Graduate Program Handbook for the Department of History of Science, Technology, and Medicine at the University of Oklahoma

(Revision of 21 January 2022)

Preface

The graduate program in the Department of the History of Science, Technology, and Medicine at the University of Oklahoma was founded in 1954. The mission of the department is three-fold: to offer instruction to undergraduates; to offer instruction and guidance to graduate students; and to contribute to research in the discipline. Our graduate program is targeted to students who seek careers in higher education as well as positions in libraries, museums, and archives worldwide. In addition, some graduate students turn to our department in order to gain a critical framework for public facing careers in such areas as writing about science, technology, and medicine, and working in fields dealing with public and institutional policy in these areas.

We provide supervised mentorship with focused coursework to graduate students in our program . Doctoral training in the department is designed to produce historians who are scholarly, productive in research, effective in the classroom, and have high standards of professional conduct and responsibility. To this end, students are trained by encouraging them to adapt program materials to the wider discipline of the history of science, technology, and medicine. Our students frequently present their work at professional meetings and submit papers for publication. Dissertations are routinely published after graduation. Many students have supported their work through external funding. As teaching assistants and later as instructors of record for their own classes, our graduate students learn cutting-edge pedagogy from our faculty who create project-centered as well as more traditional writing-based assignments.

We strive to create an environment which fosters a positive, constructive and highly motivated graduate student community. Students will encounter a diverse mix of educational experiences that will prepare them for various career paths. They will be able to take advantage of seminars and individualized reading courses with our talented graduate faculty, attend talks by internationally recognized speakers, apply for research and study abroad experiences, learn and apply effective pedagogical techniques as teaching assistants, assist on pathbreaking digital projects, and give papers at regional, national, and international conferences. Students entering the graduate program thrive when they have a strong commitment to scholarship and are willing to take charge of their own educational experiences. Students need to be able to work closely with their advisors and teachers to craft a degree program that fits their interests. This manual provides the contours within which such a program can be created.

Key Personnel and Committees

- Department governance
 - o The **Department Chair** makes all personnel assignments and is the administrative director within the department. The chair is a good source of information on general departmental policy, finance and funding issues, and university requirements, etc.
 - O Committee A is the executive committee of the department responsible for assisting the chair in administrative issues. At the beginning of the fall semester, faculty as a whole elect two tenured department faculty members to serve two-year terms.
- The Graduate program administration
 - o The **Department's Graduate Advisor** oversees the day-to-day workings of the graduate program and is the go-to person for questions about all aspects of the program.
 - The **Graduate Liaison** is responsible for administering the graduate program and serves as the primary representative of the department to the Graduate College. The Graduate Liaison can address questions about Graduate College or departmental policy on graduate study.
 - The Graduate Studies Committee monitors the graduate program and makes recommendations to the faculty about admissions to the masters and doctoral programs, and changes in the program or in policies that regulate the graduate training program. This committee also conducts the annual evaluation of graduate students and hears graduate student appeals.
 - The Graduate College Academic Counselor is a representative in the graduate college assigned to our department who deals with all administrative matters for our students.
- Student program committees
 - o The **Masters Committee** is composed of the **Masters Committee Chair** and at least two other faculty. The majority of the members of this committee must be within the department. The committee should be formed before the beginning of the third semester in the masters program.
 - o The **Doctoral Committee** is composed of the **Doctoral Committee Chair** and at least three other faculty. The majority of the members of this committee must be within the department, and one of the members must be from outside the department. The committee should be formed within the first semester of the student's doctoral program.
 - o In both the Masters and Doctoral programs, the **committee chair** is considered the student's major professor and is to act as the student's mentor and primary resource for graduate training. Advice on coursework, research involvement, and

ultimate career planning should be solicited routinely from the major professor. Students have sole discretion in selecting and/or changing their advisor, and it is quite normal for students to work with different major professors in the two parts of the program. Committees are organized by the student in consultation with their major professor in order to help supervise their work toward their degree. However, according to University policy, committee membership may only be augmented or revised with the consent of all current members. Students forming doctoral committees may consider requiring that members undertake to step down at the request of the student as a condition of appointment.

- The History of Science Association is an organization of the graduate students of the
 department. They elect officers and meet regularly to discuss the graduate program and
 often bring their concerns or suggestions to the faculty. The HSA elects representatives
 who sit on the Graduate Studies Committee and participate in the monthly faculty
 meetings.
- The **Graduate College** (see the <u>Graduate College Bulletin</u> and the <u>Graduate College website.</u>)
 - The Graduate College Dean is responsible for administering Graduate College requirements for all University graduate programs. The Graduate College establishes broad requirements for all graduate programs on campus, and the Master's and Ph.D. programs described here must follow those broad requirements. Their web site includes advice for beginning students and continuing students, as well as a link to Forms and Documents, including specific lists for Master's and Doctoral students.
 - Notes: While the departments have significant leeway in developing their own programs, Graduate College requirements, policies, and deadlines cannot be superseded, altered, or waived by the department. Graduate College requirements are set forth in the Graduate College Bulletin, and through the links on the Graduate College web site mentioned above Upon beginning their graduate training, students should review the Graduate College Bulletin to become familiar with the requirements, standards, and deadlines they are expected to meet. It is the responsibility of individual students to ensure that Graduate College paperwork is filed correctly and on-time. Students are expected to keep copies of all forms that are submitted to the graduate school in the event that they need to consult them for any reason. Also, students should become familiar with the Statement of Academic Integrity, which they can review in Section 6 of the Graduate College Bulletin or at the link through the OU Office of Integrity.

