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## **Yale Graduate Program in Translational Biomedicine**

https://medicine.yale.edu/ptb/

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# **University Offices**

#### Yale Graduate School

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Physiology Graduate			
Registrar			

## **Fields of Study**

Cancer Biology: cancer cell growth control, genome integrity, head and neck cancer, immune checkpoint therapy, kidney cancer, leukemogenesis, metastasis, radiotherapy.

Cell Biology: cytoskeleton, nuclear structure and dynamics, protein glycosylation, cilia.

Cell Signaling: kinases, phosphatases, growth signaling.

Computational Biology: genetic basis of disease, personalized medicine, statistical genetics.

Diagnostics and therapeutics: engineered biologics, cancer diagnostics.

Epithelial cell biology: epithelial patterning, skin development and disease.

Immunology: innate and adaptive immunity, autoimmune disease, immunotherapy, systems biology.

Genetics: disease etiology, rare diseases, birth defects, small RNA, epigenetics.

Lung function: cystic fibrosis, lung disease, idiopathic lung fibrosis.

Maternal-Fetal Medicine:

Metabolism: signaling and systems biology, diabetes.

Neuroscience: pathogenesis of brain disease, neurogenomics, genetic basis of behavioral disorders.

Organ homeostasis and injury: pancreatitis, kidney injury, macular degeneration, skin diseases including rare genetic conditions and scleroderma, vascular disease, osteoporosis, nonalcoholic fatty liver disease.

Physiology: kidney structure and function, polycystic kidney disease, kidney transplant.

#### **Admissions Requirements**

Students seeking admission into the PhD program in Translational Biomedicine (PTB) apply to the Translational, Molecular Medicine, Pharmacology, and Physiology (TMMPP) track within the interdepartmental graduate program in Biological and Biomedical Sciences (BBS), https://medicine.yale.edu/bbs/molmed/.

In addition to meeting general BBS requirements, applicants should have a strong background in biological, chemical, and/or physical sciences. For example, an undergraduate major/degree in biology, biochemistry, physiology, genetics, chemistry, physics, mathematics, engineering, or computer science could be appropriate. Courses in biology, biochemistry, organic and physical chemistry, and mathematics through elementary calculus, are strongly recommended. The Graduate Record Examination (GRE) General Test is neither required nor is it accepted as part of the application.

For more information regarding general BBS entrance requirements, please view the BBS Admission

Requirements.

## Special Requirements for the Ph.D. Degree

The primary mission of the PTB is to prepare the next generation of translational scientists to be forward-thinking leaders in academic research, medicine, education, industry and society. To achieve this mission, the PTB leverages its interdepartmental structure to break down silos between disciplines and to foster a collaborative community comprised of laboratories from across all the departments at the Yale School of Medicine. The PTB program emphasizes a flexible curriculum, personalized professional development, and a supportive environment in which all participants can reach their full potential.

The first 3 to 4 terms of graduate study are spent in formal course work, independent reading, laboratory rotations and early thesis work. Each student's program of study is designed in consultation with the TMMPP Track Director during the first year and with the PTB Directors of Graduate Studies once the student affiliates with the PTB, typically in the spring of the first year of study and/or fall of the second year of study. The goal is to provide both flexibility, rigor and breadth while ensuring that students are well prepared to meet the PTB course requirements and to have a strong foundation for their thesis research. Students also participate in at least three laboratory rotations during the first two terms.

PTB coursework will include at least five graduate-level courses that will typically be taken over the first four terms. Students must meet the Graduate School requirement of a grade of Honors in 2 courses, if necessary taking additional courses to fulfill this requirement. The Graduate School requires this requirement be met by the end of the second year.

The year-long graduate seminar course in the TMMPP Track (PTB629a, PTB630b) is required. PTB students are expected to take at least one of the following: PTB550a, PTB690a and/or PTB504a (offered in the fall). Our core course, PTB604b, is offered in the spring and is required. PTB students are also required to take one course in biostatistics (see more below on the range of options). In the second year PTB students are required to take 4 modules (1 year) of the Mentored Clinical Experience (MCE) and the PTB Grant Writing Course, which is taken in the Spring of the second year from January through April.

