ACADEMIC RULES FOR PHD PROGRAMS

The Doctor of Philosophy degree is conferred in recognition of marked ability and high attainment in a specific branch of learning. The Ph.D. degree is granted by the Trustees of the University of Pennsylvania upon the approval of the Graduate Council of the Faculties and upon satisfaction of all degree requirements, including acceptance of the dissertation by the student’s dissertation committee. Students may enroll in more than one academic Ph.D. program with prior permission of both Schools/programs; only one Ph.D. is earned.

The University’s standards, set forth below, are to be viewed as minimum requirements. The School or the Graduate Group has the right to establish additional requirements and to refuse to examine any student who is not qualified according to its standards. If there are additional program or School requirements, that information must be communicated and available to all students.

I. Academic Requirements

a. Curriculum

Graduate Groups determine the curricular requirements for their programs. The course of study can include a combination of specific required courses, electives, teaching, independent study or laboratory rotations, colloquia, and demonstration through examination of comprehensive knowledge in the major field.

A student who enters the Ph.D. program with a bachelors degree will be expected to spend two to three years taking 3-4 course units a semester before satisfying the Graduate Group’s academic requirements, passing the required examinations and being advanced to candidacy. Graduate Groups may require more extensive preparation through additional work, especially those programs with substantial language requirements.

Students in some programs, such as those in science fields, may begin dissertation-related research before advancing to candidacy. Students who enter with a master’s degree or other transfer credit may satisfy the formal course requirements more quickly. Graduate Groups have flexibility to establish the optimal timetable and requirements for their own students and to respond to the specific academic needs of individual students.

The customary maximum load for a Ph.D. student is four course units each semester; exceptions for a fifth course unit may be made in extraordinary cases upon approval of the graduate dean.

Graduate Groups may establish examination requirements in addition to the University’s standards described below.

i. Transfer Credit

Credit may be transferred toward the Ph.D. from a master’s degree or other work completed in a post-baccalaureate degree program, upon recommendation by the Graduate Group Chair and approval of the graduate dean, reducing full tuition registration by up to two years. No work done as an undergraduate, whether at this institution or at any other, will be counted toward a Ph.D., A.M., or M.S., with the following exception: graduate courses completed by undergraduates as submatriculants in a Graduate Group may be counted toward graduate degree requirements.

ii. Auditors

Students who desire to attend a course without performing the work of the course must first secure the consent of the instructor. They must register in order for the audited course to appear on the transcript; no credit will be received for the audited course. A teaching fellow registered for three course units may register as auditor for one additional course with permission of the Graduate Group Chair.

A student may request that the School graduate office change their status in a course to auditor, provided that the request is endorsed by the chairperson of their Graduate Group and the instructor giving the course, and is submitted to the School graduate office no later than the end of the second week of the term.

b. Evaluations and Examinations

A Qualifications Evaluation of each student is required to be conducted in the first two years. The evaluation is designed by the Graduate Group and may be based on an examination or on a review of a student’s overall academic progress. Satisfaction of this requirement is necessary in order to continue in the graduate program and is recorded in the student’s academic record. The student and the School’s graduate office must be notified of the outcome of the evaluation.

A Candidacy Examination on the major subject area is required. This examination is normally held after the candidate has completed all required courses and may be satisfied by the successful defense of a dissertation proposal. It may be oral, written, or both, at the discretion of the Graduate Group. Feedback will be provided to the student within one month. Satisfactory completion of the Candidacy Examination requirement is recorded in the student’s academic record. Upon successful completion of the Candidacy Examination, the student is advanced to candidacy. Normally, a student should advance to candidacy by the end of the third year. The maximum time limit for a student to be advanced to candidacy is five years, after which time the student will be dropped from the program.

c. Graduate Grades and Academic Standing

The grading system is as follows:

- A, excellent
- B, good
- C, fair
- D, poor but passing; and
- F, failure

At the graduate level, the grade of C, while passing, does not constitute satisfactory performance. Letter grades may be modified by a plus (+) or minus (-) sign at the discretion of the School. The minimum standard for satisfactory work for the Graduate Faculties is a B average in each academic year, but the Graduate Group may set additional requirements that determine advancement; these requirements may require a student to withdraw despite a satisfactory grade average, if the quality of the student’s work is not at a level that predicts successful dissertation research.