The Master's of Arts Degree

There are three options for completing the master's degree: Thesis option, non-thesis option, and dual degree. The course distribution requirements for the master's degree options are as follows.

The MA Thesis Option (30 hours)

Coursework and other requirements:

- The <u>introductory course</u> on research, criticism, and analysis.
- Two chronological survey courses
- One **field survey** course
- Five other **elective courses** (According to Graduate college, students cannot take more than 50% of their courses as directed readings, as of this writing: "No more than one-half of the credits for OU coursework, excluding Research for Master's Thesis (5980), may be S/U-graded coursework." and "No more than one-half of the overall coursework (OU credit and transfer credit combined), excluding 5980, may be S/U graded-coursework.")
- Audit of both <u>undergraduate survey courses</u> in history of science (unless the student has been given an exception because of previous courses taken in the field, or a teaching assistantship in one of those courses). The audit is not an administrative audit, but arranged directly with the professor teaching the course.
- Research skills and/or foreign languages
- Diversity and inclusion training
- Regular attendance of departmental colloquia.
- Thesis hours leading to the successful defense of an MA thesis.

The MA thesis will be a single, sustained piece of writing modeled on a scholarly journal article in length and quality. It must be defended orally and follow the timeline of the graduate college for all MA theses.

Full-time students are expected to satisfy all thesis-option master's requirements within two academic years (four semesters). Individual extensions to this timetable may be discussed with the department's Graduate Advisor and the person's Committee Chair during the graduate student annual evaluations (see below). (At the time of writing, the Graduate College stipulates that master's students must complete all degree requirements within five calendar years of the first enrollment in any graduate-level OU course to be applied to the master's degree. See the Graduate College website for their most current regulations.)

Students who hold graduate assistantships or who have other employment obligations should consider that a full load consists of two or three graduate-level courses, in addition to preparation to fulfill the language/research tool requirement. Students holding assistantships must maintain full-time enrollment with at least five hours each semester. Students not holding assistantships must enroll in nine hours to be considered full-time.

(Students applying for Veterans' Benefits or other forms of financial aid may have course and enrollment requirements specific to their aid and should consult Veteran Student Services, veterans@ou.edu or Student Financial Center, respectively, for more information.)

The Non-Thesis MA Degree (32 hours)

Apart from the items mentioned below, the requirements for thesis and non-thesis students are the same.

Coursework and other requirements:

Non-thesis students will complete the same required courses as thesis students (see above), with the following exceptions:

- Non-Thesis students will not take thesis hours
- Non-Thesis students must take 32 hours of coursework.

Non-thesis students will submit a portfolio portfolio and take a comprehensive examination instead of a thesis. The portfolio consists of three research papers prepared as part of their regular graduate coursework. The student's committee will then administer an oral comprehensive examination based upon their portfolio materials and the courses that they have taken. [These requirements should be completed in the final semester of the student's degree program. (Students should complete all required or core courses and at least 75 percent of all coursework listed on the approved Program of Study form before taking the exam.)] (See Appendix on Preparation for Comprehensive Exams.)

The Dual MA Degree Option (54 total hours)

The Graduate College approves proposals for dual degree programs. These programs include graduate courses earned in two departments. The programs may be designed for a specific student or established by agreement between departments. For such programs, the Graduate College requires a minimum of 18 courses or 54 credit hours, including a minimum of 27 hours in each department or school. Students should consult with an adviser about options for a dual master degree.

The department and the School of Library and Information Studies have partnered to offer the Master of Arts in History of Science, Technology and Medicine and Master of Library and Information Studies dual degree (HSTM MA / MLIS). The purpose of this dual degree program is to provide a course of study for individuals planning for a career in librarianship as a science librarian, as a curator of a rare book and manuscript collection in the history of science/health sciences, or as a public historian or archivist in the history of science.

Requirements:

- In order to be admitted into this dual degree program, students must be accepted to both degrees before twelve hours are completed in either one.
- Dual master's degree students pursue degrees simultaneously in two fields of study.
- Students must satisfy the admission, course, and examination requirements of both programs.
- If changing from a single graduate degree program to a dual degree program, hours taken prior to admission to the dual degree program may be applied to both of the degrees if approved by both academic units and the dean of the Graduate College.

- All degree requirements, including foreign language/research tools, and thesis or non-thesis examination, must be met for both programs.
- Up to 20 percent of the total graduate credit hours required for both degrees taken individually may be double-counted as credit for both master's programs.
- Students must graduate with both degrees in the same semester.

See below the Appendix on Specific requirements for the <u>Dual MA between HSTM and MLIS</u>.

MA Administrative Timeline - Key Dates and Deadlines (See appendix.)

The Doctoral Degree in HSTM

Admission to the Doctoral Program

Students wishing to obtain a doctoral degree in the University of Oklahoma's graduate program in the History of Science, Technology, and Medicine are expected to have completed a Master of Arts in this field. Most such students will have completed their program in this department. Students wishing to enter the doctoral program directly who have not received an MA from this department, should contact the Graduate Advisor of the department before making an application.

