# PROCESS HANDBOOK PHARMACEUTICAL SCIENCES GRADUATE PROGRAMS SCHOOL OF PHARMACY VIRGINIA COMMONWEALTH UNIVERSITY

# Approved by the Graduate Affairs Committee 2/12/2020

The purpose of this Handbook is to provide students and advisors in the Pharmaceutical Sciences Graduate Programs with guidance on policies and processes for completing advanced degrees (Masters of Sciences and Doctor of Philosophy). Students are responsible for knowing the information contained in this Handbook, as well as information contained in VCU graduate school documents, such as the University Graduate Bulletin. The Handbook supplements University guidance and is intended to provide increased detail and explanation for students and advisors as needed.

All policies and processes in this Handbook are subject to change, and the Handbook will be updated periodically to show these changes. To meet requirements for graduation, students will be held to the policies of the most up-to-date Handbook of the year they entered the Program.

If you have questions about any information in this Handbook, please contact your department graduate program director, faculty advisor, or the Office for Research and Graduate Studies in the School of Pharmacy.

Additional procedures and processes may exist for individual concentrations; thus, students and advisors are directed to consult them, when appropriate.

# **TABLE OF CONTENTS**

| GLOSSARY OF TERMS                          | 5  |
|--|----|
| PROGRAM PURPOSE                            | 8  |
| PROGRAM DESCRIPTION                        | 9  |
| Degree Programs in Pharmaceutical Sciences | 9  |
| Duration of education                      | 9  |
| GOVERNANCE OF THE GRADUATE PROGRAM         | 10 |
| CURRICULUM AND CO-CURRICULUM               | 11 |
| APPLICATION AND ADMISSION TO THE PROGRAM   | 13 |
| Domestic students                          | 13 |
| International students                     | 13 |
| FUNDING OF GRADUATE STUDENTS               | 14 |
| Self-funding                               | 14 |
| Funded                                     | 14 |
| PROFESSIONAL CONDUCT                       | 14 |
| REQUIRED ORIENTATION                       | 15 |
| REGISTRATION AND COURSEWORK                | 15 |
| Registration                               | 15 |
| Courses                                    | 15 |
| Number of credits                          | 16 |
| FACULTY ADVISOR                            | 16 |
| Appointment of a Graduate Faculty Advisor  | 16 |
| Changing Graduate Faculty Advisor          | 17 |

| Duties of the Faculty Advisor   | 17  |
|---|-----|
| GRADUATE STUDENT ADVISORY COMMITTEE   | 18  |
| Appointment of the Graduate Student Advisory Committee                      | 18  |
| Duties of the Graduate Student Advisory Committee                           | 18  |
| TEACHING RESPONSIBIITIES  | 18  |
| EXECUTION OF RESEARCH   | 19  |
| ANNUAL REVIEW AND PROMOTION   | 20  |
| Appeal of Decision to Terminate Graduate Student Participation in a Program | 21  |
| PROGRESSION TO CANDIDACY  | 22  |
| Admission to Candidacy  | 22  |
| Written Comprehensive Exam  | 22  |
| Oral Comprehensive Exam   | 22  |
| COMPLETION OF THE GRADUATE DEGREE   | 24  |
| Writing the project (M.P.S.)/thesis (MS)/dissertation (Ph.D.)               | 244 |
| Final Oral Defense (See Appendix V for additional information)              | 24  |
| Completion of Project/Thesis/Dissertation                                   | 266 |
| GRADUATION  | 267 |
| ADDITIONAL INFORMATION  | 277 |
| Leave Policy  | 277 |
| Travel  | 277 |
| Internships   | 278 |
| Scholarships/Fellowships  | 288 |

| Student Awards     | 29 |
|--------------------|----|
| Outside Employment | 28 |

#### **GLOSSARY OF TERMS**

Associate Dean for Research and Graduate Studies – The individual responsible for supporting, administering, and managing activities of the Pharmaceutical Sciences Graduate Program and the Office for Research and Graduate Studies in the School of Pharmacy.

**Candidacy** - Candidacy allows the student to proceed with the work on their thesis/dissertation or equivalent for their respective graduate degree. M.S. and M.P.S. students achieve candidacy upon completing all of their coursework. Ph.D. students achieve candidacy upon completing all of their coursework and successfully passing the written and oral comprehensive examinations.

**Co-curriculum** – The collection of activities, non-credit programs, and learning experiences that complement the learning outcomes of the formal pharmaceutical sciences curriculum. Examples include internships, leadership in student associations, informal training in methods, and field trips.

Comprehensive examinations — Comprehensive examinations are required for Ph.D. students and include: i) a written comprehensive exam that involves writing a research proposal and may involve a problem solving written exam; ii) an oral comprehensive exam, where the student briefly presents the proposal and answers oral questions from the advisory committee and Dean's Representative (see below). The oral exam is conducted within six weeks of the successful completion of the written comprehensive exam.

**Concentration** – VCU School of Pharmacy offers emphasis in the following research areas or concentrations: (1) Medicinal Chemistry, (2) Pharmaceutics, (3) Pharmacotherapy, and (4) Pharmacoeconomics and Health Outcomes. Each concentration may have its own degree requirements.

**Course waiver forms** – Students must complete this form either to waive previously taken courses or to substitute a course. Please see the Graduate Education Coordinator to obtain the form.

**Curriculum** -- The collection of courses and coursework performed by students in the graduate pharmaceutical sciences program.

**Dean's Representative** – A graduate faculty assigned by the Office of the Associate Dean for Research and Graduate Studies to oversee the oral comprehensive examination and thesis defense of M.S. students. The representative holds the responsibility for compliance with protocol appropriate to the examination, including the equitable treatment of the candidate.

**Department Graduate Program Director** – Oversees the students in the department concentration(s), acts on behalf of the concentrations, and holds the responsibility and authority to represent the respective department and graduate faculty to the School. Each department's Graduate Program Director is appointed by the Chair of the department.

**Degree Candidacy form** – This electronic form must be submitted for approval at least one semester prior to graduation (see instructions: <a href="https://graduate.vcu.edu/media/graduate-">https://graduate.vcu.edu/media/graduate-</a>

school/docs/pdf/DegreeCandidacyFormInstructions-DocuSign.pdf).Ph.D. students complete this form after they have successfully passed their oral examination. M.S. and M.P.S. students must complete the form and submit for approval after their 1<sup>st</sup> academic year. The form may be found at:

 $\label{lem:lember/powerFormSigning.aspx?PowerFormId=25e8c708-a427-4b8e-b87d-d566a291d639\&env=na3-eu1\&acct=b97497cf-0191-4ed3-a961-d4621f97f439.$ 

**Degree Works** - Degree Works is a web-based degree audit tool (accessed through eServices) that helps students and advisors monitor progress toward degree completion. It produces a report that outlines the components and requirements for a student's degree program and tracks the student's progress in completing

those requirements. It is the official means used to confirm that students have completed requirements for graduation.

**Dissertation** – A formal treatise written by a doctoral degree candidate.

**Dual Degree** – A joint degree program between the VCU School of Pharmacy's Doctor of Pharmacy (Pharm.D.) and other degree program (e.g., M.S., Ph.D., M.B.A., M.P.H., or Certificate in Aging).

**Electronic Thesis Dissertation** – Students are required to complete this form using the following link as one of the requirements for graduation (see instructions at <a href="https://graduate.vcu.edu/media/graduate-school/docs/pdf/ETDFormInstructions-DocuSign.pdf">https://graduate.vcu.edu/media/graduate-school/docs/pdf/ETDFormInstructions-DocuSign.pdf</a>):

https://na3.docusign.net/Member/PowerFormSigning.aspx?PowerFormId=335b9d79-bffd-4702-96ec-17f8ea946420&env=na3-eu1.

**Grade point average (GPA)** – Average grade earned by a student, figured by dividing the grade points earned by the number of credits attempted. GPA may be calculated differently between VCU and departments because departments may include different courses in the GPA calculation.

**GradTrak** – An electronic platform that connects the Student, Faculty Advisor, Department Graduate Program Director, and Office for Research and Graduate Education. It serves as a platform for communication and for documentation activities required for student progress through the program. It is located at <a href="https://pharmacy.vcu.edu/about-us/resources/">https://pharmacy.vcu.edu/about-us/resources/</a>.

