

On the Humanities Requirements of Harvey Mudd College

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Introduction

The Department of Humanities and Social Sciences (hereinafter HumSoc) is an integral part of Harvey Mudd College, and its educational objectives lie at the core of the college's mission. The current graduation requirements, while they encourage the student to study many aspects of HumSoc, fall short of fulfilling the founders' dream of creating scientists, mathematicians, and engineers who possess, as phrased by the mission statement, "a clear understanding of the impact of their work on society." The core issue identified by concerned alumni is that the requirements do not specifically address the topic of how scientific and technological progress impacts society. Indeed, one alum, a transfer student, expressed dismay at how easy it is to attend the college without ever having to consider these issues; her previous institution forced students to confront these issues directly and continuously. This issue is exacerbated by the fact that the current requirements overextend the student, with an overly broad distribution requirement which encourages a shallow and superficial understanding of HumSoc.

The HumSoc Department in particular and the faculty in general have made attempts to resolve the first problem, such as the recently adopted Integrative Experience. However, the Experience exacerbates the second problem. A single course cannot truly immerse the student in the issues of science and society, but additional course requirements can burden already-taxed students significantly. Still, the Integrative Experience is the sort of course that the founders had in mind when they created the college. The solution is to build up a set of courses to support it; just as the Department recognizes that a set of four courses is necessary to study an area of HumSoc in depth, by supplementing the Experience with at least three HumSoc courses related to Science, Technology, and Society (hereinafter STS), the Experience will truly fulfill its objective.

In any discussion of graduation requirements, it is important to bear in mind that students at Harvey Mudd are strained significantly by both their technical and HumSoc requirements. Complaints regarding the HumSoc requirements arise out of frustration by particular circumstances, not from general antipathy towards HumSoc. If students genuinely disliked HumSoc they would have chosen to attend any of the technically superb schools which have minimal HumSoc requirements. Indeed, most Harvey Mudd students are very passionate about at least one, and typically several, areas of HumSoc, and they have chosen to attend the college because of this focus.

This proposal outlines a new set of graduation requirements with the hope that they will serve as an impetus to and a framework for discussions of how to address the twin shortcomings of the current HumSoc requirements mentioned above while preserving the student's freedom to create an individualized HumSoc program.

The Requirements in Brief

In order to strengthen the Integrative Experience while ensuring a broad and meaningful exposure to HumSoc, each student will complete the following requirements:

- Hum 1 & Hum 2. This is the same number of courses, but they will be somewhat altered in content.
- Distribution requirement:
 - 3 courses, one in each of three categories: Social Science (excepting STS, which will become a required course), Humanities, and Arts & Literature. This conforms to the present distribution requirement except that only one course is required in each area instead of two.

- 1 STS elective. This is a new requirement.
- 1 Senior year, major-specific ethics class. This is a new requirement.
- 5 electives, as opposed to 4 in the present system, subject to Concentration and On-Campus requirements. The Concentration requirement is unchanged, but the On-Campus requirement is reduced from 5 to 4.
- 1 Seminar or equivalent Senior Project. This can overlap with any other requirement, just as it does in the present system.

Discussion—Freshman Year Courses

The freshman year courses serve two main purposes: to solidify students' writing skills and introduce them to HumSoc. Both of these purposes are important to the college's mission: the tools and methods of HumSoc are essential to understanding STS, and without strong writing skills it is impossible to inform coworkers, superiors, or the public about these issues. Unfortunately, current versions of the freshman year courses do not fulfill these purposes as well as they could.

Hum 1 is essentially a writing seminar required of all students. However, any general introductory course will have difficulty meeting the needs of its weakest and strongest students. Weak students are not well served by only writing 4 moderately-sized essays because they still need to learn how to write paragraphs (or, in some extreme cases, sentences). They are better served by writing a great deal and learning a bit at each stage than perfecting a small writing sample. The strong students often waste time reviewing, rather than applying, skills they have already mastered, and are frustrated by student-editing because their editors—many of whom are far weaker writers than themselves—may not be able to give useful, or even correct, advice.