Students who have completed a Thesis option MA degree in History of Science, Technology, and Medicine from OU must apply for admission to the doctoral program upon completion of their Master's degree. In their letter of application to the doctoral program, students should summarize briefly their work in the M.A. program and indicate (a) the primary field in which the doctoral program will concentrate, (b) the faculty supervisor with whom they will work, and (c) their professional goals and how their work in the doctoral program will foster those goals.

Requirements for the Ph.D. degree

Coursework and other requirements (90 hours)

- The <u>introductory course</u> on research, criticism, and analysis.
- Three chronological survey courses.
- Two field survey courses.
- Elective courses as needed to fulfill the Graduate College's course hour requirements.
- Altogether, course hours must total at least 60 hours beyond what is required for the MA. Of that, at least 48 hours of graduate coursework must *not* be dissertation research hours.
- Students are strongly encouraged to take one or more courses offered by other departments (and these are frequently taken in history). These supplementary courses often fulfill field requirements as described below.
- Dissertation hours.
- Research skills and/or foreign language requirement
- Diversity and inclusion training
- Regular attendance at departmental colloquia.
- Satisfactory completion of the general examination, as described below.

• Satisfactory completion of a doctoral dissertation and its defense in an oral examination.

The Doctoral Fields and General Exams

The content of each student's graduate program is developed through an in-depth study of four distinct fields of specialization. The purpose of the fields is to organize and build academic specializations that will provide adequate preparation for work on the student's dissertation and ensure that they are ready for a future career. The fields are usually defined in terms of reading lists that the student is required to be proficient in.

Three of these fields are usually closely related to the student's doctoral research. The fourth field should differ from the student's specialization so as to ensure a breadth of competence that will provide the student with the ability to engage broadly with the scholarly community to which they see themselves part of. The fields are to be designed by the student in consultation with their chair and the members of the student's doctoral committee.

In order to demonstrate proficiency in these four fields, the student must take a general exam that will consist of both written and oral parts. Written examinations will be set in three of the four fields. The fourth field may, at the request of the student, be satisfied by coursework. This is an option that most students choose, but it is not required. The committee members are in charge ensuring that the reading lists are appropriate to the fields. The committee as a group must agree on the questions to be asked for the written portion of the exam.

For more information on the general exams see the four appendices at the end of this document:

- Appendix: Preparations for the General Examination
- Appendix: Scheduling for the General Examination
- Appendix: Detailed discussion of General Examination for the Ph.D. Degree
- Appendix: Defining the General Examination Fields (TO BE ADDRESSED)

Program oversight and documentation for doctoral work

The doctoral committee will oversee the direction of the student's work. It will approve the fields and the dissertation and examine the student. With regard to the oversight of the general exams and the fields, the goal is to ensure that the scope and depth of the fields fits the student's needs, the chair's expectations, and the supervising faculty's standards for competence in the area of study. The student should meet regularly with the faculty supervising their fields to discuss readings and other assignments.

By the beginning of the second semester of the doctoral program, the student in conjunction with the faculty members supervising each field should submit a brief, one-to-two-page description of each field that defines its scope and the requirements for its satisfactory completion. This may or may not accompany a full reading list, a list of course requirements, and a description of any major work outside of reading preparation. If a field is meant to be untested, then the requirements for satisfying this field must be spelled out clearly. Copies of these field descriptions will be kept by the field supervisor, the student, and the committee chair.

Students are expected to keep copies of all forms that are submitted to the graduate school in the event that they need to consult them for any reason.

Timetable for completion (rewrite as paragraphs)

Students and their committee chairs should establish a timetable for completion of general field examinations with clear, specific expectations for required content and deadlines. As a rule, the department expects full-time students to complete their general examinations within three or four semesters after completion of requirements for a Master's degree. Individual extensions to this timetable may be discussed with the graduate studies advisor and committee chair during the graduate student annual evaluations.

For the full PhD Administrative Timeline with Key Dates and Deadlines, see appendix.

Program approval

The timetables and field descriptions are to be adopted **no later than the beginning of the second semester after admission to the Ph.D. program**.

The following procedures were adopted in an earlier version of the program handbook, but they have only rarely been followed: When materials for a student's program of study are ready, they are to be submitted to the department, and the entire department faculty will be notified. These materials will be available for advice and comment for a period of 30 days during the regular academic year. There is no requirement for formal faculty discussion of a student's program, unless objections are raised during this review period, at which point the matter may be brought before the full department, which may then request that changes be made. The responsibility for the student's course of study is vested in the doctoral committee. Departmental review of a student's planned course of study is not intended to usurp that responsibility, but rather to be an opportunity for advice and commentary on the general structure and scope of the fields and their requirements.

Doctoral Dissertation

Presentation of a dissertation prospectus is expected within three months of a doctoral student's successful completion of the general examination. Individual extensions to this timetable may be discussed with the graduate studies advisor and committee chair during graduate student annual evaluations.

Information and instructions are available at the Graduate College office concerning procedures for submission of the dissertation reading copy and on the prescribed dissertation format. Defense of the dissertation, based on the reading copy, takes place in a final oral examination, which is a public event.

