

**THE JOHNS HOPKINS UNIVERSITY
PROGRAM IN THE HISTORY OF SCIENCE, MEDICINE, AND TECHNOLOGY**

**GRADUATE HANDBOOK for students in the Department of History of Science and
Technology, Homewood campus (revised 2014).**

I. INTRODUCTION

The Program is run jointly by departments located at the School of Arts and Sciences and the Medical School. Our department (History of Science and Technology) is in the Krieger School of Arts and Sciences, and students receive their degrees from that School. At Homewood, the administrative coordinator is Mrs. Danielle Stout danielle@jhu.edu and her office is in 301 Gilman Hall.

The Department of the History of Science and Technology at Homewood has a long tradition dating back to Arthur Lovejoy's renowned History of Ideas Club. A formal program in the history of science began on the Homewood campus in 1962 under the leadership of Harry Woolf, and became a full department two years later. It became an internationally recognized center for graduate teaching and research, and its graduates have gone on to top positions in universities and museums throughout the world. The Department's offices on the Homewood campus are on the third floor of Gilman Hall.

The Institute of the History of Medicine was founded with the aid of a Rockefeller grant in 1929 and is the oldest academic department of its kind in the United States. It pioneered graduate education and research in the history of medicine and public health. The Institute played a prominent role in the development of medical history as an academic discipline and still has an important place within the School of Medicine. It has responsibility for editing the *Bulletin of the History of Medicine*, the premier journal in the field. The Institute has faculty and administrative offices on the 3rd floor of the Welch Library at the medical complex in East Baltimore, including a seminar room and an outstanding collection of rare books in the history of medicine.

We hope that this handbook will provide a convenient guide to the Program's policies and traditions. Bear in mind, however, that it is intended to supplement, not substitute for, such official documents as the university catalog and the document, "Procedures for Administration of Approved Policies for Award of Advanced Degrees" which is produced by the Graduate Board. Copies of these documents can be obtained from the departmental offices on either campus.

II. WHAT IS GRADUATE SCHOOL?

Graduate school is for professional training, but students may not realize what this implies for the kind of learning that goes on in a graduate program. Unlike most undergraduate study, classes are small – in fact, you may be the only person in a class – and there is a closer relationship between student and teacher, (more like the relationship of apprentice and master at

first, but over time you will become more like a colleague and collaborator and less like a student-apprentice). Students and faculty alike learn by doing. We read, we discuss, we write, and we critique. Feedback comes not in the form of grades, but in comments, suggestions, discussions, and in the models that are constantly before you.

The greatest asset in graduate school is a passion for learning and a serious desire to pursue scholarly research. If you feel no intellectual excitement at discovering something new or making a connection in a new way, then you should not be in graduate school. But be prepared to have your ideas challenged and your analytical skills sharpened. The primary function of the program is to train you to be a scholar – to make original contributions to knowledge. Realize therefore that no matter how talented you are already, you still have something to learn and you will still need “polishing”. Be prepared to accept constructive criticism and to learn from it.

The activities of discussion and critiquing go on all the time, and gradually a perceptive student will absorb the methods and adopt the standards of the profession. Whether in a class, in the colloquium, or in informal discussion with students and faculty, you will be learning all the time, simply by observing what is going on around you. Pay attention to the models you will meet; copy from the best and avoid the mistakes of the worst. Learn not to repeat errors and strive to critique your own work better with each new project.

At any time, you should feel that you can take initiative. Get in touch with a faculty member to discuss an idea or propose a project. If there is a course you would like to see taught, or a discussion group you would like to organize, get in touch with a faculty member and suggest it. Much of what we do is in response to student initiatives.

Graduate study is intensive and you will probably find that you are working all the time. You should balance work with “sanity-saving” activity -- perhaps exercise, music, casual reading, or a hobby. Avoid burn-out by knowing how to combine periods of intensive study with activity that refuels mind and body.

III. ACADEMIC LIFE

Academic Requirements until Dissertation

During the period before the dissertation, you are working both to attain a general mastery of the history of science, technology or medicine, and to learn the skills of academic research and writing. As you progress, you will begin to specialize in a few specific areas, and ultimately to choose a dissertation topic. The formal requirements for pre-dissertation students include coursework, research papers, language exams, and completion of fields.

Coursework

Coursework is the primary means by which you begin to acquire knowledge of the history and historiography of science, technology, and medicine, and learn how to do research and write.

Towards those ends, you are expected to register for 3 courses each semester. Students should also register for Colloquium, which is listed as a course. The colloquium meets weekly and involves discussion led by a guest speaker, often with a precirculated paper. Students and faculty also present papers at the colloquium.

Each semester there is usually one or more research-oriented seminar in which students focus their reading on a particular topic and write a research paper in that area. A research seminar allows students to get deeply involved in a research project, which may well extend beyond the life of the seminar itself. We strongly encourage students to work up promising research topics for scholarly publication. Research seminar themes vary from year to year (as does the professor teaching it). These seminars are often taken by more advanced students as well.