**Graduate Affairs Committee (GAC)** – The policy making body of the Pharmaceutical Science Graduate Program, to advise the Associate Dean for Research and Graduate Studies, and to act on behalf of the graduate faculty and the graduate students.

**Graduate Faculty** – Individuals of the faculty appointed according to the VCU Graduate School Bylaws eligibility criteria for membership (see <a href="https://graduate.vcu.edu/media/graduate-school/docs/pdf/UCGBylaws">https://graduate.vcu.edu/media/graduate-school/docs/pdf/UCGBylaws</a>). This body of individuals assumes the major responsibility for graduate education at the School of Pharmacy and exercises jurisdiction over all educational matters in the Graduate Program.

**Graduate Program Bylaws** – Written document establishing academic policy necessary for the conduct of the Pharmaceutical Sciences Graduate Program at Virginia Commonwealth University School of Pharmacy (see: <a href="https://pharmacy.vcu.edu/about-us/constitution-and-bylaws/">https://pharmacy.vcu.edu/about-us/constitution-and-bylaws/</a>).

**Graduate Research Assistantship (GRA)** – Advisor and/or training grant covers all or most of the stipend, tuition, and fees of Ph.D. students (generally beginning in the G-3 year).

**Graduate School of VCU** – The office within the university that provides leadership and assistance to the School of Pharmacy's graduate program and all other graduate programs on campus. https://www.vcu.edu/academics/graduate-and-professional-studies/

**Graduate Student Advisory Committee** – Graduate student advisory committees shall be appointed for each degree candidate in the pharmaceutical sciences program for whom there is a requirement to produce a thesis, dissertation, or research project for completion of a degree. The committee will coordinate and supervise the preparation of the thesis/dissertation or its equivalent.

**Graduate Student Association (GSA)** – Body made up of graduate students elected by peers in their respective departments, which provides a voice for graduate students to the graduate program.

**Graduate Student Faculty Advisor ("the Faculty Advisor")** – Individual graduate faculty member assigned to each student who takes responsibility for guiding them through their education and training. Faculty advisors work with students to develop a plan of study, supervise student projects and research, and seek funding as needed for their education and research.

**Graduate Teaching Assistantship (GTA)** – G-1 and G-2 Ph.D. students or G-3 and G-4 PharmD, Ph.D. dual degree students work as teaching assistants for a maximum of four semesters (Fall and Spring) on an average of 12 hours per week. Resources from the Graduate School and School of Pharmacy cover costs related to the stipend, tuition, and fees.

**Graduate Tuition Waiver (GTW)**: Assistantships assigned to GRAs or GTAs.

**Matriculation** – To enroll into a college program as a candidate for a degree.

Office for Research and Graduate Studies – Office that coordinates the Pharmaceutical Sciences Graduate Program in the School of Pharmacy. The Associate Dean for Research and Graduate Studies is responsible for administering and supervising the office and its staff.

**Pharmaceutical Sciences Graduate Program** – The VCU School of Pharmacy's graduate degree program which consists of different research emphases in the pharmaceutical sciences. http://bulletin.vcu.edu/graduate/school-pharmacy/

**Project** – A written presentation of the final degree project, such as a scientific paper, a literature review or a project proposal, for an M.P.S. degree candidate.

**Final oral presentation and defense** – The degree candidate orally presents his/her degree project in a public setting open to interested individuals from VCU and the broader community followed by a closed defense of the written project/thesis/dissertation in front of the examining committee.

**Special Action Form** – The Special Action Form is form required by the VCU Graduate School to request and document a variety of actions (e.g. extension of time limit for degree, leave of absence, etc.). Details and directions can be found at <a href="https://graduate.vcu.edu/media/graduate-school/docs/pdf/InstructionsforusingtheeSAF.pdf">https://graduate.vcu.edu/media/graduate-school/docs/pdf/InstructionsforusingtheeSAF.pdf</a>

**Thesis** – A formal treatise written by a M.S. degree candidate.

#### **PROGRAM PURPOSE**

#### MISSION, VISION, AND PURPOSE

The Pharmaceutical Sciences Graduate Program supports the mission and vision of the School of Pharmacy and is guided by its values.

SCHOOL OF PHARMACY'S Mission Statement, Vision Statement, and Core Values (Version: March 6, 2019 10, 2017)

**Mission.** "To achieve excellence in our Pharm.D. and graduate programs through innovative education and leading-edge research"

"We will achieve our mission by graduating outstanding future pharmacists and scientists who will improve human health, foster exemplary research, and provide sustaining contributions to interprofessional patient care."

**Vision.** "A transformational leader in pharmacy education, clinical practice, and clinical and pharmaceutical research."

#### **Core Values**

- 1. Innovation: We encourage innovations and ideas that advance the school's mission.
- 2. Personal growth: We pursue professional growth and personal development that drives excellence.
- 3. Integrity and respect: We demonstrate ethical behaviors, personal responsibility, and respect for others.
- 4. Collaboration: We embrace interprofessional and interdisciplinary collaboration in patient care, teaching, learning, and research.
- 5. Inclusive excellence: We promote an environment of engagement and inclusion that values the diversity and contributions of our students, staff, faculty, and administrators.

PHARMACEUTICAL SCIENCES GRADUATE PROGRAM'S MISSION (Version: March 6, 2019)

To train transformational leaders in the pharmaceutical sciences through innovative education and leading-edge research.

#### PROGRAM DESCRIPTION

The Pharmaceutical Sciences are a group of interdisciplinary areas of study concerned with questions of pharmaceutical chemistry, discovery, formulation, distribution, and effects throughout the medication product life cycle. https://www.aacp.org/resource/graduate-degrees-defined

#### **Degree Programs in Pharmaceutical Sciences**

The Pharmaceutical Sciences Graduate Program at VCU School of Pharmacy offers four specific concentrations. The concentrations involve an integrated base component with unique extensions into specific areas of expertise. Each student is enrolled in one of the specific concentrations and is assigned to a home department within the SOP.

| Concentration       | Responsible Department  |
|---------------------|---|
| Medicinal Chemistry | The Department of Medicinal Chemistry (MEDC)                  |
| Pharmaceutics       | The Department of Pharmaceutics (PCEU)                        |
| Pharmacotherapy     | The Department of Pharmacotherapy and Outcomes Science (DPOS) |
| Pharmacoeconomics   | DPOS  |
| and Health Outcomes |   |

**Ph.D. Program** – A doctor of philosophy (Ph.D.) represents a graduate doctoral degree that is the highest level of academic degree achievable in the Pharmaceutical Sciences. It consists of required and elective coursework, directed research, and the completion of a dissertation. The dissertation is a document presenting a doctoral candidate's research and findings, which may include the student's scholarship published, in press, or under review in peer review journals, and is used to demonstrate the candidate's ability to act as an independent researcher. The Ph.D. in Pharmaceutical Science is earned in any of the graduate program's four concentrations.

MS Program - A master's of science (MS) degree is a postgraduate degree representing the first level of graduate study in Pharmaceutical Sciences. It may be a terminal degree or a first degree leading to application to a Ph.D. program. The M.S. consists of required and elective coursework, directed research, and the completion and defense of a thesis. The thesis is a document (narrower in scope than a dissertation) contains the student's research background, findings, and interpretation. In contrast to a dissertation, which demonstrates the ability to conduct independent research, the thesis is used to demonstrate the student's ability to complete a guided research project. The M.S. in Pharmaceutical Science is earned in any of the graduate program's four concentrations.

**M.P.S. Program** - A master's of pharmaceutical science (M.P.S.) degree is a postgraduate master's degree in pharmaceutical sciences that does not focus on research, unlike the M.S. and Ph.D. degrees. Instead, it focuses on building competencies needed by those who work in the pharmaceutical industry, government, pharmacy practice, or other potential areas of employment. The M.P.S. consists of required and elective coursework, may include research, and the completion of a written project suitable for publication in a journal specified by the student's advisor.

