Department of

the History of Science

❖❖❖

Graduate Program in the

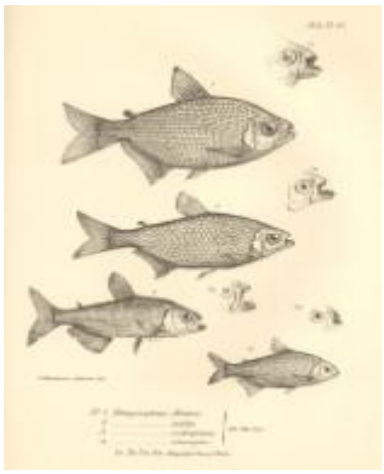
History of Science, Technology

and Medicine

Graduate Program Handbook

❖❖❖

University of Oklahoma



THE UNIVERSITY OF OKLAHOMA
GRADUATE PROGRAM IN THE HISTORY OF SCIENCE, TECHNOLOGY AND MEDICINE

PROGRAM HANDBOOK

Contents

A. Information for Students Working Toward the Degrees of Master of Arts and Doctor of Philosophy

B. Appendices

October 2009

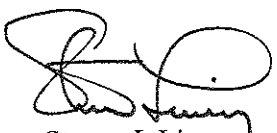
THE UNIVERSITY OF OKLAHOMA
GRADUATE PROGRAM IN THE HISTORY OF SCIENCE, TECHNOLOGY AND MEDICINE

INFORMATION FOR STUDENTS
WORKING TOWARD THE DEGREES
OF
MASTER OF ARTS AND DOCTOR OF PHILOSOPHY

The graduate program in the history of science at the University of Oklahoma was founded in 1954. The mission of the Department of the History of Science is three-fold: to offer instruction to undergraduates; to offer instruction and guidance to graduate students; and to contribute to research in the history of science. Our graduate program is specifically designed for students who are interested in research and teaching careers in higher education, or professional positions in specialized libraries, museums, and other institutions. We seek students who want to work closely with creative and productive faculty in a collegial, professional, and scholarly environment. Students are expected to address their graduate training with a positive, constructive and highly motivated attitude necessary to succeed in their graduate work. They should have a sincere commitment to scholarship, possess a strong work ethic, and be receptive to instruction in both the classroom and individual research training. Students are also expected to work independently as well as participate fully in the activities of the program.

Our philosophy of graduate training is one of closely supervised mentorship and focused coursework. 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. For example, seminar papers are expected to be of sufficient quality and form that they can be presented at professional meetings or submitted for publication; the prospectus for the thesis and dissertation should follow the standards necessary to secure external support of a project; and theses and dissertations are to be prepared to support a timely submission for publication. Students learn to make professional presentations by practicing them within the department, and then delivering them at professional meetings. In addition, as part of their professional training, graduate students have the opportunity to develop and teach courses. Close interaction between graduate students and faculty members is the norm.

This program handbook has been designed with multiple purposes in mind. If you are a prospective student, you will find information about the program resources, procedures and requirements that we hope will convince you to submit an application. If you are a current graduate student, the handbook constitutes a convenient reference as you progress through the program. In either case, should you have questions about the content of the handbook or the program, please address them to members of the Graduate Studies Committee.



Steven J. Livesey
Department Chair
Admissions Coordinator, 2009-2010

GRADUATE PROGRAM IN THE HISTORY OF SCIENCE

I. Key People and Committees

- The *Major Professor* (or "*Graduate Advisor*" prior to selection of a major professor) is 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 / advisor.

- The *Graduate Liaison* has responsibility for administering the graduate program and serves as the primary representative of the department to the Graduate College. If you have any questions about Graduate College or departmental policy on graduate study, see the Graduate Liaison.

- The *Chair of the Department* makes all personnel assignments and is the ultimate administrative authority within the department. He or she is a good source of information on general departmental policy, university requirements, etc.

- The *Graduate Studies Committee* monitors the graduate program and makes recommendations to the faculty about changes in the program or in policies that regulate the graduate training program. This committee also hears graduate student appeals.

- *Committee A* is the Executive Committee of the department and consists of two tenured faculty members elected by the faculty of the department. Their responsibility is to assist the chair in administrative issues.

II. History of Science Collections and Other Research Resources

The History of Science Collections offer outstanding access to rare books, modern journals, monographs and reference sources in the history of science, all conveniently located within a single facility. The Roller Reading Room provides a quiet and secure environment for using Collections materials. In addition, graduate students are offered access to non-public spaces. Graduate students may browse the Stacks, and directly check out items to an assigned study carrel for convenient use. The Commons provides a comfortable place for conversation, eating a bag lunch, or browsing recent journal issues. The Harlow Room provides a secure location for classes in which rare books may be used in instruction. It is also used for weekly colloquia and a variety of special events.

The Collections were founded in 1949 when Everette Lee DeGolyer loaned 129 rare works to the University of Oklahoma in exchange for the establishment of a teaching and research program in the history of science. The University complied with his stipulation by hiring Duane H. D. Roller to serve as both curator of the DeGolyer Collection and as the first professor of the history of science. Eventually, DeGolyer's gift grew to a donation of 6,000 volumes. By the time Marilyn B. Ogilvie became the second curator in 1991, the program had expanded to consist of a distinct Department of the History of Science with a half-dozen faculty, and a special collection numbering 79,000 volumes. The DeGolyer Collection was renamed as the History of Science Collections (plural) to recognize the role of additional donors. With continual University support, by Ogilvie's retirement in 2008, the Collections had grown to over 94,000 volumes. Most of these are housed in two climate-controlled areas located in a highly secure facility designed to accommodate the needs of students and researchers.

The typical hours of operation during the academic year when classes are in session are Monday through Thursday, 9:00 a.m.-7:00 p.m.; Friday, 9:00 a.m.-5:00 p.m.; Saturday, 10:00 a.m.-2:00 p.m.; and, Sunday, 1:00 p.m.-5:00 p.m.

More details about the Collections are available at libraries.ou.edu/locations/?id=20. The Collections also offers an Image Gallery at http://hsci.ou.edu/galleries/. Further information can also be obtained by contacting:

Dr. Kerry Magruder, Curator
Dr. JoAnn Palmeri, Librarian
History of Science Collections
University of Oklahoma Libraries
401 W. Brooks, BL 521
Norman, OK 73019
405-325-2741

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 Interdisciplinary Perspectives on the Environment program, and the Human Technology Interaction Center. 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.

III. Graduate College Requirements

Two types of requirements must be met: Those established by the faculty of the Graduate College, and those established by the faculty of the History of Science Department. It is the student's responsibility to be familiar with and meet both department and college requirements.

In addition to the requirements of the department, there are also general requirements of the Graduate College that students must satisfy to earn their degrees. The Dean of the Graduate College is responsible for administering Graduate College requirements. These requirements are set forth in the *Bulletin* of that College and cannot be superseded, altered, or waived by the action of the faculty or any individual. The *Graduate College Bulletin,* the *Graduate Assistant Handbook,* and the *Student Code* should be read carefully upon beginning graduate training, and should be consulted routinely to answer general questions that arise during the course of the student's program:

- Graduate College Homepage http://gradweb.ou.edu/
- *Graduate College Bulletin* http://gradweb.ou.edu/current/gcbulletin/index.asp
- *Graduate Assistant Handbook* http://gradweb.ou.edu/current/gahandbook.pdf
- *Statement on Academic Integrity* http://www.ou.edu/provost/integrity/

IV. Advisement of Students

The Graduate Advisor has the main responsibility for supervising and coordinating faculty advisement of graduate students. The student has primary responsibility for seeking faculty consultation and advice in a timely fashion.

At the beginning of the program of study, the student consults with the Graduate Advisor. In this consultation a specific program for the first semester is determined, and a general program of studies may be sketched out. All students without advanced degrees in History of Science will be required to take a two-semester graduate survey course (HSCI 5990) in History of Science in their first year. This course is strongly recommended, but not required, for incoming students with advanced degrees in the History of Science. Additionally, students in their first year will enroll in the department seminar, HSCI 5970, in both fall and spring semesters. Students also should expect to enroll in a 5000-level Advanced Studies course (see Part VIII below). In consultation with the Graduate Advisor, the student also should plan to devote time to foreign language study consistent with projected specialization in the program.

During the first semester in the program, each student will confer with a committee of two department faculty members, the Provisional Advisory Committee (PAC), to develop a general plan of study, define study objectives, and receive enrollment advice. One member of the PAC will be the Graduate Advisor, the other a faculty member of the student's choosing.

Once the student's program objectives have begun to develop (usually following the student's completion of one semester in the program, but in any case no later than the end of the second semester of enrollment), with the assistance of the Graduate Advisor the student should take steps to identify a formal Graduate Committee. Regular Master's Degree Committees usually consist of three department faculty members; regular Doctoral Committees usually consist of four department faculty members and one member from another department. The critical step is the student's reaching agreement with a department faculty member to chair the Committee and thus to supervise the student's work toward the degree in question. The student should confer with the Committee chair at the beginning of each semester; although meetings with the entire committee will be less frequent, such comprehensive consultations should take place at least once each year.

V. Rate of Course Work

A full-time graduate student with no employment obligations should think of three graduate-level courses (plus language study) as a full load. Students who hold Graduate Assistantships or who have other employment obligations will usually view a full load as consisting of two or three graduate-level courses plus language study. This will permit the student to complete the Master’s Program within two years. All students holding assistantships are full-time students.

