Curriculum Committee

Lewis \& Clark College

## Dear Committee Members:

The General Education Task Force has reviewed the current general education requirements for undergraduate students at Lewis \& Clark College. This report details our proposal for a revision of this system. The primary change is the introduction of competencies: skills and areas of knowledge that every graduate should possess. We also propose some reorganization to streamline and clarify the system.

Our proposed changes would take place in two phases. The first phase would be implemented in the fall of 2010, the second in the fall of 2012 . The second phase involves changes which may require additional planning or resource expenditures; this phase could be delayed further if the current economic crisis continues.

The nine competencies are:

## Academic Inquiry

Creative Arts
Cultural Awareness
Foreign Language
Assessing Quantitative Data
Scientific Experimentation
Symbolic Reasoning
Personal Health
Social Responsibility
This report continues with an overview of the proposed system, the rationale for these changes, discussion of each of the competencies, and some optional changes which the Curriculum Committee or the faculty may wish to entertain.

## Overview

## What is a Competency?

We define a competency as the ability to meaningfully engage in an activity or area of inquiry. We explicitly intend for competencies to include both skills and knowledge. For stylistic consistency, all of our competency titles complete a sentence of the form, "This student has demonstrated competency in $\qquad$ ."

There are degrees of competency in any field. Our intent is that, in each of these areas, every student should both demonstrate basic ability and improve their ability. The basic ability aspect ensures that our graduates are prepared, in the words of our catalog's statement on the liberal arts, to "become educated and thoughtful contributors to society". Basic ability can be demonstrated by passing a lower-level course (in some cases, a high school course) or by performing well on a test (such as the SAT or one of the College's placement exams). The improvement aspect is the overt mission of any educational institution. Improvement is generally demonstrated by passing a relevant course.

The Foreign Languages competency provides a clear example of this distinction. Basic ability can demonstrated by (among other options) taking a 201-level foreign language course or placing into 202 on the foreign language placement exam. An incoming student with several years of foreign language course may need no further work here; a student with no previous foreign language experience may need to take three courses. Improvement is then demonstrated by taking an additional course: perhaps a 300- or 400-level course for the first student, perhaps 202 for the second.

## Comparison with the Current System

While there are other competencies we would like to add, we recognize the importance of conserving resources in the current economic climate. Furthermore, we do not wish to make the requirements so burdensome that students feel unable to explore the curriculum on their own. To these ends, the first phase of our proposal does not increase the number of credits required of each student; the second phase increases the number by only four. The current general education program requires a student to take 46 credits, although a student with previous foreign language fluency could reduce this to as few as 34 . The corresponding numbers for the second phase of our proposal are 50 and 38.

| Current System | Competencies (Phase I) | Competencies (Phase II) |
| :--- | :--- | :--- |
| Exploration and Discovery (8 <br> credits) | Academic Inquiry (8 credits via <br> Exploration and Discovery) | Academic Inquiry (8 credits via <br> Exploration and Discovery) |
| International Studies (8 credits) | Cultural Awareness (8 credits) | Cultural Awareness (4 credits) |
| Scientific and Quantitative <br> Reasoning: A (4 credits), B (4 <br> credits) and B or C (4 credits) | Assessing Quantitative Data (4 <br> credits) <br> Scientific Experimentation (4 <br> credits) <br> Symbolic Reasoning (4 credits) | Assessing Quantitative Data (4 <br> credits) <br> Scientific Experimentation (4 <br> credits) <br> Symbolic Reasoning (4 credits) |
| Creative Arts (4 credits) | Creative Arts (4 credits) | Creative Arts (4 credits) |
| Foreign Language (201 or <br> placement) | Foreign Language (201 or <br> placement) | Foreign Language (4 credits, 202 or <br> higher) |
| Physical Education / Activity (2 <br> credits) | Personal Health (2 credits) | Personal Health (2 credits) |
|  | Social Responsibility (4 credits) |  |

## Which Courses Provide Which Competencies?

Ultimately, this will be decided by the Curriculum Committee, with input from the faculty teaching each course. Some guidelines and examples are given in the descriptions of the competencies below.

A course should deal extensively with the competency (rather than merely spending a week or two on it) to provide the competency. Many courses will not provide any general education competency per se. In the rare instance where a course clearly and significantly provides more than one competency (e.g., a dance class that provides both Creative Arts and Personal Health), a student may not count the course for both competencies.