The mark of S is used to indicate “satisfactory progress.” The mark of U is used to indicate “unsatisfactory progress.” The mark of I is used to designate “incomplete.” Students who fail to complete a course and do not withdraw or change their status to auditor within the prescribed period shall receive at the instructor’s discretion either a grade of I (incomplete) or F (failure). It is expected, in general, that a student shall
complete the work of a course during the term in which that course is taken. The instructor may permit an extension of time up to one year for the completion of the course. In such cases, any course which is still incomplete after one calendar year from its official ending must remain as “incomplete” on the student’s record and shall not be credited toward a degree.

**d. Dissertation**

All PhD students are required to write and deposit a dissertation consisting of original research.

**i. Format and Content of the Dissertation**

The dissertation is, essentially, a manuscript. In some fields, the dissertation may consist of articles published by the student during the course of the Ph.D. program, accompanied by a narrative explaining the context and significance of the collected works. Essential supplementary mixed media files, such as photographs, audio recordings, musical compositions, and film may be submitted to augment the written text. Dissertations based on joint work with other researchers are allowed, provided that, in such cases, a unique and separate dissertation is presented by each degree candidate. The candidate must include a concise account of their contribution to the whole work. Authorship of an entire dissertation by more than one degree candidate is not allowed.

**ii. Dissertation Committee Composition & Meetings**

Upon advancement to candidacy, each student has a dissertation committee consisting of at least three faculty members (including at least two members of the Graduate Group). At least half of the members of the dissertation committee must be members of the Graduate Group at the time of appointment to the committee. Faculty who are not members of the Graduate Group may serve as committee members only with the written approval of the Graduate Group. The authority to approve membership on committees may be delegated to the Graduate Group Chair. A Graduate Group may establish additional requirements, such as a requirement for outside reviewers on the dissertation committee.

The Chair of the Dissertation Committee must be a member of the Standing Faculty in the Graduate Group. If the Chair of a Dissertation Committee leaves the Standing Faculty before the dissertation is completed, then a new person from the Standing Faculty in the Graduate Group must be appointed as Chair. The Dissertation Committee Chair is responsible for convening committee meetings, advising the student on Graduate Group and University expectations, and assuring the Graduate Group Chair that the group’s requirements have been met.

The Dissertation Supervisor is the person primarily responsible for overseeing the student’s dissertation research. A student may have both a Dissertation Supervisor and a Dissertation Co-Supervisor, or two Dissertation Co-Supervisors, if that responsibility is shared equally. The student and Dissertation Supervisor meet regularly (at least twice a year and, in many cases, much more frequently) to establish expectations and review the progress of the student’s research. The Dissertation Supervisor may serve as Chair of the Dissertation Committee, but is not required to do so.

Dissertation Supervisors, and Dissertation Co-Supervisors, must be members of the Standing Faculty at Penn, with special approved exceptions. A member of the Associated Faculty (such as Research Faculty or Adjunct Faculty) or a member of the Emeritus Faculty may be permitted to serve as a Dissertation Supervisor with prior approval of the Vice Provost for Education on a case by case basis. The Graduate Group Chair must petition the Vice Provost for Education, in advance, for an exception. In such cases, the Dissertation Supervisor is not permitted to serve as the Chair of the Dissertation Committee and a member of the Standing Faculty in the Graduate Group must be appointed as the Dissertation Committee Chair.

The dissertation committee meets at least once annually with the student to review the student’s progress. The student prepares an Annual Dissertation Progress Report and the committee gives timely feedback (within one month) and confirms whether progress is satisfactory. A copy of the signed progress report is submitted to the Dissertation Supervisor and Graduate Group Chair and is documented by the School in the student’s academic record. The committee feedback contributes to the determination of a mark of S (satisfactory progress) or U (unsatisfactory progress) to the student’s dissertation status course (see section I.d.iii.).

Students and Graduate Groups are encouraged to review Guidelines for Advising & Mentoring PhD Students (https://catalog.upenn.edu/graduate/academic-resources/advising-mentoring/).

**iii. Dissertation Status**

All students on dissertation status are registered for year-long dissertation status courses. These courses will receive a temporary mark of PR in the fall to indicate the course is in progress and a permanent mark of S (satisfactory progress) or U (unsatisfactory) at the end of the spring semester (or fall semester if that is the student’s last enrolled term). The mark will be a reflection of the evaluation by the Graduate Group of the student’s progress based, in part, on the student’s Annual Progress Report.

