GUIDELINES TO THE GRADUATE PROGRAM

Graduate Study in History of Science (p. 1)

History of Science Faculty and Associates (p. 3)

Guidelines:

- 1. The M.A. Degree in History of Science (p. 5)
- 2. M.A. Degree in History of Medicine for Students with Medical Degree (p. 8)
- 3. The Ph.D. Degree in History of Science (p. 10)
- 4. Quality of Work (p. 17)
- 5. Required Copies of the Doctoral Dissertation (p. 20)
- 6. Courses by Distribution Area (p. 21)
- 7. Policies Regarding Transfer of Graduate Credit (p. 23)
- 8. Support for Research and Travel (p. 25)
- 9. Joint Ph.D. in History and History of Science (p. 26)
- 10. Joint Ph.D. in Philosophy and History of Science (p. 27)
- 11. Teaching Assistant Training (p. 30)
- 12. Form for Choosing (or Changing) M.A. Advisor (p. 31)
- 13. Checklist for History of Science M.A. Requirements (pp. 32-33)
- 14. Application Form for Admission to the Ph.D. Program (p. 34)
- 15. Form for Approval of Overall Ph. D. Program (pp. 35-36)
- 16. Checklist for History of Science Ph.D. Requirements (pp. 37-38)
- 17. Application Form for Dissertator Research or Travel Grant (p. 39)
- 18. Index (p. 40)

GRADUATE STUDY IN THE HISTORY OF SCIENCE AT THE UNIVERSITY OF WISCONSIN-- MADISON

The Department of the History of Science at the University of Wisconsin-Madison is the oldest department of its kind in North America and continues as a leader in graduate education. Its coverage includes the history of science, medicine, and technology, with attention both to developments internal to these disciplines and to their broader social and intellectual contexts. While concentrating on Western Europe and America, our coverage extends to other areas of the world that experienced significant encounters with Western science and medicine (such as the medieval Islamic world, China during the seventeenth century, and north Africa since the late nineteenth century). Our graduate faculty includes historians with primary appointments in the Department of the History of Science and the Department of Medical History and Bioethics; many of these faculty also have affiliations with other departments and programs. The Department of the History of Science also cooperates closely with the Department of History and with the Science and Technology Studies Program.

The Memorial Library of the University of Wisconsin-Madison is an exceptionally fine general research library and is particularly strong in the history of science. Because of the early interest in the history of science at Wisconsin, Memorial Library has been actively collecting periodicals, reference works, historical monographs, and research materials for many years. Especially noteworthy are the holdings of early scientific journals and the special collections of early works relating to the history of chemistry, medicine, and pharmacy. Memorial Library is also very strong in the history of physics and mathematics, in works relating to science in England during the sixteenth and seventeenth centuries, and in nineteenth-century German scientific journals. The history of medicine collection, housed in the Middleton Health Sciences Library, provides outstanding opportunities for research in the history of European and American medicine from the seventeenth through the twentieth centuries. Of particular interest to historians of American science, technology, and medicine is the library of the State Historical Society of Wisconsin, which is one of America's great research libraries in its own right. The State Historical Society newspaper holdings are second only to those of the Library of Congress.

Graduate students come to the Department of the History of science from a variety of backgrounds in the sciences and humanities and with diverse professional goals. The department maintains a policy of maximum flexibility and, insofar as possible, tailors the program to fit the individual. Students are encouraged to undertake work in related departments such as history, philosophy, Science and Technology Studies, and the various sciences. Joint degrees in the History of Science and another field are possible. In past years such Ph.D. programs have been successfully completed with the departments of Philosophy, Classics, Psychology, History, Chemistry, Mathematics, and Physics. The department has formally organized joint Ph.D. programs with the departments of History and Philosophy and is an active contributor to the Ph.D. minor in Science and Technology Studies. A description of the first two joint programs appears in sections 9 and 10 below. Available upon request is information of interest to students with an M.D. degree who wish to undertake graduate study in the history of medicine. Although most students who enter the graduate program anticipate completing a Ph.D. in history of

science, the department welcomes applications from students whose career goals will be furthered by the M.A. degree.

The Department of the History of Science has financial aid for graduate students in a variety of forms, including research and teaching assistantships, the John Neu Distinguished Graduate Fellowship, the Theodore and Genevieve Herfurth Research Assistantship, and the William Coleman Dissertation Fellowship. Applicants may also compete for University Fellowships and for a variety of national fellowships offered by the National Science Foundation and other agencies. In addition, the Department of Medical History and Bioethics is able to provide financial support for some students concentrating in the history of the biomedical sciences. The application for admission (accompanied by three letters of recommendation and scores from the GRE aptitude test) constitutes an application for financial aid in the Department of the History of Science and also for University Fellowships. Students with special interest in the history of medicine should also address inquiries regarding financial aid to: Chair: Department of Medical History and Bioethics, 1420 Medical Sciences Center, University of Wisconsin-Madison.

All academic disciplines have felt the effects of reductions in spending for higher education. These reductions have, of course, also intensified the competition for academic employment in the history of science, and on a national level the number of graduates exceeds the number of available positions. In recent years, however, graduates of Wisconsin have enjoyed a relatively high rate of success in securing suitable positions—in history of science programs, history or philosophy departments, various science departments, general science and liberal arts programs, libraries and archives, museums, and science journalism.

FACULTY AND ASSOCIATES

- Warwick H. Anderson, Professor, B.Med.Sc.(Physiology) University of Melbourne, M.B.B.S. (MD equivalent) University of Melbourne; M.A. (history of sociology and science) University of Pennsylvania; Ph.D. (history of medicine) University of Pennsylvania.. *History of tropical medicine and international health; public health and globalization; disease ecology; twentieth-century biomedical science and racial thought.*
- **Thomas H. Broman**, Associate Professor, B.A. (biology & chemistry) Ripon College; M.S. (agronomy) University of Illinois; Ph.D. (history) Princeton University. *Science and the Enlightenment, early modern medicine*.
- **Jane R. Camerini**, Faculty Associate, B.A. (biology) Barnard College; M.S. (zoology and cartography), University of Wisconsin; Ph.D. (bio-cartography), University of Wisconsin. *History of evolutionary and environmental sciences, 19th and 20th centuries.*
- **Judith A. Houck**, Assistant Professor, B.A. (liberal studies) St. John's College, Santa Fe; M.A., Ph.D. (history of science) University of Wisconsin. *History of women's health, American medicine, medicine and sexuality, race and medicine, science and gender.*
- **Florence Hsia**, Assistant Professor, A.B. (East Asian studies) Princeton University; M.A., Ph.D. (history) University of Chicago. *Early modern European science; Jesuit science; science and European expansion (esp. into East Asia)*.
- **Richard Keller**, Assistant Professor, B.A. (history) University of Colorado at Boulder; M.A., (European history), University of Colorado at Boulder; Ph.D. (European history), Rutgers University. *History of European and colonial medicine and public health; history of psychiatry and psychoanalysis; history of the human sciences; science and race*.
- **Judith W. Leavitt**, Ruth Bleier Professor, B.A. (social sciences) Antioch College; M.A.T. (education) University of Chicago; M.A., Ph.D. (history) University of Chicago. *History of public health in America; History of women's health in America; 19th and 20th centuries.*
- **Gregg Mitman**, Professor, B.Sc. (biology) Dalhousie University; M.A., Ph.D. (history of science) University of Wisconsin. *History of ecology; environment and health;* 20th century life sciences; science in America; science and film.
- **Ronald L. Numbers**, Hilldale and William Coleman Professor, B.A. (mathematics and physics) Southern Adventist University; M.A. (history) Florida State University; Ph.D. (history) University of California, Berkeley. *History of science and medicine in America; the historical interactions of science, medicine, and religion*.
- **Lynn K. Nyhart**, Associate Professor, B.A. (history/history & philosophy of science) Princeton University; Ph.D. (history and sociology of science), University of Pennsylvania. *History of biology, especially natural history, genetics, evolution, and marine biology; biology and society; feminist approaches to science, technology, and gender.*