**Duration of education** - Ph.D. students typically complete their degree in 4-5 years and M.S. and M.P.S. students generally complete their degrees in 2 years. The time limit for a graduate degree will not extend beyond a period of six years for graduate certificates and master's degrees and eight years for doctoral degrees. A student may appeal this time limit, which is subject to approval by the School of Pharmacy and the Graduate School. The education continues year round, including over the summer, and does not follow the undergraduate and professional academic program calendars.

#### GOVERNANCE OF THE GRADUATE PROGRAM

<u>VCU Graduate School</u> is the office within the university that administers and provides leadership and assistance to all VCU graduate programs including the Pharmaceutical Science Graduate Program.

In the School of Pharmacy, the Pharmaceutical Sciences Graduate Program is coordinated through the **Office for Research and Graduate Studies**. Individuals within the Office conduct the day-to-day functioning of the Program. The **Associate Dean for Research and Graduate Studies** is responsible for administering and supervising the office and its staff. The Associate Dean reports to the Dean and is tasked with supporting, administering, and managing activities of the Pharmaceutical Sciences Graduate Program.

Each faculty member participating in graduate education is a member of the <u>Graduate Faculty</u>, appointed according to the VCU Graduate School Bylaws eligibility criteria. The Graduate Faculty assumes the major responsibility for graduate education at the School of Pharmacy and exercises jurisdiction over all educational matters in the Graduate Program.

The **Graduate Affairs Committee (GAC)** is the policy making body of the Pharmaceutical Science Graduate Program that serves and acts on behalf of the Graduate Faculty and the graduate students. The Committee participates in important business of graduate education and advises the Associate Dean for Research and Graduate Studies.

Each department has a **Department Graduate Program Director** who is responsible for administering and representing the department's concentration(s). The Graduate Program Directors act on behalf of the programs and hold the responsibility and authority to represent the respective department(s) and their Graduate Faculty to the School. The Program Director also holds responsibility to work with the Office of Research and Graduate Studies to ensure that the program remains in compliance with all regulations as well as collect key performance indicators for graduate students in their department.

Each student in the graduate program must have a primary faculty advisor (co-advisors are allowed). The **student's Faculty Advisor** must be a Graduate Faculty member. The Advisor assumes the responsibility of guiding the student through his/her education and training. Faculty advisors mentor students, develop plans of study, supervise student projects and research, and provide career development and guidance assistance.

A **Graduate Student Advisory Committee** shall be appointed for each degree candidate in the Pharmaceutical Sciences Graduate Program. The committee will coordinate and supervise the preparation of the dissertation, thesis or its equivalent. Details can be found at <a href="http://bulletin.vcu.edu/academic-regs/grad/advisory-committees/">http://bulletin.vcu.edu/academic-regs/grad/advisory-committees/</a>.

## **CURRICULUM AND CO-CURRICULUM**

# **CURRICULA for Graduate Degrees in the Pharmaceutical Sciences**

Ph.D. Program: Please see the links below for each of the four concentrations.

Core Requirements (8 credits total)

| Course             | Title   | Hours |
|--------------------|---|-------|
| OVPR 601           | Scientific Integrity  | 1     |
| or <u>OVPR 602</u> | Responsible Scientific Conduct                                    |       |
| or <u>OVPR 603</u> | Responsible Conduct of Research                                   |       |
| PSCI 607           | Introduction to Pharmaceutical Sciences From Bench to Shelf       | 2     |
| <u>PSCI 614</u>    | Research Techniques   | 1     |
| PSCI 690           | Seminars in the Pharmaceutical Sciences (one credit per semester) | 4     |

Medicinal Chemistry Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-Ph.D.-medicinal-chemistry/">http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-Ph.D.-medicinal-chemistry/</a>

Pharmaceutics Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-">http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-</a> Ph.D.-pharmaceutics/

Pharmacoeconomics and Health Outcomes Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacoeconomics-health-outcomes/">http://bulletin.vcu.edu/graduate/school-pharmacoeconomics-health-outcomes/</a>

Pharmacotherapy Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-Ph.D.-pharmacotherapy/">http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-Ph.D.-pharmacotherapy/</a>

MS Program: Please see the links below for each of the four concentrations.

Core Requirements (16 credits total)

| Course             | Title   | Hours |
|--------------------|---|-------|
| OVPR 601           | Scientific Integrity  | 1     |
| or <u>OVPR 602</u> | Responsible Scientific Conduct  |       |
| or <u>OVPR 603</u> | Responsible Conduct of Research   |       |
| <u>PSCI 607</u>    | Introduction to Pharmaceutical Sciences From Bench to Shelf                   | 2     |
| <u>PSCI 610</u>    | Frontiers of Pharmaceutical Research (two-credit course taken four semesters) | 8     |
| <u>PSCI 614</u>    | Research Techniques   | 4     |
| PSCI 690           | Seminars in the Pharmaceutical Sciences                                       | 1     |

Medicinal Chemistry Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-ms-medicinal-chemistry/">http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-ms-medicinal-chemistry/</a>

Pharmaceutics Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-ms-pharmaceutics/">http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-ms-pharmaceutics/</a>

Pharmacoeconomics and Health Outcomes Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-ms-pharmacoeconomics-health-outcomes/">http://bulletin.vcu.edu/graduate/school-pharmacoeconomics-health-outcomes/</a>

Pharmacotherapy Concentration: <a href="http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-ms-pharmacotherapy/">http://bulletin.vcu.edu/graduate/school-pharmacy/pharmaceutical-sciences-ms-pharmacotherapy/</a>

# **M.P.S. Program**: To appear in 2021-22 Bulletin (please contact office of Research and Graduate Studies for details)

Core Requirements (16 credits total)

| Course             | Title   | Hours |
|--------------------|---|-------|
| OVPR 601           | Scientific Integrity  | 1     |
| or <u>OVPR 602</u> | Responsible Scientific Conduct  |       |
| or <u>OVPR 603</u> | Responsible Conduct of Research   |       |
| <u>PSCI 607</u>    | Introduction to Pharmaceutical Sciences From Bench to Shelf                   | 2     |
| <u>PSCI 610</u>    | Frontiers of Pharmaceutical Research (two-credit course taken four semesters) | 8     |
| <u>PSCI 614</u>    | Research Techniques   | 4     |
| <u>PSCI 690</u>    | Seminars in the Pharmaceutical Sciences                                       | 1     |

Dual Degree Ph.D. Program in Pharmaceutical Sciences: https://pharmacy.vcu.edu/admissions/dual-degree/

#### **CO-CURRICULAR**

Co-curricular refers to learning activities and experiences occurring outside of the formal curriculum and courses of study in education that complement the formal educational process. These activities are intended to contribute to the students' professional development by providing opportunities for developing professional behavior, networking skills, leadership, career development activities, and other competencies that may not be emphasized in the formal graduation program. Co-curricular activities and experiences vary depending on a student's previous experiences, program of study, and faculty advisor. They might include internships, student leadership activities, mentoring students, service learning, participation in professional organizations, international exchanges, etc. Students are encouraged to work with their advisors and advisory committees to ascertain their co-curricular needs and develop a plan for addressing them.

#### **DEGREE WORKS**

Degree Works is a web-based degree audit tool that helps students and advisors monitor progress toward degree completion. It produces an easy-to-read report that outlines the university core, general education, major, collateral requirements and electives for a student's degree program, and tracks the student's progress in

completing those requirements. Records and registration uses this tool to track students' progress and approve them for graduation. All students are required to understand and use Degree Works. Details about Degree Works can be found at https://rar.vcu.edu/audit/.

#### APPLICATION AND ADMISSION TO THE PROGRAM

Students apply to the Pharmaceutical Science Graduate Program through a standard process administered by the VCU Graduate School. Students should apply to a specific concentration of interest (see section Program Description) within a specific degree program (M.S., M.P.S., or Ph.D.).

Details about applying can be found at: <a href="https://www.vcu.edu/admissions/apply/">https://www.vcu.edu/admissions/apply/</a> Application and admissions procedures differ depending on whether the applicant is a domestic or international student.