**iv. Public Presentation & Defense**

A public, oral presentation of the dissertation is required. The presentation may take the form of a workshop based on a complete draft of the dissertation, or it may be based on the final version of the dissertation, depending on the rules of the Graduate Group. In either case, the presentation must either include or be followed by an oral examination (defense). This examination may be private if specified by the rules of the Graduate Group.

At least three members of the dissertation committee must participate in the defense. Defenses may be conducted in-person, virtually via video conferencing (e.g., Zoom, Skype, Microsoft Teams), or in a hybrid format with some individuals participating remotely and some in-person.

**v. Acceptance of the Dissertation**

By the prescribed deadline on the Graduation Calendar (https://provost.upenn.edu/graduate-degree-calendar/), the Graduate Group shall report to the Office of the Provost the acceptance of the dissertation and its suitability for publication. The report shall include the date of the oral presentation or the date of the meeting of the dissertation committee, the names and roles of the dissertation committee members, and whether they individually approve the dissertation. The student and the Dissertation Supervisor will also have access to a copy of the report.

**vi. Publication & Submission**

Dissertations must follow the format prescribed in the Dissertation Formatting Guide. Candidates also should familiarize themselves with any special requirements imposed by the Graduate Groups under which they are working.

All Penn Ph.D. dissertations are submitted electronically as of Spring 2020; hardcopies are not required. Since Fall 2015, Penn
requires open access publication of dissertations in the institutional repository, ScholarlyCommons (https://repository.upenn.edu/). All Ph.D. dissertations must be submitted in digital format through ProQuest's ETD Administrator module.

Students should discuss with their advisor whether a delay in publication (embargo) is necessary or advisable. Students may apply for delay in publication by ProQuest and in ScholarlyCommons (https://repository.upenn.edu/) separately; the maximum allowed embargo period in ScholarlyCommons (https://repository.upenn.edu/) is a total of nine years from the graduation date. An initial three-year embargo period in ScholarlyCommons (https://repository.upenn.edu/) is approved automatically. A request for a delay of an additional three years requires approval by the Graduate Group Chair. In the event that a further delay is needed, the approval of the Graduate Group Chair and the School's Graduate Dean is required.


A dissertation submitted as part of the requirements for a degree is the property of the University. Any copyrights or patent rights arising therefrom shall be governed by the policies of the University of Pennsylvania, including the Patent and Tangible Research Property Policies and Procedures and the Policy Relating to Copyrights and Commitment of Effort for Faculty. Information about securing copyright for a dissertation and using copyrighted or previously published materials in a dissertation is available online (https://provost.upenn.edu/dissertation-copyright/).

II. Time Limits

As of 2010-2011, the University’s maximum time limit for completion of a PhD program is ten years after matriculation; some Graduate Groups and Schools have established more stringent criteria. Graduate students who have been dropped after ten years may petition the Graduate Group to return as a student for a maximum of one year in order to achieve recertification and defend the dissertation. (See sections below on Petition for Readmission and Recertification.)

Combined degree students (e.g., M.D.-Ph.D.s) typically enroll full-time in the professional program during the first two years of study and do not begin full time Ph.D. course work until the third year; for these students, the ten-year time limit begins at the start of full-time Ph.D. study.

a. Petition for Readmission After Reaching the Maximum Time To Degree

A student who has been dropped after reaching the maximum time limit may petition the Graduate Group to return as a student for a maximum of one further year in order to achieve recertification and complete and defend the dissertation. Faculty members have no obligation to continue working with a student who has been dropped, nor is there any presumption that a Graduate Group will respond favorably to a petition for re-admission. If a Graduate Group wishes to recommend re-admission, it must present to the Graduate Dean a list of faculty members willing to serve as a dissertation committee and a detailed, realistic plan of how the student will, within one year of enrollment, achieve recertification, pass the Candidacy Examination, and submit the final copy of the dissertation. If re-admission is approved by the Graduate Dean, the student must pay Reduced Tuition for two semesters, unless all requirements are completed within one semester. Students may petition for readmission at the time they are dropped from the program, or at a later date. The student should be fully ready and committed to completing within a one-year timeframe; enrollment will not be extended beyond that final year, and no further petition for readmission will be considered by the University.

b. Re-certification

If the Graduate Group and Graduate Dean approve the petition for readmission, the student must immediately be recertified. In order to ensure that a student’s dissertation research remains at the frontier of current research in the field, the student must retake and pass the Candidacy Examination, or satisfy alternative recertification criteria designed by their Graduate Group and approved by the Graduate Council of the Faculties. The new deadline for completion of all requirements for the Ph.D., including recertification, shall be within one year.

i. Approved Individual Graduate Group Re-certification Policies

The following policies have been approved by the Graduate Council of the Faculties and supplement the University’s Recertification Policy.