A qualifying examination is given during the second year of study and consists of a written research proposal based on the proposed thesis project followed by an oral exam. Within one year after a successful qualifying exam the student schedules the first thesis committee meeting and provides an updated summary of the thesis project (in the form of a revised Specific Aims page and an NIH-style "Introduction" to the revised Aims). At this meeting the student is considered for advancement to candidacy, which must occur prior to the end of Year 3. In addition to all other requirements, students must successfully complete the Responsible Conduct in Research course (PTB650/PHAR 580/C&MP 650/PATH 660) prior to the end of their first year of study. In their fourth year of study, all students must successfully complete B&BS 503, the RCR Refresher for Senior BBS Students.

## M.D./Ph.D. Students

M.D./Ph.D. students who affiliate with the PhD program in Translational Biomedicine follow a different course than other incoming graduate students, resulting in some modifications of the academic requirements for the Ph.D. portion of the M.D./Ph.D. degree. Typically, one or more research rotations are done during the first two years of medical school (in many cases, several rotations are done during the summer between Years 1 and Year 2). No set number of research rotations is required. M.D./Ph.D. students officially affiliate with the PhD program in Translational Biomedicine after selecting a thesis adviser and consulting with the Director(s) of Graduate Studies (DGS). M.D./Ph.D. students interested in affiliating with the PTB are encouraged to consult with the DGS as early as possible to determine an appropriate set of courses tailored to the student's background and interests.

The courses, rotations, and teaching requirements for M.D./Ph.D. students entering the PTB (see below) may be modified from the normal requirements for Ph.D. students with permission of the DGS. Although five graduate-level courses are still required, some medical school courses are recognized. M.D./Ph.D. students must also meet the Graduate School requirement of a grade of Honors in two courses, if necessary taking additional courses beyond the five required in the department to fulfill this requirement. Students must also maintain an average grade of High Pass in all courses. M.D./Ph.D students are not required to take PTB604b or the MCE course. In addition, only one term of teaching is required.

M.D./Ph.D. students will be admitted to candidacy once they have completed their course work, obtained two Honors grades, passed their qualifying exam, and had their dissertation prospectus accepted by their thesis committee.

## **Master's Degrees**

**M.Phil.** See Degree Requirements under <u>Policies and Regulations</u>.

**M.S.** Students are not admitted for this degree. They may receive this recognition if they leave Yale without completing the qualifying exam but have satisfied the course requirements as described above, as well as the Graduate School's Honors requirement. Students who are eligible for (or who have already received) the M.Phil. will not be awarded the M.S.

#### Courses

PHAR 504a / PTB 504a, Molecular Mechanisms of Drug Actions

Elias Lolis

This course covers the molecular mechanisms of therapeutics, which are presented in a conceptual framework to increase understanding but decrease memorization. Topics include (but are not limited to) receptor affinity, efficacy, multiple equilibria, pharmacokinetics, and toxicity; enzyme kinetics and inhibition, drug discovery and design; molecular basis of antimicrobial therapy, cardiology drugs, anticancer and antiviral therapies; and therapeutics for inflammatory disorders, asthma, and allergy.

## PHAR 550a / C&MP 550a / ENAS 550a / MCDB 550a / PTB 550a, Physiological Systems

Stuart Campbell

The course develops a foundation in human physiology by examining the homeostasis of vital parameters within the body, and the biophysical properties of cells, tissues, and organs. Basic concepts in cell and membrane physiology are synthesized through exploring the function of skeletal, smooth, and cardiac muscle. The physical basis of blood flow, mechanisms of vascular exchange, cardiac performance, and regulation of overall circulatory function are discussed. Respiratory physiology explores the mechanics of ventilation, gas diffusion, and acid-base balance. Renal physiology examines the formation and composition of urine and the regulation of electrolyte, fluid, and acid-base balance. Organs of the digestive system are discussed from the perspective of substrate metabolism and energy balance. Hormonal regulation is applied to metabolic control and to calcium, water, and electrolyte balance. The biology of nerve cells is addressed with emphasis on synaptic transmission and simple neuronal circuits within the central nervous system. The special senses are considered in the framework of sensory transduction. Weekly discussion sections provide a forum for in-depth exploration of topics. Graduate students evaluate research findings through literature review and weekly meetings with the instructor.

#### PATH 690a / PTB690a, Molecular Mechanisms of Disease

Demetrios Braddock and Carlos Fernandez-Hernando

This course covers aspects of the fundamental molecular and cellular mechanisms underlying various human diseases. Many of the disorders discussed represent major forms of infectious, degenerative, vascular, neoplastic, and inflammatory disease. Additionally, certain rarer diseases that illustrate good models for investigation and/or application of basic biologic principles are covered in the course. The objective is to highlight advances in experimental and molecular medicine as they relate to understanding the pathogenesis of disease and the formulation of therapies.