Robin E. Rider, Senior Lecturer, B.S. (mathematics) Stanford University; M.A. (mathematics), Ph.D. (history), University of California, Berkeley. *Early modern science; printing and publishing of science; history of mathematics*.

Eric Schatzberg, Associate Professor, B.S. (engineering) Swarthmore; Ph.D. (history and sociology of science), University of Pennsylvania. *History of technology; 19th and 20th centuries; technology and culture; critiques of technology.*

Michael H. Shank, Professor, B.A. (physics) Goshen College; M.A. (history and philosophy of science) University of Notre Dame; A.M., Ph.D. (history of science) Harvard University. *Physical Sciences to the 17th Century, especially in late middle ages; science and the university.*

Richard Staley, Assistant Professor, B.A. (history and philosophy of science) University of Melbourne; Ph.D. (history of science), University of Cambridge. *History of the physical sciences since Newton; relativity and quantum theory; instruments, experiment, and theory; science in the 20th century; science and war.*

EMERITUS FACULTY

Victor L. Hilts, Professor, A.B. (history and science) Harvard University; Ph.D. (history of science) Harvard University. *History of the social and behavioral sciences*.

David C. Lindberg, Hilldale Professor, B.S. (physics) Wheaton College; M.S. (physics) Northwestern University; Ph.D. (history and philosophy of science) Indiana University. *Science and natural philosophy before 1700; science and religion*.

John Neu, B.S. (English) University of Wisconsin; M.L.S. (library science) University of Wisconsin. *Bibliography of the History of Science*.

Daniel M. Siegel, B.S., M.S. (physics) University of Chicago; Ph.D. (physics) University of California, Berkeley; M. Phil. (history of science) Yale University. *Physics and related disciplines in the 19th and 20th centuries*.

Robert Siegfried, B.A. (chemistry) Marietta College; Ph.D. (chemistry and history of science) University of Wisconsin. *History of chemistry*.

Glenn A. Sonnedecker, B.S., (pharmacy), Sc.D. Ohio State University; M.S., Ph.D. (history of pharmacy and science) University of Wisconsin. *Pharmacy and materia medica*.

In addition to these faculty members with appointments in the Department of the History of Science, faculty from other departments (History, Philosophy, English, Sociology, Rural Sociology, La Follette, and various natural sciences) cooperate in the History of Science Program.

1. THE M.A. DEGREE IN HISTORY OF SCIENCE

Requirements for the M.A. Degree in History of Science.

- 1. A total of ten 3- or 4-credit courses, of which at least seven courses must be in the history of science or medicine. A grade of B or better must be received in all courses used to satisfy this requirement. Courses in history of science with numbers 300 or above carry graduate credit and may count toward the MA degree (except HistSci 403 & 404, which may be applied toward the MA degree only with departmental permission.)
- 2. Four of the following five distribution areas must be represented by at least one course (3-4 credits). No course may be counted for more than one distribution area. (See page 21 for a list of courses in each area.)

Distribution Areas

- 1) Science: Ancient through the Enlightenment
- 2) Modern Science and Technology
- 3) Medicine and Public Health
- 4) Transnational Science and Medicine
- 5) Race, Gender, Class, and Religion in Science and Medicine
- 3. At least three seminars, including two seminars in History of Science and/or History of Medicine.
- 4. History of Science 720 (Pro-Seminar: Historiography and Methods). Ordinarily this course must be taken during the first year of graduate work.
- 5. Additional courses up to the required total from within or outside the Department, to yield a balanced program fitted to the background and interests of the student.
- 6. Students are required to complete at least one research paper based on primary sources during their first year in the graduate program. To fulfill this requirement, students may need to request, from one of their professors, the opportunity to write a research paper (as opposed to, say, a historiographic or literature paper).
- 7. Completion of an M.A. paper (a research paper), which in form, content, and length is to approximate an article that might be submitted for publication in a history of science journal. Typically this will be based on a previously prepared term or seminar paper (such as the paper described in item 6, above), appropriately extended and revised.
- **M. A. Advising**. The departmental Director of Graduate Studies will ordinarily serve as advisor for first-year students. Student are expected to choose an M.A. advisor no later than registration week of their third semester in the department (completion of the appropriate form is required). The M.A. advisor will assist students in planning their academic program and preparing an M.A. paper. Early in the second year, students are to inform the M.A. advisor, on a tentative basis, whether they intend to apply for admission to the Ph.D. program upon completion of the M.A.

degree. Students may change advisors at any time. To initiate such a change, the student should fill out the appropriate form and file it with the departmental Chair.

Concurrent Courses. Some department courses require concurrent registration in another course open only to graduate students (e.g., the courses numbered 323 and 623). Such courses count as a single course in meeting graduate degree requirements.

History of Science 925, 990, and 999. Students who intend to enroll for course credit while writing a Master's paper should enroll in HistSci 925 when offered, rather than HistSci Science 990 or 999.

History of Science 950, Colloquium. All students are expected to attend departmental colloquia on a regular basis. During their first two semesters of residency, students must enroll in HistSci 950 ("History of Science Colloquium") for either 0 or 1 credit unless exemption is specifically granted. Exemption or delay of this requirement requires the approval of the Director of Graduate Studies.

3-4 Credit Courses. Some history of science courses may be taken for either 3 or 4 credits. Graduate students will ordinarily take the course for 4 credits. When the 4-credit option is inappropriate for academic or financial reasons, graduate students may enroll for 3 credits with the approval of the instructor and the Director of Graduate Studies.

