GRADUATE CERTIFICATE IN SCIENCE AND TECHNOLOGY STUDIES

for discussion at the SSNet Curriculum Town Hall - January 12, 2009

There was strong interest in exploring the potential for establishing a Graduate Certificate in Science and Technology Studies when we discussed SSNet curriculum intiatves last April. What follows is a summary of Graduate School requirements for certificates with suggestions and questions about strategy for developing an STS proposal. For discussion! Suggestions, recommendations most welcome.

Interdisciplinary Committees and Degree-Offering Groups

There may be a mechanism for establishing an interdisciplinary faculty group, recognized by the Graduate School, that can offer a degree-granting program; Betty Feetham mentioned a "research network" and there's a Graduate School Memorandum on "Interdisciplinary Committees" (link below). It isn't clear whether such a committee is required to offer a certificate, but we should investigate the possibility of establishing "interdisciplinary group" status for SSNet in any case. Any wisdom about this?

- The Astrobiology Certificate may be a model for STS in this regard:
 - The Astrobiology Program is not a degree-granting unit or academic department. Our program is offered in cooperation with the Ph.D. programs of our participating departments, and the Certificate is earned through required coursework and activities in addition to the participating student's Ph.D. program requirements. [There's a link to a list of 10 participating academic departments which includes "History (of science)".]
- Memorandum on Interdisicplinary Committees and Degree-Offering Groups http://www.grad.washington.edu/Acad/gsmemos/gsmemo05.htm

Graduate Certificate requirements

Graduate Certificates require the following:

Curriculum: the requirements of a certificate must "not be significantly redundant" of those for an existing PhD program and must constitute a "coherent body of study" / a "linked series of courses"

- a minimum of 15 credits: 9 credits in courses above the 500-level; 9 in graded courses
- maximum coursework overlap with a PhD program = 6 credits in courses that are PhD electives
- a required capstone experience

Admission and progression requirements:

- certificate students must be enrolled in a PhD program to be eligible for admission to a certificate program; application and advising processes vary.
- students must maintain a GPA of 3.0 in all required courses and 2.7 in all other courses that count toward the certificate.

Governance:

- a Director, a roster of core faculty, and a steering committee are required; a broader advisory board is optional.

Proposal requirements and process:

- Components of a proposal: in addition to curriculum, admission procedures, and governance:
 - document demand
 - specify purpose and learning objectives / demonstrate integration
 - outline budget
- Process/deadlines:
 - initial consultation with the Graduate School
 - Planning Notification of Intent (NOI): circulate to all stakeholders early in the program development process; get signatures on a "NOI Routing Form"
 - submit the proposal for a new certificate by November 1, February 1, or May 1.

Certificate proposal quidelines: http://www.grad.washington.edu/Acad/GradCertificate.htm

+ notice of Intent details: http://www.grad.washington.edu/Acad/NOI.htm

List of links to established certificates:

http://www.grad.washington.edu/Acad/certificatelist_acadprog.htm

Models for an STS Certificate

Purpose / learning goals:

- two linked constituencies for an STS certificate have been identified:
 - graduate students in disciplinary PhD programs in the humanities and social sciences for whom questions about science and technology are a primary focus of inquiry: e.g., students interested in HPS (history and philosophy of science), social or cultural studies of science and technology, and normative questions (research ethics, science policy, equity issues in science);
 - students in science and technology graduate programs who are interested in historical, philosophical, socio-cultural, and normative questions about their disciplines (e.g., FoSEP);
- a certificate in STS stands to make quite different, if complementary contributions in these areas:
 - consider whether/how best to serve these two constituencies (if this distinction seems accurate);
 - clarify certificate purpose and learning goals in relation to them.

STS Curriculum:

- Core requirements: models include one core introductory course + electives (Cinema); two required core courses + 2 electives (Values in Society); 3 courses chosen from a roster of graduate courses in the area, to include one required core course that may be taught under various numbers (Law, Societies and Justice); a choice of four courses from different categories of courses core, practice, theory, topics (Museology). Here's a proposal for an STS curriculum, as a point of departure:
 - establish one dedicated, integrative/introductory core course required for all STS Certificate students (as for the proposed Cinema certificate) = 5 credit / 500-level
 - are there ways to link this to the capstone course required for the HPS major?
 - require one other "broad perspectives" course chosen from a list of 500-level offerings already available = 4-5 credits / 500-level
 - examples include: Philosophy 560 / History 511 / Communication 540/595
 - require one (or two?) other topic or discipline-specific elective = 5 (or 10) credits
 - develop a sample list?
 - or give examples of well-formed clusters and require students to consult with/get approval from a certificate advisor for appropriate electives?
- Capstone: possibilities include a research paper adjudicated by a 2-person committee (Cinema proposal); a research paper supervised by a core faculty advisor and presented at an SSNet colloquium or a professional meeting in the field (LSJ); a 2-credit capstone workshop dedicated to developing a potentially publishable paper (Values in Society); designating one PhD qualifying exam in the area of the certificate (an option proposed for the Cinema certificate). A suggestion:
 - if the course requirements run to 15 credits (one course in each area above), propose a 2-credit research paper workshop;
 - if we require two electives (rather than one) so the course requirements are relatively heavy (18-20), require development of a research paper (with an advisor) + presentation at an SSNet colloquium.

Governance:

- establish a Graduate School-recognized Interdisciplinary Committee (as the steering committee?), and draw up a list of core faculty from active participants in the SSNet;
- develop guidelines for electing members of the core faculty and appointing a director.

Demand:

- input from FoSEP; participants in SSNet micro-seminars; SSNet graduate student participants

Budaet:

- long term: what's required to finance a certificate that is not embedded in a pre-existing program or department: director/coordinator's time; advising commitment; one core course; advertising.
- medium term: an NSF "Small Grant for Training and Research" seems ideal for developing an STS program at UW; it offers up to \$130K/year for three years for program expenses, including a post-doctoral fellowship and as many as three graduate fellowships.