#### PTB629a / PTB630b, Topics in Translational Molecular Medicine, Pharmacology and Physiology

PTB coordinator: Christopher Bunick

This course, for all TMMPP track students, is led by track faculty who assign papers from their own group and field for a weekly discussion. Students rotate through taking responsibility for leading the weekly discussion while all students produce a Specific Aims page each week that builds on the assigned literature.

#### CBIO 604b / PTB 604b, Physiologic Function and Cellular Structure of Organ Systems

Agnes Vignery and Richard Kibbey

This course is an introduction to the organization and function of cells within complex multicellular systems as encountered in the human body. You will cover major tissues and organs as well as the cardiovascular, immune, and nervous systems, with special emphasis on the molecular and cellular bases of developmental processes and human diseases. Each week the lectures are supplemented with an active learning session including clinical correlations and student presentations.

#### PTB 605b, Grantsmanship and Preparing Training Award Applications

Megan King

Objective: This course seeks to develop skills in scientific writing, preparation of grant proposals, setting training goals, and building a support network for PhD students.

Approach: This course is designed to further refine an existing draft of a research and training proposal in the structure of an NIH F31 application in preparation for submission. In addition to providing peer and mentored feedback on the scientific proposal, this course will focus on the preparations of other materials required for the F31 application, including development of a statement of training goals. While student's ineligible (or not intending) to apply for an F31 are welcome to participate (and indeed transferable skills in scientific writing and goal setting will benefit all PhD students), the course will be structured to prepare an F31 application for the April F31 deadline.

## Joining a Lab for the Dissertation Research

The single most important decision made by a graduate student is the selection of a dissertation advisor and laboratory. Students are encouraged to use the rotations to learn about potential advisors holistically, taking into account variables such as scientific focus, mentorship style, laboratory resources, and the past training record of the potential advisor. Other useful sources of information are prior trainees of the advisor, the Director of Graduate Studies and other faculty. The DGS must approve the selection of a laboratory, which requires commitment on the part of the advisor and their primary department. The selection of a lab marks the assignment of a student from a track to the PTB.

## **Qualifying Examination**

Format: The qualifying exam will consist of 1) a written research proposal based on the prospective thesis project and 2) an oral exam in which the student defends the research proposal before a qualifying exam committee.

*Timeframe*: PTB students are expected to prepare for and complete the qualifying exam in the fall semester of the second year. Students needing extra time to prepare for the exam (for example, a student who carried out additional lab rotations or transferred between labs) may be allowed to have an extension of the deadline or to take the exam in the following spring term, but only with approval from the thesis advisor and the DGS. All students are required to complete the qualifying exam within one year of joining the program.

Qualifying exam committee: The student will assemble a qualifying exam committee of three faculty members (excluding the thesis advisor) in consultation with their advisor and the DGS, who must approve the committee. The chair of the committee must have an appointment as a PTB trainer.

Preparation for the qualifying exam: The student should develop a one-page outline draft of their proposal in the form of an NIH "Specific Aims" page that will be shared with their committee members in the early fall of their second year, typically two months prior to the exam. In consultation with the exam committee and thesis advisor, the student will define several (at least three) research areas broadly relevant to the thesis project that the student will be expected to be knowledgeable about from reading the literature. The student is encouraged to meet with qualifying exam committee members for advice and guidance in reading the literature.

Preparation and submission of the written research proposal: The written proposal should include a single Specific Aims page (Arial 11 pt font, 0.5 inch margins, single spaced) and be in the format of an NIH F31 grant: 6 pages, Arial 11 pt font, 0.5 inch margins, single spaced including figures. The proposal should include a Significance (Introduction) section, Research Strategy section, and References; References do not count towards the page limit. The written proposal should be provided to the committee at least a week prior to the oral exam date. Should the proposal be submitted in less than a week's time, there may be a need to reschedule the defense at the discretion of the qualifying exam committee.

Oral exam: The student will prepare an oral presentation that covers the background and topic of their proposal (maximum of ~20 slides). The committee will ask questions both conceptual and technical in nature on topics related to the content of the proposal. At the conclusion of the exam the committee will consider the written proposal and oral defense and unanimously agree on a Pass, Fail, Conditional Pass outcome. In the case of a conditional pass, specific guidance and a timeline will be provided to the student including possible rewriting of the proposal and/or second oral defense. In all cases, students must successfully complete the qualifying exam by the end of their sixth term.