VI. Outline of Master's Program Requirements

The major steps towards the Master’s degree are:

A. Completion of the course distribution requirements. The course distribution requirements for the Master’s degree for all options below are as follows:

1. A two-semester-long graduate survey course in the history of science (HSCI 5990) is required for all first-year students without advanced degrees in the History of Science.

a. Students are expected to enroll in this course during both the fall and spring semesters. This is a team-taught course, involving the entire faculty.

b. As a part of this course, students must audit a concurrent section of the relevant undergraduate survey, HSCI 3013 or 3023. Auditors are expected to do all the reading assignments and attend all lectures; examination requirements are generally excused, but this will be determined by the instructor of the 3013/3023 course.

c. A teaching assistantship in HSCI 3013/3023 during the semester in which 5990 is taken will substitute for auditing.

2. A two-semester-long historiography and methods course (HSCI 5970) is required for all first-year students.

3. One course each from the sequence HSCI 5513, 5523, and 5533 is required.

B. Fulfillment of the requirements of either the Thesis or Non-Thesis Option for the Master's degree, or fulfillment of the requirements of the dual-Master's program.

1. There are two options for earning an MA in History of Science. The student may choose either the Thesis Option or the Non-Thesis Option for the MA. Students intending to apply for admission to the PhD program are expected to select the Thesis Option.

2. The requirements for earning an MA degree in History of Science by the Thesis Option are as follows:

a. Completion of an approved course of study comprising at least 30 approved credit hours of graduate course work;

b. Demonstrated competence in one approved foreign language;

c. Completion and oral defense of a Master's thesis, with that thesis being a single, sustained piece of writing modeled on a scholarly journal article as regards length and quality;

i. It is expected that this thesis will be presented to the department (as a pre-circulated paper) and discussed as a part of the colloquium series.
ii. At the discretion of the student's MA committee, this presentation may take the place of the oral defense of the thesis.

d. For full-time students, all three of these requirements are to be satisfied by the end of the student's fourth semester in the program. If special circumstances warrant an exception, the Department may extend this deadline.

3. The requirements for earning an MA degree in History of Science by the Non-Thesis Option are as follows:

a. Completion of an approved course of study comprising at least 32 approved credit hours of graduate course work;

b. Demonstrated competence in one approved foreign language;

c. Submission to the student's Master's Committee of a portfolio of three research papers prepared as part of their regular graduate course work;

d. Satisfactory performance on a comprehensive examination, to be evaluated by the student's Master's Committee (see Appendix I);

e. For full-time students, all four of these requirements are to be satisfied by the end of the student's fourth semester in the program. If special circumstances warrant an exception, the Department may extend this deadline.

4. The requirements for earning an MA degree in History of Science as part of the dual-Master's program in partnership with the School of Library and Information Science are as follows:

a. Satisfaction of the course distribution requirements above;

b. Satisfactory completion of either the Thesis or the Non-Thesis Option above, with two alterations:

i. The total hours required will be 27 hours credited towards the History of Science MA if the Thesis Option is selected or 29 hours if the Non-Thesis Option is selected (a three-hour reduction for each option from the standard);

ii. The timetable for completion of the dual-Master's program will be set by the student's MA committee, subject to departmental approval.

For further detail on the dual-degree option, see Appendix II.

VII. Outline of Doctoral Program Requirements

The major steps towards the PhD degree are:

A. Satisfaction of course requirements:

1. Completion of an approved course of post-baccalaureate study comprising at least 48 credit hours of graduate course work, not counting hours for dissertation research. Usually, more than 48 hours of formal course work are necessary. The Ph.D. degree calls for a total of 90 approved credit hours beyond the baccalaureate degree, or 60 hours beyond the Master's degree, including dissertation hours.
2. Students admitted to the doctoral program are assumed to have satisfied the course distribution and language requirements for the Master's.
   a. If not, additional coursework or language study may be required.
   b. There are no additional course distribution requirements at the PhD level other than in preparation for field requirements, described below.
3. Students are strongly encouraged to take one or more courses outside the department, especially (but not solely) to fulfill the requirements of the outside field. These courses normally, though not necessarily, will be in the history department.

B. Demonstrated competence in a second approved foreign language;

C. Satisfactory completion of the General Examination, described below;

D. Completion of a satisfactory doctoral dissertation and its defense in an oral examination.

VIII. Course Requirements for Graduate Degrees

Note: The 5500-series of courses in the History of Science includes the following:

5513 – Advanced Studies in the History of Ancient and Medieval Science
5523 – Advanced Studies in the History of Renaissance and Early Modern Science
5533 – Advanced Studies in the History of Modern Science
5550 – Topics in the History of Science (graduate level)

Each of these courses may be repeated with a change of content; maximum credit for any one of these courses is 12 hours. In certain cases when the specific content of the Topics course (5550) warrants it, completion of the Topics course may be counted as fulfilling the requirement of one of the Advanced Studies courses.

A. Master of Arts Degree

Students working toward the Master of Arts degree (Thesis Option) are expected to fulfill the following minimum course requirements:

History of Science Graduate Survey (5990)	— 6 hours
Seminar (5970)	— 6 hours
Advanced Studies in the History of Science (one course in each of the following fields: Ancient/Medieval; Renaissance/Early Modern; Modern Science: 5513, 5523, 5533)	— 9 hours
Elective Courses: students may choose among approved courses outside the department (e.g. History), and department offerings, such as HSCI 5550 and HSCI 5960	— 6 hours
Master's Thesis Research (5980)	— 3 hours
	30 hours

B. Doctor of Philosophy Degree

Students working toward the Doctor of Philosophy degree usually will be expected to fulfill the following minimum course requirements (not counting dissertation hours) before completion of the General Examination:

Approved course of study consisting of 30 credit hours for the Master's degree, or its equivalent	— 30 hours
Additional hours specified by the student's committee	— 18 hours
	48 hours

For sample programs, see Appendix III. For course descriptions, see Appendix IV.

IX. The History of Science Seminar and Preparation of the Master's Thesis

During the first year of the Master's program, participation in the 5970 seminar is mandatory. Generally, in the Fall semester the 5970 seminar will focus especially on learning fundamental methods and

techniques for research in the history of science, including particular attention to such problems and issues as use of research tools and presentation of research results in selected interpretive frameworks. Generally, the Spring semester 5970 seminar will be a 'pro-seminar,' concentrating on analysis and assessment of selected scholarly interpretations as well as on original research.

By the end of the second semester of the Master's program, students should consult their Master's degree committee (see section IV above) to define a Master's thesis topic and prepare a prospectus for the Master's thesis. Final determination of the topic should occur no later than end of the Fall semester of the second academic year.

X. Foreign Language Requirements

Wide acquaintance with foreign languages is expected of students in the history of science at the University of Oklahoma. Generally speaking, it is desirable for the professional historian of science to have a reading knowledge of French and German, and Latin for those with specializations before the modern period. Each student in the graduate program will develop a plan for appropriate language competency, in consultation with the student's committee. This plan may require review and adjustment as the student proceeds in his or her program of graduate study.

For the Master of Arts degree, demonstrated reading competence in at least one foreign language is required.

For a student in the doctoral program, as the student's knowledge and interests develop, requirements in foreign language competency appropriate to the student's objectives will be determined by the doctoral committee in consultation with the student. In every case, requirements for the Ph.D. degree will include demonstrated reading competence in at least two appropriate foreign languages.

Students are strongly encouraged to take foreign language competency examinations as early as possible in their programs of study. Attaining competence in a foreign language prior to enrollment in the graduate program confers significant benefits toward timely completion of the degree. Those entering with knowledge of one or more appropriate languages should demonstrate their competency at the time of enrollment in the graduate program, or as soon thereafter as possible.

It is generally expected that every graduate student will pass one appropriate foreign language competency test no later than the start of the third semester of enrollment. Basic reading competency can be established by passing the reading examination administered by the appropriate language department, or by completion of six credit hours of appropriate intermediate-level language courses with grades no lower than B. If competency is established by intermediate-level course credit, earned at an accredited college or university, the credit should date back no more than five years.

Students should expect to apply and develop their knowledge of appropriate foreign languages in seminar work. Some questions incorporating materials in pertinent foreign languages can be expected in the General Examination.

XI. Admission to the Doctoral Program

As a rule, students wishing to begin study toward an advanced degree in the University of Oklahoma's graduate program in the History of Science are expected to apply for admission to the Master of Arts program. This includes applicants who intend to work through the M.A. program into the doctoral program. In certain circumstances, however, an applicant may be accepted directly into the Ph.D. program. Such circumstances include particularly applicants who have earned Master's degrees in the history of science in comparable programs established at other universities.

Students in the University of Oklahoma Master of Arts program in History of Science may be recommended for advancement into the Ph.D. program upon completion of the M.A. program with a sufficiently high standard of performance. Students wishing to pursue the Ph.D. should select the Thesis Option and should apply formally to the department upon successful completion of Master's requirements. In their application students should summarize briefly their work in the M.A. program and indicate (a) the primary field in which the doctoral program will concentrate and the faculty supervisor with whom they will work and (b) professional goals and the contribution the doctoral program will make in their achievement.

XII. General Examination for the Ph.D. Degree

A. Procedures

1. The General (Qualifying) Examination for the Ph.D. consists of two parts, one written and one oral.
2. Each written field examination is four hours in length and given on a separate day. The oral examination is the culmination of the entire General Examination and is not a separable part.
3. 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.
4. If the General Examination is failed, it may be retaken once.
5. Upon satisfactory completion of the General Examination, the student is admitted to Candidacy for the degree of Doctor of Philosophy.