Anthropology (Revised July 2010)

Students who have not completed the dissertation within the University’s maximum time limit may apply for readmission, but must then complete all requirements for the Ph.D., including deposit of the dissertation, within one year. In order to reapply, the student should have a complete draft of their dissertation that has been approved by their advisor. At that point, the student should meet with the Graduate Group Chair, who will then bring the student’s case before the Graduate Group for a vote. Should the vote support the student’s readmission, the Graduate Group Chair will present the case to the Graduate Dean, outlining the student’s outstanding requirements and a timetable for completing them. In some cases, the student may be asked to repeat the Candidacy Examination in order to demonstrate a satisfactory grasp of current scholarship in the field. The Graduate Dean then reviews the case, and if it is approved, writes a letter formally spelling out the arrangements, and the tuition and fees that the student will be expected to pay.

Communication (Revised June 2010)

Students who have not completed all requirements for the Ph.D., including the deposit of the dissertation, within ten years of matriculating must submit all written work they have completed on their dissertation to a committee comprised of a minimum of three members of the Communications standing faculty. This committee may be the student’s dissertation committee or, if that committee is not intact, an Ad Hoc committee appointed by the Committee on Graduate Studies. The committee members will evaluate this material (they may, at their discretion, meet with the student), and take one of the following actions:

1. require the student to retake all or part of the Comprehensive Examination (if the committee believes there is a question about the continued currency of the student’s research);
2. impose other conditions such as the committee believes will ensure the currency and timely completion of the student’s work toward the Ph.D.;
3. recommend to the Committee on Graduate Studies that the student be disqualified from continued doctoral candidacy (if the committee believes the written work provides insufficient evidence of progress toward the completion of an adequate doctoral dissertation).

In the case of (1) or (2), above, the committee will report its decisions and actions to the Committee on Graduate Studies. Upon satisfactory re-certification, the student must complete all requirements for the Ph.D., including deposit of the dissertation, within one year.
Comparative Literature (Revised July 2010)
Students who have not completed all requirements for the Ph.D., including the deposit of the dissertation, within the University's maximum time limit must retake the dissertation prospectus exam (also known as the "final exam"). This exam will involve submitting an updated version of the prospectus to the student's committee; the committee must approve the new prospectus in order for the student to satisfy the recertification requirement. Upon satisfactory re-certification, the student must complete all requirements for the Ph.D., including deposit of the dissertation, within one year.

Economics (Revised July 2010)
Students who have not completed all requirements for the Ph.D., including the deposit of the dissertation, within the University's maximum time limit must retake the Dissertation Proposal Defense Exam; and write and submit a review of the most recent literature on the dissertation topic, to be formally approved by the dissertation committee (which also conducts the proposal defense). Upon satisfactory re-certification, the student must complete all requirements for the Ph.D., including deposit of the dissertation, within one year.

Education (Revised July 2010)
Ph.D. students in the Graduate Group in Education who have not completed all their degree requirements within the University's maximum time limit must submit a progress report and plan to their dissertation committee. The purpose of this report/plan is:

- to document which degree requirements the student has completed;
- to provide a rationale for why they have been unable to complete all the requirements within the time limit and to provide a timeline/schedule of steps for completion of the remaining requirements within a one-year extension.

The student's chair and a majority of their dissertation committee must review and approve the progress report and plan. The student must then submit the progress report and plan to the Committee on Degrees for their review and approval. The student must re-take a preliminary exam that documents familiarity with the current status of their field.

Hispanic Studies (Revised October 2017)
Students who have not completed all requirements for the Ph.D., including the deposit of the dissertation, within the University's maximum time limit must 1) submit an updated version of the prospectus and 2) submit a review of the most recent literature on the dissertation topic. The student's committee must approve the new prospectus and review of literature in order for the student to satisfy the recertification requirement. Upon satisfactory re-certification, the student must complete all requirements for the Ph.D., including deposit of the dissertation, within one year.