**Domestic students** (i.e., US citizens or permanent residents) application link: <a href="https://www.vcu.edu/admissions/apply/graduate/">https://www.vcu.edu/admissions/apply/graduate/</a>

**International students** application link: <a href="https://www.vcu.edu/admissions/apply/international/graduate-applicants/">https://www.vcu.edu/admissions/apply/international/graduate-applicants/</a>

The Graduate School application includes submission of graduate record exam (GRE) and Test of English as a Foreign Language (TOEFL or IELTS, for international students only) scores, transcripts, personal statement, CV and recommendation letters. Several criteria are considered when determining admissions to the School's Graduate Program including:

- Academic performance (e.g., Grade point average)
- Research experience (education or work-related)
- Non-research experience (education, life-experience, or work-related)
- Quality of letters of recommendation and personal statements
- Excellence in coursework and prerequisite courses
- Advanced degrees
- GRE scores (recommended minimum Q+V of 300/340)
- Candidate interviews
- Availability of a suitable graduate faculty advisor appropriate for the research interests of the student
- Applicants for whom English is a second language must provide evidence of proficiency in the English language prior to admission and/or full-time enrollment in the university. An applicant may satisfy university English proficiency requirements by taking the TOEFL (minimum scores of 600 for paperbased or 100 for internet-based tests) or the IELTS (minimum score of 6.5)

#### **Admissions Process**

1) The Admissions Committee or Admissions Director rank orders candidates based on strength of application; 2) Applicants may be invited for a formal (in person or video) interview; and 3) Graduate Faculty in each department vote to select the candidate for an offer.

Note: Whereas the Department of Medicinal Chemistry does not typically assign a Faculty Advisor prior to entering the program, the Department of Pharmaceutics and Department of Pharmacotherapy and Outcomes Science typically assign a student to an advisor prior to entering the program. Thus, students seeking to enter a concentration in the Department of Pharmaceutics or the Department of Pharmacotherapy and Outcomes Science should consult with the appropriate Graduate Program Director to find out which graduate faculty are seeking students.

#### **FUNDING OF GRADUATE STUDENTS**

Candidates admitted into the program are classified as either self-funded, funded by the School of Pharmacy, and/or externally funded.

**Self-funding**. Self-funded students are responsible for paying for all of the tuition and fees associated with their program as well as for health insurance and other living costs. All M.S. and M.P.S. students are considered self-funded and are responsible for paying for their graduate education. Ph.D. students may also be self-funded. Self-funded students may pay for their education out-of-pocket, or an external entity may pay for their education (e.g., employer, home country for international students). All self-funded students contribute to the scholarly research of their advisors and are held to the same standards of professionalism and competency as all other graduate students.

**Funded by the School of Pharmacy.** The School of Pharmacy and Graduate School competitively admits Ph.D. students in which their tuition and fees are fully covered as well as receive a stipend. Graduate Teaching Assistantships and/or Graduate Research Assistantships are offered to excellent students who remain in good academic standing. In exchange for funding, students contribute to the scholarly research of their advisors as well as the teaching mission of the School of Pharmacy.

**External Funding.** Eligible Ph.D. students are highly encouraged to apply for individual training grants when enrolled in the program (e.g., F30; F31; R25 NIH individual training grants, American Foundation for Pharmaceutical Education). Students should consult with advisors, graduate directors, and Office of Research and Graduate Studies about opportunities for external funding.

#### PROFESSIONAL CONDUCT

Graduate students, as well as all other members of the VCU community, are expected to act with professional conduct and follow the <u>VCU code of conduct</u>.

Any action by a graduate student considered to be unprofessional conduct shall constitute cause for disciplinary action, including possible probation, expulsion or loss of funding. Unprofessional conduct includes, but is not limited to:

• fraud or deceit in gaining admission to the University, i.e., false or obviously misleading representations on the admission application,

- an act that violates the established legal standards regarding conduct of one person towards society (i.e. stealing, lying, cheating and slander),
- conviction of a felony
- plagiarism or other scientific misconduct, and
- guilty verdict by the MCV Honor Council
- gender-, race-, or religion-based, violence or harassment

Graduate students are prohibited from removing, or assisting in the removal of, research-related materials (including, but not limited to, laboratory notebooks, drugs, chemicals, biological samples, laboratory supplies, laboratory specimens or data) from the MCV campus without the written permission of their faculty advisor. Violation of this policy will be construed as an act of theft.

Other examples of unprofessional conduct can include harassment of or disrespectful behavior towards faculty, staff, postdoctoral fellows, graduate students, or professional students.

The university reserves the right to terminate the enrollment of any student for unlawful, disorderly, or immoral conduct or for persistent failure to fulfill the purposes for which the he or she was matriculated.

# **REQUIRED ORIENTATION**

All new graduate students are required to attend both the Pharmaceutical Science Graduate Program orientation organized at the School of Pharmacy and the university-wide Graduate School orientation for all VCU graduate students. International students must also attend the International student orientation. Orientations occur yearly in the beginning of the fall semester. Students who start the graduate program in the spring or who are unable to attend for some other reason will be expected to attend orientations in the following year.

Details about the Pharmaceutical Science Graduate Program orientation will be sent directly to the student from the VCU School of Pharmacy Office for Research and Graduate Studies.

Details about the university-wide Graduate School orientation can be found at the graduate school website located at: https://graduate.vcu.edu/student/orientation.html

Details about the International student orientation can be found at the global education website located at: <a href="https://global.vcu.edu/students/started/">https://global.vcu.edu/students/started/</a>

# **REGISTRATION AND COURSEWORK**

**Registration** - Policies for graduate student registration can be found at: <a href="http://bulletin.vcu.edu/academic-regs/grad/registration-policies/">http://bulletin.vcu.edu/academic-regs/grad/registration-policies/</a>. As with other policies, students are responsible for compliance with University policy standards associated with registration.

Registration for classes for the fall, spring, and summer semesters is normally performed in advance of the formal registration period. THE STUDENT IS RESPONSIBLE FOR THE TIMELY SUBMISSION OF REGISTRATION FORMS FOR EACH SEMESTER. Students will not receive stipend and/or tuition if they are not registered.

**Courses** – All School of Pharmacy graduate students must fulfill curricular requirements of the School consisting of Pharmacy Core Curriculum, courses required by their respective concentrations, and electives (see

**CURRICULA for Graduate Degrees in the Pharmaceutical Sciences** above). These courses and their grades will be documented in the Student Advisory Committee and Course Plan.

A minimum GPA of 3.0 is required for promotion in the program. Failure to maintain at least a 3.0 results in probation. Failure to raise the GPA to the minimum by the end of the next semester results in termination from the program; readmission may occur upon approval of department graduate faculty of the concentration.

Number of credits – Ph.D. students require a minimum of 60 (30 didactic and 30 directed research) credits and M.P.S. and M.S. students require a minimum of 30 (24 didactic and 6 directed research) credits to graduate. Depending upon the particular concentration, full-time students normally register for 9 to 15 hours of graduate credit in the Fall and Spring semesters and for up to 6 hours of graduate credit in the Summer semester. Students funded by RAs or TAs are advised to register for 12 hours of credit for fall and spring semesters and 3 hours for the summer semester. Except for under the most unusual circumstances, enrollment must be continuous during the training period.

Full-time status permits registration for 15 credit hours in the Fall and Spring Semesters and 3 credit hours in the Summer. Auditing a class does not count towards a student's credit hours. University policy regards registration for credit hours over 15 in a given semester (Fall, Spring, or up to 15 in the Summer may be permitted) as an "overload" and subject to additional tuition cost. However, relief from additional tuition cost may be provided if the course "overload" is a requisite component of the program of study. This must be approved by the Graduate School following submission of a **Special Action Form**. While most students register for the first semester beginning in August, arrangements may be made to initiate graduate work at other times during the academic year.

Funded students who fail to take the required amount of credit hours will have their funding withheld. Registration for less than the minimum required number of credit hours may be permitted for students in the final stage of completing a dissertation. Such exemption must be approved by the Faculty Advisor, with notification to the Department Graduate Program Director and Office of Research and Graduate Studies. Such exemption is not automatic. In addition, international students may not be eligible for this exemption and therefore must confirm eligibility with the Global Education Office.

On occasion, students may train, with permission of their advisor, advisory committee, and graduate director, at a site distant from the institution. Under such circumstances, registration for a reduced number of credit hours may be permitted, with the written approval of the Associate Dean for Research and Graduate Studies.