B. Doctoral field requirements

1. Students must satisfy the requirements for four distinct fields: three of these fields will be examined and will be closely related to the student's doctoral research; the fourth field may be satisfied without an examination and will differ from the student's specialization enough to ensure a breadth of competence sufficient to teach survey courses and to participate as an active and informed member of the history of science community.
2. The doctoral field, designed by the student and his/her committee chair, supports his/her dissertation research.
    a. It may be defined by period, region, and/or theme.
    b. Examples of possible doctoral fields include: "Gender and Modern Science," "Early Modern Natural Philosophy/Natural History," "The Life Sciences Since 1800," "Science and Technology in American Culture," "Science and Religion From Antiquity to the 17th Century/From the 17th Century to the Present," "Race and Science," "Science and Popular Culture," "Science and Patronage," "The Laboratory in Modern Science," "Science and Imperialism," "Science and the Professions."
3. The second field is typically (but not necessarily) supervised by a member of the student's committee other than the committee chair.
    a. This field may be defined by period, region, and/or theme, or it may be a research tools and methods field.
    b. This field will be closely related to a student's research interests but in a manner distinct from the doctoral field, thus providing a different thematic focus, methodological/theoretical perspective, or context than the doctoral field.

c. Examples of possible second fields include fields similar to those listed above as possible doctoral fields, plus research tools and methods fields, which might include fields like "Research Methods in the History of Medieval Natural Philosophy," or "Research Methods in the History of Pre-Modern Scientific Literature."

4. The outside field is typically (but not necessarily) supervised by a faculty member outside of the department, presumably a member of the student's committee. This field is intended to support the student's research interests by providing a different perspective on or a different context for the student's research topic.

   a. It may be defined by period, region, and/or theme. If the second history of science field is not a research tools and methods field, the outside field may be constructed as such.

   c. Examples of possible outside fields include: "Early Modern Intellectual/Cultural/Social History," "19th-20th Century American Intellectual/Cultural/Social History," "Modern European Intellectual/Cultural/Social History," "Methods and Techniques of Oral History," "Science in Modern Literature," "Anthropology of Science/Medicine," "Philosophy of Science," "Modern Environmental History," "The Cultural Geography of Science and Technology." [Slashes are to indicate alternatives.]

5. The complementary field may be satisfied by means other than a written examination, as determined by the student's committee.

   a. 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.

   b. The goal of this field is to provide the student with a broader perspective on the history of science than found in his/her three research fields. This breadth should be sufficient to enable the student to teach courses he or she is likely to be expected to teach.

   c. This field will cover periods, themes, and regions substantially distinct from his/her research fields.

C. Program oversight and documentation for doctoral work

1. Faculty supervising fields are expected to discuss the design of the field and its requirements with the student and to consult with his/her committee chair to ensure that the field fits the student's needs, the chair's expectations, and the supervising faculty's standards for competence in the area of study.

2. Faculty supervisors will meet regularly with students to discuss readings and other assignments. Some work for a field supervised by one faculty member may take the form of coursework with another faculty member.

3. Faculty supervising a field will work with the student to prepare a brief, 1-2 page, description of the field and its requirements.

   a. This description will outline the core topics to be covered, list any course requirements, and describe briefly any major writing assignments.

   b. Copies of this field description will be kept by the field supervisor, the student, and the committee chair. A copy also will be submitted to the department.

D. Timetable for completion

1. Students and their committee chairs should establish a timetable for completion of general field examinations with clear, specific expectations for required content and deadlines.
2. As a rule, full-time students are expected to complete the requirements for their general examinations within three semesters of completion of requirements for a Master's degree. The department may authorize individual extensions to this timetable if special circumstances warrant.
3. Defense of a dissertation proposal may be part of the general examinations, or it may be submitted to the committee within three months of completion of general examinations. The department may authorize individual extensions to this timetable if special circumstances warrant.

E. Program approval

1. The timetables and field descriptions are to be submitted to the department no later than the beginning of the second semester after admission to the Ph.D. program.
2. When materials for a student's program of study are submitted to the department, the entire department faculty will be notified.
3. These materials will be available for advice and comment for a period of 30 days during the regular academic year. When the review period occurs outside the academic year, faculty should be asked to acknowledge receipt of the materials.
4. 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.
5. The responsibility for the student's course of study is vested in the doctoral committee.
    a. 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.
    b. The requirement that the general nature and scope of the various fields be submitted in written form to the department is also intended to benefit the student by ensuring that expectations are clear, thus enabling students to maintain consistent progress toward the completion date identified at the beginning of the process.
6. If no request for changes has been made by the end of the notification period, the student's program shall be considered approved. The department may approve a student's program of study before the 30 days have elapsed if there is a need for timely action.
7. Significant modifications to a student's program, such as replacement of one field with another, changes in committee members, addition or subtraction of a major research or writing assignment, or modifications to the timetable of more than a semester, shall be accompanied by a new departmental approval process.

F. Scheduling for the General Examination

1. Although the General Examination may be taken all at one time (three or four written field examinations within a period of two weeks or less, followed by an oral examination within one or two weeks), it may also be taken in parts at intervals separated by several weeks or months.

2. In either case the oral portion of the examination is performed at the end, after completion of all field examinations.

3. The General Examination must be completed within one semester of its start, delimited by the first and last days of the term. If the General Examination is not completed within one semester, any field examination taken more than a semester earlier will be repeated.

4. The student will be required to have passed foreign language requirements for two languages before beginning the General Examination. Demonstrated competence in more than two foreign languages may be required in cases where the student's objectives and program of study warrant.

For additional information concerning preparation for the General Examination, see Appendix V.

XIII. Doctoral Dissertation

Presentation of a Ph.D. dissertation prospectus is expected within three months of a doctoral student's successful completion of the General Examination.

The doctoral candidate works closely with the faculty member supervising the dissertation research. 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.

XIV. Annual Evaluation of Graduate Students

The Graduate College requires that each continuing graduate student be given a written evaluation of performance at the end of the academic year. This evaluation is completed only after the end of the Spring semester. A copy of the evaluation statement goes to the Graduate College.

As a preliminary phase of the annual evaluation, each graduate student takes part in a self-evaluation exercise, including discussion of the self-evaluation in conference with the Graduate Advisor and one other department faculty member, chosen by the graduate student. The second faculty member selected for this conference should have some basis for knowledge of the graduate student's work, usually as teacher of a seminar or an advanced course. Ph.D. Candidates should usually select their dissertation advisor as the second conference participant.

Conferences are scheduled during the four-week period immediately following Spring Vacation. Students are asked to provide the two faculty members involved with a self-evaluative statement on their progress in the graduate program, focusing particularly on progress within the preceding year and goals for the coming year, a week before the scheduled conference. If the student holds an appointment as a graduate assistant, the statement should include some evaluation of performance in that capacity. All students – whether currently graduate assistants or not – should make known their requests to be considered for an assistantship appointment at this time.

Appendix I

Additional Information Concerning
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.

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.

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 in the History of Science are encouraged to broaden their understanding of the discipline. 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.

The Comprehensive Examination consists of an oral examination administered by the committee. Members of the committee present questions that survey the history of science. Committee members also consider the student's preparation in the program.

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 history of science. Relatively minor deficiencies may still not disqualify the candidate; serious and extensive deficiencies will result in failure on the examination.

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. Students may not retake the examination a third time.

Appendix II

Dual Degree Program
History of Science and Library and Information Studies

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 Master of Library and Information Studies/Master of Arts in History of Science program is an example of a dual degree program established by a department and the School of Library and Information Studies. Students must be admitted to both degrees before twelve hours are completed in one.

The purpose of the dual degree Master of Library and Information Studies and Master of Arts in the History of Science program is to provide a course of study for those 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.

Students must apply to and be accepted by each department. Dual degree students work with a joint advising committee made up of members of both units. They 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). Language proficiency, usually in French, German, or Latin, is required in the History of Science Department.

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 History of Science Department and/or the School of Library and Information Studies if they wish.

Students must simultaneously apply for graduation for both degrees. Both degrees must be completed before either is awarded.

Master of Arts in the History of Science
Degree Requirements
(Thesis Option: 27 hours; Non-Thesis Option: 29 hours)

Required courses, 24 hours:

HSCI 5970 Seminar in Research, Criticism, & Analysis	6 hours
HSCI 5990 Special Studies/Graduate Survey in History of Science	6 hours
HSCI 5513 Advanced Studies in the History of Ancient and Medieval Science	3 hours
HSCI 5523 Advanced Studies in the History of Renaissance and Early Modern Science	3 hours
HSCI 5533 Advanced Studies in the History of Modern Science	3 hours

Elective Courses:

Student may choose among approved courses outside the department (e.g., History), and department offerings, such as HSCI 5550 and HSCI 5960	3 hours

The American Library Association (ALA) Accredited
Master of Library and Information Studies
Degree Requirements (27 hours)

Required courses, 12 hours:

LIS 5033 Information and Knowledge Society
LIS 5023 Management of Information and Knowledge Organizations
LIS 5043 Organization of Information and Knowledge Resources
LIS 5053 Information Users in the Knowledge Society

Guided electives, 15 hours; at least one course from each of the following categories:

Learning Organizations and Organizational Culture

Prerequisites: LIS 5033 Information and Knowledge Society and LIS 5023 Management of Information and Knowledge Organizations

HR 5033 Seminar in Leadership in Organizations
HR 5073 Creative Problem Solving
LIS 5223 Information Technology Management
LIS 5243 Academic Library Administration
LIS 5253 Community Relations and Advocacy
LIS 5263 Organizational Learning and Learning Organizations
LIS 5273 Public Library Administration
LIS 5283 School Library Media Center Administration
LIS 5293 Special Library and Information Center Administration
ODYN 5113 The Psychology of Leadership

