Translational Bioscience Graduate Program

School of Medicine

University of Missouri

PhD Graduate Program Student Handbook

University of Missouri-Columbia
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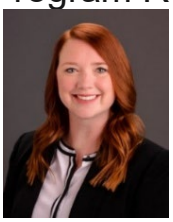

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PROGRAM OVERVIEW

The Doctor of Philosophy (PhD) is the highest academic degree awarded by the University of Missouri. It is conferred upon the completion of a substantial body of original research that advances scientific knowledge. The Translational Biosciences PhD Program, housed in the School of Medicine, provides rigorous training in the conceptual, technical, and professional skills required to become a leader in biomedical research.

Students in this program are prepared to investigate complex problems spanning the full spectrum of biomedical science—from fundamental mechanisms to clinical applications—and to communicate their findings to both scientific and public audiences. The program emphasizes interdisciplinary collaboration and offers flexibility to tailor each student's training to their interests and career goals.

The program is organized around interdisciplinary Research Emphasis Areas, each uniting faculty with shared research interests and a commitment to mentorship: Biochemistry and Biophysics, Cancer Biology, Infection and Immunity, Integrative Physiology, Nutrition and Exercise Physiology, Population and Precision Health.

Each PhD student works with their advisory committee to design an individualized course of study, including foundational coursework, advanced training, and mentored research. Graduates emerge with the expertise to lead in diverse biomedical careers and to drive innovation that improves human health.

ADMISSION INTO THE PROGRAM

General Academic Requirements

The Graduate School of the University of Missouri-Columbia requires that all applicants for a graduate degree should have earned a bachelor's degree (or equivalent) from an accredited institution. See https://gradschool.missouri.edu/admissions/eligibility-process/ for information regarding accreditation and minimum admission requirements.

Language Requirement

International and non-native English-speaking applicants must submit scores from an approved language exam: TOEFL, IELTS, PTE Academic, Cambridge English (B2, C1, or C2), or Duolingo. Score requirements are set by the MU Graduate School English Proficiency Standards.

Applicants from countries where English is the native language are exempt. Others may request a waiver if they have completed at least one year of full-time college-level study in an English-speaking country within the last two years.

An additional English proficiency test is required for any graduate student serving in a teaching role. Students needing to strengthen language skills are encouraged to enroll in courses through the Center for English Language Learning.

Application Submission: Apply to the Translational Biosciences PhD Program at https://applygrad.missouri.edu/apply. Required materials include:

- Transcripts from all undergraduate institutions

- Curriculum vitae (CV)
- Personal statement describing research experience and motivation for pursuing a PhD
- 3 letters of recommendation addressing academic and research potential

Deadline: December 1 (for admission the following August)

Review: Applications are reviewed by a faculty committee representing all Emphasis Areas. Selected applicants will be invited for a campus visit in January. Admission offers must be accepted by April 15.

Orientation: Admitted student appointments begin August 1st, and orientation begins in early August. The academic year starts on the first Monday of the third full week of August.

GRADUATE STUDENTS, APPOINTMENTS AND TUITION

Graduate Research Assistant (GRA) Appointments

Students admitted to the Translational Biosciences PhD Program are expected to commit 100% of their time and effort to their doctoral training. This includes coursework, research, and professional development. To support this full-time commitment, all predoctoral students are appointed as Graduate Research Assistants (GRAs) at 0.5 FTE, which provides a stipend, full tuition support, and university-subsidized health insurance. Deviations from the 0.5 FTE GRA position, such as part-time enrollment or pursuit of a Teaching Assistantship, must be approved in advance by the Emphasis Area Leader

The primary responsibility of a GRA is to conduct research, typically accounting for about half of the student's time, with the remaining effort devoted to coursework and related training. Together, these activities constitute a full-time position. Students must request program pre-approval for any paid work outside the GRA appointment, which must be reported annually. The current base stipend is $33,000 per year, paid monthly. Tuition and student health insurance is fully covered, additionally. Financial support is guaranteed for five years (60 months) for students in good academic standing and making satisfactory progress toward the degree, as defined in the Satisfactory Progress section of the handbook. Students needing additional time may continue to receive support with an approved plan for degree completion.

Students are strongly encouraged to apply for fellowships and external funding as part of their training. All students will receive instruction in grant writing and are encouraged to submit a competitive fellowship application—such as an NIH F31—by their third year. Students who obtain external fellowships that cover their stipend will receive a $2,000 annual stipend supplement, raising their total stipend to $35,000.