#### **FACULTY ADVISOR**

The Graduate Student Faculty Advisor assumes responsibility for guiding students through their education and training. Faculty advisors work with students to develop a plan of study, supervise the student's projects and research, and may assist with seeking funding as needed for their education and research. VCU Graduate School Bylaws require Faculty Advisors to be members of the graduate faculty

(https://graduate.vcu.edu/media/graduate-school/docs/pdf/UCGBylaws). The Faculty Advisor is supported by a

(<a href="https://graduate.vcu.edu/media/graduate-school/docs/pdf/UCGBylaws">https://graduate.vcu.edu/media/graduate-school/docs/pdf/UCGBylaws</a>). The Faculty Advisor is supported by a Graduate Student Advisory Committee (see page 17 below).

# **Appointment of a Graduate Faculty Advisor**

Students may be required to arrange interviews with graduate faculty members in their department to discuss research projects and mutual interests.

**PCEU and DPOS:** For the Department of Pharmaceutics and Department of Pharmacotherapy and Outcomes Science, a Faculty Advisor is typically assigned to each student prior to entering the program. In the event a Faculty Advisor is not assigned to a student prior to entering the program the Department Graduate Program Director will serve as the acting Faculty Advisor. Uncommitted students are expected to identify a Faculty Advisor within four months of enrolling at VCU.

**MedChem:** For the Department of Medicinal Chemistry, new students are typically not assigned a Faculty Advisor prior to entering the program. The Director of Graduate Program serves as faculty advisor until the appointment of permanent advisor. The process for selection of a permanent advisor involves a common process including faculty interviews, faculty presentations and/or research experiential rotations in two or more laboratories. The department requires the student to submit his/her preference of Faculty Advisor to the Department Chairman by November 1 for students entering the graduate program in the fall and by March 1 for students entering in the spring.

#### **Changing Graduate Faculty Advisor**

Although the vast majority of students maintain the same advisor throughout their entire graduate education process, under certain circumstances (e.g., advisor leaves the university or a better fit is needed for the student's training needs, research interests, and/or goals) a change of Faculty Advisor may be warranted. A change in the permanent Faculty Advisor may be made with permission of the Graduate Faculty member proposed to serve as the new Advisor, the Graduate Director from the appropriate concentration, and the Associate Dean for Research and Graduate Studies. Although Ph.D. students must have an advisor by the end of the Fall semester of their G-2 year in order to progress in the program, a research rotation may be permitted to ensure of a good fit between student and advisor. This option requires approval from prospective advisors, the appropriate graduate program director, and the Associate Dean for Research and Graduate Studies.

Students or Advisors considering an advisor change are encouraged to work with the Advisory Committee, Departmental Graduate Director, Department Chair, or Associate Dean for Research and Graduate Studies to address any specific issues as well as ensure a fair and cooperative process in selecting a new advisor.

#### **Duties of the Faculty Advisor**

- 1. The Faculty Advisor shall, supported by the Graduate Student Advisory Committee, have responsibility for guiding the student's academic and research program.
- 2. The Faculty Advisor shall, together with the student, develop a course plan for the student's didactic program.
- 3. The Faculty Advisor shall, on the basis of the proposed didactic and scholarly program for the student, identify members of the faculty to comprise the Graduate Student Advisory Committee and elicit their agreement to serve.
- 4. The proposed didactic program and the members of the Graduate Student Advisory Committee must be filed with the Office of Research and Graduate Studies using the Graduate Student Advisory Committee and Course Plan Form found on GradTrak <a href="https://gradtrak.pharmacy.vcu.edu/main/fac\_inbox.aspx">https://gradtrak.pharmacy.vcu.edu/main/fac\_inbox.aspx</a>. For Ph.D. students the information must be filed by the end of the Fall semester of the second year and no less than six months prior to Ph.D. candidacy. For M.S. and M.P.S. students the information should be filed no later than the 2<sup>nd</sup> semester of study.
- 5. The Faculty Advisor shall collect necessary information on the student's performance and evaluate progress on an annual basis in accordance with School of Pharmacy guidelines as well as submit a progress report after each advisory committee meeting on GradTrak.
- 6. The Faculty Advisor shall supervise the student's research work and thesis preparation.

- 7. The Faculty Advisor will serve as chair of the examining committee for the student's defense of their thesis project (M.S.) or dissertation (Ph.D.). However, only graduate faculty holding the Ph.D., or equivalent degree, may chair a dissertation committee. Faculty advisors with a Pharm.D. or a Master's degree must delegate the Chair responsibility of a student dissertation to a Ph.D. member of the graduate faculty.
- 8. Ensure that the student has a minimum of one advisory committee meeting per academic year and submit the progress report form in GradTrak.
- 9. Ensure the student creates the individual development plan (IDP), updates it annually, and provide feedback to the student

#### GRADUATE STUDENT ADVISORY COMMITTEE

The Graduate Student Advisory Committee, which supports both the Faculty Advisor and the student, includes individuals with a broad level of relevant scientific expertise and experience in advanced degree education. The Advisory Committee serves as both an examining and consultative body and functions as a source of counsel to assist in the development of the student.

Appointment of the Graduate Student Advisory Committee (see "Graduate advisory committees" on page 27 of the Bulletin; <a href="http://bulletin.vcu.edu/pdf/2019-2020-graduate.pdf">http://bulletin.vcu.edu/pdf/2019-2020-graduate.pdf</a>)

- 1. The Graduate Student Advisory Committee shall be appointed prior to the administration of comprehensive (or cumulative) examinations.
- 2. Each member of the committee must hold a graduate faculty or affiliate graduate faculty appointment.
- 3. The composition of the Advisory Committee shall be such that significant areas of the student's scholarly program are represented in the expertise of the faculty members.
  - **Ph.D.:** The committee will have a minimum of five faculty members, including a chair holding a Ph.D. degree, who may serve as the student's faculty advisor. At least three members must be from within the student's department and at least two from outside the candidate's department.
  - **MS:** The committee will have a minimum of three faculty members, including a chair, who may serve as the student's faculty advisor. At least two members must be from within the student's department and at least one from another department.
  - **M.P.S.:** The M.P.S. is a non-thesis degree that requires the completion of a project instead of thesis or dissertation. The committee will have a minimum of three faculty members, including a chair, who may serve as the student's faculty advisor. At least two members must be from within the student's department and at least one from another department.
- 4. The Faculty Advisor shall identify members of the graduate faculty to comprise the Graduate Student Advisory Committee and elicit their agreement to serve. A formal request should be filed by the Faculty Advisor using the Graduate Student Advisory Committee and Course Plan Form found on GradTrak (<a href="https://gradtrak.pharmacy.vcu.edu/">https://gradtrak.pharmacy.vcu.edu/</a>). Appointment of the Advisory Committee is effective upon approval by the Associate Dean for Research and Graduate Studies.
- 5. Should changes/additions to the Graduate Student Advisory Committee become necessary, a revised form must be submitted via GradTrak for approval by the Associate Dean for Research and Graduate Studies.

#### **Duties of the Graduate Student Advisory Committee**

1. The Committee shall work with the Faculty Advisor in guiding the student's graduate program.

- 2. The Committee will also serve as a consultative body to provide scholarly counsel. The body of experimental work to be incorporated into the dissertation is subject to approval of the membership of the Graduate Student Advisory Committee.
- 3. The Committee must meet at least annually to ensure timely progress toward degree completion. The Faculty Advisor has the responsibility to advise the student when the meeting of the Graduate Student Advisory Committee should take place, and it is the student's responsibility to schedule an appropriate time for this meeting with their committee members. After each advisory committee meeting, the advisor will submit a Graduate Advisory Committee Report form on GradTrak.
- 4. The Graduate Student Advisory Committee shall conduct the Oral Comprehensive Examination for Ph.D. students as well as the Final Oral Defense examination for the M.S. Students. A representative of the Dean appointed by the Office of Research and Graduate Studies shall chair these oral examinations.