Information Technology

Corequisite: LIS 5033 Information and Knowledge Society

LIS 5533 Introduction to Instructional Technology
LIS 5603 Information Systems and Networks
LIS 5643 Knowledge Representation
LIS 5653 Preservation of Information Materials
LIS 5990 Database Management
LIS 5990 Digital Collections
LIS 5990 Information Security

Content Management

Prerequisites: LIS 5033 Information and Knowledge Society and LIS 5043 Organization of Information and Knowledge Resources

LIS 5403 Cataloging and Classification
LIS 5413 Indexing and Abstracting
LIS 5423 Archives
LIS 5433 Design and Implementation of Web-based Information Services
LIS 5473 Document and Records Management
LIS 5543 Collection Development and Management

Access to Knowledge Structures

Prerequisites: LIS 5033 Information and Knowledge Society and LIS 5053 Information Users in the Knowledge Society

LIS 5503 Information Literacy and Instruction
LIS 5513 Information Sources and Services
LIS 5523 Online Information Retrieval
LIS 5553 Competitive Intelligence

Research, Production, and Evaluation

Prerequisites: LIS 5033 Information and Knowledge Society, LIS 5023 Management of Information and Knowledge Organizations, LIS 5043 Organization of Information and Knowledge Resources, and LIS 5053 Information Users in the Knowledge Society

LIS 5713 Research Methods
LIS 5990 Evaluation of Information Services and Products (5733) (option for non-thesis students)
LIS 5990 Informetrics (5743)

In addition to course requirements, the Graduate College requires all candidates for an advanced degree to complete an end of program assessment. For the MLIS, the School offers three options: the comprehensive examination, the thesis, or the portfolio. For the History of Science degree, the Department requires the thesis (thesis option) or the portfolio and the comprehensive exam (non-thesis option).

History of Science Department
601 Elm Street, Room 625
Norman, Oklahoma 73019-3106
(405) 325-2213
email: suzannemoon@ou.edu

School of Library and Information Studies
401 West Brooks, Room 120
Norman, Oklahoma 73019-6032
(405) 325-3921
e-mail: mryan@ou.edu

Appendix III

Sample Graduate Programs for M.A. and Ph.D.
Assuming 2-Year MA with Master's Thesis

Example 1: student interested in modern life sciences. Major fields: modern life sciences (doctoral), patronage and scientific institutions (second), modern American intellectual history (outside), early modern natural philosophy/the Scientific Revolution (complementary).

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
5970 5990 5523 Language Work	5970 5990 5533 Language Work	5513 5550 Begin Master's Thesis Language Work	5960 5980 Finish Master's Thesis Language Work
Year 3 Fall	**Year 3 Spring**	**Year 4 Fall**	**Year 4 Spring**
5533 Outside Field Course Language Work	5550 Outside Field Course Language Work	5960 5550 Complete Generals	Submit proposal Begin dissertation

In the above example, the student satisfies her 55X3 requirements and other Master's requirements by spring of year 2, satisfies the requirements for the doctoral field with a second 5533 (on history of modern life sciences, say) and a 5960 in fall of year 4 (further reading on biology and society), satisfies the requirements for the second field in history of science with a 5550 in fall year 2 (on patronage, say) and a 5960 in spring of year 2 (on scientific institutions), satisfies the requirements for the outside field with two courses in year 3, and satisfies the requirements for the complementary field by taking another two 5550s and submitting detailed syllabi for a course on the Scientific Revolution and a modern survey. (Alternatively, this student might have taken a second 5523 and a 5550 to satisfy the requirements of the complementary field). Total hours credited towards the MA by end of year 2: 30 (including 3 thesis hours).

Example 2: student interested in early modern natural history. Major fields: early modern natural history (doctoral), scientific illustration (second), Early Modern cultural history, with an emphasis on religion (outside), science in antiquity (complementary)

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
5970 5990 5523 Language Work	5970 5990 5533 Language Work	5513 5550 Begin Master's Thesis Language Work	5960 5980 Finish Master's Thesis Language Work
Year 3 Fall	**Year 3 Spring**	**Year 4 Fall**	**Year 4 Spring**
Outside Field Course 5550 Language Work	5960 5523 Language Work	5550 Outside Field Course Complete Generals	Submit proposal Begin dissertation

This student satisfied his Master's requirements by taking the 55X3s and completing his Master's essay by the end of the second year. He satisfies his doctoral field requirements with a second 5523 (early modern science and religion, say) and a 5960 on early modern natural history. He satisfies his second field requirements with a 5550 on scientific imagery and representation and a 5960 focusing on early modern scientific images. He satisfies his outside field requirements with a pair of reading courses in the history department on early modern cultural history, and he satisfies his complementary field requirements with a second 5513 and a 5550 (perhaps Aristotelian natural philosophy). He also submits detailed syllabi for his own 3013 and for a course on science and religion to satisfy the complementary field requirement.

Appendix IV

Department of the History of Science
Course Descriptions

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.

1133 Science and Popular Culture. Draws on interdisciplinary perspectives to examine the interplay between science and popular culture from the Scientific Revolution to the present. Topics include representations of science, scientists, and nature in popular literature, television, films, and documentaries; the development of zoos and science museums; children and science, and science journalism. (Sp) [IV-WC]

2103 The Origins and Development of Modern Science. Prerequisite: sophomore standing. May be repeated once with change of section. 1. Science and Civilization, 2. Science and Religion in Historical Perspective, 3. Science, Frauds and Fallacies, 4. History of Science and Technology, 5. History of Evolutionary Thought, 6. Science in Its Social Context: 1600 to the Present. (F, Sp, Su)

2213 The Darwinian Revolution. Consideration of social, political and theological issues associated with the development of evolutionary thought in the nineteenth and twentieth century's. Students will learn about both the origins and the reception of Darwinism, the state of natural history before Darwin and the fate of earlier evolutionary hypotheses. Consideration is also given to the social, philosophical, and religious implications that have been taken from Darwinism that endure into our own times, most notably perhaps, in the contemporary debates over genetic engineering and whether evolution should be taught in schools. (Irreg.)

2223 Lives in Science: History of Science Through Biography. Prerequisite: sophomore standing or permission of instructor. A biographical approach to the history of science. Accounts of selected scientific figures' lives are studied from various periods and cultures. Special attention is given to critical analysis and interpretation of scientific biographies, and to differing traditions in biographical treatment of scientists. (Sp) [IV-WC]

2333 Inventing the Modern World. A survey of the history of technology since 1500. The course emphasizes historical contexts and cultural meanings, not technical details, as it explores the key steps in the construction of our modern technological world. Materials include literature and film as well as non-fiction. (F) [IV-WC]

G3013 History of Science to the Age of Newton. Prerequisite: junior standing or permission. 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]

G3023 The History of Science Since the Seventeenth Century. Prerequisite: junior standing or permission. A survey of the historical and intellectual development of modern science. (F, Sp, Su) [IV-WC]

3413 Biomedical Ethics. Prerequisite: Junior standing or permission of instructor. Familiarize students with key concepts and debates in biomedical ethics through an analysis of their history. Consideration of a few of the pressing questions and their histories which may include: The patient/doctor relationship, medical research on humans and animals, reproductive rights and technologies, genetics, medical decisions at the end of life, and the allocation of scarce medical resources. These discussions will provide insight into the relationship between science and society. (Irreg.)

3423 Modern Medicine – A Historical Introduction. Prerequisite: junior standing or permission of instructor. Examines the history of modern medicine in Europe and America. Aims to connect medical ideas and practices to the broader social and cultural contexts in which they were developed. (Irreg.) [IV-WC]

3433 Science, Technology, and Politics: International Perspectives. Prerequisite: junior standing, or permission of instructor. Focuses on interactions among professionals, the public, and the state, with case studies drawn from different national contexts. Topics will vary, but can include such issues as AIDS; genetically-modified organisms; legal testimony; nuclear power; global warming; weapons development; mass transit; cloning; and science and engineering education. (Irreg.) [IV-WC]

3443 Historical Studies of Science in a Religious World. Prerequisite: junior standing or permission; previous history/history of science course recommended. An overview of major events in the intersection of science and religion from the Middle Ages to the present. Detailed look at the historical record and exploration of the background of the people involved, the social and political context, and the reasons why certain issues mattered so much. (Irreg.) [IV-WC]

3453 Science and Civilization in Islam. Prerequisite: junior standing or permission. History of scientific traditions and ideas in Islamic civilization, from the origins of Islam to the early modern period. Emphasis is on the derivation, development and transmission of Islamic science, as well as on the assimilation and influence of science within Islamic culture. (Sp) [IV-NW]

3463 Cold War Science. Prerequisite: junior standing or permission. Science and technology during the Cold War, including strategic weapons and SDI, medical experiments, the space race, science in popular culture, and science and foreign policy. (Irreg.) [IV-WC]

3473 History of Ecology and Environmentalism. Prerequisite: junior standing or permission of instructor. Explores the historical development and interaction of ecology as a profession and a political stance from the eighteenth through the twentieth century. The course centers on the science of ecology, with attention paid to the political ramifications of particular ideas and how they have been incorporated into environmental discussions (conservation, the Dust Bowl era, population control, the DDT controversy, and rainforest deforestation). (Irreg.) [IV-WC]

3483 Technology, Politics, and International Development. Prerequisite: Junior standing or permission of instructor. Explores the interactions between politics and technology that have informed efforts to produce developed industrial societies around the world. Examines the emergence of development thinking and practice in Japan and the colonized world, international development and the techno politics of decolonization, and contemporary issues in technology and development. (Irreg.)