COURSEWORK REQUIREMENTS

Registration

Registration for courses each term is the responsibility of the student. Course registration should conform to the student's plan of study, as determined by Program requirements, Emphasis Area requirements and the student's Doctoral Program Committee. Permission numbers may be required for enrollment in some courses. These are obtained from Christa Smith, Program Coordinator. Course information is available through myZou.

Full-time Enrollment

PhD students in Translational Biosciences must maintain full-time enrollment at the University of Missouri-Columbia. Before passing the Comprehensive Exam, full-time status requires 9 credit hours each of Fall and Spring semesters, and 5 credit hours in Summer term. After passing the comprehensive exam, students must enroll in at least 2 credit hours in each of Fall and Spring semesters, and 1credit hour in Summer term. 1 credit hour of TR_BIOSC 9090: Dissertation Research is required each post-comprehensive exam semester (Fall, Spring, Summer) until the dissertation defense.

Adding/Dropping Courses

University guidelines must be followed for adding or dropping courses. Students should consult their emphasis area leader and the program coordinator before adding or dropping courses in a given semester. Dropping a course may necessitate additional matriculated credit hours to maintain full-time enrollment status. Additional fees may be incurred for late registration and are typically the responsibility of the student.

Transfer of Credit

Up to 30 credit hours of graduate coursework from a regionally accredited university may be counted towards the 72 credit hours required for the PhD degree. These transfer credit hours will be considered as general electives and will not count towards the 15 credit hours of 8000/9000 level coursework. The student's emphasis area leader must approve the specific courses to be transferred and request approval from the Graduate School. Requests for more than 30 credit hours must be approved by the Dean of the Graduate School.

Academic Performance and Probation

PhD students must maintain continuous full-time enrollment with a cumulative GPA ≥3.0 in all graduate-level, letter-graded coursework (A–F scale). Additionally, students must pass required (non-elective) TBS and Emphasis Area courses with a B- (2.7 or better). Grades from Satisfactory/Unsatisfactory courses and undergraduate-level courses (below 7000) are excluded from cumulative GPA calculation. If a student's cumulative GPA falls below 3.0, or they score below a 2.7 in a required course, they will be placed on academic probation. Probation is lifted if the GPA is raised to ≥ 3.0 by the end of the next semester. If not, the student may request one additional probationary semester. Failure to reach a 3.0 GPA after two consecutive probationary semesters will result in dismissal. When retaking a course, both the original and repeated grades count toward the GPA. Each required course designated by the Program or Emphasis Area must be passed with a B– (2.7) or better. A lower grade results in academic probation and requires the student to retake the course (or a suitable substitute if original course is unavailable) within one year. Only the retake grade is used to determine if the requirement is met. Failure to earn a B– or higher after retaking the course will result in dismissal.

Students may also be placed on probation for failure to complete non-coursework program requirements including required compliance and safety training, attendance at required program poster sessions, and other emphasis area-specific required activities. All required activities will be clearly communicated to students in advance and include the following unless excused in advance by the Emphasis Area leader:

- Poster presentation at Orientation Week
- Completion of required conflict of interest disclosure in eCompliance
- Completion of Annual Review in MyVita
- Annual Committee Meetings (after formation of Thesis Committee)

Students on Academic probation will remain on their Graduate Research Assistantships and will continue to receive their stipend and tuition/fee coverage. Students on probation will also maintain the same access to University facilities as students not on probation.

Course of Study for the PhD Degree

Earning a PhD requires producing original scholarship that advances scientific knowledge. Because of this, the PhD is a highly individualized degree, with each student developing a unique course of study designed to build technical, operational, and professional skills for research and long-term career success. In the Translational Biosciences PhD Program, responsibility for training is shared among all program stakeholders:

The Program provides oversight through an Executive Committee composed of the Directors and Emphasis Area Leaders. The Program ensures that students meet core requirements in biomedical knowledge, communication skills, and professional competencies. It also oversees curriculum (via the Curriculum Committee) and training in the responsible conduct of research.

Emphasis Areas are faculty groups organized by shared research interests. They provide a disciplinary "home" for students, including specialized coursework. Incoming students provisionally select an Emphasis Area upon admission, with the Area Leader serving as their First-Year Advisor. Final selection of the Emphasis Area occurs by the end of the first Spring semester.