After a successful defense, the university requires dissertations to be uploaded to a permanent storage site with open access. If you intend to publish part or all of your dissertation in a form close to that offered at the defense, you should consider that this kind of access may make publication impossible in some scholarly journals. It is possible to request that part or all of a dissertation be embargoed (closed) for up to three years, however the application for this must be made to the Graduate College well in advance of the defense.

General Requirements for All Graduate Programs

Research Skills and Foreign Language Requirements

MA students must demonstrate proficiency in 1, and PhD students proficiency in 2, research skills relevant to their own research. Traditionally these are natural languages, including French, German, Latin, Greek, and Arabic, but students may also find it more useful for their individual research to substitute another skill set. These could include (but are not limited to): statistical, quantitative, or demographic methods; paleography; American Sign Language; a computer programming language; oral history; or ethnographic methods. Students should work with their advisors and committee members to determine which skills are relevant and how they will be evaluated. A grade of 'B' or better in two intermediate level courses on the subject will generally be accepted as fulfilling the requirement. Students may also arrange individual evaluations to be administered by Department faculty with expertise in the subject.

Diversity, Equity, and Inclusion Training

Diversity, Equity and Inclusion is a core value of the program. Therefore, at a minimum, in their first two years in the program, all graduate students must either complete the 5 workshops in the "unlearning" series (https://www.ou.edu/diversity/programs/training) or work with their advisor and committee to approve an appropriate substitute/alternative.

Colloquium Attendance

The annual colloquium series is a central part of graduate training. It allows graduate students learn about the very latest research and to meet scholars from outside our department, both from other departments and from other universities. It also gives students an understanding of how professionals in our field interact. Often graduate students will be asked to participate in colloquia by introducing scholars before their talks. Advanced graduate students are expected to offer a colloquium presentation based on their dissertation research to the whole community. Graduate students are expected to attend regularly.

Student Advising and Mentoring

The graduate advisor has the main responsibility for supervising and coordinating the advising of graduate students. Students are encouraged to regularly consult with the graduate advisor, their committee chair, the department chair, and/or other faculty in the department, especially if they encounter difficulties of any kind during their program of study.

Once the student has designated a chair for their MA or PhD committee, that faculty member will supervise the student's work toward their degree. The student should confer with the committee chair frequently and maintain contact with other members of their committee as needed. While meetings with the entire committee will be less frequent, students are encouraged to consult with all committee members for their input and advice.

Advising in the MA program

At the beginning of their program, each student consults with the graduate advisor to discuss the requirements of the program. MA students must meet with the department graduate advisor early in the first semester of their program. Once the student's program objectives have

begun to develop (usually following the first semester in the program, but no later than the end of the second semester), the student should meet with the graduate advisor to discuss forming the student's MA committee. The student should select an advisor to work with by the end of the second semester in the program. In addition to the advisor, the student needs to have two more faculty members to form a committee. At least two of the three faculty members forming a master's degree committee must be in the department. It is the responsibility of the student to secure the agreement of faculty to serve on the committee. The graduate school requires that the student submit the names of committee members no later than October of the second year in the program.

Advising in the PhD program

A doctoral committee consists of a minimum of four members, three department faculty members and one member from another OU department who serves as the Graduate College representative. The Graduate College representative's role is to ensure that all requirements are met and all policies are followed and that the student is treated fairly. Students may add committee members beyond these minimums—including faculty members from other departments or universities—keeping in mind that the Graduate College requires that the majority of committee members hold faculty positions within the department.

Annual Evaluation of Graduate Students

The Graduate College requires that each continuing graduate student receive an annual written evaluation of performance that assesses their progress toward their degree. The department schedules the graduate student evaluations early in the spring semester. The annual evaluation includes a self-evaluation exercise and a conference with the graduate advisor and one other department faculty member chosen by the graduate student.

To begin the evaluation process, the graduate advisor will provide students with a mini-CV template on which to outline the work they have done during the past calendar year, from January through December (though first year MA students will only indicate work done since they began the program in August).

- Students should be sure to note whether they have an appointment as a graduate assistant. All students, whether or not they currently hold a graduate assistantship, must use this time to request they be considered for an assistantship appointment in the coming academic year.
- Students should use this form to explain their expected accomplishments in the upcoming year.
- If a student finds it necessary to provide a further explanation of their work or goals, they may also write an optional short letter to accompany the mini-CV. This letter can explain special circumstances or describe work that does not fit on the CV.

You can find the template for a mini-CV here:

 $\frac{https://docs.google.com/document/d/15suXsMj3fxTX0NCFnPT2wT4FdfmHc57CYNgQs_ECc4A/edit?usp=sharing}{A/edit?usp=sharing}$

The graduate advisor will also ask students to provide the name of a faculty member they would like to be involved in the evaluation process. The second faculty member is usually the student's committee chair. If a student does not yet have an official committee chair, they may Revised on 5 December 2021 (SPW)

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ask any other faculty member who is not the graduate advisor to participate in the conference. This second faculty member should have some knowledge of the student's work, usually as the instructor of a seminar or an advanced course.

In January the student, the graduate advisor, and committee chair (or second faculty member) will hold an advisory meeting to discuss the mini-CV and the student's progress during the past year, their goals for the coming year, assistantship responsibilities (if applicable), and funding issues. This meeting can address any special circumstances the student wishes to address.