Foreign Language Requirements. There is no foreign language requirement for the M.A. degree. However, graduate students must demonstrate proficiency in either French or German (or an approved alternative) in order to be admitted to the Ph.D. program. The Ph.D. in History of Science requires proficiency in two foreign languages. Those students intending to pursue a Ph.D. degree should anticipate these requirements. (See Ph.D. language requirements below for methods by which proficiency may be demonstrated.)

M. A. Paper. Students will submit an M.A. paper during the spring term of the student's second year in the department. These papers are due on the first Monday in April. One hardcopy should be submitted to the department office, and an electronic copy (preferably PDF) should be emailed to mail@histsci.wisc.edu. Although no formal limits have been established for the length of the M.A. paper, something in the neighborhood of 30-45 typewritten pages is recommended. Style should follow KateTurabian, A Manual for Writers of Term Papers, Theses, and Dissertations (University of Chicago Press). Separate bibliography is not to be included; bibliographical information should be communicated in the footnotes. Quotations in the body of the paper should be translated into English. The paper is to be a research paper. Typically it will be the outgrowth of a course or seminar paper, subsequently revised through independent study or the Seminar: Research and Thesis (Hist. Sci. 925)--thus representing 3-6 credits of effort. The student should work closely with a member of the departmental faculty in its preparation.

The paper will be evaluated by the usual criteria for a historical research paper: clarity, insight, significance, quality and quantity of research, appropriate and relevant use of primary and secondary literature, successful defense of the paper's central thesis, and stylistic merit. In the case of students applying for admission to the Ph.D. program, particular attention will be

paid to the potential for Ph.D. work revealed by the paper. It must be stressed, however, that admission to the Ph.D. program is based on an evaluation of the student's overall departmental record; the M.A. paper is but one (and not necessarily the decisive) element.

Any student wishing to submit an M.A. paper later than the fourth semester must request an extension of time. The request for such an extension must be received at least two weeks prior to the date when the paper would ordinarily have been submitted. Except for students proceeding on a part-time basis, extension will be granted only in the most extenuating circumstances. Failure to submit a paper during the fourth semester or to request an extension of time will be grounds for departmental review of a student's record and possible termination of a student from the graduate program.

M.A. Checklist. Students wishing to be awarded the M.A. degree will submit an M.A. Checklist along with the M.A. paper. The checklist appears in Section 13 below.

2. M.A. DEGREE FOR STUDENTS ENTERING WITH AN ADVANCED HEALTH PROFESSIONAL DEGREE

An M.A. degree in the History of Medicine is awarded through the History of Science Department at the University of Wisconsin, Madison. This program is designed for students with doctoral training in one of the health professions who wish to pursue a Master's degree in the history of medicine.

Requirements:

A minimum of ten 3- or 4-credit courses are required for the M.A. degree. The distribution should be along the following lines:

I. Required Courses:

504 Society and Health Care in American History

507 or 508 Health, Disease, and Healing I and II (4-credit option, if available)

720 Proseminar: Historiography and Methods

901 Graduate Seminar in the History of Medicine

II. Additional Requirements:

One additional history of medicine course at or above the 300 level One additional history of science course at or above the 300 level One additional seminar in the history of medicine, history of science, or history One approved elective to complete the 30 credits.

III. Transfer credits

Students can apply up to 6 credits from their previous professional degree work. These 6 credits will count as 2 courses toward the requirements for the M.A. degree. If only 3 credits are transferred, these will count as 1 course towards the M.A. requirements. The Graduate School stipulates that only courses taken within the previous ten years may be used for transfer credits.

IV. History of Science Department Requirements

There is no foreign language requirement for the M.A. degree for students entering with an advanced health professional degree. However, graduate students must demonstrate proficiency in either French or German (or an approved alternative) in order to be admitted to the Ph.D. program. The Ph.D. in History of Science requires proficiency in two foreign languages. Those students intending to pursue a Ph.D. degree should anticipate these requirements (See Ph.D. language requirements below for methods by which proficiency may be demonstrated.)

M. A. Paper. Same as for M.A. degree in History of Science.

M.A. Checklist. Students wishing to be awarded the M.A. degree will submit an M.A. Checklist along with the M.A. paper. The checklist appears in Section 13 below.

3. THE PH.D. IN HISTORY OF SCIENCE

Students entering the Department of the History of Science are ordinarily admitted to the master's degree program only. Students who already have an M.A. degree in History of Science from another institution are occasionally admitted directly to the Ph.D. program, but each case is judged on its own merits. Students in the master's degree program who wish to be admitted to the Ph.D. program will submit an application with the M.A. paper. Applicants to the Ph.D. program are presumed to have explored the various research opportunities available in the department by consultation with the faculty, and are asked to state their probable area of doctoral research at the time of application. In order to be admitted to the Ph.D. program, students must have demonstrated proficiency in either French or German or an approved alternative. (See Ph.D. language requirements below for methods by which proficiency may be demonstrated.)

If faculty action on the application is affirmative, the student completes the process of admission to the Ph.D. program by securing the written consent of a History of Science faculty member to serve as major professor. A form recording the consent of the major professor must be filed before the end (last day of classes) of the semester in which application to the Ph.D. program is made.

Requirements for the Ph.D. Degree in History of Science.

- 1. Acceptance for Ph.D. work by a major professor, who will henceforth direct the student's work.
- 2. Achievement of a reading proficiency in two foreign languages
- 3. An appropriate number of seminars (see below).
- 4. A minor in another department (see below).
- 5. Departmental approval of overall Ph.D. program.
- 6. Passage of the preliminary examination.
- 7. Completion of a satisfactory dissertation based on original research, written under the direction of the student's major professor and subject to the approval of the dissertation committee.
- 9. Passage of a final oral examination on the dissertation.
- 10. Graduate School residency requirements for the Ph.D. degree as stated in the Graduate School Bulletin.

Ph. D. Advising. In order to complete the process of admission to the Ph.D. program, a student chooses a major professor. A student may change major professors after admission to the Ph.D. program. When changing or choosing a major professor, a student must obtain the written consent of the new major professor. A form for this purpose, which must be endorsed by the Department Chair or the Director of Graduate Studies, is provided in this handbook (section 9).

Ph.D. Checklist. These checklists will be maintained in the Departmental Office; a student may inspect his or her checklist at any time.