## Rationale

## Problems With the Current System

Our proposal is meant to address several shortcomings in the current general education system:

- The goals of each area (what is to be learned) are not clearly stated.
- Several aspects of the current system are needlessly complicated or are not stated clearly. The most egregious example is the Scientific and Quantitative Reasoning requirement: one from category A , one from B , and one from B or C, with students "expected" to take A or B outside their major and "encouraged" to take C.
- Requirements are often given in terms of divisions and departments. This is to some degree inevitable; one wouldn't expect to meet a Foreign Language requirement by taking a course in the Physics department. That said, making this less explicit may break down some barriers within the campus community and facilitate interdisciplinary collaboration.
- Some of the lists of courses seem haphazardly thrown together. While no particular courses were singled out, there is a fear that some courses only tangentially address the requirement with which they are associated.
- We feel that the 201 level of foreign language coursework is not sufficient for a student to communicate effectively in another language and to understand the subtleties and intricacies of the culture(s) associated with that language.
- We feel that 8 credits of International Studies was unnecessary. Furthermore, the current requirement conflates the study of cultures in the abstract with study of specific cultures; we feel that the latter is more important to general education.
- While the current Physical Education / Activity requirement serves to instill a habit of exercise, it does not address a number of other personal health issues that affect our students. These issues include nutrition, sleep hygiene, and mental health.
- The current requirements do not address the fifth element of the liberal arts laid out in the catalog, "application of theory and knowledge developed in the liberal arts to the search for informed, thoughtful, and responsible solutions to important human problems."


## Why Competencies?

Explicitly delineating what students are expected to gain in general education courses provides clear benefits to students, instructors, and assessors.

Some students regrettably view general education as a burdensome list of meaningless obligations to be "checked off". It is our hope that the competency system will help students understand the personal benefits of such courses. Alumni should also be able to more clearly articulate what they learned during their time at Lewis \& Clark.

Instructors teaching general education courses will benefit from a clear statement of what their students are supposed to learn. This is useful in writing syllabi, writing exams, and assigning grades.

The greatest benefit accrues to assessors. When learning objectives are not stated, there is no way to determine if they have been met. The current system provides little hope of assessing students, faculty, courses, departments, or the College as a whole; the competency system should be a step in the right direction. The competency system should also simplify the Curriculum Committee's task of determining which courses should be listed in the various general education areas.

## The Competencies

Note: the example courses listed with each competency are meant as a representative sample, not an exhaustive list.

## Academic Inquiry

Basic Competency: Admission to the College
Improvement: 8 credits via Exploration and Discovery
Core 106 (Fall $E \& D$ ), Core 107 (Spring $E \& D$ )
Students should demonstrate proficiency in the basic techniques of academic inquiry: careful reading, critical thinking, argument in writing and speech, research, and information literacy.

Students will further develop this fundamental academic competency in other areas of General Education as well as in their majors and elective course work.

## Creative Arts

Basic Competency: Admission to the College
Improvement: 4 credits
Examples: Art 113 (Sculpture I), Art 304 (History of American Art), English 201 (Introduction to Poetry and Poetry Writing), Music 132 (Piano), Theater 106 (Fundamentals of Movement)

Students should demonstrate either proficiency in communicating through the direct practice of an artistic discipline, or understanding of the history and theory of such a discipline.

We would prefer to limit this competency to the practice of an artistic discipline, but we believe that the alreadystrained courses in studio arts, music, and so forth would not be able to accommodate additional students without significant resource expenditures.

## Cultural Awareness:

Basic Competency: Admission to the College
Improvement: 4 credits
Examples: Economics 295 (Political Economy of Korea), History 141 (Colonial Latin American History), International Affairs 236 (International Relations of Northeast Asia), International Studies 240 (Overseas Program), Music 164 (World Music Intensive: Theory and Practice), Political Science 317 (Southeast Asian Politics and Government), Religious Studies 241 (Religion and Culture of Hindu India)

Students should demonstrate understanding of one or more cultures other than their own. This competency may be developed through the study of a specific culture's shaping of the world, or through the comparison of several cultures, but not merely through the study of theoretical cross-cultural issues in the abstract.

In the first phase, this competency would be defined identically to the current International Studies requirement, including both the higher credit count ( 8 credits) and the broader definition.

The number of credits in the second phase is four less than the current International Studies requirement. The intent is that these four credits be effectively shifted to a more rigorous Foreign Language competency, as described below.

## Foreign Language

Basic Competency: Identical to the current requirement (see catalog, p. 17)
Improvement: 4 credits in a course, numbered 202 or above, from the Foreign Languages department, in the language program in which the student has demonstrated basic competency

Examples: French 202, Russian 230 (Introduction to Russian Literature in Translation)
Students should demonstrate proficiency in speaking, hearing, reading, and writing a language other than their own. This competency also includes the study of the culture in which the language is spoken.