## **Fellowships**

The NSF GRFP: There is an annual competition for the NSF funded Graduate Research Fellowship. Here is the announcement for this year:

Deadline: Oct. 16, 2023

We highly recommend applying for this award in your second year if you are eligible. We will carry out a series of workshops mid-September through the due date to help you prepare. If you are unsure whether your project is appropriate for NSF funding, please attend the first workshop where this will be discussed.

The NIH F30/31: The NIH F awards fund students for up to 5 years depending on your specific prior funding and year of study. While you can apply for the F award throughout your graduate school career, we highly encourage you to apply for the spring (April) deadline in your second year. The required grant writing course PTB 605b is designed to help you prepare for this application cycle and will run from January – early April. The course also helps students prepare for alternate grant mechanisms (see below) and, even if you do not apply for an external fellowship, its focus on defining your training goals and building a support network to help you achieve them will be valuable for all students.

Other fellowships: There are numerous other, often more focused, opportunities such as the American Heart Association (https://professional.heart.org/en/research-programs/aha-funding-opportunities/predoctoral-fellowship - next deadline September 6, 2023) and the Soros (https://www.pdsoros.org/ - deadline October 26, 2023). Some involve an internal nomination process, such as the HHMI Gilliam Fellows Program (https://www.hhmi.org/science-education/programs/gilliam-fellows-program). The GSAS frequently sends out announcements about opportunities.

### **Prospectus & Thesis Committee**

Prospectus and Thesis Committee: Upon completing the qualifying exam and moving towards engaging in full-time research, a thesis/prospectus committee will be formed that will consist of the student's thesis advisor and a minimum of three additional faculty members. Generally members of the qualifying exam committee will continue on members of the prospectus and thesis committee, but as the thesis project evolves it may make sense to replace committee members as the project focus evolves. This committee will be selected by the student, but each committee must have a Chair who is a PTB-affiliated trainer.

*Timeframe*: The committee must be convened and hold its first meeting (the prospectus meeting) within a year after the qualifying exam, typically prior to the end of the fifth term. Once the student's Prospectus is approved and they are admitted to candidacy, which must occur by the end of the sixth term, the thesis committee will meet at least every six months until the time of degree.

Format and Prospectus Approval: One week prior to the prospectus (first thesis committee) meeting, the student will provide the committee with 1) a Specific Aims page that the student has updated from the materials included as part of the qualifying exam; and 2) an "Introduction to revision" page that describes the changes made to the Specific Aims over the first year as the student has engaged in the research project. These documents and the oral presentation by the student will be the basis on which the committee will recommend approval of the prospectus to the PTB DGS, who in concert with the Registrar will oversee the submission of the Prospectus materials and their approval to the GSAS registrar.

Individual Professional Development Plan (IDP): Prior to the prospectus meeting (and all subsequent thesis committee meetings) the student is expected to complete an IDP and discuss it with their mentor. For example, use the resource: myidp.sciencecareers.org or another similar mechanism. This is a valuable time to step back and assess your accomplishments and future goals and to ensure that your PhD training is preparing you for future success.

External examiner visit: Prior to or immediately after admission to candidacy, students are asked to work with their advisor to identify a faculty member from outside Yale who will ultimately serve on their dissertation committee. This individual will be invited as part of the Translational Science Seminar Series in the student's third or fourth year of study to visit Yale, during which the student will have a dedicated hour to present and discuss their thesis research. After the student has prepared the thesis, the external examiner will read the thesis and make suggestions for edits. The external examiner is then invited back to campus (or may participate virtually) in the thesis defense of the student.

## **Responsible Conduct of Research**

At the start of their first year of study, all master's and Ph.D. students are required to attend sessions on professional ethics, including academic integrity, prevention of sexual misconduct, and discrimination and harassment reporting. Students must also complete an approved online training module in professional ethics before they can register for the spring term of their first year.

#### Dissertation

When the student is prepared to ask for permission to write their dissertation, they will convene a meeting of the thesis committee. The student should provide the committee with a written outline of the thesis prior to

the meeting. If the progress of the student is deemed sufficient and the thesis outline is approved, the student will be given permission to proceed with writing the thesis and scheduling their defense. Approval of the committee at this stage will be contingent on the student either having a first-author publication (including in press) or having generated a prepared first-author manuscript for submission for publication that is provided to the committee; in most cases this is expected to be available online as a preprint. A complete draft of the dissertation must be distributed to the committee members (including the external examiner) no later than two weeks before the defense is to take place. The thesis defense consists of two parts: 1) An open seminar to which all members of the academic community will be invited; and 2) An oral defense of the thesis, which will include only the student and the thesis committee. When the defense has been completed, the committee will discuss acceptance of the thesis (with or without revisions). Once all changes have been made to the satisfaction of the committee, the student can submit the dissertation and all required paperwork to the GSAS. The dissertation should normally be submitted no later than March of year six.