#### **TEACHING RESPONSIBILTIES**

Ph.D. students funded by the Graduate Tuition Waiver (GTW) are assigned to serve as a Graduate Research Assistant (GRA) or Graduate Teaching Assistant (GTA). Teaching assistantship assignments for GTAs are made by the SoP TA committee and typically involve the first four Fall/Spring semesters. GTAs typically perform on average 12 hours per week executing duties associated with the teaching assistantship. GRAs are also required to complete duties as assigned and comply with all department and university regulations and guidelines. Course coordinators provide performance evaluations and feedback for GTAs in GradTrak. Failure to perform satisfactorily may result in loss of funding. Students should enter their teaching narrative into GradTrak at the end of each semester.

Self-pay Ph.D. and M.S. students are required to perform some form of teaching during the course of their training. The teaching responsibilities must be completed and documented to a satisfactory level. **Documentation** of teaching duties must be submitted in GradTrak and approved by their Advisor prior to the Final Oral Defense.

## **EXECUTION OF RESEARCH**

Each student in the M.S. and Ph.D. programs must conduct an original investigation under the supervision of their Faculty Advisor, prepare a thesis (for the M.S.) or dissertation (for the Ph.D.) reporting the results of this research and conduct an analysis of its significance in relation to existing scientific knowledge. This research is reported in a thesis or dissertation. The VCU **Graduate School Electronic Thesis and Dissertation**Manual [PDF] serves as a guide for the preparation of graduate theses and dissertations for graduate students in all programs within the university. The M.P.S. program, which is a non-thesis option, requires the completion of a written project suitable for publication in an outlet specified by the student's advisor.

The student and the Faculty Advisor should work together to identify the area of investigation. The Faculty Advisor plays a particularly critical role in providing guidance in the identification of a suitable area of investigation and the progressive accumulation of data, which constitute the body of the project/thesis/dissertation.

In order to ensure that appropriate progress in the maturation of the student as a science professional is achieved, continuing communication between the student and Faculty Advisor is essential. It is in the best interest of the student that the expectations of the Faculty Advisor be fully understood and discussed as appropriate. The student has the obligation to gain an understanding of what will be regarded by the Faculty Advisor as a satisfactory standard of accomplishment.

The experimental work incorporated into the project, thesis or dissertation is subject to the approval of the Student Advisory Committee. The Advisory Committee should, therefore be formally consulted periodically throughout the process to ensure that there is agreement with respect to the material deemed necessary and sufficient for incorporation into the written project/thesis/dissertation. Such consultation will normally occur in the form of a minimum of an annual meeting between the Graduate Student Advisory Committee and the student.

Measures to monitor student progress in research:

- (1) Grade awarded for performance in Directed Research course credit
- (2) Meeting reports of the student with the Advisory Committee and Faculty Advisor
- (3) Annual promotion by the department's graduate faculty, subject to approval by the Graduate Affairs Committee
- (4) Research publications in peer-review journals
- (5) Reviews appearing in peer-review journals or edited textbooks
- (6) Invention disclosures and patents
- (7) Presentations at scientific conferences
- (8) Submitted applications and awards for training grants
- (9) Documentation of progress by completing and distributing Pharmaceutical Sciences Graduate Program forms described in this document, such as Graduate Student Advisory Committee and Course Plan Form, Notice for the Oral Comprehensive Examination, Oral Qualifying Exam Form, etc. These forms can be obtained on GradTrak, from the department Program Directors or from the Associate Dean for Research and Graduate Studies. It is the student's responsibility, upon completion, to copy and distribute the completed forms to the parties listed on the document.

#### ANNUAL REVIEW AND PROMOTION

The formal structure of advanced degree programs provides a basis for ensuring that the standards of performance are maintained and that students are treated equitably while engaged in training that develops an appropriate level of professional rigor and accomplishment.

Each graduate student will be evaluated during the annual review for satisfactory progress in scholarship and research, teaching (e.g., GTA or GRA duties), coursework, and professional conduct. The graduate faculty of the student's department will rate each student in these areas. A student who receives an unsatisfactory rating in any category will be notified in writing using the electronic Graduate Student Annual Review, including what actions must be taken by the student to correct the unsatisfactory rating. Any unsatisfactory rating will automatically cause the student to be on probationary status. Because graduate student funding and mentor advising is a privilege, not an entitlement, failure to remedy the unsatisfactory behavior in the time period specified on the Graduate Student Annual Review Form may be cause for immediate termination and/or loss of funding.

The primary purpose of the annual review is to clearly communicate in writing expectations and impressions regarding student performance to the student, faculty, department and School each year. This annual process also acts as the basis for an annual advisor/student conversation regarding the student's progress. Feedback

may range from praise to disciplinary action, and everything in between. Therefore, students should interpret the feedback on the annual review as informative for future success. A satisfactory review in all evaluated areas will allow the student to be promoted to the next year. A grade other than "satisfactory" is a matter of serious concern and requires review and possible action by the Department to permit continued participation in the program.

A student enrolled in a graduate program may be dismissed from the School in which he/she is enrolled for failure to meet academic requirements prescribed by the school or failure to exhibit the attitudes and skills deemed necessary to function within the chosen scientific discipline. It is the responsibility of the advisor, graduate advisory committee, and/or graduate program director to communicate in writing or email any deficiencies to students.

If the student is terminated from the program or loses funding, the student may request reinstatement in writing to the Associate Dean for Research and Graduate Studies. The final decision regarding the appeal is final.

#### Appeal process following dismissal from the graduate program

A student may appeal a decision to terminate his/her association with the program under the procedures specified by the School of Pharmacy in this document as well as by the VCU Graduate School (<a href="http://bulletin.vcu.edu/pdf/2019-2020-graduate.pdf">http://bulletin.vcu.edu/pdf/2019-2020-graduate.pdf</a>; see Dismissal from a graduate program and appeal process, beginning on page 28 of the Graduate Bulletin).

Consistent with these guidelines:

- 1. The student has the burden of proof in the appeal.
- 2. The student must initiate the appeal process, by written notice to the Department Program Director, within 10 business days after receipt of the Graduate Dean's termination letter. The student shall copy the Associate Dean for Research and Graduate Studies in the School of Pharmacy on the notice.
- 3. Within 15 business days of the receipt of the certified termination letter the student shall submit a written document providing the basis for the appeal of the termination along with any supporting documentation to the Department Program Director.
- 4. The Department Program Director will chair a committee drawn from members of the School of Pharmacy graduate faculty to review the appeal materials submitted by the student. The committee must have a minimum of three members and consist of a minimum of one member from each of the three departments. Members of the student's advisory committee are not permitted to serve on the appeals committee.
- 5. The appeals ad hoc committee shall review the materials submitted by the student. The committee review may allow the appearance of the student before the committee. The review process should be completed within 5 business days from the day of receipt of the appeal document from the student. At that time, the chair of the committee shall prepare a memorandum reflecting the decision of the committee, which is communicated to the student and to the Office of the Associate Dean of the School of Pharmacy. The documentation provided by the student, along with documentation supporting the decision by the appeals committee to accept or deny the appeal shall be forwarded to the Office of the Associate Dean for Research and Graduate Studies.
- 6. The decision of the appeals committee along with all supporting documentation shall be reviewed by the Associate Dean for Research and Graduate Studies.
- 7. The Associate Dean Research and Graduate Studies shall recommend to uphold or reverse the termination. Within 5 business days of receipt of the documentation, the Associate Dean for Research and

Graduate Studies renders the final decision and notifies the student, the program/department and the Graduate School of the decision in writing.

- 8. Action by the Graduate School on receipt of the notice from the School of Pharmacy follows the procedure as described in the Graduate and Professional Programs Bulletin.
- 9. In the event that the termination is upheld, students have the option of filing an appeal with the Graduate Dean according to the guidelines indicated in the Bulletin.

# PROGRESSION TO Ph.D. CANDIDACY

# **Admission to Candidacy**

The Ph.D. degree represents the student's emergence towards becoming an independent research scientist. A critical milestone of this process includes both mastery of subject matter and research competency, as judged in the context of written and oral examinations. Students become eligible for candidacy on the basis of completing required coursework and examinations, and the recommendation of the Faculty Advisor, Graduate Student Advisory Committee and Graduate Program Director. Advancement to candidacy should preferably take place soon after Spring of the second academic year.