Linguistics (Revised July 2010)
A student can be re-certified by submitting a revised dissertation proposal reflecting current scholarship on the topic and then undergoing a new dissertation proposal defense, following the usual procedures for the Graduate Group. Upon satisfactory re-certification, the student must complete all requirements for the Ph.D., including deposit of the dissertation, within one year or less as determined by the Graduate Group.

Near Eastern Languages and Civilizations (Revised October 2010)
For Near Eastern Languages and Civilizations, students who apply to be re-enrolled in the Ph.D. program must pass a recertification examination demonstrating satisfactory grasp of current scholarship in their field. Students who have not completed all requirements for the Ph.D., including deposit of the dissertation, within the University's maximum time limit must submit to their full dissertation committee (i.e., the supervisor and two readers) a copy of all written work they have completed on their dissertation. The committee members will evaluate this material, and report to the whole group, recommending that one of the following actions be taken: (1) The student is required to retake the qualifying examination (if the committee believes there is a question about the continued currency of the student's research); or (2) The student is disqualified from continued doctoral candidacy (if the committee believes the written work provides insufficient evidence of progress toward the completion of an adequate doctoral dissertation). Other conditions are imposed on the student's dissertation research, such as the committee believes will ensure the currency and timely completion of the student's work toward the Ph.D. within one year of recertification.

Social Welfare (Revised July 2010)
Ph.D. students who have not completed all their degree requirements within the University's maximum time limit may apply for recertification. The standards for granting an extension are:

- There is a full committee working with a student on a dissertation;
- the student's dissertation work represents an extension of preliminary degree work and is conducted in constant consultation with the Dissertation Chair and committee;
- a plan for completion within one year is realistic, particularly in relation to the student's prior diligence in completing work;
- the Dissertation Committee Chair supports the student's plan for completion of the dissertation.

An application for an extension consists of the following steps: The student meets with the Dissertation Chair about an extension and the Chair calls a meeting of the full dissertation committee. The dissertation committee hears a student presentation detailing work thus far on the dissertation and a plan for completion within one year. In addition to fielding questions about the dissertation work and the feasibility of the completion plan, the student may also be orally examined on the broader social welfare context of the dissertation work, to demonstrate currency in the field. The presentation is given in a closed meeting to dissertation committee members and steering committee members. The dissertation committee makes a recommendation to the doctoral program director on whether or not the student should be re-certified.

Upon receiving the recommendation of the dissertation committee, the doctoral program director makes the final decision about whether or not the extension is granted. The doctoral program director will inform the student of a decision. Decisions to re-certify will be relayed to the University administration by the program director.

III. Tuition
Beginning in fall 2008, Ph.D. students will be charged full tuition until they have completed five years of full-time study or the equivalent of approximately 30 course units. The time may be as brief as three years if
a student enters with credits from a post-baccalaureate degree program or successfully completes the Ph.D. in fewer than five years.

If the student has not earned the Ph.D. degree by the end of five years, the student will be charged reduced tuition until the degree is awarded, or for a maximum of five additional years. Continuous enrollment is required through year ten (or until graduation), with an exception for approved leave. After a maximum of five years at reduced tuition, the student ceases to be enrolled. With permission and re-certification from the Graduate Group, a student may re-enroll for a final year in order to defend and deposit the dissertation. Such a student must pay reduced rate tuition for a final two semesters, unless all requirements are completed within one semester.

A student engaged in research overseas may be registered for Dissertation Abroad. Full tuition is charged to students in years 1-5, reduced tuition to students in years 6-10; a reduced general fee is charged for students on Dissertation Research Abroad regardless of their year.

IV. Continuous Registration/Leaves of Absence

Continuous registration as a graduate student is required unless a formal leave of absence (http://catalog.upenn.edu/pennbook/phdstudentleaveofabsence/) is granted by the Graduate Dean of the student’s School; see the PhD Student Leave of Absence Policy (https://catalog.upenn.edu/pennbook/phdstudentleaveofabsence/). A leave of absence will be granted for military duty, medical reasons, or family leave; this leave is typically for up to one year and “stops the clock” on time to completion. Personal leave for other reasons may be granted for up to one year with the approval of the Graduate Dean, but it does not automatically change the time limit. Leave should not be granted for the purpose of evading tuition charges. Additional requirements for return may be imposed by the Graduate Dean. No language or other degree examinations may be taken while a student is on leave of absence. A student without an approved leave of absence who fails to register each semester will be considered to have withdrawn from candidacy for the degree; approval by the Graduate Dean and recertification are required for reinstatement.