Research Advisors are chosen after students complete three research rotations. By mutual agreement, students select their Advisor, who then helps them form a Doctoral Thesis Committee (minimum of three additional faculty). This committee administers the comprehensive exam, guides dissertation research, and evaluates the final thesis.

The Student is ultimately responsible for their academic progress and successful completion of the PhD. This includes proactively shaping their training experience, engaging in regular communication with mentors, and seeking feedback throughout the research process. Because each PhD journey is unique, students are strongly encouraged to develop an Individual Development Plan (IDP) during their first year to clarify short- and long-term career goals, identify skill gaps, and guide training decisions. It can be reviewed and updated in consultation with the Research Advisor and Doctoral Thesis Committee. This process encourages reflective planning, facilitates mentor-mentee communication, and helps students stay on track toward timely degree completion.

Coursework Requirements

The University of Missouri requires 72 graduate credit hours for a PhD, including >15 credit hours of 8000/9000-level didactic or seminar courses (max 4 hours from seminars). In the Translational Biosciences PhD Program, coursework falls into five categories shown in Table 1. Credit hour distribution varies by Emphasis Area and student timeline. *TR_BIOSC 9090* credit hours adjust as needed to maintain full-time status and reach 72 total hours.

Table 1: Typical 5-Year Credit Hour Breakdown

Course Type	Avg. Credit Hours
Program Didactic Coursework	10
Emphasis Area Didactic Coursework	6–15
Seminars and Journal Clubs	14
Rotation Research	6
Dissertation Research	27-36
Total	72

Year 1 Coursework

All first year students are expected to complete the coursework outlined below. Specific courses may vary for each student, but all students are expected to enroll in courses each semester after consulting their Emphasis Area leader and/or Program Coordinator.

Table 2: Year 1 Coursework

Fall Year 1	CH	Spring Year 1	CH	Summer Year 1	CH
Core Science Course	3-4	Emphasis Area Course	3-4	TR_BIOSC 9090 Dissertation Research	5
TR_BIOSC 9087 First Year Seminar	1	TR_BIOSC 8560 Data Design/Analysis I	3		
TR_BIOSC 9085 Research Rotation	5*	BIO/BCH 8060 Ethical Conduct of Research	1		
		TR_BIOSC 9087 Sec X First Year Seminar	1		
		TR_BIOSC 9085 Research Rotation	1*		
TOTAL CREDITS	**9-10**		**9-10**		**5**

***NOTE**: The difference in the number of rotation credits in Fall vs Spring does not reflect a different expectation for time spent in the lab during rotations. Instead it reflects that most students complete 2 rotations and sometimes part of a 3rd rotation before the beginning of the Spring Semester

Program Didactic Coursework (Y1): In the Fall Semester, first-year students must enroll in one graduate-level (7000+) *"Core Science Course"*, selected in consultation with their Emphasis Area leader. This course should align with both the Emphasis Area and the individual student training needs. In the Spring Semester, all students are required to take *TR_BIOSC 8560 (Data Design & Analysis)* and *BIO/BCH 8060 (Ethical Conduct of Research)*, which provide essential training in research design, data analysis, and research ethics, forming a foundation for future dissertation work.

First Year Seminar: In both Fall and Spring semesters of Year 1, PhD students enroll in a dedicated section of TR_BIOSC 9087 (Seminar). This section is designed to introduce students to a broad range of MU faculty research and to provide a supportive, faculty-free environment where students can practice critically evaluating research presentations and gain confidence in asking questions.

Emphasis Area Didactic Courses (Y1): Each Emphasis Area has its own set of required courses and approved electives, which students begin taking in Year 1. Students should review their Emphasis Area Handbook and consult with their Emphasis Area Leader to plan coursework. It is the student's responsibility to ensure elective choices do not conflict with required Program Didactic Coursework. All Emphasis Area course selections must be approved by the Emphasis Area Leader prior to enrollment each semester.

Research Rotations: All first-year students are required to complete 3 research rotations and associated evaluations by the end of the first Spring Semester. Rotations are typically 8 weeks, but duration may vary to accommodate different research formats and faculty schedules. After completing rotations, students will select their primary faculty research mentor and initiate their dissertation research. Students unable to identify their primary research mentor after 3 rotations may do a fourth rotation with approval of the Emphasis Area Leader Selection of a primary research advisor must occur no later than the end of the Spring Semester unless an extension is granted by the Emphasis Area Leader to extend a rotation into the Summer Semester.