Another kind of course is a reading seminar focused on historiographic issues. All students must take the course in Research Methods within the first three years of graduate study. Other courses may explore innovative new work in our field. A third category consists of the survey courses in the history of medicine, the history of science, and technology; graduate students attend the undergraduate survey course lectures but meet with the professor in a separate graduate seminar for discussions of readings. The survey courses are used to prepare for examinations in the first year (see below).

There are many other types of course which can be arranged by a student with a professor, such as independent studies, or directed readings. You may also take courses in other departments.

Research Papers: Writing and Presentation

Students in the department who are not yet advanced to candidacy ('candidacy' means that you have completed course work, languages, and fields) should aim to write one research paper (~20 pages) based on original sources per semester. The intent of this requirement is to ensure that all of our students have the necessary research and writing skills to tackle their dissertations. You should expect to write papers outside your area of special interest: this is an opportunity to broaden your knowledge and learn to use a variety of sources. Explore and experiment. While it is understood that students will rarely be able to produce a paper of fully publishable standard in the short space of a semester, we hope that some of these papers, more fully developed, would be suitable for presentation at conferences and, ultimately, publication.

For first and second-year students, the department seminar(s) offered in the fall provide an obvious context for writing a research paper for that semester. Other venues for such writing include graduate seminars both within and outside the department. Finally, you may choose to do an independent study with a particular faculty member, to pursue a specialized research topic. A research paper might also be written as a part of a field. Students should be sure to inform their advisors about their research progress even when working with other faculty members.

Presentation of your work to a larger audience is as important as research and writing. In your second year, you will choose one of your research papers and develop it more fully in order

to present it in the departmental colloquium series. You need to schedule that paper by talking with the person organizing colloquium, which usually must be done a few months before that semester begins.

Students are encouraged to present their work at professional conferences. The department will often schedule practice sessions on an ad hoc basis to help you polish your talk. Consult your advisor if you'd like a practice session.

Languages

All graduate students must demonstrate reading proficiency in 2 languages (besides English!). Customarily, students have chosen French and German as their two languages, although your research interests might lead you to select Latin or another language necessary for your scholarly work. Proficiency is shown by means of an exam, administered by the relevant language department or by a faculty member. Students may choose to take advantage of the reading courses offered by the German and French departments. Language requirements should be completed **by the end of the third year**.

Fields

One of the tasks of the second and third year is the choice and completion of three fields. One field should be within the Program, one in a historical discipline outside the Program, and the third is negotiable depending on student interests and needs. The second field is intended to give students broader knowledge of general history. Often this field will be done with faculty in the History Department, but other departments (such as History of Art or Romance Languages) also have faculty doing historical research and students may work with faculty in those departments, with their advisor's permission. Our students have also done historical fields with curators or research historians at the Smithsonian Institution. The third field can extend beyond historical subjects and may involve a scientific subject, for example. A field is intended to demonstrate a student's mastery of a specific body of knowledge, both for the student's own scholarly work and as a preparation for teaching. Each student will select fields in close consultation with the advisor. Typical fields might be "Nineteenth and Twentieth-Century American Science"; "Social History of Early-Modern Medicine"; "The History of Modern Astronomy", "American Colonial History", "Modern German History", "Modern Evolutionary Theory", etc.

Exact requirements will be worked out with individual faculty, but in general involve a solid year of work. Often a field done with an external faculty member will consist of taking whatever seminars are offered that year, perhaps supplemented with a reading list, and ending with a research paper or exam. Your fields should provide you with the in-depth knowledge of particular areas relevant to your dissertation, but you should not think of the field as background to the dissertation itself.

Participation in Departmental Activities

One of the most important aspects of graduate training is immersion in the intellectual life of the department. It is by joining in that life that students learn how historians understand, discuss,

and disagree about issues, methods, and sources. If you don't take part, you are not getting the best training that you could; nor are you well-prepared to become a member of a faculty elsewhere. For these reasons, it is important that students attend Colloquium and other departmental functions, and learn to play a role in such discussions. The intellectual life of the department is not something produced by the faculty for the students' consumption; rather, it is a group project in which we try to create the intellectual community within which we would all like to work.

First year surveys and examinations.

The purpose of the first year program is to provide students with a basic grounding in the subject matter and methodology of the history of science, medicine and technology. To this end, all first-year graduate students will take a two-semester survey course in either the history of science or the history of medicine. In each case, you will attend the relevant undergraduate survey course. For the history of science and technology, there are three survey courses offered on a rotating basis: students are required to take *two* of these for the first-year examination (which two depends on what is offered that year). These surveys are: "History of Science: Antiquity to the Renaissance", "Scientific Revolution", and "The Rise of Modern Science".

In addition to the undergraduate lectures and reading material, there will be a graduate reading list for each course and you will meet regularly to discuss these readings with the faculty member who is teaching the course. Students will complete requirements by passing an examination at the end of each semester (given in December and May). This exam is a 24-hour take-home, generally with three essay questions. Speak to your advisor and to the faculty leading the graduate discussion sections about specific requirements for the exam.

Research Methods course.

