

Part II. Annotated Legislation

We recommend replacing the section of “Degree Requirements #1-7” on pp. 24-26 of the 2004-2006 Bates Catalog with the following:

Degree Requirements. Students may pursue courses leading to the degree of either bachelor or arts or bachelor of science. When determining graduation eligibility, students are held to the curriculum and degree requirements listed in the Catalog for the year in which they matriculated at Bates. Each student is solely responsible for completing all of these requirements.

Each candidate for graduation must complete the following requirements:

1. Either (a) thirty-two course credits, sixty-four quality points, and two Short Term units; or (b) thirty course credits, sixty quality points, and three Short Term units. Option (b) is available only for students who graduate in the three-year program. The following values are used in the computation of quality points:

A+ = 4.0	B+ = 3.3	C+ = 2.3	D+ = 1.3	F = 0	ON = 0
A = 4.0	B = 3.0	C = 2.0	D = 1.0	F# = 0	W = 0
A- = 3.7	B- = 2.7	C- = 1.7	D- = 0.7	DEF = 0	P = 2

Explanation: We decided not to change, the current course-credit system and quality point expectations.

2. Registration in each regular semester for no fewer than three or no more than five academic courses.

Explanation: We decided not to change the minimal and maximal course load. It remains possible for students to receive special permission from the Academic Standing committee to enroll in six courses in a semester.

3. Enrollment in courses at Bates for the final semester of the senior year. Senior work in the major field must be completed in residence.

Explanation: We decided not to change this final semester residence rule for graduation.

4. Physical Education credits. The physical education requirement may be satisfied by completing two ten-week physical education activity courses. Student may also meet the requirement through department-approved participation in intercollegiate athletics, club sports, and activity courses, or any combination. This requirement should be completed by the end of the first year in residence.

Explanation: We decided not to change the physical education requirements.

5. A major field of study. Students successfully complete all prescribed work in a major comprising at least eight courses and including a senior thesis or a capstone experience, as determined by the major department or program.

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

Explanation: We decided not to change, these minimal expectations of what constitutes a major. We have changed "comprehensive exam" to "capstone experience" to reflect current practice.

6. Two concentrations. In addition to their major, students successfully complete two general education concentrations, declared at the same time as their major. A concentration consists of four courses chosen from a faculty-designed menu that is structured on the basis of a clearly articulated organizing principle. The faculty when designing the concentrations may also include relevant non-course-based experiences such as significant community service, study abroad, orchestra, chorus, plays, volunteer work, etc., in lieu of courses. Non-course-based experiences, though counting towards a concentration, may not be counted towards the 32 credits needed for graduation.

Concentrations may be of two basic types: (1) concentrations focusing on a particular issue or topic or area of inquiry identified by self-constituted groups of faculty in different disciplines; (2) concentrations within a single department, program, or major. The latter might replace or be in addition to existing secondary concentrations, at the discretion of individual departments or programs. All remaining retained secondary concentrations are renamed "minors."

All proposed concentrations must be certified by the Committee on Curriculum and Calendar and published yearly in the College Catalog on line or in print. Students' concentrations appear on their transcripts and will be a permanent part of their academic record.

Double-dipping rules: (i.e., satisfying two requirements with one course or non-course-based experience) Students may only "double-dip" once between their concentrations and their majors (i.e., only one of the eight courses or non-course based experiences they choose as counting towards their two concentrations may also be counted towards their major). Alternatively, they may only double-dip once between their two concentrations (i.e., only one course [or non-course based experience] may count towards both concentrations). The two concentrations together must thus have a minimum of seven distinct courses or non-course-based experiences. When appropriate, concentration courses (but not non-course-based experiences) may be counted towards any other degree requirements (writing, scientific reasoning, laboratory experience, quantitative literacy).

Rationale: Breadth and Integrative learning. One of the goals of a liberal education in the arts and sciences is to expose students to a variety of fields in addition to their major, and, at the same time, to foster their abilities to integrate their learning across contexts and over time. The perspectives and skills students learn in other disciplines and fields enhance the knowledge they acquire in their majors. Integrative learning is appealing intellectually because of its

attentiveness to making connections, not only between courses and across disciplines, but also between academic and non-course-based experiences. As one source put it: “The capacity to connect is central to scholarship... whether focused on discovery and creativity, integrating and interpreting knowledge from different disciplines, applying knowledge through real-world engagements, or teaching students and communicating with the public.” (Mary Taylor Huber & Pat Hutchings, *Integrative Learning*)

Explanation: As they seek to make connections, students will choose their concentrations from the approved faculty-developed list. They will do so in consultation with their advisors so as to supplement and complement their majors with significant and coherent work in allied or more distant fields.