The graduate advisor will ask the faculty member to provide an evaluative statement on the student's progress in the graduate program, focusing particularly on progress within the preceding year and goals for the coming year.

Lastly, the graduate advisor will provide each student with a written evaluation summarizing their accomplishments and noting any deficiencies. Evaluations become a part of the student's department file. The Graduate College expects each student to be classified as "Satisfactory" or "Unsatisfactory" and the evaluation letter will usually begin with that. If an evaluation notes unsatisfactory progress, the graduate advisor will send a copy of the letter to the Graduate College.

Appendix: Examples of Coursework

Examples of MA degree program:

https://docs.google.com/document/d/1-qi5So18gQIsGv5WJoitC-b9GZrMVOvnPx80Ebw JaNc/edit?usp=sharing

Examples of Ph.D. degree program:

https://docs.google.com/document/d/1Y8iuGUXfWVEytC8udiaHlNrJzrJ7PQWVNZBzDCOx9Go/edit?usp=sharing

Appendix: Timetables

Below are timetables for different programs.¹

Spring timetable 2022:

¹ Suggested emendation: The minimum specific period of time prior to defense to send out the reading copy, for both MA and PhD. I know this document has a comment in the appendix about the revised timetable the Grad College is instituting beginning Spring 2022, which, for PhD is 4 weeks prior to defense. Rather than list it as the "recommended" timeline, could it be further clarified by something more concrete that the Department adopts like "the minimum time" or something similar. I think the Grad College timeline is helpful, but a recommendation still leaves space for a disagreement. It's even conceivable that faculty wish a longer period for review, say 5 or 6 weeks, which would be fine. But, I think a policy position would be quite helpful and so, in my view, strengthening the verbiage would aid such a goal. Revised on 5 December 2021 (SPW)

Appendix: Graduate Course Descriptions (Updated 10-15-21)

The department offers courses which are slashlisted so undergraduate students may take an undergraduate 4000-level course while graduate students may take a graduate 5000-level course. The lectures in a slashlisted course are the same. However, students in the 5000-level course have substantial additional requirements beyond those for students in the 4000-level course. These additional requirements are listed in the slashlisted course syllabus.

- (1) Undergraduate Survey Courses (takes as an unofficial audit by most MA students)
- **3013 History of Science to the Age of Newton.** Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. A survey of Western people's efforts to understand the natural world, from earliest historical times to the seventeenth century. (F, Sp, Su) [IV-WC]
- **3023** The History of Science Since the Seventeenth Century. Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. A survey of the historical and intellectual development of modern science. (F, Sp, Su) [IV-WC]
 - (2) Introductory Survey Course
- **5970 Seminar: Research, Criticism and Analysis.** 2 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 15 hours. Fundamentals of investigation and exposition in the history of science. (F, Sp)
 - (3) Chronological Survey Courses
- **5513** Advanced Studies in the History of Ancient and Medieval Science. Prerequisite: 3013 or equivalent, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Thematic historical analyses of ancient and/or medieval foundations of science, focusing on the development of particular disciplines or scientific institutions, the relationship between science and religion, or transmission of science. Includes examination of sources and critical assessment of scholarly interpretations. (Irreg.)
- 5523 Advanced Studies in the History of Renaissance and Early Modern Science. Prerequisite: 3013 or 3023, or equivalent, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Thematic historical analyses of scientific ideas and practices in the scientific revolution and the enlightenment, 16th–18th centuries. Includes examination of sources and critical assessment of scholarly interpretations. (Irreg.)
- 5533 Advanced Studies in the History of Modern Science. Prerequisite: 3023, or equivalent, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Thematic historical analyses of modern science and culture focusing on the European and American development and professionalization of scientific disciplines, interdisciplinary Revised on 5 December 2021 (SPW)

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relationships among the sciences, and intersections between scientific and public culture. Includes examination of sources and critical assessment of scholarly interpretations. (Irreg.)

- (4) Field Survey Courses
- **5713 History of Medicine Seminar.** Prerequisite: Graduate standing. This seminar is a graduate-level introduction to the history of medicine. We will begin with an examination of the origins and development of the history of medicine as an academic discipline, then delve into some of the big themes and questions that have shaped the field. (Irreg.)
- **5723 History of Technology Seminar.** Prerequisite: Graduate standing. This course introduces graduate students to the study of technology in its historical contexts. Based in the history of technology, it also introduces students to tools and concepts from cognate fields, such as environmental history, urban studies, mobility studies, and more. (Irreg.)
 - (5) Thesis/dissertation hours
- **5980 Research for Master's Thesis.** Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
- **6980 Research for Doctoral Dissertation.** 2 to 16 hours. (F, Sp, Su)
 - (6) Other graduate courses
- **5133 Science and Literature.** (Slashlisted with HSCI 4133) Prerequisite: Graduate standing and permission of instructor. May be repeated with change of content; maximum credit 6 hours. Explores the relationship between science and literature in the Victorian period from historical and literary perspectives. Students read and contextualize select historical works of fiction and of science in order to better understand the historical relationship between science and society, and between contemporary scientific and literary cultures. No student may earn credit for both 4133 and 5133. (Irreg.)
- **5550 Topics in the History of Science.** 1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of content; maximum credit 12 hours. Topics of scholarly interest in the history of science.
- **5613** Issues and Methods in the Digital Humanities. (Slashlisted with HSCI 4613) Prerequisite: graduate standing or permission of instructor. Provides a graduate-level introduction to the central issues, methods, and tools in the emerging field of the digital humanities. Digital humanities is an interdisciplinary set of methods, concepts, values, and practices that enable scholars to create and apply new technologies to answer social, cultural, and historical questions. No student may earn credit for both 4613 and 5613. (Irreg.)
- **5623** Practicum/Internship in the Digital Humanities. (Slashlisted with HSCI 4623) Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 9 hours. A practical, project-based internship, focused on the design and development of a project in the digital humanities under the close supervision of a faculty member. No student may earn credit for both 4623 and 5623. (F, Sp)