3493 The Cultural History of Information. Prerequisite: junior standing or permission of instructor. An introduction to the history of information technologies and communications media from the printing press to the internet. Topics will include the print revolution, the advent of electronic communications, the growth of broadcast media, the development of the digital computer, and the internet boom. Course materials include novels and films as well as non-fiction. (Irreg.) [IV-WC]

3550 Topics in the History of Science. 1 to 3 hours. Prerequisite: junior standing and permission of instructor. May be repeated with change in content; maximum credit six hours. Topics of special interest in the history of science. (Irreg.)

3813 Science in the Ancient World. Prerequisite: junior standing or permission. An examination of science and scientific inquiry in the Near East and Greece in antiquity. Topics include the origins of ancient science, the transmission and interaction of various scientific traditions, the relation between science and philosophy, the development of a concept of science, and the place of science within the cultures of the period. (Irreg.) [IV-WC]

3823 Science in Medieval Culture. Prerequisite: junior standing or permission. A survey of the historical development of medieval scientific, mathematical, medical, and philosophical thought. (Irreg.) [IV-WC]

3960 Honors Reading. 1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor. The topics will cover materials not usually presented in regular coursework.

3970 Honors Seminar. 1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. The projects covered will vary. The content will deal

with concepts not usually presented in regular coursework.

3980 Honors Research. 1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted honors candidate to work at a special project. (Irreg.)

4990 Independent Study. 1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)

G5513 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.)

G5523 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 ideas and practices in the scientific revolution and the enlightenment, 16^{th}–18^{th} centuries. Includes examination of sources and critical assessment of scholarly interpretations. (Irreg.)

G5533 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 relationships among the sciences, and intersections between scientific and public culture. Includes examination of sources and critical assessment of scholarly interpretations. (Irreg.)

G5550 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.

G5960 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.

G5970 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)

G5980 Research for Master's Thesis. Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)

G5990 Special Studies. 2 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)

G6970 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)

G6980 Research for Doctor's Dissertation. 2 to 16 hours. (F, Sp, Su)

Appendix V

Additional Information Concerning
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 insure 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 section X, above.

(a) **The Role of the Outside Member of the Doctoral Committee.** The department agrees with, and acts in accord with, the Graduate College policy regarding outside members of doctoral committees. The Graduate College requires that committees be composed of five graduate faculty members, at least one of which must be outside the major department. It is expected that the supervisor of the outside doctoral field will satisfy this Graduate College policy as well as 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 section X of the department's Information statement. 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 insure 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 insures 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 in the History of Science 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 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. Deficiencies within parts of the responses may serve either to fail the candidate before the oral examination (if they are especially broad and serious), or focus discussion in the oral examination (if they are relatively minor and tangential).

The same standards and general procedure apply to 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 to 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 VI

Funding Opportunities
Financial Aid

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. The academic-year stipend for a graduate assistantship in 2009-2010 is $15,157. (Graduate assistants who have passed the General Examination for the Ph.D., and are thus Doctoral Candidates, receive half-time stipends of $16,881). In conjunction with the department's responsibility for overseeing the History of Science Society's *Current Bibliography*, two graduate research assistants may be appointed to 12-month half-time positions at an annual stipend of $18,539. In addition, the department anticipates that an assistantship will also be available through its proposal to the Society for the History of Technology to edit *Technology and Culture*. The department is currently able to waive all of the out-of-state portion of tuition for graduate assistants. Partial in-state tuition waiver awards are also allocated annually.

Application Process

Applicants to the graduate program who wish to be considered for the award of an assistantship should so inform the department chairman or graduate admissions coordinator when applying for admission.

Funding Opportunities
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 of the History of Science 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.

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.

Funding Opportunities
DeGolyer Graduate Fellowship in History of Science

The DeGolyer Graduate Fellowship in History of Science was established with an endowment in the name of Everette L. DeGolyer to provide Graduate Travel Fellowships in the Department of the History of Science. Funds will be awarded to graduate students in the department who attend professional meetings to deliver a paper or presentation or who travel to libraries or archives to conduct research for theses or dissertations.

Applicants for these funds must be graduate students in good standing in the Department of the History of Science.

Application Deadline: October 1

Application Procedures

The DeGolyer Fellowship is designed to supplement rather than replace travel funding from other sources. Prior to submitting an application, students should submit applications to other funding sources (e.g., the OU Graduate College Robberson Conference Presentation Travel Grant Program, the OU Graduate College Robberson Research Grant Program, the Neustadt and Puterbaugh Student Research Grant Programs, the Graduate Student Senate Conference/Creative Exhibition Grant and Research Grant Programs, and/or externally-funded travel grant programs). Alumni Fellows are not excluded from consideration, but are expected to use travel support associated with the Alumni Fellowship as a primary source of funding.

A complete application will consist of two copies of:

- The DeGolyer Fellowship application cover sheet,
- All applications submitted to other funding agencies for support of the designated travel and the disposition of those applications,
- A complete budget that shows the anticipated costs of travel and the sources of funding obtained or anticipated.

Applications will be reviewed within two weeks of the deadline.

Selection Criteria

In general, preference will be given to:

- Students whose research is directed toward the completion of a thesis, dissertation or a manuscript to be submitted for publication.
- Students traveling to a conference or meeting to deliver a paper.
- Students demonstrating more extensive pursuit of non-departmental funding.

Funding Opportunities
Andrew W. Mellon Travel Fellowship Program

Through a generous endowment made by the Andrew W. Mellon Foundation to the History of Science Department and the History of Science Collections, the University of Oklahoma announces a travel fellowship program for visitors to make use of its resources for research in the History of Science. The Andrew W. Mellon Travel Fellowship Program is intended to assist scholars at both pre-doctoral and post-doctoral levels.

The program is designed to provide travel expenses and a reasonable per diem to researchers who reside outside the central Oklahoma area, and who have well-defined research projects that can be served by the holdings of the History of Science Collections. Support is available for qualifying projects for periods ranging from two to eight weeks. It is expected that pre-doctoral applicants will be graduate students actively engaged in projects for the M.A. thesis or Ph.D. dissertation that are formally approved at the student's home institution. Although there is no limitation on the subject field of investigation, applicants must demonstrate the utility of materials in the History of Science Collections.

Application Deadline and Procedures

Applicants preparing proposals should contact the Curator or the Assistant to the Curator for information. To preserve the timeliness of travel fellowships, proposals will be evaluated three times each year, with deadlines for submission October 15 (for research conducted January 1 - April 30), February 15 (for research conducted May 1 - August 30) and May 15 (for research conducted September 1 - December 30). On-campus accommodations conveniently located near the Collections can be arranged for fellows.

For information, please contact:

The University of Oklahoma
The Andrew W. Mellon Travel Fellowship Program
Bizzell Library
401 West Brooks, Room 521
Norman, OK 73019-0528
hsci.cas.ou.edu/images/Mellon/Mellon.html
kmagruder@ou.edu
palmerij@ou.edu

Appendix VII

Department of the History of Science
Department Faculty and Their Research Interests

CURRENT FULL-TIME DEPARTMENT FACULTY

Peter Barker, Professor (Ph.D., SUNY Buffalo)

History and historiography of the Scientific Revolution; 19th- and 20th-century physical science; nuclear weapons and nuclear energy; history of psychology; philosophy of science

Recent Selected Publications:

Content adviser for Natalie M. Rosinsky, *The Story of the Atomic Bomb: How It Changed the World.* Mankato, MN: Compass Point Books, 2010.

On the Reality of the Celestial Orbs: The Substance of the Heavens and the Causes of Planetary Motion from Peurbach to Kepler, book in progress.

"The Intelligent Eye: Understanding Illustrations in Early Modern Astronomy Texts." With lead author Kathleen M. Crowther. *Early Science and Medicine*, article in progress.

"The Reality of Peurbach's Orbs." In *Cosmological Continuity*, edited by P. Boner, edited volume in review.

"Process Concepts and Cognitive Obstacles to Change: Perspectives on the History of Science and Science Policy." With lead author Xiang Chen. *Centaurus* 51 (2009), in press.

"*The Hypotyposes orbium coelestium* (Strasbourg, 1568)." In *Nouveau Ciel Nouvelle Terre - La Révolution Copernicienne dans l'Allemagne de la Réforme (1530-1630)*, edited by M. A. Granada and E. Mehl, 85-108. Paris: Les Belles Lettres, 2008.

"Stoic alternatives to Aristotelian natural philosophy: Pena, Rothmann and Brahe." *Revue d'histoire des sciences* 61, no. 2 (2008): 1-22.

"Kepler and Melanchthon on the Biblical arguments against Copernicanism." In *Nature and Scripture in the Abrahamic Religions: Up to 1700*, edited by Jitse M. van der Meer and Scott H. Mandelbrote, vol. 2, 585-604. 2 vols. Brill's Series in Church History, no. 36. Leiden: Brill, 2008.

"Towards a cognitive history of the Copernican revolution." *Organon* 35: 61-72. Reprinted in *The Global and the Local: The History of Science and the Cultural Integration of Europe: Proceedings of the 2nd ICESHS (Cracow, Poland, September 6-9, 2006)*, edited by M. Kokowski, 302-309. Kraków: European Society for the History of Science, 2007.

The Cognitive Structure of Scientific Revolutions. Hanne Andersen, Peter Barker and Xiang Chen (co-authors). Cambridge: Cambridge University Press, 2006.

New Work in Early Modern Science. P. Barker (ed.) *Centaurus* 48, no. 1 (2006).

"The Lutheran Contribution to the Astronomical Revolution." In *Religious Values and the Rise of Science in Europe*, edited by J. Brooke and E. Ihsanoglu, 31-62. Istanbul: Research Centre for Islamic Art History and Culture (IRCICA), 2005.