#### **Written Comprehensive Exam**

Each student follows the written examination guidelines for his/her respective department. For specific details, please contact Graduate Directors for individual department guidelines. In the event of failure of the written comprehensive examination, repeat of the examination requires approval of the Department. The Associate Dean for Research and Graduate Studies will be notified in writing of the outcome of the written exam by the student's Department Graduate Program Director.

#### **Oral Comprehensive Exam**

Upon passing the written examination, the student becomes eligible for the oral examination. The oral examination is conducted by the Graduate Student Advisory Committee and is chaired by a representative of the dean. The oral examination is administered to assess the ability of the candidate to integrate information and display an appropriate mastery of problem-solving capabilities as well as mastery of basic principles and knowledge of the discipline.

- a. Time line The oral examination should be scheduled following the completion of required didactic coursework, typically after Spring semester of the G-2 year and to be completed by Fall of the G-3 year.
- b. Scheduling The student selects the date, time, and location of the oral examination with the approval of his/her Graduate Student Advisory Committee. The student must then initiate the process by entering the exam date, time, and location in Gradtrak, as well as posting it in the 1<sup>st</sup> floor elevator in the Robert Blackwell Smith Building at least 10 business days prior to the date of the exam. In the event that the student misses this 10-business day requirement, he/she must request an exemption from the Associate Dean for Research and Graduate Studies.

- c. Notification An announcement of the candidate's name, department, time and place of examination shall be posted at least 10 business days in advance of the examination. The student must provide a completed copy of the announcement to the Office of Research and Graduate Studies. The Notice for the Oral Comprehensive Examination form can be obtained on GradTrak. Along with the completed form, a copy of material (e.g. a research proposal) as may be used in the conduct of the oral comprehensive examination should be provided to the Associate Dean for Research and Graduate Studies, who will then post the Notice for the Oral Comprehensive Examination on the respective department bulletin board.
- d. School Representative A graduate faculty member from outside the student's home department shall serve as the representative of the dean. This Representative shall chair the examination as a voting member of the examining committee. The School Representative will be appointed to this role on a rotating basis by the Associate Dean for Research and Graduate Studies. The representative holds the responsibility for compliance with protocol appropriate to the examination, including the equitable treatment of the candidate. Three to five business days in advance of the examination, the Office of Research and Graduate Studies will send the representative the student's file for the exam. Attached to the file is a form used to report the outcome of the examination, the Oral Comprehensive Examination Form.
- e. Attendance The oral comprehensive examination is open to all members of the faculty, but only members of the advisory committee and the dean's representative may ask questions. If a committee member is unable to attend the examination, a substitute may be requested by revising the Advisory Committee Form on GradTrak, followed by approval of the Associate Dean for Research and Graduate Studies
- f. Exam Format The student may present a short overview (maximum 20 min recommended). Each committee member and dean's representative ask questions of the candidate. Following the questioning period, the examination committee dismisses the student from the room, and asks for a motion to pass. Following the motion and second, the committee holds discussion of whether another round of questions is warranted or calls for a vote on the success or failure of the student's performance.
  - i. Voting A favorable vote by the examining committee (all members of body being required to vote) with no more than one negative vote or abstention, is required to pass the examination. Members of the examining committee must vote on the performance as either pass or fail. Absence of a committee member will be construed as a negative vote. The members of the examining committee must indicate the outcome of the exam by completing and submitting Oral Comprehensive Examination Form to the Associate Dean for Research and Graduate Studies.
  - ii. Failure to pass In the event that the student fails the oral comprehensive examination, the student must receive approval of the advisory committee in consultation with department's Program Director to retake the examination. The examination should be retaken within three months of the first examination. Only one re-examination is allowed.

# **COMPLETION OF THE GRADUATE DEGREE**

#### Writing the project (M.P.S.)/thesis (M.S.)/dissertation (Ph.D.)

In the normal course of the development of the thesis/dissertation project, the student's Faculty Advisor will communicate when the project has reached sufficient maturity to initiate writing of the thesis/dissertation.

- a. Graduation Application When the writing is initiated the candidate should complete and file the Graduation Application on-line (http://www.vcu.edu/enroll/forms/graduation/), which indicates an anticipated completion date. An email is sent to all students at the beginning of each semester detailing the procedures and timelines for students expected to graduate in that semester. The student should consult the School and university calendars for deadline dates for completion of each part of the graduation application. This form must be co-signed by the Graduate Program Director, Faculty Advisor, and Associate Dean for Research and Graduate Studies.
- b. Writing the Dissertation/Thesis Students routinely underestimate the time required to complete the writing of the thesis/dissertation document and the creation of a version conforming to the University policy. As the process of creating the document is initiated, a copy of the VCU Thesis Manual should be consulted for guidance. Copies of the manual are available on the University web site: <a href="http://www.graduate.vcu.edu/community/thesis.html">http://www.graduate.vcu.edu/community/thesis.html</a>
- c. Format The student should correctly format the thesis/dissertation using the library's electronic thesis and dissertation online submission and template (http://www.graduate.vcu.edu/community/thesis.html). Current policy affords considerable flexibility in the format of the document but certain requirements, particularly those describing page margins, MUST be followed. Students are highly encouraged to include original research papers as research chapters in the dissertation/thesis. The student should appear as the first author in these papers, which may already be published in peer-review journals, be accepted for publication, are under review, or are in preparation. The final document will also include: 1) an introduction that provides an extensive overview of the research area, a rationale for the research, and overarching hypothesis; and 2) a discussion section that fully integrates the research chapters and provides substantive conclusions and hypothesis-driven future directions. Candidates should consult with the Associate Dean for Research and Graduate Studies to ensure that an acceptable format is being followed in the creation of the document when the on-line template cannot be used.

#### **Final Oral Dissertation Defense**

- a. Final Oral Defense Preparation The Faculty Advisor in conjunction with the advisory committee determines when the thesis or dissertation document can serve as the basis for the Final Oral Defense. The form for scheduling the M.S. and Ph.D. Final Oral Defense can be found on GradTrak.
- b. Notification With approval of the Faculty Advisor, copies of the thesis\dissertation consistent with University standards shall be provided to the members of the Student Advisory Committee

ten (10) business days or more before the date of the defense of the thesis\dissertation. In the event that the student misses this 10-business day requirement, he/she must request an exemption from the Associate Dean for Research and Graduate Studies. Receipt of the thesis is indicated by the signature of the Advisory Committee members on the Notice of Final Oral Defense form or by submission electronically on GradTrak. Signature of the Advisory Committee members on the Notice of Final Oral Defense form is not an endorsement of the dissertation document. The Faculty Advisor has the responsibility of ensuring that the document is in a form that can adequately provide a basis for the defense.

Following acceptance of the thesis\dissertation defense schedule by the committee, the student must submit a copy of the thesis\dissertation and a request for scheduling of the final examination to the Associate Dean for Research and Graduate Studies a minimum of ten (10) business days in advance of the examination date via GradTrak.

The student will then post the Notice of Final Oral Defense to include the name and department of the candidate together with the title of the dissertation and the day, place and time of the examination. A Final Oral Defense seminar is also required and must be scheduled as required by the individual department.

c. School Representative (M.S. only) – A graduate faculty member representing the School shall chair this examination as a voting member of the examining committee. The Associate Dean for Research and Graduate Studies of SOP will select this Representative on a rotation basis and whose appointment is outside the department. The Representative will then be appointed to this role upon approval by the Associate Dean for Research and Graduate Studies. The Representative holds the responsibility for compliance with protocol appropriate to the examination, including the equitable treatment of the candidate.

For the Final Oral Defense, the Office of the Associate Dean for Research and Graduate Studies will send the candidate's file to the School Representative, three to five days in advance of the defense. Attached to the file is the Dissertation Defense Form used to formally report the outcome of the examination to the Associate Dean for Research and Graduate Studies and the Graduate Program Director.