In order to foster breadth and integrative learning, students will be encouraged (but not currently required) to choose at least one concentration from type 1 above. In choosing a concentration of type 2, they will be encouraged to select one in a department or program that does not overlap excessively or relate too closely to their chosen major. Concentration designers (departments, programs, or self-constituted groups of faculty) may, in consultation with relevant department or program chairs exclude majors in certain closely allied fields from taking their concentrations. For instance, a Biochemistry concentration may be closed to Biology majors or Chemistry majors. Any such restrictions must be specified in the published list of concentrations.

Students will be required to declare their concentrations by the end of their sophomore year, at the same time as they declare their majors. To this end we recommend the reinstatement of obligatory major-and-concentration declaration days and their designation on the College calendar. We further propose that students who have not yet declared both a major and their concentrations not be allowed to begin their junior year. Students continue to have the option to change majors and concentrations.

Implementation: Over the coming year (2006-2007), all departments and programs will be encouraged to propose at least one type 2 concentration, tailoring it or keeping it loose as they see fit. In some cases these concentrations may be structured very simply. For example “any four courses in XXX” at progressively advanced levels might make up a XXX concentration. In other cases, things may be more elaborated. Another possibility, for example, would be to require three courses in a department plus one common gateway or capstone experience for all concentrations. Other departments or programs may wish to revamp their existing secondary concentrations, something that would be fairly easy to do. Currently, secondary concentrations are offered in no fewer than 25 fields, and declared by about 35% of graduating seniors.

During the same time period, self-constituted groups of faculty from different departments or programs will be encouraged to propose type 1 concentrations. An initial call to the faculty for ideas along these lines resulted in suggestions for concentrations in the following topics and areas of inquiry, which we present here as ideas for possibilities: Architectural Studies; Urbanism and Constructed Spaces; Beauty and Desire; Buddhist Studies; Class, Poverty and Justice; Coastal and Watershed Systems; Color: Sight and Perceptions; Community and Health; Comparative Literature; Critical Thinking and Praxis; Cultural Production: Art, Artist and Audience; Culture and Citizenship; Democracy, Citizenship, and Education; Diasporas; European Studies; Evidence: Documentation and Reality; Family and Child Studies; Film Studies; Five Arts: Production and Performance; Globalization and Local Lives; History in the

Public Sphere; History of Science; Identity; Indigenous Responses to Globalization; Intercultural Competence; Improvisation/Experimental Studies; Islam, Latin American Studies; Legal Studies; Linguistics; Literature and Politics; Nature and Culture; North Woods; Philosophy of Science; Political Behavior and Judgment; Pollution and Pollution Control; Queer Studies; Race and Gender; Representing Africa; Sports, Competition and Culture; The Collaborative Project; The Human Body; The Making and Meaning of Place; Visible Ideas: 2D & 3D Design; War and Peace.

In further developing and formalizing these and other proposals—whether for type 1 or type 2 concentrations—faculty will be asked to take into account the following guidelines:

- 1) A concentration must include enough regularly available courses so as to be realistically doable by students. We have no set formula for determining the number of courses that need to be offered in a given concentration since this will depend on the frequency and regularity with which these courses are taught, on enrollment limitations that might exclude students from taking them, and on such things as prerequisites that might represent additional hurdles.
- 2) A concentration should also be “leave proof,” i.e., it should take into account the potential absences of faculty members involved in it, and it should involve a sufficiently large enough number of faculty (three or more?) so as to be able to tide over those absences.
- 3) A concentration might well include some common experience for all students taking it. For example, all concentrators might be asked to take a common gateway or core course, or a common capstone course (perhaps in Short Term), thereby ensuring that they have at least one overlapping experience. Alternatively, they might all be expected to participate in a common non-course-based enterprise, or to give presentations at a common workshop or symposium.
- 4) A concentration should encourage work at progressively more advanced stages in the field. One way to ensure this progression is to include 100, 200 and 300 level courses.
- 5) Non-course-based experiences such as significant community service, summer research, orchestra, chorus, plays, volunteer work, student teaching, etc. can count towards a concentration, but do not count towards a student's 32 credits. The potential acceptability of such non-course based experiences for any concentration should be determined by the department, program, or group of faculty involved in designing the concentration, in consultation, if necessary with knowledgeable faculty, and staff, with the Harvard Center, with the Off-Campus Studies office, etc.
- 6) The inclusion of a course in a concentration requires the consent of the instructor.
- 7) A minor or a second major may be substituted for a concentration.