Thus, some sort of tracking is necessary. The HumSoc department should follow the lead of the Biology department and give qualified students the option of taking an on-campus HumSoc course in lieu of Hum 1. The determination of qualified students could be based on an AP English Exam or on a writing sample provided by the student. Hum 1 itself should be reformed to put a greater emphasis on basic writing skills, probably including weekly or even daily writing exercises. This change in format will not only improve students' writing abilities, but may also help remove the lack of confidence in their communication skills discussed in the Spring 2002 HMC Bulletin. Having two levels of Hum 1 based on writing ability may also be useful, but this also reduces student choice in the selection of a section so may ultimately be counter-productive. Obviously, the exact details are best resolved by the department, which has the most detailed knowledge of its resources and the students it serves.

Hum 2 is presently a generic HumSoc course, which does not appear to have any specific purpose. In the proposed system, Hum 2 will still have multiple sections and themes, but will serve as a first course in STS. STS is the core of the college's mission statement, and students should be introduced to it early. However, a "first course in STS" does *not* necessarily mean a formal introduction to STS, although such a course is definitely an option for a Hum 2 course. Due to its inherently interdisciplinary nature, an STS-themed course can analyze many choices of subject matter from many different perspectives. This makes STS suitable for a large, multi-section course such as Hum 2. Three such courses might be as follows: a music course on how technology has impacted composition and performance practice, an international relations course on how changing mass media has affected US foreign policy, or a literature course focusing on dystopian or other fiction dealing with technological themes. Thus, students will still have the same choices that they do in selecting their Hum 2 course, but they will also have an early opportunity to explore how society and technology interact.

Although the main focus of the course should be on the subject matter and not writing skills, there probably should be a writing portfolio just as in current Hum 1 course, since a single writing seminar is not enough to solidify the student's writing ability. Having a portfolio in Hum 2 will also help build the students' confidence in their writing skills as they will be able to compare how their writing improved from Hum 1 to Hum 2, again addressing the above mentioned lack of confidence.

Discussion—Distribution Requirement

The revised distribution requirements lie at the heart of this proposal. The following principles guided their creation. First, a significant STS requirement is necessary so that students will learn to automatically consider the social dimension of any technical endeavor they undertake. Second, studying a few areas deeply improves the student's knowledge and critical thinking skills more than studying many areas superficially. Third, the burden on the student must not be increased.

In accordance with the first and second principles, two specific areas will be added to the distribution: STS and ethics. Together with the STS-themed Hum 2, as well as the Integrative Experience, these form a set of courses which will train the student to study the issues of science and society from different perspectives. Further, by having studied these issues in several different contexts, students will have gained a knowledge base which will permit them to apply the general critical thinking skills they have gained throughout their HumSoc education to any issue they may face in life. It is this particular knowledge base which is missing from the current curriculum.

Although any course listed as STS—at any member of the Claremont Consortium—should fulfill the STS elective requirement, there are additional courses not so listed which the department would approve as fulfilling this requirement. Examples of such courses include:

- Hum 82. Science and Technology in the Modern World
- Hum 124. Science and Politics in the United States.
- Hum 126. Nuclear Arms Control
- Hum 140. Environmental Philosophy.

The capstone experience of the new system is the ethics course. It is here, as seniors who are well versed in their technical discipline and have developed their critical thinking skills through three years of HumSoc courses, that students will confront the social and ethical issues facing their respective disciplines. For this reason there will be 6 versions of the ethics course, one for each technical department, and the course will be co-taught by a member of the HumSoc department and a member of the corresponding technical department. The course should be primarily discussion-based, so larger departments may need to hold multiple sections.

The discussions should focus on topical issues, addressing them from both the technical and societal viewpoints. Each of the technical disciplines is impacted by a host of ethical considerations, and all issues should be considered for inclusion in this course. However, conversations on campus have revealed that students feel that they have no place to discuss workplace ethics in general or issues that arise in the course of their clinic work in particular. By encouraging students to draw on examples from their clinics and theses, this class should provide a forum for remedying this lack while getting students to think about larger issues as well.

Double, joint, and IPS majors, in keeping with the principle that students should not be overburdened, will not be forced to take multiple versions of this course. Double majors and joint-majors will be free to take the course in either of their departments. Off-campus majors will take the version corresponding to their minor, and IPS majors will choose a version in consultation with their HumSoc advisor.