5990 Special Studies. 3 to 5 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours. Specialized studies in the history of science. Individual research culminating in the preparation of a research paper. (F, Sp, Su)

6970 Seminar in the History of Science. 2 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 15 hours. Advanced study and historical criticism in specialized areas. (F, Sp)

6990 Independent Study. 1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

(7) Directed readings

5960 Directed Readings in the History of Science. 1 to 4 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of content; maximum credit six hours toward M.A. degree, 12 hours toward Ph.D. degree. Intensive readings in a selected area of the history of science, under the direction of a graduate faculty member.

6960 Directed Readings. 1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

Appendix: Funding Opportunities

Graduate Assistantships

The department awards graduate assistantships, with responsibilities both in research assistance and in support of the department's undergraduate instructional program; well-qualified applicants will be considered for fellowships that carry no responsibilities for research or for instructional assistance. Assistantships are awarded annually on a competitive basis. Decisions on assistantship awards are usually made in March.² In conjunction with the department's responsibility for overseeing the History of Science Society's *Current Bibliography*, two or three graduate research assistants may be appointed to 12-month half-time positions.³ In addition, assistantships include a tuition waiver for qualified graduate assistants for both resident and non-resident tuition up to the total number of hours required to complete the degree, as well as a subsidy for the basic student health plan.

Application for assistantships. Applicants to the graduate program are considered for both admission and funding in the application review process. No separate funding application is required. Current students should note their desire for consideration for funding or continued funding in their annual evaluation materials.

Travel Awards

² As of this writing, the department offers a 10-month half-time teaching assistantship stipend of \$20,000 at the MA level and \$22,500 for students admitted to the Ph.D. track.

³ As of this writing, the an annual stipend for the bibliography is \$22,500.

GSS (Graduate Student Senate)

https://www.ou.edu/sga/graduate-student-senate

Roberson Travel Award

https://www.ou.edu/gradcollege/funding/travel-and-research

Department General Account

History of Science Graduate Research Award

Through the generosity of an anonymous donor, the department will initiate a History of Science Research Award. To encourage graduate students in the preparation, presentation and publication of excellent research papers, the department will present one award annually. Students can apply in any one of the three categories below:

- (a) Travel and/or material support in the preparation of a paper
- (b) Travel support to attend a meeting at which the research paper will be presented
- (c) Recognition of research papers published in the previous calendar year

Application Process

For category (a), the application will consist of a brief (2-page maximum) description of the research to be undertaken and the need for travel and/or research funds in the form of a budget. For category (b), the application will consist of an abstract of the paper and an estimate of travel/registration expenses, a description of the meeting at which the paper will be presented, and assurances from the meeting organizer(s) that the paper has been accepted for presentation. For category (c), the application will consist of a copy of the paper and, if not contained in the published article, a 250-word abstract.

Because the amount of funding will vary with the income from the endowed fund, applicants in categories (a) and (b) should also attempt to secure funding for travel from other sources. In all three categories, the criteria for selection will be the quality of the proposed activity or product.

Deadline for Applications: 1 October — ON A ROLLING BASIS.

Selection of the recipients will be made by the History of Science Graduate Studies Committee, with announcement of the awards on or before 1 November.

Appendix: Research Resources

History of Science Collections...

Other Research Resources are available to graduate students on the campus of the University of Oklahoma. The Western History Collections offers a comprehensive research facility of Western Americana, with 80,000 books, over 1.5 million prints and negatives, and 26 million historical manuscripts. The Sam Noble Oklahoma Museum of Natural History is one of

the two largest natural history museums in the world associated with a university. It houses more than 6 million artifacts in earth, life and social sciences.

Also, in conjunction with the areas of faculty research interests, which are listed in Appendix VII, the department participates in and draws upon wider concentrations of the University faculty, including the Center for Medieval and Renaissance Studies, the Environmental Studies program, and the Arts and Humanities Forum. As a result, graduate students have opportunities to take courses with faculty in this wider network and, depending on their interests, those faculty may serve on their Master's and Ph.D. committees. Appendix VIII offers a list of current interdepartmental university faculty, as well as non-university faculty, who have served on graduate student committees in the recent past.

Appendix: Preparations for the Comprehensive M.A. Examination (Non-Thesis Option)

The department faculty members strive in every case to ensure fairness and equity among all program students and high standards of scholarship among those completing their course of study with the non-thesis master's degree. The department's procedures are in conformance with and proceed from the requirements specified in the *Graduate College Bulletin*.