- d. Exam Format and Attendance The Final Oral Defense presentation shall be open to the public, but the defense is only open to graduate faculty. In the event that a committee member is unable to attend the examination, a replacement committee member may serve. The student is responsible for submitting a revised Graduate Student Advisory Committee and Course Plan via GradTrak for approval to the Associate Dean for Research and Graduate Studies. All graduate faculty members may attend the defense, but only advisory committee members and the dean's representative may question the candidate. Likewise, only advisory committee members and the dean's representative shall vote on the success or failure of the candidate.
- e. Voting A favorable vote by the examining committee (all members of body being required to vote) with no more than one negative vote or abstention, is required to pass the examination. All members of the examining committee must vote on the performance as either pass or fail. Absence of a committee member or abstention will be construed as a negative vote. After passing the final examination, Committee members must complete the Dissertation Defense Form, which the Committee Chair then submits to the Associate Dean for Research and Graduate Studies. This form, along with the student's file is returned to the Associate Dean for Research and Graduate Studies. This form is NOT the signature page that must appear in the final version of the thesis or dissertation. At this stage, the Advisory Committee has NOT

- approved the document as final but only that the candidate has completed an examination on the content of the document.
- f. Failure to Pass If the outcome is negative, the Final Oral Defense may be retaken with the approval of the student's advisory committee and the student's Graduate Program Director. Advance written approval by both parties is required by the department on behalf of the candidate.

# **Completion of Project/Thesis/Dissertation**

- a. The Student Advisory Committee approves the thesis document as acceptable after the Final Oral Defense has been successfully completed. Corrections or modifications of the thesis/dissertation document may be requested by the Advisory Committee. Approval of the thesis/dissertation as acceptable is indicated by the signature of all members of the Advisory Committee on the ETD Signature Page of the thesis (available at. http://www.pharmacy.vcu.edu/programs/graduate/current-students/student\_resources/) Approval of the thesis/dissertation by the Advisory Committee must be unanimous. Two original signed copies of the Signature Page should be obtained by the student. A complete copy of the dissertation, along with the Signature Page, is then submitted to the Associate Dean for Research and Graduate Studies for signature by the Dean of the School of Pharmacy, or his representative, and the Dean of the Graduate School.
- b. Submission of the dissertation document should be done according to university guidelines and be submitted on-line (see <a href="http://www.graduate.vcu.edu/community/thesis.html">http://www.graduate.vcu.edu/community/thesis.html</a>). The following forms are also to be delivered to the library when the dissertation is submitted: the completed Signature Page, the Survey of Earned Doctorate form (can be obtained on the School's website, or from the Associate Dean for Research and Graduate Studies or Graduate School).
- c. The candidate may also bind and process the thesis through University Library Services. The student is responsible for payment of all charges for these services including the copyright fee. http://www.library.vcu.edu/services/binding.html.

# **GRADUATION**

**Graduation Attendance** - Students need to apply to graduate through eservices and all signatures need to be obtained electronically. Students must obtain a preliminary freeze after they apply to graduate and their final freeze once their Degree works indicates they are at 100%. Students normally participate in the earliest VCU graduation ceremony that follows completion of degree requirements. The Graduate School permits summer graduates to walk in spring VCU graduation ceremony immediately prior to the summer completion, or in the following fall ceremony. Approval from the student's advisor, program director and the School's Dean are required to participate in the School's graduation if it precedes degree completion. All students should notify the Office of Research and Graduate Studies of intent to walk in any VCU and/or SOP graduation ceremonies, in a timely manner so proper preparations may be made for their participation. After graduation, students should notify the Associate Dean for Research and Graduate Studies of all changes in contact information.

#### ADDITIONAL INFORMATION

#### **Leave Policy**

Students are expected to dedicate a full day's work on campus to academic activities (e.g., research, teaching, study, class, and seminar). In addition to national and university holidays, students are allowed two weeks of vacation per year with prior approval of their advisor. The undergraduate and professional academic program calendars do not apply to graduate students. Vacation time does not accumulate if not used in a one-year period. Special exceptions may be made on case-by-case basis. For example, international students with their advisor's approval may return to their native countries for a visit of not more than four weeks in a two-year period. The student is expected to confer with his-her advisor and then seek approval from the graduate program director and Associate Dean for Research and Graduate Studies. GTW students may jeopardize their school funding if the annual leave time exceed two weeks and they do not receive permission as described above.

Students must consult with their advisor before taking any time off. Absence due to illness must be accompanied by notification to the advisor, graduate director, and Office of Research and Graduate Studies.

# Travel for academic or research purposes

Students traveling to a destination outside of VCU for academic or research activities (e.g., making presentations or attending conference/seminar) need to complete a Travel Authorization Form (see <a href="https://procurement.vcu.edu/i-want-to/travel/">https://procurement.vcu.edu/i-want-to/travel/</a>) prior to travel arrangement. This travel must include the advisor's explicit approval, with a funding source information. The reimbursement must be requested not more than 30 days after return.

Students may apply for travel awards from the department, School of Pharmacy (e.g., Peter and Byron Sian Travel Award and the Rector and Rorrer travel Award; see <a href="https://scholarships.pharmacy.vcu.edu/graduate-awards">https://scholarships.pharmacy.vcu.edu/graduate-awards</a>) to the Office of Research and Graduate Studies and the Graduate School (see <a href="https://graduate.vcu.edu/media/graduate-school/docs/pdf/GraduateStudentTravelGrant.pdf">https://graduate.vcu.edu/media/graduate-school/docs/pdf/GraduateStudentTravelGrant.pdf</a>) to assist in travel expenses. Additionally, students who submit F30 or F31 applications are eligible for a \$1,000 Rector and Rorrer travel award to present their research at a scientific conference.

## Internships

The School of Pharmacy strongly supports internship experiences for Ph.D. students. With their advisor and advisory committee's approval, students may seek external internship opportunities during the graduate program. On receiving the offer of an internship opportunity, students must submit a request for approval to their respective Graduate Program Director and the Associate Dean for Research and Graduate Studies, with support from their advisor. Their TA duties, if any, and graduate study funding support will be appropriately arranged on an individual basis with their advisor, together with the Graduate Program Director and the Associate Dean for Research and Graduate Studies.

Students must register for 1 credit course of research while at their internship. Students on an F-1 Visa must obtain approval from the Global Education Office to participate in CPT (Curricular Practical Training)

## Scholarships/Fellowships

Students are encouraged to seek and apply for internal and external scholarships and fellowships during the graduate program. Upon successful award receipt, they may be relieved of TA duties with the approval of the Graduate Program Director and SOP Associate Dean for Research and Graduate Studies. Students submitting an F30 or F31 application will receive a \$1,000 Rector and Rorrer travel award to present their research at a scientific conference.

#### **NIH Individual Training Grants**

F30 Ruth L. Kirschstein Individual Predoctoral NRSA for MD/Ph.D. and other Dual Degree

Fellowships: <a href="https://researchtraining.nih.gov/programs/fellowships/F30">https://researchtraining.nih.gov/programs/fellowships/F30</a>

F31 Ruth L. Kirschstein Predoctoral Individual National Research Service Award: https://researchtraining.nih.gov/programs/fellowships/F31

Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31 -Diversity): <a href="https://grants.nih.gov/grants/guide/pa-files/PA-19-196.html">https://grants.nih.gov/grants/guide/pa-files/PA-19-196.html</a>

# Administrative Supplement on existing NIH grants

Research Supplements to Promote Diversity in Health-Related

Research: https://grants.nih.gov/grants/guide/pa-files/pa-18-586.html

# NIH Training Institutional Training Mechanisms (Senior investigator serves as Director)

T32 Ruth L. Kirschstein Institutional National Research Service

Award: https://researchtraining.nih.gov/programs/training-grants/t32

R25 Research Education Program: https://researchtraining.nih.gov/programs/research-education/r25

#### Predoctoral Fellowships in Pharmaceutical Sciences

American Foundation for Pharmaceutical Education (APFE): <a href="http://afpepharm.org/index.php/contact/grants-scholarships-and-awards/">http://afpepharm.org/index.php/contact/grants-scholarships-and-awards/</a>

#### **Student Awards**

Graduate student awards may be found at: https://scholarships.pharmacy.vcu.edu/graduate-awards

# **Outside Employment**

Outside employment for Ph.D. students is prohibited unless permission is given by the advisor, Graduate Program Director, and SOP Associate Dean for Research and Graduate Studies. International students with F-1 visa are highly encouraged to consult with the Global Education Office for their requirement and eligibility of outside employment consultation.