The further specification of these criteria—initially and as time goes on—will be the duty of the Committee on Curriculum and Calendar, which will also be responsible for approving all concentrations, whether they are proposed by departments, programs, or groups of faculty. The

CCC seems the best venue for this since it includes among its members elected representatives of the three divisions and interdisciplinary programs, as well as students, and *ex officio* representatives of the Registrar's office, the Dean of the Faculty's office, and the Library.

Students with ideas for concentrations are encouraged to work with faculty who are the sole proposers of concentrations.

The CCC, in conjunction with the Registrar, will also develop an on-line concentration declaration form which students will be asked to fill out and submit at the same time that they declare their majors. On this form they should clarify which courses (or non-course based experiences) they have already taken in their concentrations, and which they have yet to take and when they plan on taking them. They will also be asked to develop and specify alternative plans in case they are unable to access some of the courses they desire. These declaration forms must be approved by the student's major advisor.

In addition, each concentration will designate a faculty supervisor who will take note of these declarations, give advice to students in case of contingencies or changes of plans, and certify satisfactory completion of the concentration in the student's senior year. In the case of concentrations of type 2, this supervisor/certifier may well be the chair of the department or program involved (or her/his appointee), who would do this at the same time as certifying the work of majors and secondary concentrations (minors). In the case of concentrations of type 1, it should be one of the faculty members involved in sponsoring the concentration.

For faculty who have been at Bates for some time, these concentrations may recall the old "clusters" that used to be part of the General Education requirements. In our mind, concentrations differ from clusters in a number of significant ways: (1) clusters were limited to the humanities and history; concentrations may be formed across the entire curriculum; (2) clusters could not be formed within individual departments or programs; concentrations can; (3) clusters were formed, first, by students themselves in conjunction with their advisors, and then by a faculty "cluster development committee" whose members might or might not be familiar with the contents of various courses and the appropriateness of their inclusion; concentrations are formed by the faculty who teach the courses involved; (4) finally, clusters, once formed, did not have anyone responsible for them; concentrations will have certifiers who can verify a student's completion of a concentration and make adjustments should the need arise.

7. Three writing-attentive courses. Students successfully complete three writing attentive ("W") courses, one at the first-year level, one at the sophomore or junior level, and one at the senior level. W-designated courses can take the form of an entire course or unit, a section of a course, or a subset of a course. W-courses can be proposed by departments, programs, or individual faculty members with the approval of their department or program. They must be certified by the First Year Seminar and Writing Workshop Committee, whose charge will be expanded to include this responsibility, and whose name will be changed to the First Year Seminar and Writing Committee.

Double-dipping rules: When appropriate W-attentive courses may also be used to fulfill any other degree requirements at Bates (major, concentrations, scientific reasoning, laboratory experience, quantitative literacy).

Rationale: One of the goals of a liberal education in the arts and sciences 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.

Explanation: W-designated courses focus on what writing well has to do with thinking well. They represent the college's commitment to improving writing across the curriculum through diverse and cumulative approaches. They do not necessarily address the problem of students who have difficulties with writing mechanics (spelling, grammar, vocabulary, etc.)

- **First-year level of writing:**
W-designated courses at the first year level enhance students' understanding of how analysis and intellectual discovery shape the process of writing. Typically, short writing assignments and a series of revisions provide practice with all stages of the writing process, from conceiving and refining a focus to organizing and presenting ideas. First-year seminars, most of which focus on writing, provide an ideal experience for the first-year level course. Currently, the vast majority of incoming students take first-year seminars. Those who do not, or who take one of the few seminars that might not fulfill the W-requirement, will be asked to take an alternative writing-attentive course during their first year. Completion of a first-year level course is normally a prerequisite for enrolling in a second-level writing course.
- **Second-level writing (sophomore or junior year):**
W-designated courses (or short term units) at the sophomore or junior level further students' ability to develop and refine arguments, ideally in their major. The goal is to further a critical understanding of the conventions of good writing, whether in analytical work, essays, or research papers. Such courses introduce greater complexity into subjects such as what constitutes a cohesive argument, an effective style, or a coherent presentation. W-designated courses at this level need not be in the English language.