A. Committee

1. The Comprehensive Examination committee for students selecting the Non-Thesis Option for the MA is composed of no fewer than three graduate faculty members of the department. The composition of the committee is determined by the department, in consultation with the student.

B. Preparation

- 1. Preparation for the Comprehensive Examination begins with the student's initial enrollment in the program. Through coursework, seminars, independent reading, participation in departmental colloquia, and regular personal interaction with faculty and fellow students, graduate students are encouraged to broaden their understanding of the discipline.
- 2. In all cases, students are encouraged by the graduate advisor to meet with each faculty member on the Comprehensive Examination committee in the semester before the examination to monitor preparations. Included among these preparations is a review of course syllabi, supplemented by additional reading, where necessary. The graduate advisor coordinates these efforts.

C. Procedures

- 1. The Comprehensive Examination consists of an oral examination administered by the committee. Members of the committee present questions that survey the curriculum. Committee members also consider the student's preparation in the program.
- 2. Immediately following the oral examination, all committee members meet to discuss the student's performance. The committee seeks to determine whether responses in the examination display sophisticated and comprehensive understanding of the discipline.

- Relatively minor deficiencies may still not disqualify the candidate; serious and extensive deficiencies will result in failure on the examination.
- 3. Students are notified of passage immediately after the examination. In cases of failure of the examination, the committee provides the student with a copy of the Authority Report form filed with the Dean of the Graduate College and a written assessment of the deficiencies displayed in the examination. Students may retake the examination a second time. If the student decides to attempt the examination after further preparation, the general recommendations for preparation outlined above apply once again, but on this occasion the student and each member of the committee are guided by the written assessment of the first examination. Students may not retake the examination a third time.

Appendix: Requirements for the Dual MA between HSTM and MLIS

- A. Requirements of the degree
 - 1. Students must apply to and be accepted by each department.
 - 2. The following requirement has generally not been followed: Dual degree students work with a joint advising committee made up of members of both departments.
 - 3. Students must meet the requirements for the master's degree in each department, including the comprehensive master's degree examination or the master's thesis (a portfolio is a third option for the MLIS degree).
 - 4. Students must simultaneously apply for graduation for both degrees. Both degrees must be completed before either is awarded.
- B. Selection of course of study
 - 1. Students may complete either the thesis-option or the non-thesis option for the HSTM portion of their program.
 - a. Thesis Option, 27 HSCI hours and 3 double-counted LIS hours (elective)
 - b. Non-Thesis Option, 29 HSCI hours and 3 double-counted LIS hours (elective)
- 2. Students intending to continue into the HSTM doctoral track will select the thesis option.
 - 3. Students will follow the HSTM course distribution and degree requirements outlined above for the option they select.
 - a. The total course load requirement is 18 courses or 54 credit hours, including a minimum of 27 credit hours in each department. Students may choose to write a thesis in the department and/or the School of Library and Information Studies if they wish.
 - 4. Students should coordinate their MLIS coursework and program requirements in consultation with an advisor in the School of Library and Information Science.

C. Communication with School of Library and Information Studies

1. Dual degree students should contact the School of Library and Information Studies at slisinfo@ou.edu for advising, LIS master's course and degree requirements, and course selection. Information on the dual degree is also available on the School of Library and Information Studies website at https://www.ou.edu/cas/slis/programs/dual-degree.

D. Timetable for completion

- 1. The timetable for completion of the dual-master's program will be set by the student's master's committee. Full-time students usually satisfy all dual master's requirements within three years (six semesters). Individual extensions to this timetable may be discussed with the graduate studies advisor and committee chair during the graduate student annual evaluations.
- 2. The Graduate College stipulates that master's students must complete all of the degree requirements within five calendar years of the first enrollment in any graduate-level OU course to be applied to the master's degree.

Appendix: Detailed discussion of General Examination for the Ph.D. Degree

Procedures

- 1. The General (Qualifying) Examination for the Ph.D. consists of two parts: one written, and one oral. General Examinations consist of three days of written examinations and one day of an oral examination.
- 2. General exams should be open-note and open-book. Students should be allowed to take the exams on their own computers if they wish.
- 3. Although the HSTM faculty will not require students to take general exams in the department or on campus, we will provide a neutral, distraction-free space for any student who requests.
- 4. The time limits of general exams should be flexible, ranging from 4 to 8 hours (for each field examination). The exact length may be determined by the committee and the student. In no case should one exam take longer than ONE working day (8 hours).
- 5. Only one field examination will take place per day, for a total of three days devoted to written examinations. The oral examination is the culmination of the entire General Examination. It occurs after the completion of the written examination and takes place during one day.
- 6. After the oral examination the committee will judge the entire General Examination to be one of the following: Pass with distinction; Pass; Pass conditional on certain requirements being met by the student; Fail.
- 7. Students who fail the General Examination may be retake it once.

8. Upon satisfactory completion of the General Examination, the student is admitted to Candidacy for the degree of Doctor of Philosophy.

Appendix: Preparations for the General Examination

The department faculty members consider the general examination one of the most important steps in the training of doctoral students and strive in every case to ensure fairness and equity among all program students and high standards of scholarship among those advanced to candidacy. The following remarks are intended to supplement details provided in The Doctoral Exams section above.