#### **Teaching Requirements**

All PTB students are required to teach the equivalent of two courses at the TF-10 level (10 hours per week) or one course at the TF-20 level (20 hours per week). These can be chosen from numerous lecture, laboratory and seminar courses offered at the undergraduate, graduate or medical school levels. Students generally teach in the 3rd year but may also begin teaching during the spring of their 2nd year with permission of the thesis advisor and the PTB DGS. MD/PhD students are only required to TA one course at the TF-10 level.

Prior to the first semester of teaching, each PTB student must attend the Teaching @ Yale Day Orientation. Students are also encouraged to take one or more of the short teaching courses and workshops offered by the Poorvu Center for Teaching and Learning.

#### **Leave of Absence**

Students who wish or need to interrupt their study temporarily may request a leave of absence. There are three types of leave—personal, medical, and parental.

General policies, as well as specific requirements for any type of leave may be found at: <a href="http://catalog.yale.edu/gsas/policies-regulations/academic-regulations/#leavesofabsence">http://catalog.yale.edu/gsas/policies-regulations/academic-regulations/#leavesofabsence</a>

#### **Appendix 1: Required Coursework Timeline**

#### Term 1 – Year 1, Fall Semester

At least one but typically two of the following:
Physiological Systems (PHAR 550a / C&MP 550a / ENAS 550a / MCDB 550a / PTB 550a)
Molecular Mechanisms of Disease (PATH 690a / PTB690a)
Molecular Mechanisms of Drug Actions (Phar 504a)

Seminar Course (PTB 629a): Topics in Translational Molecular Medicine, Pharmacology and Physiology

**Laboratory Rotations** 

#### Term 2 – Year 1, Spring Semester

Physiologic function and cellular structure of organ systems (CBIO 604b / PTB 604b)

Seminar Course (PTB 630b): Topics in Translational Molecular Medicine, Pharmacology and Physiology

Responsible Conduct in Research ("Ethics in Science" PTB 650b)

Laboratory rotation(s)

Biostats options: MCDB 452/752 "Biomedical Data Science, Mining and Modeling" (with or without coding) or ENAS 549 "Biomedical Data Analysis".

#### Summer Term between Year 1 and Year 2

Biostats option: IMED645 "Introduction to Biostatistics in Clinical Investigation" (two weeks – 10 classes total – daily course that meets during July)

#### Term 3 – Year 2, Fall Semester

Medical Research Scholars Program: Mentored Clinical Experience (C&MP 610)

Additional electives (if needed or desired)

#### Term 4 – Year 2, Spring Semester

Medical Research Scholars Program: Mentored Clinical Experience (C&MP 611)

Grantsmanship and Preparing Training Award Applications (PTB 605b)

Additional electives (if needed or desired)

**Note:** Students who participate in the Medical Research Scholars Program, which currently serves students in all tracks and PhD programs of the BBS, would participate in an additional year of the Mentored Clinical Experience in Year 3.