The Bates Education Committee is reticent to delineate the criteria for designating courses as second level "W" because it is aware of the many pedagogical strategies a teacher might employ in various combinations to improve student writing: i.e., pre-thinking a topic through reports and debates; soliciting paper proposals; assigning annotated bibliographies; and/or requiring several revisions of each assignment. Instead, the committee hopes that faculty will design these classes in consultation with their programs and departments before submitting them. The First-Year Seminar and Writing Committee through a process THAT WILL INCLUDE consultation with and advising of faculty members and their programs or department, will begin to formulate a set of principles or standards for "W 2" designation.

The College expects to offer a series of meetings and seminars with participating "W 2" faculty in order to have a sense of the progress of this new curricular element and will report annually to the College about the progress of "W 2" implementation.

- **Senior-level writing:**

As a culminating writing experience, seniors write a thesis or complete a writing-attentive component of a senior capstone course, as determined by their major department or program. W-designated courses at this level need not be in the English language.

Other modes of communication (oral, visual, etc.) enhance the ability to convey ideas. Thus faculty are encouraged to consider including oral or visual presentation components as part of their W-courses. At all three levels of the process, students and faculty should have access, if needed, to the resources of the Writing Workshop.

At the first and second levels, some faculty may wish to offer a W-attentive section of a multi-section course with a more restricted enrollment. Alternatively, they may choose to designate a certain number of slots in any given course as “W-slots.”

Implementation: Keeping in mind the above descriptions of expectations for first, second, and senior-level writing courses, departments, programs, and individual faculty may propose any of the following to fulfill the W requirement; first-year seminars, regular semester courses or sections or portions thereof, short term units, thesis courses, other senior seminars and capstone experiences. All departments or programs must provide their own majors with a writing-attentive experience (typically a senior thesis).

In order for courses to be designated W, faculty submit proposals to the First Year Seminar and Writing Committee for approval.

Verification and certification of the fulfillment of these W-requirements by individual students prior to graduation will be the responsibility of the Office of the Registrar.

8. Scientific Reasoning, Laboratory Experience, and Quantitative Literacy. Students successfully complete three distinct courses: (1) one course that includes a regularly scheduled laboratory component (in the laboratory or in the field), i.e., an “L” section; (2) one Scientific Reasoning (“S”) course, which may or may not have a laboratory component; (3) one course in quantitative literacy (“Q”). “L,” “S” and “Q” courses can be proposed by departments, programs, or individual faculty members with the approval of their departments or programs. They must be certified by the Scientific Reasoning and Quantitative Literacy Committee which will be newly formed for this purpose.

Double-dipping rules: no double-dipping is allowed between L, S, and Q courses (i.e., these requirements must be met by three distinct courses). However, when appropriate, L, S, and Q courses may be used to fulfill other degree requirements (major, concentrations, and writing).

Rationale: One of the goals of a liberal education in the arts and sciences is to help students develop an understanding of the nature of scientific knowledge, especially the interplay between observations and theories and the process through which scientific knowledge progresses. Making one’s own measurements and observations, and then, analyzing and communicating the results, are crucial to this understanding. The required lab component provides this hands-on experience.

The quantitative requirement achieves the goal of helping students develop the ability to understand quantitative information and to make informed judgments accordingly.

Explanation. L-courses are already defined in our curriculum and registration materials: they are those courses, almost exclusively in the natural sciences, in which students must sign up for a regularly scheduled lab.

S-courses are those courses which further students' understanding of the nature of scientific knowledge, of the inductive character of scientific reasoning, the desirability of scientific theories that unify a broad range of observations, and the extent to which the reliability of conclusions is influenced by the quality of those observations. These courses will be drawn predominantly from the natural sciences.