Students must take "Research Methods in the History of Science, Medicine, and Technology" at some time within the first three years of study: this is a one-semester course designed to introduce students to the methodology and techniques of historical research and analysis. The content of the course will vary somewhat, depending on who is teaching it. The course may be taken in the first year, but may also be deferred to a later year.

Choosing an advisor

In your first year you will be assigned a faculty advisor, depending on your interests. Near the beginning of the second year, you should determine the area you wish to specialize in and choose an advisor who is willing to supervise the rest of your graduate program. Your advisor should help you design a coherent, individualized program of studies. Generally your advisor will be the person you expect to be your dissertation advisor. If your interests change, you should also change advisors.

The Master's Essay

In general the Department does not offer the M.A. as a freestanding degree program. Where Ph.D. students have needed additional time to improve their research and writing skills before going on to their field and dissertation work, the department has recommended that they prepare for an M.A. In such cases, one year of residency, completion of satisfactory course work, competency in one foreign language, and the submission of an acceptable thesis, generally in the

range of 75-100 pages, are required. Although the master's essay can be understood as remedial, you should also know that a number of our students have undertaken master's essays, have published them in scholarly journals, and then have gone on to complete the graduate program and embark on distinguished careers. About as many others have ended up with terminal master's degrees. Sometimes students who choose to leave the program will complete a master's degree.

The Dissertation

Nothing will do more to shape your future career than the choice of subject and the quality of your thesis. The subject will be negotiated between you and your advisor, sometimes with the assistance of other faculty members with particular expertise in the field. Your dissertation must be an original contribution to knowledge, and should be defined in a way that allows you to complete it within 2-3 years.

In selecting a project, remember that you will be making a serious investment of your time and energy over the next several years. Your first book will most likely be derived from the dissertation. Don't be discouraged if your first couple of ideas don't fly. Feedback from your advisor up front can save you from making some costly mistakes.

Defending a dissertation. At completion, the thesis will be read by your advisor and one other member of the department, before the final defense. The defense itself lasts about two hours, with each examiner taking a turn questioning you. After a successful defense you will send one copy of the thesis to the library (for microfilming and binding) and give a second bound copy to the department. Meeting the official fall and spring deadlines for the defense affects whether tuition needs to be paid (for the fall) and whether you can graduate at the May ceremonies (for the spring).

Satisfactory Progress

There is no ironclad definition of satisfactory progress, except to say that it is defined by the student's advisor and the student, in conjunction with the Department expectation. Certain general guidelines apply to everyone. This list indicates what requirements should be completed by the end of the year indicated. Aim to complete everything within 5 years.

1st year :completion of 1st year exams; coursework and writing of research paper(s).

2nd year: work on "fields", presentation of paper in Colloquium, complete MA thesis if student is writing one. Define dissertation topic over the summer if fields are finished.

3rd year: fields and languages completed. Define dissertation topic over the summer.

4th year: dissertation proposal written and accepted by start of fall term, research underway.

5th year: continue research and writing. Aim to complete the dissertation.

6th year: dissertation finished, if not in the 5th year. Generally there is no departmental funding past the 5th year of graduate study, and students are advised to apply for external grants if they expect to go beyond 5 years of study.

The single most important assessment of satisfactory progress is made by your advisor; the two of you should work out concrete plans for assessing satisfactory progress from year to year. Final decisions about satisfactory progress are made by the Department as a whole, when it

meets in the spring to review the progress of each individual student. If progress is not satisfactory, students may be denied funding or asked to leave the program. Each year you should think of April 1 as your unofficial deadline: be prepared to show your advisor what you have accomplished to date that year, so your advisor can speak for your progress in the faculty meeting later that spring. Starting in 2010-2011 the Graduate Board requires that all students complete a year-end report of their activities, which must be submitted to their advisors or department chairs in late spring (see your advisor for details).

IV. FUNDING.

Basic funding from the Krieger School provides tuition, stipend, and health insurance. Usually, first-year students receive fellowships, that is, they receive funding without the obligation of service to the department in the form of teaching or research assistance. After the first year, students will be expected to serve as Teaching Assistants (TAs). Some students enter the department with external funding, such as that from the National Science Foundation (NSF), or Mellon Fellowship. In cases of external grants, the Department will renegotiate the level of funding from the Krieger School.

Teaching Assistants

Being a teaching assistant is preparation for being a professor. Usually, being a TA involves running a discussion section, where the TA teaches the discussion part of the course, grades student work, and assists in other ways. The guideline the department has suggested is an average of 10-12 hours per week.

Funding after Third Year

The Department generally guarantees funding for up to five years, contingent on satisfactory progress. After the third year funding may be in the form of a teaching assistantship or straight stipend, depending on departmental needs and on the nature of the student's dissertation research. we expect to provide fellowships (i.e. with no teaching duties) for at least two of the semesters during your 4th and 5th years. All students in good standing receive tuition relief and health insurance as the budget permits. Students are encouraged to apply for outside funding for dissertation research and writing.

Conferences & Research

The department offers its students support towards research expenses and attendance at conferences. It is a reimbursement account: allowable expenses (such as travel and accommodation) will be reimbursed after your trip.