- (a) The Role of the Outside Member of the Doctoral Committee. The Graduate College requires that committees be composed of four graduate faculty members, at least one of whom must be outside the major department. In the department it is expected that the supervisor of the outside doctoral field will also serve as the representative of the Graduate College policy. You are encouraged to find an outside member who will offer informed advice and criticism of the student's work. Students are also encouraged to consider the addition of a sixth member from outside the University with special expertise in the area of the dissertation.
- (b) The Procedures Used to Prepare the Examination. The composition of the General Examination is described in The Doctoral Fields and General Exams section above. The questions for each field are written by the faculty members that supervised the fields, with other faculty being asked to write questions at the committee chair's discretion. The entire examination, however, is reviewed by all members of the committee to ensure balance, comprehensiveness, and fairness.

In preparing each section, faculty draw upon considerations that include, but are not restricted to the following:

- the current state of the field
- the historiographical issues that inform current and previous research traditions in the field
- the student's interests as they pertain to the field as a major or minor field of specialization
- the student's prior preparation in the program.

In all cases, the goal is to prepare an examination that allows the student to display comprehensive knowledge and opportunities for student specialization.

- (c) Recommendations for Preparation for the General Examination. Through coursework, seminars, independent reading, participation in departmental colloquia, and regular personal interaction with faculty and fellow students, graduate students are encouraged simultaneously to broaden their understanding of the discipline and to establish informed perspectives on possible areas for specialized research. The chair of the student's committee assumes ultimate responsibility for coordinating this preparation.
- (d) **Guidelines for Determining Pass/Fail.** The entire examination is read by all members of the committee. Thereafter, the committee meets to discuss the acceptability of the candidate's responses. Evaluations of specialized faculty within each field are considered especially significant in the general decision regarding the candidate's advancement to the oral

part of the examination. The oral examination is an opportunity for the student to qualify or supplement their written answers. In extreme cases, deficiencies within parts of the written responses may serve to fail the candidate before the oral examination (if they are especially broad and serious). More usually they focus discussion in the oral examination.

The committee seeks to determine whether responses in the written and oral portions of the examination display sophisticated and comprehensive understanding of the history of science. Relatively minor deficiencies may still not disqualify the candidate; more serious but limited ones may result in the recommendation that the candidate retake portions of the examination; serious and extensive deficiencies will result in failure on the entire examination.

(e) Feedback to Students Regarding Performance on Oral and Written Examinations. Students are notified of passage immediately after the oral portion of the examination. Where the committee has reservations about portions of the examination, the student is informed immediately after the oral portion of the examination, and in addition on a copy of the report filed with the Dean of the Graduate College, the committee chair provides the candidate with a written statement of the deficiencies, together with procedures for remediation.

In cases of complete failure of the examination, the committee chair provides the candidate with a copy of the report filed with the Dean of the Graduate College and a written assessment of the deficiencies displayed in the examination. Candidates may retake the examination a second time, as described below, but not a third time.

(f) Procedures in Cases of Unsatisfactory Performance on the General Examination. As noted above, the candidate may display minor deficiencies in parts of the examination that do not result in complete failure. In such cases, the committee may recommend that the student prepare further and either take the examination in those fields again or, depending on the circumstances, require the student to prepare a special area of the field and submit other written work that displays satisfactory achievement.

In cases of complete failure of the examination, the student and chair of the committee meet to discuss the performance and determine the student's future course of action. In some cases, the student may decide to withdraw from the program. If the student decides to attempt the examination after further preparation, the general recommendations for preparation outlined above apply once again, but on this occasion the student and each member of the committee are guided by the written assessment described in the previous section.

Appendix: Scheduling for the General Examination

- The General Examination may be taken according a timetable chosen by the student, so long as it occurs within one semester. For one example, a student may choose to take three or four written field examinations within a period of two weeks or fewer, followed by an oral examination within one or two weeks. Another student may choose to take examinations in parts at intervals separated by several weeks or months.
- A single oral examination is performed after completion of all written examinations.
- The general examination must be completed within the same semester that it is started.
- The student must have completed all requirements for languages or research tools before the general examination can begin.

Appendix: Defining the General Examination Fields

The four fields are designated as follows:

- The doctoral research field
- The second research field
- The third research field (previously called "the outside field")
- The fourth field (previously called "the complementary field")

The **doctoral research field** supports the student's r dissertation research. The field may be defined by period, by region, or by topic/theme.

The **second and third research fields** are generally closely related to a student's research interests but in a manner distinct from the doctoral field. They will provide a different thematic focus, methodological or theoretical perspective, or context than the doctoral field. These fields are typically (but not necessarily) supervised by a member of the student's committee other than the committee chair. These fields may be defined by period, region, and/or theme, or they may allow the student to work more deeply on a language (such as medieval Arabic), a research tool or method.

The **fourth field** is often satisfied by means other than a written examination, as determined by the student and their committee. Such alternate means may include course work and/or the submission of a portfolio of work, which may include detailed syllabi for survey courses along with papers prepared for graduate courses. It also may involve a written examination if the committee so chooses. The goal of this field is to provide the student with a broader perspective on the history of science than found in the other three fields. This breadth should be sufficient to enable the student to teach courses beyond their immediate area of research. This field will cover periods, themes, and regions substantially distinct from the student's research fields.