Approval of Prelim Fields and Overall Ph.D. Program. No more than one semester after admission to the Ph.D. program, a student must obtain departmental approval of the overall Ph.D. program. To obtain this approval the student must submit to the department through the major professor a form indicating the titles of the four fields, the minor department, seminars taken or contemplated, and the area of dissertation research. Completion of this form will require the student to obtain the consent and signature of each faculty member directing a field upon which there will be an examination, and also the signature of a faculty member who endorses the course work to be offered for the fourth field. In addition, students electing a field not regularly approved for the preliminary examination will be required to submit with their form a short statement describing that field and a relevant reading list. No set of four fields is likely to be approved among which there appears to be undue overlap, or in which the four fields taken together constitute a program that is excessively narrow or specialized. Prelim fields outside the department are encouraged; however, an outside prelim field may not overlap substantially with the minor field. If both the prelim field and the minor are in the same department, they should be based upon different courses and represent different subject matters. A semester of independent study is a standard option for each of the three "examined" prelim fields.

Requests for approval of prelim fields and the overall Ph.D. program will not be acted on between May 1 and September 1.

Ph. D. Minor. The Graduate School offers two alternatives. The Option A minor, as defined by the Graduate School, requires a minimum of 10 credits in a single department or area of study. This minor requires the approval of the minor department; contact the intended minor department for specific requirements. Students in the History of Science most often choose an Option A minor in the Department of History (which requires 12 credits), although students have arranged Option A minors in many other departments and programs, including Science and Technology Studies. The **Option B minor** requires, according to the official Graduate School wording, "a minimum of 10 credits in one or more departments." But for practical purposes, this is intended for course work distributed across at least two departments, and you should think of it in those terms. This minor is approved by the faculty of the History of Science Department; and (unless word comes down from on high to the contrary) you should probably assume that the department will require 12 credits. Requests for approval of an Option B minor should be in the form of a letter that describes the proposed courses and their relevance to your overall plan of study. Either type of minor may in some cases be satisfied by prior graduate study. Talk to your major professor in advance about your plans for a minor. You are not required to complete the minor before prelims, but the faculty encourage you to do so.

Ph.D. Seminar Requirement. Students who have entered or who intend to enter the Ph.D. program are expected to enroll in seminars. The number of seminars required is determined by the "N-1" rule, where N is the number of semesters of full-time registration at the time of prelims (including the current semester). However, the seminar requirement is capped at 5. Students are, of course, encouraged to take additional seminars. HistSci 720 ("Historiography and Methods") and HistSci 925 ("Research and Thesis") do not count toward this seminar requirement.

History of Science 990 and 999. Students who are intending to enroll for course credit while writing a Ph.D. dissertation should enroll in a seminar, if appropriate, rather than HistSci 990 or 999.

Ph.D. Foreign Language Requirement. Graduate students must demonstrate proficiency in two foreign languages for the Ph.D. degree. The two languages will normally be French and German; other languages may be substituted when appropriate, by approval of the department. Substitutions require early action on the part of the student. The candidate must have demonstrated proficiency in one language before admission to the Ph.D. program, and in the second preferably before taking the preliminary examination. ABD status, with its attendant reduction in fees, is contingent upon satisfying the two-language requirement.

Proficiency may be demonstrated by means of (1) a language examination administered on the Madison campus by the relevant department or University Extension (consult departments and University Extension regarding availability), (2) the Graduate Student Foreign Language Test or other national foreign language test, or (3) undergraduate language courses (see chart below). Approval of language proficiency by the third means is secured by application to the department through the Director of Graduate Studies. In special cases, the department may choose to certify language proficiency in some alternative manner.

Years elapsed between completion of the most advanced undergraduate language course and matriculation in History of Science graduate program

	0-3	4	5
Level and grade of the most			
advanced foreign language			
course taken			
4th semester (B or AB)	Yes	No	No
4th semester (A)	Yes	Yes	No
5th semester (B or AB)	Yes	Yes	No
5th semester (A)	Yes	Yes	Yes
6th semester (B or AB)	Yes	Yes	Yes

With the approval of the department and the student's advisor or major professor, a student may choose to substitute quantitative methods for a foreign language. The student will be required to complete a coherent program of no fewer than nine credits, or their equivalent, of coursework in

statistics, demography, or other quantitative methodologies relevant to historical research. The GPA in these courses must exceed 3.00, and at least three credits must have been earned in courses beyond the introductory level.

Prelim Fields. The Ph. D. preliminary examination will cover four fields, chosen by the student in consultation with his or her major professor. The exact scope of each field will be determined by mutual agreement of student and directing professor, with the overall program subject to departmental approval. The following is a list of fields regularly offered for the preliminary examination in history of science. This list is not to be construed as a complete list of fields that may be offered, and students are encouraged to take other fields either within or outside the department where appropriate. Approval of fields not regularly offered will require the submission of a reading list, a short statement describing the field, and the approval of a sponsoring faculty member.

- 1. Ancient Science (Hsia/Shank)
- 2. Medieval Science (Hsia/Shank)
- 3. Scientific Revolution (Hsia/Shank)
- 4. Medicine from Antiquity to 1750 (Broman)
- 5. Science in the Enlightenment (Broman)
- 6. History of Biology since 1750 (Nyhart/Mitman)
- 7. Physics since Newton (Staley)
- 8. European Medicine since 1750 (Broman/Keller)
- 9. Science in the Atomic Age (Staley/Mitman)
- 10. History of Scientific Methodology (Shank)
- 11. History of the Social Sciences
- 12. Public Health and Society (Leavitt/Keller/Anderson)
- 13. History of Public Health in America (Leavitt)
- 14. History of Health Care in America (Leavitt/Numbers/Houck)
- 15. Science in America (Numbers/Mitman)
- 16. Science and Religion (Numbers/Hsia/Shank)
- 17. Women and Science, Medicine and Technology (Leavitt/Nyhart/Houck)
- 18. Social Aspects in the Development of Science and Technology (Numbers/Anderson)
- 19. History of Technology (Schatzberg)
- 20. Science, Medicine and Globalization (Anderson)

The Preliminary Examination. Ph. D. students will be examined orally and by written examination on three fields and will complete work in the fourth field through satisfactory course performance. The preparation of each of the three examined fields will be directed by a faculty member from the Department of History of Science or, if deemed appropriate, from another department of the University. The three examined fields must be directed by three different faculty members.

1) The written examination. The student will prepare a take-home examination in each of the three examined fields; students shall work independently (without any consultation) on these. Examination questions will be given to the student no later than one month before the oral portion of the preliminary examination. The completed take-home examination must be made available to all members of the examining committee no less than four days before the oral

examination. The maximum allowable length will be eight double-spaced pages (approximately 2000 words) each.