# Appendix 2: Schedule of Academic Dates and Deadlines Fall Term 2023

Date	Day	Description
Aug. 21	M	New student orientation week begins (mandatory)
Aug. 23	W	Add/drop period opens, 8:30 a.m.
Aug. 30	W	Fall-term classes begin, 8:20 a.m.
Sept. 1	F	Monday classes meet on Friday Due date to notify department of intention to submit dissertation for award of the Ph.D. in December Final day to file petition for M.A., M.S., and M.Phil. degrees to be awarded in December
Sept. 4	M	Labor Day. Classes do not meet
Sept. 5	Т	Add/drop period ends, 5 p.m. Final day for registration. A fee of \$50 is assessed for course schedules accepted after this date Final day to apply for a fall-term personal leave of absence. The entire fall-term tuition charge or continuous registration fee (CRF) will be canceled for students who withdraw from the Graduate School on or before this date, or who are granted a leave of absence effective on or before this date
Sept. 22	F	One-half of the fall-term full tuition charge will be canceled for students who withdraw from the Graduate School on or before this date, or who are granted a medical leave of absence effective on or before this date. The CRF is not prorated
Oct. 1	SU	Due date for dissertations to be considered by the Degree Committee for award of the Ph.D. in December Final date for the faculty to submit grades to replace grades of Temporary Incomplete (TI) awarded during the previous academic year
Oct. 17	Т	October recess begins, 11 p.m.
Oct. 23	M	Classes resume, 8:20 a.m.
Oct. 27	F	Midterm Final day to change enrollment in a fall-term course from Credit to Audit or from Audit to Credit Final day to withdraw from a fall-term course One-quarter of the fall-term full tuition charge will be canceled for students who withdraw from the Graduate School on or before this date, or who are granted a medical leave of absence effective on or before this date. The CRF is not prorated Teaching appointments will not appear on the transcripts of students who withdraw from the assignment on or before this date
Oct. 31	T	Readers' Reports are due for dissertations to be considered by the Degree Committee for award of the Ph.D. in December
Nov. 8	W	Final day to withdraw a degree petition for degrees to be awarded in December
Nov. 10	F	Deadline for departments to return Degree Recommendation Forms for December degrees to registrar
Nov. 15	W	Registration for spring term 2024 opens, 8 a.m.
Nov. 17	F	November recess begins, 5:30 p.m.
Nov. 27	M	Classes resume, 8:20 a.m.
Nov. 29	W	Final day to submit petitions for extended registration and Dissertation Completion Status for the spring term
Dec. 13	W	Registration for spring term 2024 closes, 5 p.m.
Dec. 14	TH	Classes end, 5:30 p.m. Final examinations begin, 7 p.m.

Dec. 20	W	Examinations end, 5:30 p.m. Winter recess begins
Dec. 21	TH	Date of December degree award

# Spring Term 2024

Date	Day	Description
Jan. 2	Т	Final grades for fall-term courses due Final day that faculty may submit a request for the assignment of a grade of Temporary Incomplete
Jan. 8	M	Add/drop period opens, 8:30 a.m.
Jan. 15	M	Martin Luther King, Jr. Day. Administrative offices are closed. Classes do not meet
Jan. 16	T	Spring-term classes begin, 8:20 a.m.
Jan. 19	F	Add/drop period closes, 5 p.m. A fee of \$50 is assessed for course schedules accepted after this date
Jan. 30	Т	Final day to apply for a spring-term personal leave of absence  The entire spring-term tuition charge or continuous registration fee (CRF) will be canceled for students who withdraw from the Graduate School on or withdr before this date, or who are granted a leave of absence effective on or before this date
Feb. 9	F	One-half of the spring-term full tuition charge will be canceled for students who withdraw from the Graduate School on or before this date, or who are granted a medical leave of absence effective on or before this date. The CRF is not prorated
Feb. 15	ТН	Due date to notify department of intention to submit dissertation for award of the Ph.D. in May Final day to file petitions for M.A., M.S., and M.Phil. degrees to be awarded in May
Mar. 8	F	Midterm Spring recess begins, 5:20 p.m. Final day to change enrollment in a spring-term course from Credit to Audit or from Audit to Credit Final day to withdraw from a spring-term course One-quarter of the spring-term full tuition charge will be canceled for students who withdraw from the Graduate School on or before this date, or who are granted a medical leave of absence effective on or before this date. The CRF is not prorated Teaching appointments will not appear on the transcripts of students who withdraw from the assignment on or before this date
Mar. 15	F	Due date for dissertations to be uploaded to DPRS for consideration by the Degree Committee for award of the Ph.D. in May
Mar. 25	M	Classes resume, 8:20 a.m.
Mar. 29	F	Good Friday. Administrative offices closed. Classes meet
April 15	M	Readers' Reports are due for dissertations to be considered by the Degree Committee for award of the Ph.D. in May
Apr. 17	W	Deadline for departments to return Degree Recommendation Forms for May degrees to registrar Final day to withdraw a degree petition for degrees to be awarded in May
May 2	TH	Classes end, 5:20 p.m.
Мау 3	F	Final examinations begin
May 8	W	Final examinations end
May 10	F	Final grades for spring-term courses are due for candidates for terminal M.A. and M.S. degrees to be awarded at Commencement

May 19	SU	Graduate School Convocation
May 20	M	University Commencement Date of May degree award
May 29	W	Final grades for spring-term and full-year courses due Final day that faculty may submit a request for the assignment of a grade of Temporary Incomplete
June 5	W	Final day to submit petitions for extended registration and Dissertation Completion status for the fall term