Q-courses are those courses that teach students to understand and evaluate quantitative arguments, and that help them develop the ability to apply quantitative skills to solve problems in multiple contexts. Quantitative literacy is not the same as knowledge of mathematics. Quantitative literacy is anchored in context and is data-based. Mathematics is less context-specific and is symbol-based. Quantitative literacy is a habit of mind usable in and across many fields.

We anticipate that many courses will be listed in more than one of these categories, i.e., as "L," "S," and/or "Q" courses. Students will have the option of counting such courses in any one of the listed categories but not in more than one.

Implementation. Keeping in mind the above expectations, departments, programs, and individual faculty will propose that certain of their courses and short term units be designated in the catalog and registration materials as "L," "S," and/or "Q"-courses."

In order for courses to be designated "L", "S", or "Q", faculty submit proposals to the newly formed Scientific Reasoning and Quantitative Literacy Committee for approval. The constitution of this committee will be determined by the Committee of Five, in consultation with the faculty, to reflect the intent of the legislation.

The Office of the Registrar will verify and certify the fulfillment of these requirements by individual students prior to graduation.

9. Overall Implementation and Timetable. The new Bates Education Requirements will be introduced gradually, beginning with the class of 2011, in the Fall of 2007. Students graduating before 2011 will not be given the option of fulfilling the new requirements, but will be expected to abide by the ones current at the time of their matriculation. By the Fall of 2010, all students will be subject to the new requirements.

Starting in the Fall of 2007, all fulltime faculty members are expected to offer at least one "W" or "L" or "S" or "Q" course per year, or one course per year that counts towards a concentration of type 1 (area of inquiry). Exceptions to this may be granted by the Dean of the Faculty. It is anticipated that full implementation of this expectation may take a few years, up to Fall 2010.

Oversight of the development and implementation of the new requirements is the responsibility of the Educational Policy Committee. More specific development, implementation, and oversight of the individual components of the curriculum are the responsibility of other committees as follows:

- **4-course concentrations--Curriculum and Calendar Committee;**
- **W-courses--First-Year Seminar and Writing Committee;**
- **L, S and Q courses--new committee on Scientific Reasoning and Quantitative Literacy**

The EPC will report on the progress of the curriculum and its implementation to the faculty by 2012.

Explanation: While the specifics of the Bates Education Program will continue to evolve according to the wisdom and will of the Bates community, one issue remains clear and constant: general education at Bates is a process that requires continual reflection and review. The various committees involved in the review process over the past several years (the “Asheville Group,” the Coordinating Committee, the Design Team and now the Bates Education Committee) have constituted a provisional forum for this oversight; the work will continue, after those committees’ disband.

We anticipate questions will arise and curricular changes will occur as students set about fulfilling the new requirements. Therefore we propose introducing the requirements, one class at a time, starting in Fall, 2007 with the class of 2011. Those classes graduating before 2011 follow the general education requirements in place at the time of their matriculation. This approach creates a four-year transition period, allowing faculty, departments and programs to adjust their offerings gradually.

We propose 2006-2007 as a “development year” during which the faculty and committees involved in the implementation of the legislation will be established and directed to:

- follow the intent of the legislation;
- be constituted to reflect the interest and expertise of the component area;
- continue the interactive and consultative process of the past three years including a sense-of-the-faculty vote as relevant; and
- report to the faculty of the whole on an annual basis about the progresses and success of the existing year and the readiness to undertake the following year of implementation.

The successful implementation of the new Bates Education requirements anticipates the cooperation and participation of all departments, programs, and individual faculty. We foresee

that by 2011, all fulltime faculty will offer annually at least one “W” or “L” or “S” or “Q” course, or will contribute one course to a type I (area of inquiry) concentration.

The proposed legislation seeks to make clear the form and intent of a new general education program. It purposely stops short of legislating details that will be more fully developed during the implementation stage---details that are expected to evolve as the College community gains experience with the new system. This approach was chosen in order to encourage a continuing refinement of the new program; that refinement would likely be frustrated if a cumbersome three-reading legislative process were necessary each time the faculty wished to modify one of the program’s details. The proposed legislation therefore does not include page count criteria in the writing course portion, nor does it specify which courses will satisfy the S, L, or Q requirement. Rather, it attempts to provide sufficient detail so that the designated committees can develop guidelines to handle that level of detail. The flexibility created by this approach is essential to the long-term viability of the program’s design.