- 2) The oral examination. The oral examination will last approximately two hours. During the oral examination the candidate may be questioned about the content of the written examinations as well as any other aspects of the fields by any member of the committee.
- 3) The fourth field. Students will satisfy the requirements for work in a fourth field by completing two courses, including one seminar (or its equivalent in other work) in the area. The average grade in these two courses must be no lower than AB. Work for the fourth field must be completed no later than the end of the semester in which the oral examination occurs.
- 4) Evaluation of the preliminary examination performance. The quality of the candidate's total performance on the preliminary examination will be evaluated according to the following scale and made part of his or her permanent departmental record: fail, pass, pass with distinction. In making this evaluation, the committee will give equal weight to the performance in each of the three examined fields. To complete the preliminary examination successfully, the candidate must, in the opinion of a majority of the committee members, have passed each individual field. No student may take the prelim exam in whole or in part more than twice. A retake (with at least two members of the original committee) may cover an individual field or all fields, at the discretion of the committee.
- **Ph.D. Dissertation Proposal**. The department requires students to set up a dissertation committee as soon as possible but no later than the semester following passage of the preliminary examination, and to meet with this committee during that same semester to discuss the proposed dissertation research. (See the heading "Criteria for Satisfactory Progress as a Graduate Student" in section 4 for more details on deadlines.) The dissertation committee will consist of three faculty members, chosen by the student and the major professor. Approving the dissertation proposal and providing general oversight of the student's dissertation research are among the charges of this committee. The members of this committee will ordinarily be the official readers of the finished dissertation (though changes in membership are possible).
- **Ph.D. Dissertation Format.** The remarks made above regarding style of the M.A. paper apply equally to the Ph.D. dissertation. Because of the common tendency to write longer dissertations than the subject requires, the Department encourages conciseness. In most instances, a dissertation of 250-400 pages should be sufficient. In no case will the Department accept a dissertation of more than 500 pages without prior approval. Departmental policy is that footnotes should be placed at the bottom of each page rather than at the end of the dissertation or the end of each chapter. Full-sized copies of the dissertation must be provided for both the departmental library and the major professor. The student should also be aware that the Department and the Graduate School impose additional rules concerning the Ph.D. dissertation and the oral defense; on these rules, see below, section 5 (p. 20), and the pamphlet (available from the Graduate School) entitled "The Three D's").

Submission of Ph.D. Dissertation. The student must submit a preliminary draft of the Ph.D. dissertation to the reading committee, and shall then take the comments of the members of the

committee into account in preparing the final draft. If any member of the committee does not give a response to the draft within one month, the student, with the permission of his or her major professor, may proceed without the benefit of that professor's commentary.

Ph.D. Oral Examination

- 1) Candidates for the Ph.D. degree must pass an oral defense of the dissertation before the Ph.D. can be awarded. Candidates need to plan ahead for this oral examination (in consultation with the major professor), in order to make sure that faculty best qualified to serve on the examining committee will be available on the proposed date of the examination. When a date has been agreed upon, the Ph.D. candidate must schedule the exam with the department administrator, who will take care of official posting and notification of all participants.
- 2) No less than three weeks before the examination, the department administrator must file the "Ph.D. Final Oral Committee Approval Form" with the Graduate School. In order to do so, the administrator must be provided with the candidate's name, title of dissertation, date of examination, and names of readers and non-readers. The examining committee must consist of at least five legal members of the UW faculty, three of whom are designated readers. At least one member of the committee (either a reader or a non-reader) must be from outside the department. Make-up of the committee must be approved by the departmental faculty.
- 3) "Non-readers" should be offered a copy of the dissertation, so that they can read it if they wish. All members of the committee must receive a copy of the abstract before the examination.
- 4) Duration of the examination will typically be two hours. In the course of the examination, all five members of the committee will be given opportunity to question the Ph.D. candidate about the content of the dissertation. At the conclusion of the examination, the Ph.D. candidate leaves the room while the committee deliberates. The committee votes and, if there is a favorable majority, signs the warrant accordingly. Should any member of the committee dissent from a majority decision to pass, the warrant must be immediately forwarded to the Graduate School, where the case will be investigated and adjudicated by Graduate School deans. In case of two dissenting votes, the decision of the deans will almost invariably be negative. The committee may, at its discretion, pass the candidate with conditions.
 - 5) The examination is open to observers; the deliberations of the committee are not.
- 6) Ph.D. candidates need to be aware that the Graduate School has stringent rules regarding acceptable dissertation format. And the finished dissertation must be presented to the appropriate Graduate School representative (Ph.D. office, 217 Bascom Hall) for approval of its format. Departmental regulations require only that the notes be footnotes rather than endnotes; exceptions may be granted in special cases. For additional detail, see the pamphlet, <u>The 3-D's: Deadlines, Defending, Depositing</u>, available from the bookcase in the hall outside room 217 Bascom Hall.

This page intentionally left blank.

4. QUALITY OF WORK

Academic Integrity. Both the University of Wisconsin and the History of Science Department expect graduate students to adhere to the highest standards of academic integrity. University guidelines relating to academic misconduct are available from the Graduate School. Plagiarism and other forms of proven academic misconduct are considered by the History of Science Department to be grounds for dismissal from the graduate program. In addition, a graduate student may not submit substantially the same work to fulfill the requirements of more than one course, unless the student has received explicit, written consent from the instructor of each course and the director of graduate studies.

First-Year Review. All beginning students will have their records reviewed during the summer following the commencement of graduate work. They will be expected to have taken an appropriate number of courses, and they must have no incompletes remaining as of July 1 of that summer. Students whose record is judged to be inadequate on the basis of this first-year review may be placed on probation or dropped from the graduate program.

Incompletes. Students are discouraged from taking incompletes, and they are expected to remove promptly any incompletes received. As noted above, first-year students must have no incompletes on their record as of July 1 of the summer following the beginning of graduate work. A student also must have removed all incompletes before receiving an M.A. degree. All incompletes must also be removed before a student is allowed to take either the preliminary examination or the final oral examination. Students admitted to the Ph.D. program must remove all incompletes by the end of the August following the date of departmental action on the application for admission. An incomplete carried beyond the one semester after receipt is considered unsatisfactory and will result in review of the student's work.

Course performance and grades. The grade "A" in a HistSci course is meant to signify excellent work. "AB" represents satisfactory performance. "B" is given for acceptable work, but suggests cause for concern. "BC" and "C" represent unsatisfactory performance; courses in which these grades have been received confer credit but do not count towards departmental requirements for a graduate degree. A student receiving two "C"s will have his or her record reviewed. For admission to the Ph.D. program, a grade point average substantially higher than "B" must be achieved. Grades are, of course, only a rough measure of success; for a fuller and more precise evaluation, students are encouraged to take the initiative in discussing with their instructors, at the end of the term, the quality of their work, areas where additional effort might be called for, and potential for further study.

Leave of Absence Policy. Graduate students wishing to take a leave of absence of one or more semesters should submit a letter to the Chair or Director of Graduate Studies, explaining the circumstances, indicating the anticipated duration of the leave, and requesting permission for the leave. If permission is granted, the letter of permission will stipulate conditions of reentry. In all cases, removal of all incompletes will be a condition of reentry. Students wishing to reenter will need to contact the Graduate School Admissions Office in order to initiate reentry procedures.