Kathleen Crowther, Assistant Professor (Ph.D., The Johns Hopkins University)

Early modern science and medicine; body and gender in early modern Europe; science and religion

Recent Selected Publications and Invited Presentations:

Reforming Adam and Eve. Cambridge: Cambridge University Press. (forthcoming).

"Lutherans in the Garden of Eden: The Reform of Adam and Eve." In *'Wading Lambs and Swimming Elephants': The Bible for the Laity and Theologians in the Medieval and Early Modern Era*, edited by August den Hollander and Wim François. Bibliotheca Ephemeridum Theologicarum Lovaniensium, series edited by Peeters in Leuven, in progress.

"The Intelligent Eye: Understanding Illustrations in Early Modern Astronomy Texts." With Peter Barker. *Early Science and Medicine,* article in progress.

"Raising Cain: Vice, Virtue and Social Order in the German Reformation." In a volume on the Seven Deadly Sins, edited by Richard Newhauser and Susan Ridyard, forthcoming.

"Sacred Philosophy, Secular Theology: The Mosaic Physics of Levinus Lemnius (1505-1568) and Francisco Valles (1524-1592)." In *Nature and Scripture in the Abrahamic Religions: Up to 1700*, edited by Jitse M. van der Meer and Scott H. Mandelbrote, vol. 2, 397-428. 2 vols. Brill's Series in Church History, no. 36. Leiden: Brill, 2008.

"From Seven Sins to Lutheran Devils." The Devil in Society in the Pre-Modern World, Centre for Reformation and Renaissance Studies, University of Toronto, October 18, 2008.

"The Anatomy of Eve: Imagining the Maternal Body in 16th-Century Germany." Three Societies Meeting, Oxford, UK, July 5, 2008.

"Wonderful Secrets of Nature: Natural Knowledge and Religious Piety in Reformation Germany." *Isis* 94, no. 2 (June, 2003): 253-273.

"`Be Fruitful and Multiply': Genesis and Generation in Reformation Germany." *Renaissance Quarterly* 55, no. 3 (Autumn, 2002): 904-936.

Piers J. Hale, Assistant Professor (D.Phil., Lancaster University, England)

Social history of modern biology; biomedical and environmental ethics; British socialism, environmentalism and feminism; gender and the body; science and utopia

Recent Selected Publications:

"Debating waste, nature, and justice in nineteenth-century England: Herbert Spencer, Thomas Huxley, and William Morris." In *The World Turned Inside Out: Waste in History and Culture*, edited by John Scanlon and John Clark. Cambridge Scholar Press, forthcoming 2010.

"Evolving Utopia: The Biology of Nowhere." In *William Morris in the Twenty-First Century*, edited by P. Bennett, et al. Oxford: Peter Lang, forthcoming, 2010.

Utopia and the politics of biology, book in progress.

Evolution as Parable: Charles Kingsley and the 'Water Babies'. With John Beatty, book in progress.

Negotiating Boundaries. Edited by Piers J. Hale and Jonathan Smith. Victorian Science and Literature, vol. 1, series edited by Bernard Lightman and Gowan Dawson. London: Pickering & Chatto, edited volume in progress.

"Of Mice and Men: Evolution and the Socialist Utopia. H.G. Wells, William Morris and George Bernard Shaw." *Journal of the History of Biology*. Published online January 29, 2009. DOI: 10.1007/s10739-009-9177-0.

"*Water Babies*: An Evolutionary Fairy Tale." With John Beatty. *Endeavour* 32, no. 4 (2008): 141-146.

"The Search for Purpose in a Post-Darwinian Universe: George Bernard Shaw, 'Creative Evolution', and Shavian Eugenics: 'The Dark Side of the Force.'" *History and Philosophy of the Life Sciences* 28, no. 2 (2006): 191-214.

"Labor and the human relationship with nature: The naturalization of politics in the work of Thomas Henry Huxley, Herbert George Wells, and William Morris." *Journal of the History of Biology* 36, no. 2 (2003): 249-284.

Hunter Heyck, Associate Professor (Ph.D., The Johns Hopkins University)

19th- and 20th-century science; science and social thought; history of technology; information technology and society; technology and the environment.

Recent Selected Publications:

"Defining the Computer: Herbert Simon and the Bureaucratic Mind, Part I," and

"Defining the Computer: Herbert Simon and the Bureaucratic Mind, Part II," both in IEEE *Annals of the History of Computing* 30, no. 2 (April-June 2008): 42-51, 52-63.

"Patrons of the Revolution: Ideals and institutions in postwar behavioral science." *Isis* 97, no. 3 (September 2006): 420-446.

"Building an Interdisciplinary Community: Herbert Simon and the GSIA." *Journal of the History of the Behavioral Sciences* 42, no. 4 (Fall 2006): 311-334.

"Gerard Debreu." In *Encyclopedia of American Lives.* NY: Scribner's, 2006.

"George Kozmetsky." In *Encyclopedia of American Lives*, NY: Scribner's, 2006.

Herbert A. Simon: The Bounds of Reason in Modern America. Baltimore: Johns Hopkins University Press, 2005.

"Think Piece: Mind and Network." *Annals of the History of Computing* 27, no. 3 (July-September 2005): 103-104.

Steven J. Livesey, Professor and Chair of the Department (Ph.D., U.C.L.A.)
Medieval science; history of early scientific methodologies; science in medieval universities

Recent Selected Publications:

A Biographical Database of Commentators on Aristotle and the Sentences. Software application and data set; for information, see http://www.ou.edu/class/med-sci/Commbase.htm. To be published by Brepols, Turnhout.

"*Nisi magnitudines numeri sint:* the *Posterior Analytics* and measuring nature." In *The Reception of the Posterior Analytics in the Middle Ages*, edited by Alfred Storck. Porto Alegre: Linus Editores, forthcoming in 2009.

Entries (184) for *International Encyclopaedia for the Middle Ages-Online* **[**http://www.brepolis.net/info_iema_en.html**]** Brepols: Turnhout, 2004-2009.

"Divine Omnipotence and First Principles: A Late Medieval Argument on the Subalternation of the Science." In *Thinking Impossibilities: The Intellectual Legacy of Amos Funkenstein*, edited by Robert S. Westman and David Biale, 13-33. Toronto: University of Toronto Press, 2008.

"John of Reading," "Richard Swineshead," "William Heytesbury," In *The Continuum encyclopedia of British philosophy*, edited by A. C. Grayling, Andrew Pyle, and Naomi Goulder, 1451-1452, 1680-1681, 3097-3098. 4 volumes. Bristol: Thoemmes Continuum, 2006.

"*Accessus ad Lombardum*: The Secular and the Sacred in Medieval Commentaries on the *Sentences*." *Recherches de philosophie et théologie médiévales* 72 (2005): 153-174.

"James of Venice" (p. 282); "Lombard, Peter" (pp. 315-316); "Quadrivium" (pp. 431-432); "Scholasticism" (pp. 453-455); "Scientia" (pp. 455-458). In *Medieval science, technology, and medicine: an encyclopedia*, edited by Thomas F. Glick, Steven J. Livesey, Faith Wallis. London-New York: Routledge, 2005.

Medieval Science, Technology, and Medicine: An Encyclopaedia. Edited by Thomas F. Glick, Steven J. Livesey, Faith Wallis. London: Routledge, 2005.

Theology and Science in the Fourteenth Century: Three Questions on the Unity and Subalternation of the Sciences from John of Reading's Commentary on the Sentences, edition and critical commentary. Leiden: E. J. Brill, 1989.

Kerry V. Magruder, Curator, History of Science Collections; Assistant Professor (Ph.D., Oklahoma)
17th- and 18th-century theories of the earth; early geology, cosmology, and the development of the historical sciences

Recent Selected Publications and Presentations:

"Jesuit Science after Galileo: The Cosmology of Gabriele Beati." *Centaurus* 51 (2009): 189-212.

"The Idiom of a Six Day Creation and Global Depictions in Theories of the Earth." In *Geology and Religion: Historical Views of an Intense Relationship between Harmony and Hostility*, edited by Martina Kölb-Ebert, 49-66. Geological Society of London Special Publications, no. 310. London: The Geological Society of London, 2009.

"Thomas Burnet, Biblical Idiom, and 17th-Century Theories of the Earth." In *Nature and Scripture in the Abrahamic Religions: Up to 1700*, edited by Jitse M. van der Meer and Scott H. Mandelbrote, vol. 2, 451-490. 2 vols. Brill's Series in Church History, no. 36. Leiden: Brill, 2008.

"Understanding a Contested Print Tradition: Bourguet's Mosaic, Platonic and Aristotelian Theories of the Earth." *The Compass*, accepted for publication; forthcoming with an imprint date of December 2008.

"Global Visions and the Establishment of Theories of the Earth." *Centaurus* 48 (2006): 234-257.

"Stars over Ancient Babylon." A 47-minute DVD, written and produced by Kerry Magruder for the OBU Planetarium in "The Cosmology and Cultures Project" (Oklahoma Baptist University and the American Council of Learned Societies, 2005). Instruction manual at http://hsci.cas.ou.edu/images/mov/Babylon.pdf; available as online video at http://hsci.cas.ou.edu/images/mov/Babylon.mov.

"Copernicus and His *Revolutions*," a 77-minute DVD, written and produced by Kerry Magruder for the OBU Planetarium in "The Cosmology and Cultures Project" (Oklahoma Baptist University and the American Council of Learned Societies, 2005). Instruction manual at http://hsci.cas.ou.edu/images/mov/Copernicus.pdf; available as online video at http://hsci.cas.ou.edu/images/mov/Copernicus.mov.