The improvement aspect of this competency does not take effect until the second phase of our proposal.
This competency increases the level of foreign language study required to one course beyond 201. This effective addition of four credits cancels out the four credit reduction in International Studies / Cultural Awareness discussed above. This seems a reasonable exchange, as 202-level language courses deal extensively with culture and impart a significantly enhanced capacity for cross-cultural communication and awareness.

Students who choose Latin or Greek as their foreign language would be able to demonstrate improvement in this competency by taking any other Classical Studies course, as Latin and Greek have no courses beyond 201.

As in the current general education system, students whose native language is not English would be exempt from this requirement.

## Assessing Quantitative Data

Basic Competency: As per the footnote on p. 15 of the catalog
Improvement: 4 credits
Examples: Economics 103 (Statistics), Math 105 (Perspectives in Statistics), Political Science 201 (Research Methods in Political Science), Psychology 200 (Statistics I)

Students should demonstrate proficiency in interpreting and analyzing quantitative data. This competency includes a sense of numerical scale, producing and reading graphs, and familiarity with basic statistical measurements such as means, medians, and standard deviations.

All courses providing this competency should have the basic competency as a formal prerequisite.

## Scientific Experimentation

Basic Competency: As per the footnote on p. 15 of the catalog
Improvement: 4 credits
Examples: Biology 100 (Perspectives in Biology), Chemistry 110 (General Chemistry I), Physics 141 (Introductory General Physics I), Psychology 300 (Psychology Methodology)

Students should demonstrate proficiency in designing and carrying out experiments to test hypotheses. This competency includes understanding of how data are gathered, as well as the null hypothesis and factors that can bias results.

All courses providing this competency should have the basic competency as a formal prerequisite.

## Symbolic Reasoning

Basic Competency: As per the footnote on p. 15 of the catalog
Improvement: 4 credits
Examples: Computer Science 171 (Computer Science I), Math 103 (Perspectives in Mathematics), Philosophy 101 (Logic)

Students should demonstrate proficiency in abstract, formal, symbolic reasoning to solve quantitative problems.
All courses providing this competency should have the basic competency as a formal prerequisite.

## Personal Health

Basic Competency: Admission to the College
Improvement: 2 credits, not in same semester, in first two years
Examples: Physical Education 101 (Activities), Physical Education 102 (Varsity Athletics), Theater 106 (Fundamentals of Movement), College Outdoors "Breakaway Adventures" programs

Students should demonstrate understanding and develop habits of physical health, with an eye toward a lifelong practice of fitness.

In the second phase, the course list for this competency should be broadened to include a new course on health issues, such as exercise, nutrition, meditation, sleep hygiene, etc. Such a course could be substituted for one (if a 1credit course) or both (if a 2-credit course) personal health credits. The Department of Physical Education and Athletics suggests that such a course could be taught with no additional faculty by eliminating some existing PE 101 courses. Courses such as Chemistry 105 (Perspectives in Nutrition) might also be acceptable at this point.

## Social Responsibility

Basic Competency: Admission to the College
Improvement: 4 credits
Examples: Communication 244 (Practicum), Economics 232 (Economic Development), Environmental Studies 160 (Introduction to Environmental Studies), Philosophy 103 (Ethics), Political Science 244 (Practicum), Psychology 445 (Psychology Internship), various community service projects

Students should demonstrate proficiency in or understanding of the skills and habits of social responsibility and civic leadership. This includes both study of and engagement in activities to improve the health of the community.

Because of resource limitations and the partially co-curricular nature of the Social Responsibility competency, it would not be implemented until the second phase of our proposal. It may also be wise to convene a special task force to clarify the many ways this competency might be met.

Implementing this competency would require, among other things, changing the current wording in the catalog (p. 13 and p. 26) that "credit earned for independent study, practica, or internships may not fulfill General Education requirements".

## Optional Variants

## Early Change to International Studies and Foreign Language

If it does not appear that resource requirement would be too onerous, the second phase versions of the International Studies and Foreign Language competencies could be implemented immediately.

## A Course in Scientific and Quantitative Reasoning

Resources permitting, we would like all students to engage with scientific and quantitative reasoning in small classes, during their first two years. The motivation for small classes (greater participation, individual faculty attention, etc.) applies here just as it does to Exploration \& Discovery; currently, SQR perspectives courses are among the largest on campus. We would also like to prevent students with math anxiety from avoiding SQR until their final semester.

Achieving this goal is, of course, not resource-neutral, but we believe it is worthy of further expenditure. This could be done by providing more sections of existing perspectives courses or by creating new courses, such as those being created as part of the HHMI grant or the Computational Problem-Solving course proposed by Jeff Ely.

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