Probationary Admission. Graduate students in history of science who are admitted on probation must complete no fewer than three graduate-level courses during each of their first two semesters of graduate work. Incompletes received while the student is on probationary status must be removed no later than four weeks after the completion of the course in which the incomplete was received. A grade of B or better in all first-year courses is required for the removal of probationary status.

Criteria for Satisfactory Progress as a Graduate Student. Students who carry a full academic course load of 3 courses (9-12 credits) per semester are expected to meet the following schedule of normal progress:

M.A. Degree: by the end of the fourth semester **Preliminary Examination**: preferably by the end of the sixth semester, and no later than the fourth week of the seventh semester.

Any full-time student failing to meet this schedule will have his or her overall academic record reviewed by the departmental faculty. If a student falls below the normal (or agreed upon) rate of progress or an acceptable level of performance, a probationary period of not more than two semesters will usually be set, during which the student must meet conditions specified by the department. However, the department acknowledges the legitimacy and appropriateness of part-time graduate study. A student who wishes to carry fewer than nine credits per semester (either on a one-time basis or for a more extended period) must secure formal departmental approval. In requesting approval of part-time study, the student should explain in writing the circumstances necessitating a part-time program and propose a schedule for completing the three stages of the graduate program. Failure to meet the schedule approved by the departmental faculty will lead to review of the student's overall academic record.

Ph.D. Degree: Within one semester of passing the Ph.D. prelim, students must submit a dissertation proposal to a committee of three faculty members, who will meet with the student to evaluate the proposal. (See p. 15 for more information about the dissertation proposal and the committee composition.) Each year following acceptance of the dissertation proposal, the student must submit a progress report to the advisor and dissertation committee. These annual reports will be filed with the Department, and will allow the Department to monitor students' progress.

If a student does not seem to be making progress toward completion of the dissertation, the Department may require other evidence of progress, such as a new dissertation proposal or a completed chapter, or other means of assuring the Department that progress is being made. Failure to meet this schedule and to demonstrate continuing progress toward completing the dissertation will lead to a review of the student's overall academic record, with the possibility that the faculty will decide not to request a waiver of the Graduate School requirement about retaking prelims,* or the faculty, ultimately, may recommend that the student be dropped from the graduate program.

Right of Appeal. Appeal of departmental decisions regarding award of M.A. degree, passing of preliminary examination, and admission to the Ph.D. program can be initiated by submitting a letter (setting out specific grounds of appeal) to the departmental Chair within two weeks of the date on which the student received notification of the departmental action.

^{*&}quot;A candidate for the Ph.D. degree who fails to take the final oral examination within five years after passing the preliminary examination is required to take another preliminary examination and be admitted to candidacy for a second time."

5. Required Copies of the Doctoral Dissertation

See the pamphlet entitled "Deadlines, Defending, Depositing Your Doctoral Dissertation," issued by the Graduate School. Several frequently-asked questions are answered below.

How many copies of the final version do I need?

- 1 for Memorial Library
- 1 for the Departmental Library
- 1 for the major professor (if more than one major professor, then 1 for each major professor)

As many for yourself as you wish to have (students frequently provide a copy for each member of the dissertation committee)

What do I do about binding?

Memorial Library takes care of its own binding.

Binding of copies for the Departmental Library and Major Professor are your responsibility. You are not obliged to bind copies presented to other faculty members on your committee.

You can have copies bound locally, but this tends to be expensive (Grimm Bookbindery currently charges \$28/copy). Alternatively, you can send copies to ICI Binding in Lansing, Michigan, at a cost of \$6.50 each plus shipping. This <u>must</u> be run through a university account; Eileen will provide a requisition to enclose with the copies to be bound, and you will reimburse the department for the total cost. You can then either ship the copies to ICI Binding on your own; or you can have Eileen send the wrapped parcel through UW Stores, which ships UPS, adding a 25% surcharge to the usual UPS rate (a few dollars on most orders).

6. COURSES BY DISTRIBUTION AREA

Distribution Area 1: Science: Ancient through the Enlightenment

322/622	Ancient and Medieval Science (Shank)
323/623	The Scientific Revolution (Hsia/Shank)
324	Science in the Enlightenment (Broman)
507	Health Disease and Healing I (Broman)
512	Galileo
903	Seminar: Medieval, Renaissance and 17th Century Science
911	Seminar: Eighteenth Century Science (Broman)

Distribution Area 2: Modern Science and Technology

325	History of Physics, Classical Period (Staley)
326	History of Modern Physics (Staley)
333	History of Modern Biology (Nyhart)
337/637	History of Technology (Schatzberg)
339/639	Technology and its Critics since WWII (Schatzberg)
353	History of Ecology (Mitman)
394	Science in America (Numbers)
536	History of the Social Sciences (Hilts)
538	Science in the 20th Century: Historical Themes and Issues
905	Seminar: Modern Physical Science (Staley)
907	Seminar: History of Technology (Schatzberg)
909	Seminar: History of Biology and Medicine (Nyhart/Broman/Mitman)
915	Seminar: Science and Medicine in America

Distribution Area 3: Medicine and Public Health

504	Society and Health Care in American History (Numbers)
508	Health, Disease and Healing II (Keller)
509	The Development of Public Health in America (Leavitt)
543	Doctors and Delusions: Madness and Medicine in the Modern Era (Keller)
575	Clinical Medicine Since 1750
901	Graduate Studies in Medical History
902	Research Seminar in Medical History
919	Seminar in Medical History

Distribution Area 4: Transnational Science and Medicine

513/713	Environment and Health in Global Perspective (Mitman)
553	International Health and Global Society (Keller/Anderson)
New	Science and Exploration (Hsia)
New	History of Germs (Anderson)
New	Seminar: Science, Medicine, and Colonialism (Anderson/Keller)

Distribution Area 5: Race, Gender, Class, and Religion in Science and Medicine

331	Science, Medicine and Religion (Numbers/Hsia)
343	Darwinian Revolution (Nyhart)
431	Childbirth in the United States (Leavitt)
523	Race and American Medicine and Public Health (Houck)
524	Medical History of Sex and Sexuality (Houck)
531	Women and Health in American History (Leavitt/Houck)
532	History of the Body (Houck)
New	Seminar: Race, Gender, Class and Religion in Science and Religion
913	Seminar: Social Aspects in the Development of Science

7. POLICIES REGARDING TRANSFER OF GRADUATE CREDIT

Applied to M.A. Degree in History of Science:

- 1. Graduate work in fields outside the history of science, either at another institution or at UW-Madison before admission to the History of Science Department: Up to 6 credits (2 courses) may be transferred and count toward the 2 courses that a student is permitted to earn in fields outside the history of science. These credits must meet the same criteria of relevance to the history of science applied to extra-departmental course work for History of Science graduate students.
- 2. Graduate work in the history of science at other institutions: The department will give credit for up to 3 courses toward the M.A. degree for such work. Applicability of the transferred courses to the distribution requirements will be judged on a case-by-case basis.
- 3. Total courses transferred under paragraphs 1 and 2 may not exceed 4. Credit will ordinarily be granted on a one-for-one basis, though adjustments may be necessary in case of doubt about the quality or level of the transferred credits. If the transferred credits have already been counted toward another master's degree at UW-Madison, then, by Graduate School policy, only 7 of them may be applied to the M.A. degree in the History of Science. No credits carrying a grade below B are transferable. The Graduate School stipulates that only courses taken within the previous ten years may be used for transfer credits.

