivate this ability, Bates requires its students to take three progressively more advanced levels of writing courses.

III. FORMAL, QUANTITATIVE, AND SCIENTIFIC REASONING
Students must successfully complete 3 FQSR credits, at least 1 by the end of their sophomore year. FQSR courses are defined as those which emphasize one or more of the following skills: the ability to understand the roles and connections among experimentation, observation, models, and theories; the use of data to support or refute hypotheses; the ability to employ inductive and deductive reasoning appropriately; the use of language and symbolic expression in a disciplined way. FQSR-designated courses may come from various departments and programs, including, but not necessarily restricted to, offerings in mathematics, logic, statistics, natural and social sciences. One of these courses must include “a regularly scheduled laboratory component,” where students make and test hypotheses, conduct experiments, make their own measurements, and analyze and communicate their results.

Rationale
Familiarity with formal, quantitative, and scientific reasoning, proficiency in problem solving, numeracy, and the ability to comprehend, organize, and communicate quantitative information are goals of a Bates education. Understanding how the reliability of conclusions drawn from experiments is influenced by experimental design and measurement quality is another goal of a Bates education. In preparation for a capstone experience, students need to be able to accumulate and evaluate evidence and use it to formulate cogent arguments.
IV. GENERAL EDUCATION CONCENTRATIONS

A General Education Concentration (GEC) consists of four courses chosen from a set that is structured by faculty on the basis of a clearly articulated organizing principle. Students must take 2 General Education Concentrations (GECs) outside of their major. Each GEC consists of 4 courses, from a faculty-designed menu of approved courses. The organizing principles can take a variety of forms. For example, an issue or topic might serve as an organizing principle for an interdisciplinary GEC that draws on faculty expertise from a variety of fields. Alternatively, an area of inquiry for which Bates does not provide a major, but in which several faculty members have active interests, may provide the basis of a GEC. In other cases, the courses or activities comprising a GEC may be drawn from a single department or program, in which case, the discipline or approach might serve as the organizing principle. While it is anticipated that many departments and programs will choose to offer GECs in their respective fields, they will not be required to do so.

Rationale

The structure is designed to achieve three goals that are described more fully below: breadth, coherence, and continued development.

**Breadth**
Students are asked to complete two GECs outside of their major field. This promotes a broad and liberal education and discourages overspecialization. To ensure that promoting the goal of a broad education does not place undue constraints on students’ choice of GECs, only one of a student’s two GECs must be in a field or focused on a topic that is designated as being significantly removed from that of their major. At the student’s discretion their second GEC may also be drawn from an area quite distinct from their major, or it may be in a more closely allied field. Answering the question of which GECs are deemed significantly removed from the major—in other words, which GECs provide sufficient breadth—will be left to the departments and programs offering the majors. Some departments or programs might choose to use the existing division structure as a convenient means for categorizing GECs. For example, students might be required to take at least one GEC from a division outside the division in which the major resides. Other departments or programs might prefer simply to designate each available GEC as providing either sufficient or insufficient breadth for their majors. Finally, if a department or program is concerned that a particular small set of GECs might overlap excessively with their field, they may choose to exclude them from consideration by their majors.

**Coherence**
To ensure that students’ academic breadth is achieved coherently and purposefully, GECs are designed by groups of faculty with common or complementary interests and areas of expertise. Those faculty coming together to design a GEC should also be committed to offering the courses or activities comprised by the GEC for at least five years so that students embarking in pursuit of the completion of a GEC do not find themselves stranded part way through. Guidance for the design of GECs and oversight of their implementation will be provided by a Bates Education Committee.

**Continued Development**
The organization of courses and experiences comprising a GEC guides students to an increasingly sophisticated handling of the subject or topic. In this way majors and GECs combine to encourage students to achieve a depth of learning and progress intellectually both within and beyond their primary academic focus. Since the faculty-designed GECs constrain only eight of the thirty-two courses required for graduation, students will still be free to experiment in new academic areas by taking introductory or survey courses. However, the structure of GECs ensures that students’ general education does not consist entirely of such courses.
FAQs

Proposed curriculum

Q: What are the implications of the proposed model for the number of required courses?
A: The existing General Education curriculum requires a maximum of 12 courses: 5 Humanities; 3 Social Sciences, 3 Sciences and 1 Quantitative. Proposed model (with double dipping) would be a range from a minimum of 8 to a maximum of 14 courses (3 Writing; 3 FQSR; and 4+4 for GECs).

Writing

Q: Who determines which courses are W-designated?
A: The faculty, in consultation with a committee overseeing the general education program.

Q: When is the W-designation of a course determined?
A: As part of a proposal to the CCC, prior to offering the course. Faculty would need to review existing courses to determine which and how many fit the W criteria and at what level.

FQSR

Q: Can a lab course in the Social Sciences meet requirement for lab?
A: Yes, if it meets the listed criteria and the spirit of the rationale.

Q: Would a Math major be able to satisfy FQSR by courses in the major?
A: No. A Math major would need to take a lab.

Q: Would a Chemistry or Biology (or other Natural Science) major be able to satisfy FQSR by courses in their major?
A: Yes, that would be possible, but those majors typically require courses outside the major field (chemistry majors must take particular courses in math and physics, for example).

Q: Does this requirement help the math-fearful student achieve a level of scientific literacy?
A: Yes, because the lab requirement is designed to introduce students to some of the key scientific ideas, as described in the FQSR rationale. However, it provides more flexibility than does the currently required two-course set plus third science course.

Q: Can a student graduate from Bates without taking a course in the Natural Sciences?
A: Yes, although to successfully complete the lab requirement students will have to demonstrate that they have developed the experimental, analytic, and communication skills often associated with science courses. We found it problematic to define a canon of scientific knowledge to be required of all students, especially without doing so for the other academic fields offered by the College. Instead, we decided to focus on how scientific ideas are developed and tested. We hope that the GECs will provide an opportunity for interested faculty to develop structured sets of science course that convey a well-considered set of core scientific ideas.

GECs

Q: Can the courses that constitute a GEC also count towards a Secondary Concentration or a second major?
A: Yes, with the approval of the department or program offering the Secondary Concentration or the second major.

Q: Aren't GECs just "clusters" by another name?
A: No. While GECs share the cluster's goal of coherent knowledge, they have been designed with a different core philosophy in mind, and care has been exercised to avoid the implementation problems that were encountered with clusters.
Why GECs are not clusters:

- GECs are carefully designed and structured by faculty (rather than students) with the same attention to students’ academic development that is evident in the design of majors. While students will form many GECs by choosing four courses from a larger set of courses, the larger set is carefully structured and organized by faculty to ensure coherence and continued student development. The structure may include a variety of constraints on how the GEC’s curriculum can be completed. For example, one or more of the courses in a GEC might be required of all students completing the GEC. Some courses may be designated as prerequisites for others. In all cases the structure is designed to encourage students to work at increasingly advanced levels as they work toward completing the GEC.

- The GEC design process is guided and overseen by a faculty committee to ensure that the educational goals expressed in the GEC description are satisfied.

- Students choose two pre-designed GECs early in their academic careers (end of sophomore year), rather than formulating them after the fact.

- GECs are robust. They can only be formed by groups of faculty willing to commit to several years of participation, and they must be formulated so that students can complete the GEC even if one or more of the faculty contributing to the GEC are unavailable to teach in a particular year.