"Earth, Theories of the," and "Geology," co-authored with Kenneth L. Taylor. In *Europe 1450 to 1789: Encyclopedia of the Early Modern World*, edited by Jonathan Dewald, II: 222–26, and III: 39–42, respectively. 6 vols. New York: Charles Scribner's Sons, 2004.

Suzanne Moon, Assistant Professor; Editor-in-Chief, *Technology and Culture* (2010) (Ph.D., Cornell University)

Technology; 20th-century international development; technology, science and colonialism; technology outside the western world; Southeast Asia; environment

Recent Selected Publications and Invited Presentations:

"The Uses of Portability: Circulating Experts and the Technopolitics of Cold War and Decolonization," coauthored with Donna Mehos. In *The Technopolitical Shape of Cold War Geographies*, edited by Gabrielle Hecht. Cambridge, MA: MIT Press, forthcoming in 2010.

"Justice, Geography, and Steel: Technology and National Identity in Indonesian Industrialization." In "National Identity: The Role of Science and Technology," edited by Carol E. Harrison and Ann Johnson, *Osiris* 24 (2009): 253–277.

Review of Vaclav Smil, *Transforming the Twentieth Century: Technological Innovations and their Consequences*, Oxford: Oxford University Press, 2006, for *The Journal of World History*, forthcoming September 2009.

Review of Michael Adas, *Dominance by Design: Technological Imperatives and America's Civilizing Missions*, for *East Asian Science, Technology, and Society* 2, no. 1 (2008).

"Mohammad Hatta and the Cooperative Movement: Autonomy and Interdependence in Indonesia." Sociotechnical Imaginaries: Cross National Comparisons, Workshop for edited volume, Harvard University Weatherhead Center for International Affairs, November 13-14, 2008.

Technology and Ethical Idealism: A History of Development in the Netherlands East Indies. Leiden: CNWS, 2007.

"The Emergence of Technological Development and the Question of Native Identity in the Netherlands East Indies." *The Journal of Southeast Asian Studies* 36 (2005): 191-206.

Review of Paul Josephson, *Resources under Regimes: Technology, Environment, and the State*, for *Isis* 97, no. 2 (June 2006).

"Development, Technology, and the Unique Economy of the Colony: the Dual Economy Thesis in Netherlands East Indies' Development Policies, c. 1920." In *Science, Tropical*

Medicine, and Empire. Western Europe and the Colonial World Since 1800, edited by Benedikt Stuchtey. Oxford: Oxford University Press, 2005.

"Empirical Knowledge, Colonial Authority, and Native Development: The Controversy over Sugar/Rice Ecology in the Netherlands East Indies, 1905-1914." *Environment and History* 10 (2004): 59-81.

JoAnn Palmeri, Assistant Professor of Bibliography and Librarian of the History of Science Collections; Assistant Professor of the History of Science (Ph.D., University of Oklahoma)

20th-century astronomy and cosmology; science and technology in American popular culture; science and religion

Recent Selected Publications:

"Bringing Cosmos to Culture: Harlow Shapley and the Uses of Cosmic Evolution." In *Cosmos & Culture: Cosmic Evolution in a Cosmic Context*, edited by Steven J. Dick and Mark L. Lupisella. NASP SP, 4802. Washington, D.C.: NASA, 2009.

The Biographical Encyclopedia of Astronomers. Editor-in-chief, Thomas Hockey. Associate editor JoAnn Palmeri. New York: Springer, 2007.

"Science Fiction." In *Genreflecting: A Guide to Popular Reading Interests*, edited by Diana Tixier Herald and Wayne A. Wiegand. Westport, Conn.: Libraries Unlimited, 2006.

"Cosmology," "George Gamow," "Stephen Hawking," "Gene Roddenberry," and "Carl Sagan." In *An Encyclopedia of Science and Literature*, edited by Pamela Gossin. Westport, Conn.: Greenwood Publishing Group, 2002.

"Cosmology, Contemporary." In *History of Astronomy: An Encyclopedia*, edited by John Lankford. New York: Garland, 1997.

Katherine Pandora, Associate Professor (Ph.D., University of California at San Diego)

Science, popular culture, and the public; 19th-/20th-century American science; natural history; history of the social sciences; science and technology studies; gender studies

Recent Selected Publications and Invited Presentations:

"'There was a Child Went Forth Everyday': Portraying Children's Experiential Engagement with the Natural World in Work and Play in the Stories of Samuel Griswold Goodrich and Jacob Abbott." In a forthcoming 2011 volume edited by the American Antiquarian Society.

"The Children's Republic of Science in the Antebellum Literature of Samuel Griswold Goodrich and Jacob Abbott." *Osiris* 24 (2009): 75-98.

"Popular Science in National and Transnational Perspective: Suggestions from the American Context." *Isis* 100 (2009): 346-358.

"Science in the Everyday World: Why Perspectives in the History of Science Matter." With Karen Rader. *Isis* 99 (2008): 350-364.

"Portraying the 'Intimate Scientist' in 20th-century America: The Pushback in Popular Culture Against Scientific Arrogance." UC Berkeley History of Science and Technology Colloquium Series, May 2008.

"Making Sense of Science: Views from within the 'Intellectual Commons' of Popular Culture." Woods Hole Marine Biological Laboratory, Dibner Institute and Arizona State University Summer Seminar Workshop, May 2007

"Diversity and Its Discontents: Scientific Surveys and the Creation of the Twentieth-Century Numeric American." *Reviews in American History* 35 (December 2007): 599-605.

"Redesigning the Engineering Mind: The Revelations of the Arcturus IV Science Fiction Project at mid-century MIT." *Science, Technology & Society Curriculum Newsletter* (Spring 2006): 1-7.

"Knowledge Held in Common: The Tales of Luther Burbank and Science in the American Vernacular." *Isis* 92 (2001): 484-516.

Rienk Vermij, Assistant Professor (Ph.D., University of Utrecht)

Cartesian natural philosophy; Copernicanism; early modern meteorology; Enlightenment science and religion; science in the Netherlands

Recent Selected Publications:

"Putting the earth in heaven. Philips Lansbergen, the early Dutch Copernicans and the mechanization of the world picture." In *Mechanics and cosmology in the medieval and early modern period*, edited by M. Bucciantini and M. Camerota en S. Roux. Biblioteca di Nuncius studi e testi, 67. Firenze: 2007.

"Albertus Leoninus (1543 -1614) and Copernicus's 'third motion' of the earth." *Journal for the History of Astronomy* 37 (2006): 101-109.

"Nature in defence of Scripture. Physico-theology and experimental philosophy in the work of Bernard Nieuwentijt." In *The Book of Nature in Early Modern and Modern History*, edited by K. van Berkel and A. Vanderjagt, 83-96. Leuven: Peeters, 2006.

Kleine geschiedenis van de wetenschap. Amsterdam: Nieuwezijds, 2005; new edition 2007.

Huygens. De mathematisering van de werkelijkheid. Diemen: Veen magazines, 2004; new edition 2007.

"The formation of the Newtonian philosophy: the case of the Amsterdam mathematical amateurs." *British Journal for the History of Science* 36 (2003): 183-200.

The Calvinist Copernicans. The Reception of the New Astronomy in the Dutch Republic, 1575-1750. Amsterdam: Edita KNAW, 2002.

"The Flood and the scientific revolution: Thomas Burnet's system of natural providence." In *Interpretations of the Flood*, edited by F. García Martinez and G. P. Luttikhuizen, 150-166. Leiden: Brill, 1999.

"Science and belief in Dutch history." In *A History of Science in the Netherlands. Survey, themes and reference*, edited by K. van Berkel, A. Van Helden, L. C. Palm, 332-347. Leiden: Brill, 1999.

"Subterranean fire. Changing theories of the earth during the Renaissance." *Early Science and Medicine* 3 (1998): 323-347.

Stephen P. Weldon, Assistant Professor; History of Science Society Bibliographer (Ph.D., Wisconsin)

Science and religion in a modern global perspective; scientific atheism; modern biology and evolution; American intellectual and cultural history; history of bibliography and classification

Recent Selected Publications:

Isis Current Bibliography, vol. 93 (2002) – vol. 99 (2008).

"The Isis Bibliography from Its Origins to the Present Day: One Hundred Years of Evolution of a Classification System." *Circumscribere* 6 (2009): 26-46.

Review of A. Nonimous [John C. Greene], *The Wonderful Adventures of Nat Selleck & Eva Lou Shinn in Sci Fi Land: A Spoof on Evolution and Natural Selection*, for *Isis* 99 (2008): 875-876.

"'La classification des sciences n'a jamais cessé d'évoluer': A Century of Effort at Putting Science in Its Place." In publication of Centenário Simão Mathias: Documentos, Métodos e Identidade da História da Ciência, CESIMA, Pontifícia Universidade Católica de São Paulo, August 29, 2008, in press.

"Totalitarianism, Democracy, and the Science-Religion Dialog during the Second World War." In *God and the Good War*, edited by Philip Kevin Goff. Submitted August 2007; under review.

"American Jews and the Ideology of Modern Science." In *Encyclopedia of American Jewish History*, edited by Stephen H. Norwood and Eunice G. Pollack, vol. 2. Santa Barbara, CA: ABC-CLIO, 2007.

"Humanism and Eugenics: A Case Study of Herman J. Muller." In *Humanism Today*, edited by Howard B. Radest, 139-249. Prometheus, 2007.

"Humanism, Secular, U.S." In *Dictionary of the History of Ideas*, 2004.

"Postmodernism" and "Social Construction." In *Science and Religion: A Historical Introduction*, edited by Gary B. Ferngren. Baltimore: Johns Hopkins, 2002. (Republication of two articles that appeared in 2000. Both contain new introductions.)