Dissertation registration takes place in the fall and spring semesters. Dissertation students who are candidates for August degree remain full-time students through August 31st without summer registration.

V. Change of a Graduate Group

A student who wishes to change their Graduate Group must submit an application for admission to the new Graduate Group.

VI. Research Abroad

A student who will conduct dissertation research abroad for the semester registers for Dissertation Research Abroad status. Full tuition is charged to students in years 1-5, reduced tuition to students in years 6-10; a reduced general fee is charged for students on Dissertation Research Abroad regardless of their year.

VII. Extramural Research

If graduate credit is sought for research work pursued at laboratories not officially a part of the University of Pennsylvania (for example, where the investigator is not a member of the Graduate Group), the student must obtain prior permission from the Graduate Group Chair. University policies regarding intellectual property apply in the case of research conducted in extramural settings.

VIII. Institutional Courtesy/Exchange Programs

The Exchange Scholar Program allows University of Pennsylvania Ph.D. students to apply to study for a semester or academic year at one of ten other participating institutions:

- Brown University,
- Columbia University,
- Cornell University,
- Harvard University,
- Massachusetts Institute of Technology,
- Princeton University,
- Stanford University,
- University of California-Berkeley,
- University of Chicago, and
- Yale University.

Through cooperative arrangements with Bryn Mawr College, Haverford College, and Swarthmore College, University of Pennsylvania students may, upon presentation of the proper credentials and with the permission of the instructor concerned, enroll for courses in these institutions. The University of Pennsylvania will accept toward a master’s or Ph.D. degree up to the equivalent of three course units for work completed under this arrangement.

Through a cooperative arrangement between The Annenberg School for Communication and Johns Hopkins University, students selected as exchange scholars from the Annenberg School for Communication may count up to one academic year of study at John Hopkins (taken while registered at Penn), subject to the approval of the Graduate Group, toward the Ph.D. degree at the University of Pennsylvania.

Ph.D. and research master’s students enrolled in Anthropology or History of Art may, upon approval of their Graduate Group and the instructor, enroll for a maximum of two courses in the Department of Art Conservation at the University of Delaware. The University of Pennsylvania will accept credits completed under this agreement for a master’s or Ph.D. degree.

Ph.D. students enrolled in Ancient History, Classical Studies, Religious Studies, Germanic Languages, and History may, upon approval of their Graduate Group and the instructor at the host institution, enroll for a maximum of four courses for graduate credit at the Lutheran Theological Seminary at Philadelphia.

Ph.D. students enrolled for at least one full academic year in the Graduate Groups in Ancient History, Classical Studies, Art and Archaeology of the Mediterranean World, History of Art, Religious Studies, Germanic Languages, Political Science, or History may, subject to the approval of their Graduate Group and the instructor, enroll for a maximum of four courses at the Jewish Theological Seminary.

Each year, up to two English Ph.D. students (one in film and one in poetics) may, upon approval of the Graduate Group and the instructor at the host institution, take one course each offered by Temple University’s Department of Film and Media Arts and in English.
Under the terms of the Ph.D. Student Exchange Program with Rutgers University, Ph.D. students in all fields may take up to four courses at Rutgers University upon approval of their Graduate Group chair.

Details regarding the institutional exchange agreements are available from the Office of the Vice Provost for Education.

IX. Regarding Tutoring Students for Compensation

Many PhD programs have an academic requirement that students teach for one or more semesters. Teaching assistantships and teaching fellowships are done under the supervision of the faculty instructor. The Center for Teaching and Learning is a valuable resource for all graduate students interested in improving their professionalism as teachers – even those who do not have the opportunity to serve as a TA.

A Teaching Assistant (or Teaching Fellow) shall not be allowed to tutor for compensation any student that they are grading or have influence in assessing.

(Source: Almanac, July 5, 2022 (https://almanac.upenn.edu/articles/of-record-academic-rules-for-phd-programs/))