In order to achieve this added focus on STS while observing the third guiding principle—that the student not be overburdened—the formal breadth requirement must be reduced. Thus it is halved to one course in each of the three divisions. Since STS no longer fulfills a breadth requirement, the actual breadth requirement is only reduced by two courses. This reduction is also consistent with the second guiding principle. There is still a breadth requirement to expand students' horizons. However, students are studying not one but two areas in at least moderate depth: STS—the college's *raison d'être*—and their chosen Concentration area. Students are further given an extra elective, as the distribution is now five courses rather than six, which they can use to tailor their program to either greater depth or breadth as they and their advisors see fit.

Discussion—Electives

Although the proposed changes to the elective requirements are minor, they are worthy of discussion.

Most students at Harvey Mudd College are extremely passionate about at least one area of HumSoc and typically several. Indeed, the need arises for the Concentration requirement not because students

are not interested in any area, but because they are interested in so many that their education may be too unfocused. Although the Concentration requirement draws a good balance in theory between requiring depth and allowing student freedom, its implementation in practice is imperfect. At present, student “planning” for the concentration requirement often consists of first fulfilling the Distribution requirement, then building up a concentration with whatever courses fit into their schedule. If serious scheduling conflicts arise, especially as a result of the On-Campus requirement, student frustration runs high. The Department is urged to review its advising process to facilitate the design of an appropriate Concentration. Although a less formal solution may suffice, one possibility to examine is adding a “proposal” at the end of the sophomore year, in which student and advisor develop in writing a program to fulfill all the remaining HumSoc requirements. Early planning will resolve many of the problems currently associated with the Concentration.

The reason for reducing the On-Campus requirement is to alleviate the pressure on students whose primary interest lies in areas in which the department, literally or practically, has no course offerings, and is unlikely to have them in the future. These include classics, foreign language, religious studies, dance, and studio art. Students are required to overload if they wish to complete a formal minor, which is six courses at the other Claremont Colleges, in those areas—a burden not shared by other students. Presently, Harvey Mudd alumni are pursuing graduate studies in classics, Middle English literature, and theater, to name a few. As a lack of a formal minor can be a substantial obstacle to these students’ later education, the only fair solution is to reduce the On-Campus requirement by one.

The HumSoc Requirements and the Integrative Experience

These new HumSoc requirements would make the Integrative Experience, as presently implemented, almost redundant because students will most likely fulfill the Integrative Experience requirement with their STS elective. However, the Integrative Experience and the courses which have been added to fulfill it—especially those in technical departments—are a welcome addition to the college, and they should be encouraged. Further, with the broader exposure to STS created by the new HumSoc requirements, the Integrative Experience will be a much deeper “exploration of the interaction between science, technology, and society,” the intended purpose of the Experience stated in the course catalog. In order to preserve the integrity of the HumSoc program and the Integrative Experience while simultaneously seeking to minimize the burden on the student, any Integrative Experience in a technical department should be allowed to double count as a course in that major, as is presently the case. However, an Integrative Experience in the HumSoc department should be allowed to count as a HumSoc elective, but it should not fulfill any HumSoc distribution requirement. The Integrative Experience will therefore be a fourth STS-themed course taken by the student, completing a Concentration of sorts in STS.

Conclusion

While it may seem at first glance that this proposal is a radical departure from the current HumSoc program, it is really a set of small changes which could significantly improve the program. The basic goals are the same: exposing students to different modes of thought and encouraging them to think about the impact of their work on society. The only differences are that the former goal is slightly more focused and that the latter goal is being emphasized more. The fact that only one new course, namely the ethics course, needs to be offered to achieve this goal demonstrates that the HumSoc Department is strong and has served students well up until now. A new set of HumSoc requirements, based on the suggestions in this proposal, will help it serve students even better.

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Signatories

Although this document was authored by a single individual, it represents a synthesis of many ideas from a large number of alumni. The following signatories have endorsed this proposal and the principles it contains. The list is accurate as of the date of release of this proposal; a continually updated list may be found at <http://www.cs.hmc.edu/~is/proposal/support.html>.

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