"Deism," "Postmodernism," "Secular Humanism," and "Social Construction of Science." In *The History of Science and Religion in the Western Tradition: An Encyclopedia*, edited by Gary B. Ferngren, Edward J. Larson, and Darrel W. Amundsen. New York: Garland, 2000.

ADJUNCT FACULTY MEMBERS

R. Richard Hamerla, Associate Dean, Honors College; Associate Professor, Honors College; Adjunct Associate Professor of the History of Science (Ph.D., Case Western)

History of the physical sciences; 19th-century science; history of chemistry; science in the 19th-century American West

Recent Selected Publications:

An American Scientist on the Research Frontier; Edward Morley, Community, and Radical Ideas in Nineteenth-Century American Science. Dordrecht: Springer Academic Publishing, 2006.

"History of Bioweapons Development and Deployment." In *Biodefense: Principles and Pathogens*, edited by Michael S. Bronze and Ronald A. Greenfield. Wymondham, Norfolk, England: Horizon Science, 2005.

"Edward Williams Morley and the Atomic Weight of Oxygen: The Death of Prout's Hypothesis Revisited." *Annals of Science* 60 (October, 2003): 351-372.

"The Morley-Michelson Experiment?" *Chemical Heritage* (June 2000).

Sarah W. Tracy, Associate Professor, Honors College; Adjunct Associate Professor of the History of Science (Ph.D., Pennsylvania)

History and sociology of medicine; medicine in American culture; gender and medicine; history of the human sciences; history of psychoactive substances; sociology of knowledge; science studies; medical anthropology

Recent Selected Publications:

"Medicalizing Alcoholism One Hundred Years Ago." *Harvard Review of Psychiatry* 15, no. 2 (March/April 2007).

"Alcoholism." In *Social Issues: An Encyclopedia of Controversies, History, and Debates*, edited by M. E. Sharpe, 2006.

"Why Addiction is a Disease." *Christian Networks Journal* (addiction issue) Summer 2005.

Alcoholism in America from Reconstruction to Prohibition. Baltimore: Johns Hopkins University Press, 2005; paperback, 2007.

"Days of Recurring Desire: Inebriety and Alcoholism in Patient Narratives, 1900-1920." *The Society for Historians of the Gilded Age and Progressive Era Newsletter* XV, no. 2 (Fall 2005): 1, 7-9.

Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000. Co-editor with Caroline Jean Acker and contributor. Amherst/Boston: University of Massachusetts Press, 2004.

"Charles Dederich." In *American National Biography*. Supplement One online, www.anb.org, Oxford University Press, 2002.

"Contesting Habitual Drunkenness: State Medical Reform for Iowa's Inebriates, 1902-1920." *The Annals of Iowa* (Summer 2002).

RESIDENT EMERITUS FACULTY

David B. Kitts, David Ross Boyd Professor *Emeritus* of the History of Science and Geology and Geophysics, (Ph.D., Columbia)

History and philosophy of biology; structure of historical knowledge; vertebrate paleontology; geomorphology

Recent Selected Publications:

"The Names of Species: A Reply to Hull." *Systematic Zoology* 33 (1984): 112-114.

"The Complexity of Living Bodies and the Structure of Biological Theories." *Acta Biotheoretica* 32 (1983): 195-205.

"Can Baptism Alone Save a Species?" *Systematic Zoology* 32 (1983): 27-33.

"The Logic of Discovery in Geology." *Earth Science History: Journal of the History of Earth Science Society* 1 (1982): 1-6.

Marilyn B. Ogilvie, Curator and Professor *emerita*, History of Science Collections; Professor *emerita* of the History of Science (Ph.D., Oklahoma)

19th- and 20th-century science; history of women in science; modern biological science

Recent Selected Publications:

Searching the Stars: The Story of Caroline Herschel. Eastbourne. East Sussex: Gardner Books, 2008.

*Marie Curie: A Biography***.** Westport, Conn.: Greenwood Press, 2004.

The Biographical Dictionary of Women in Science. Co-edited with Joy Harvey. New York: Routledge, 2000.

"Obligatory Amateurs. Annie Maunder (1868-1947) and British Women Astronomers at the Dawn of Professional Astronomy." *British Journal for the History of Science* 33 (2000): 67-84.

Kenneth L. Taylor, Professor *emeritus* (Ph.D., Harvard)

History of geology and natural history; 18th-century science

Recent Selected Publications:

"The Establishment of Geohistory." Essay review of Martin J. S. Rudwick, *Bursting the Limits of Time*, and *Worlds Before Adam*. Scheduled for publication in *Isis*, 2009.

"Desmarest's 'Determination of some epochs of nature through volcanic products' (1775/1779)." *Episodes: Journal of International Geoscience* [International Union of Geological Sciences], in series 'Classic Papers in the History of Geology', 32 (2009): 114-124.

The Earth Sciences in the Enlightenment: Studies on the Early Development of Geology. Variorum Collected Studies Series. Aldershot, England/Burlington, VT: Ashgate Publishing, 2008.

"Geological Travellers in Auvergne, 1751–1800." In *Four Centuries of Geological Travel*, edited by Patrick Wyse Jackson, 73–96. Special Publication 287. London: The Geological Society of London, 2007.

"Marivetz, Goussier, and Planet Earth: A Late Enlightenment Geo-Physical Project." *Centaurus* 48 (2006): 258–283.

"Earth, Theories of the," and "Geology," co-authoried with Kerry V. Magruder. In *Europe 1450 to 1789: Encyclopedia of the Early Modern World*, edited by Jonathan Dewald, II: 222–26, and III: 39–42, respectively. 6 vols. New York: Charles Scribner's Sons, 2004.

"Two Ways of Imagining the Earth at the Close of the 18th Century: Descriptive and Theoretical Traditions in Early Geology." In *Abraham Gottlob Werner and the Foundation of the Geological Sciences: Selected Papers of the International Werner Symposium in Freiberg 19th to 24th September 1999*, edited by Helmuth Albrecht and Roland Ladwig,

369-378. *Freiberger Forschungshefte*, vol. D207. Freiberg: Technische Universität Bergakademie Freiberg, 2002. [Second edition, 2003: pp. 426-435.]

"Un commentaire anonyme inédit sur les observations et les idées de William Hamilton (1730-1803) relatives aux phénomènes volcaniques de la région de Naples." *Travaux du Comité Français d'Histoire de la Géologie*, 3ème série, t. 15 (2001): 1-35.

"The Beginnings of a Geological Naturalist: Desmarest, the Printed Word, and Nature." *Earth Sciences History* 20 (2001): 44–61.

"Buffon, Desmarest, and the Ordering of Geological Events in *Époques*." In *The Age of the Earth: from 4004 BC to AD 2002*, edited by C. L. E. Lewis and S. J. Knell, 39-49. Special Publication 190. London: The Geological Society of London, 2001.

"La volcanologie au XVIIIe siècle." *Pour la science* [French version of *Scientific American*] no. 286 (August 2001): 8-10.

Appendix VIII

Department of the History of Science
University and non-University Interdepartmental Faculty

By its very nature, the history of science draws upon disciplines, techniques, and scholarship that go beyond the narrow confines of the field. For this reason, faculty and graduate students frequently have the opportunity to work with a number of non-departmental faculty, both from OU and from outside the University, who have related interests and whose teaching or scholarship contributes to the history of science. These outside scholars, such as those listed below, work closely with students in our program, as either a formal or informal member of Master's or Ph.D. committees,- and participate in the department's colloquia.

UNIVERSITY DEPARTMENT FACULTY

Anthropology
Katherine Hirschfeld
Paul E. Minnis

Art History
Allison Palmer
Kenneth Haltman

Communication
Eric Kramer

Computer Science
Deborah Trytten

English
Catherine Hobbs
Timothy S. Murphy
Su Fang Ng
Ronald Schleifer

Geography
Robert A. Rundstrom

Geology
Bob Rundstrom
Karl Offen

History
David Chappell
Sandie Holguin
Judy Lewis
Roberta Magnusson
Don Pisani
Daniel Snell
Norman Stillman
Jane Wickersham

Honors College
Robert Lifset
Laurel Smith

Modern Languages, Literatures, and Linguistics
Luis Cortest

Philosophy
Zev Trachtenberg

Women's and Gender Studies
Martha Skeeters

FACULTY OUTSIDE THE UNIVERSITY

Pamela Gossin
School of Arts and Humanities
University of Texas at Dallas

John Lynch
Barrett, The Honors College
Arizona State University

Karen Reeds
Independent Scholar

Dennis Sepper
Department of Philosophy
University of Dallas

Edith D. Sylla
Department of History
North Carolina State University

Kathleen Wellman
Department of History
Southern Methodist University

Katherine Tredwell
Independent Scholar

Elizabeth A. Williams
Department of History
Oklahoma State University

FOR FURTHER INFORMATION:

DEPARTMENT OF THE HISTORY OF SCIENCE
THE UNIVERSITY OF OKLAHOMA
GRADUATE ADMISSIONS COORDINATOR
601 ELM, ROOM 625
NORMAN, OK 73019-3106
PHONE: 405-325-2213
TOLL FREE: 1-800-522-0772, EXT. 2213
FAX: 405-325-2363

www.ou.edu/cas/hsci

Cover illustrations: Detail from
Charles Darwin, "The Zoology of the Voyage of H.M.S. Beagle", 1838-1843
***Mammalia,* Parts 2, nos. 1-2; 3, nos. 1, 4; 4, no. 4**
Used with permission of The History of Science Collections,
The University of Oklahoma

Seventh Revised Printing, October 2009