Applied to Ph.D. Degree in History of Science:

- 4. The department is willing to entertain requests for transfer of additional courses (beyond transfers approved under paragraphs 1 and 2) from other institutions or other departments within the UW-Madison to meet the departmental Ph.D. requirements. However, a decision on such transfer will not be made until after the student has satisfied the departmental M.A. requirements and been admitted to the Ph.D. program. In practice, students will find that the formal Graduate School Ph.D. requirement of six semesters (or their equivalent) of full-time study beyond the bachelor's degree is quite minimal and that progress toward the Ph.D. degree is dependent principally on one's knowledge and abilities; insofar as graduate work done in other departments and at other institutions contributes in this way, to that extent it will shorten the time required for earning the Ph.D. degree in this department.
- 5. Substitution of M.A. or M.S. degree in the history of science* earned at another institution for our own M.A. degree as a prerequisite for Ph.D. level work. Each case will be judged on its merits at the time of application for admission.

(In cases of an affirmative decision, the department will usually withhold a final decision on admission to the Ph.D. program until the student has completed a semester or an academic year of work in the department. During that period, the student will be engaged full-time in preparation for the preliminary examination and the meeting of other departmental Ph.D. requirements. At the close of the specified period, the student's progress and achievements will

be evaluated by the same process as that applied to M.A. candidates within the department, and a final decision on admission to the Ph.D. program will be made.)
6. In addition to the transfers outlined above, it is frequently possible to have previous graduate study in fields outside the history of science counted toward the Ph.D. minor (usually consisting of 12 credits in a single discipline). However, this matter must be negotiated with the UW-Madison department representing that discipline.

8. SUPPORT FOR RESEARCH AND TRAVEL

The department has limited funds for support of research and research-related travel (including travel to scholarly meetings for presentation of research papers) for graduate students who have been admitted to the Ph.D. program. Graduate students are eligible to apply for a career maximum currently set at \$800. Awards are subject to the availability of funds and the merits of the application and should not be considered an entitlement.

Students wishing to apply for departmental travel funds must submit a completed "Research and Travel Request Form" (p. 39) to the departmental chair. This form requires the endorsement of the major professor. Applications should be submitted well in advance of the anticipated date of the travel or research activity.

Students are expected to avail themselves of funding from other sources whenever possible. Research funding is also available from the Department of History of Medicine.

9. JOINT PH.D IN HISTORY AND THE HISTORY OF SCIENCE

After completing a master's degree in History or the History of Science (or an approved alternative), the interested student must be admitted independently to the other department, and at that time indicate interest in the joint Ph.D. program. The student then applies to a standing committee of the two departments for admission to the joint Ph.D. program. Students must declare a home department and will follow the regulations of that home department with regard to seminar requirements, financial aid, and satisfactory progress.

Students admitted to the joint Ph.D. program will be assigned a supervising committee, consisting of three members (two from the home department), who will supervise the student's subsequent work. The preliminary examination will test the student's competence in both History and the History of Science, balancing the material and the fields between the two departments. The number of prelim fields must equal the number required of students majoring exclusively in History or in History of Science, plus one.

Students must fulfill the language requirements of the appropriate field of their home department. The joint Ph.D. program is conceived to meet the minor requirement of the Graduate School, and no formal minor is required. However, students who wish to have a minor field recorded on their transcript may complete a regular Option A or Option B minor or the internal minor of the Department of History.

Preparation of the Ph.D. dissertation will be guided by the student's supervising committee. Satisfactory completion and defense of the dissertation constitute the final requirements for the joint Ph.D. degree.

10. JOINT PH.D. IN PHILOSOPHY AND HISTORY OF SCIENCE

I. Description

A. General

Each candidate for the Ph.D. degree will be required to pass four prelim fields: two in Philosophy and two in History of Science. The candidate will write a dissertation under the direction of a major professor from either Philosophy or History of Science. A candidate writing the dissertation under a historian of science will be said to have a "history of science emphasis" (HSE), while a candidate writing the dissertation under a philosopher will be said to have a "philosophy emphasis" (PE). All programs must have the approval of the Interdepartmental Committee on Philosophy and history of Science.

B. Languages

Every candidate will be required to have a reading knowledge of one foreign language related to his or her general area of interest. most frequently this language will be French or German. In addition, HSE candidates will be required to have a reading knowledge of a second foreign language.

C. Logic

All candidates must satisfy the logic requirement. They may do so by (1) passing Philosophy 511 (or a comparable course at another University) with a grade of B or better; or (2) passing a special examination in logic administered by the Logic Committee of the Philosophy Department.

D. Prelims

Two prelim fields will be in philosophy and two in history of science. One of the philosophy prelims must be in philosophy of science. The second prelim area in philosophy will normally be chosen from among the following:: (l) history of philosophy, (2) epistemology and metaphysics, (3) logic.

- 1. History of Philosophy. A candidate is considered to have passed the prelim in the history of philosophy if he or she takes three of the four graduate history of philosophy courses offered by the Philosophy Department and passes the examinations administered at the end of each course. The three courses chosen should be those most relevant to the candidate's overall program.
- 2. Philosophy Prelims other than History of Philosophy. The candidate may choose either Option P (the paper option) or Option E (the examination option). (See Department of Philosophy statement of Information for Graduate Students for a complete description of

Options P and E.) Before the candidate can take prelims under either option, he or she will be expected to have taken three graduate seminars in the Philosophy Department. History of philosophy seminars and independent study courses do not count toward the fulfillment of this requirement.

History of Science Prelims: Wide latitude is granted for the selection of prelim fields adapted to the student's interests. A given prelim field is to be negotiated with a professor in the Department of History of Science and approved by the Interdepartmental Committee on Philosophy and History of Science. The following list is intended to suggest the scope of a given field: ancient science, the scientific revolution, 19th century chemistry, 20th-century physics, history of the social sciences, science in America, science and religion (see section 3 above for a complete list). The examination in each history of science field will have both a written (take-home) and an oral component

E. Minor

The student will be required to define a minor program. This may be within the Department of Philosophy or the Department of History of Science but outside the four areas covered in the preliminary examination (a coherent unit consisting of 12 credits is required), or it may be in some other department as a regular Option A or Option B minor. Approval by the Interdepartmental Committee is required.

F. Thesis

Within six months after passage of the preliminary examination the student is required to submit a dissertation proposal for approval. At that time a dissertation committee of three faculty members will be established, which will guide the preparation of the dissertation. This same committee (with possible changes in membership if faculty go on leave or interests shift or personalities clash) will serve as readers and examiners for the oral defense of thesis. For HSE candidates, two members of the committee (and thus two readers) are to be from the Department of History of Science and one from the Department of Philosophy. For PE candidates, two members are to be from the Department of Philosophy and one from the Department of History of Science. For the oral defense, each department will also supply one nonreader.

G. The M. A. Degree.

There is no provision for an M.A. degree in philosophy and history of science.

II. Administration of the Joint-Degree Program

A. General

The Ph.D. program here described will fall under the rubric of the Joint Degree Program of the University of Wisconsin Graduate School. The degree earned through this program will be the Ph.D. in Philosophy and History of Science.

B. Interdepartmental Committee on Philosophy and History of Science

General oversight of the program will be the responsibility of an interdepartmental committee of four members, two of whom are drawn from the faculty of each of the cooperating departments. Committee members will be appointed annually by the Chairman of their respective departments. The Committee will then elect its own Chairman.

C. Admissions to the Program

Each student in the program must have a "home department, normally the one in which his or her emphasis lies. The student must apply to, and be admitted by, the home department, acting on the advice of the Interdepartmental Committee. (It is assumed that each department will make provision for the student to indicate, in his or her application materials, the desire to enter the joint-degree program; such applications will then be funneled through the Interdepartmental Committee.) Students may change home departments in the usual manner. Students already members of the Departments of Philosophy or History of Science may apply for admission to the joint-Ph.D. program by submitting a letter of request to the Interdepartmental Committee.

D. Approval of Ph.D. Programs

Each candidate for the Ph.D. in Philosophy and History of Science must submit his or her list of prelim fields for approval to the Interdepartmental Committee.

E. Evaluation of Student Progress

The Interdepartmental Committee will meet at the close of each semester to evaluate the progress of all candidates for the joint Ph.D. and recommend remedial action as required.

11. Teaching Assistant Training

- 1. First-time TAs (fall-term only): TAs must have completed, before the beginning of the term in which they first TA, either the L&S TA orientation program or the History of Science Department's "Teaching Forum" (both are encouraged), or an equivalent training program offered by another department. (5 hrs. minimum)
- 2. First-time TAs (fall or spring term): Additional training in pedagogical technique, directly applicable to the TA's teaching assignment, will take place (1) in regular staff meetings between the TA and the supervising instructor, **and** (2) in a review of TA performance following live or taped observation by the instructor. (5 hrs. minimum)
- 3. First-time TAs (summer term): No specific requirements, but selection of TAs should take previous training into account as an important criterion.

12. CHOICE (OR CHANGE) OF ADVISOR

M.A. Advisor	Ph.D. Advisor
Name of Student:	
Name of (New) Advisor:	
Signature of (New) Advisor (signifying consent):	
Approved:	
(Chair or Director of Graduate Studies)	(Data)

14. APPLICATION FOR ADMISSION TO THE PH.D. PROGRAM

Department of the History of Science 7143 Social Science University of Wisconsin-Madison Madison, Wisconsin 53706

Name of Applicant	
Date of Matriculation in Department:	
Approved (Chair or DGS) Date Title of M.A. Paper	
Foreign language (normally French or German):	
How earned (see p. 13)?	
Signature, date:	
Describe in general terms the expected area of the Ph.D. dissertation:	
Date Signature of Applicant	
Signature of faculty member who agrees to serve as major professor:	
* * * * *	
Departmental Action	
Signed Date Chair of Department	

15. FORM FOR APPROVAL OF OVERALL PH.D. PROGRAM

Department of the History of Science

No less than a semester after admission to the Ph.D. program in history of science Students must obtain departmental approval of their overall program. Students seeking approval of their overall program should complete this form and submit it to the department through their major professor.

Name	Date submitted	<u> </u>
Major Professor		_
Foreign Language Proficiency		
Language		
How earned?		_
Signature	Date	
Expected date of preliminary examin	nation	
Semesters of registration to this date	3	
Examined fields to be offered for the	e preliminary examination (must include signa	ature of directors):
Title		
Director's name and signature		
Title Director's name and signature		-
Title		
Director's name and signature		-
Fourth Field, to be offered without e field):	examination (must include signature of faculty	member endorsing
Title		-
Endorser		

Course work in fourth field. Give course number, department, title, semester taken (or to be taken) and grade (if already received). One course must be a seminar or its equivalent. Any changes in this field must be approved by the endorser and by the Chair or Director of Graduate Studies.

Minor department	
Date minor completed or expected to be completed	
Seminars and date taken or to be taken:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Area of dissertation research:	
Department approval	
Signature of Chair or Da Director of Graduate Studies	

16. CHECK-LIST FOR HISTORY OF SCIENCE PH.D. REQUIREMENTS

Student's Name	
Date admitted to Ph.D. program	
1. Completion of language requirement	ents
1st language	
How earned?	
2nd language	
How earned?	
Date of completion	Signed
2. Overall Program approved	(Chair or DGS)
3. Minor agreement form received Prelim Warrant)	d (or minor certified on
Yes No	Field or Dept.
4. Seminars Completed	
5. Completion of Preliminary Exa	amination:
Examination results:	Dean with Distinction
	Pass with Distinction
Date Taken	Grade: Pass
Signed(Major Professor)	Fail
Fields:	
(Field Title)	(Professor's Signature)
(Field Title)	(Professor's Signature)
(Field Title)	(Professor's Signature)

Fo	ourth Field	*:			
(Fie	ld Title)	(Chair or DGS)	Date of Completion		
including o	one semina	*	for work in a fourth field by complete in other work) in the area. The avern AB.	•	
6. Comple	etion of Di	ssertation:			
Titl	e				
Date of oral defense					
Res	sults of ora	l defense			
Sig	ned	(Major Professor)			
7. Date de	gree awar	ded		_	

17. APPLICATION FOR RESEARCH OR TRAVEL GRANT

Name	
Destination	
Dates of trip (inclusive)	
and title or topic of the paper; if trip is	nted, indicate name and nature of the meeting, length for research, briefly describe the research):
and sums):	ce or History of Medicine Department (including dates
•	
Estimated costs: Transportation Lodging Food Photocopying/microfilming Other	Sums requested:
TOTAL	
Endorsement of Major ProfessorSig	gnature Date
Approved Disapproved	Amount of grant
SignedChair or Director of Graduate St	udies Date