Summer Research: No didactic courses are normally taken during the first Summer Semester. Instead, first-year PhD students will register for 5 credit hours of *TR_BIOSC 9090 (Dissertation Research)* and focus on their dissertation research project.

Year 2 Coursework

Table 3: Year 2 Coursework

Fall Year 2	CH	Spring Year 2	CH	Summer Year 2	CH
Emphasis Area Courses	3-4	Emphasis Area Course	3-4	TR_BIOSC 9090 Dissertation Research	5
TR_BIOSC 9422 Journal Club	1	TR_BIOSC 9476 Fellowship and Grant Proposal writing for Biomedical Scientists	3		
TR_BIOSC 9087 Research Seminar OR Departmental/Emphasis Area Seminar	1	TR_BIOSC 9422 Journal Club	1		
TR_BIOSC 9090 Dissertation Research	3-4*	TR_BIOSC 9087 Research Seminar OR Departmental Seminar	1		
		TR_BIOSC 9090 Dissertation Research	1*		
TOTAL CREDIT HOURS	**9**		**9**		**5**

**9090 credits are added as needed to reach 9 credits in Fall/Spring and 5 in Summer*

Program Didactic Coursework (Y2): In the Spring Semester of Year 2, students will enroll in *TR_BIOSC 9476 (Fellowship and Grant Proposal Writing for Biomedical Scientists)*. This course provides targeted training in

scientific writing and proposal development, preparing students to draft their comprehensive exam proposals and future fellowship applications.

Seminar and Journal Club (Y2): In Year 2, the format of *TR_BIOSC 9087 (Seminar)* shifts to a traditional research seminar model, where students attend weekly presentations by internal and external speakers. Some Emphasis Areas may require a departmental seminar course instead of TR_BIOSC 9087; students should consult their Emphasis Area Handbook and Leader to confirm the appropriate enrollment.

In both Fall and Spring semesters of Y2 and Y3, all students will also enroll in *TR_BIOSC 9422 (Journal Club)*, an interdisciplinary course designed to develop critical reading and discussion skills across a broad range of research areas within the Program.

Emphasis Area-Specific Didactic Coursework (Y2): Students will continue taking Emphasis Area-specific courses in Year 2. As in Year 1, Students should review their Emphasis Area Handbook and consult with their Emphasis Area leader for approval of all coursework.

Summer Research: Second-year PhD students will register for 5 credit hours of *TR_BIOSC 9090 (Dissertation Research)* unless summer elective coursework replaces some or all research credits.

Year 3 Coursework

In Year 3, PhD students will continue enrolling in TR_BIOSC 9422: Journal Club and TR_BIOSC 9087: Seminar each semester. Students should also complete any remaining Emphasis Area coursework. In addition, the comprehensive exam must be completed by the end of the Fall Semester of Year 3 unless an extension is approved by the Emphasis Area leader and mentor. Upon passing, the student advances to PhD Candidacy. After candidacy, full-time enrollment requires a minimum of 2 credit hours in each of Fall and Spring semesters, and 1 credit hour in Summer term.

Table 4: Year 3 Coursework

Fall Year 3	CH	Spring Year 3	CH	Summer Year 3	CH
Emphasis Area Course (if needed)	3	Emphasis Area Course (if needed)	3	TR_BIOSC 9090 Dissertation Research	1
TR_BIOSC 9422 Journal Club	1	TR_BIOSC 9422 Journal Club	1		
TR_BIOSC 9087 Research Seminar OR Departmental/Emphasis Area Seminar	1	TR_BIOSC 9087 Research Seminar OR Departmental/Emphasis Area Seminar	1		
TR_BIOSC 9090 Dissertation Research	4	TR_BIOSC 9090 Dissertation Research	1		
Comprehensive exam	NA				
TOTAL CREDIT HOURS	**9**		**3-6**		**1**

Years 4-5 Coursework

During Years 4-5, the PhD students will focus on their dissertation research, with most PhD students taking no formal coursework. PhD students will continue to register for *TR_BIOSC 9090 (Dissertation Research)* and the appropriate Research Seminar course. If a 6th year is required and, enrollment remains the same as Years 4-5.

Table 5: Year 4 and Year 5 Coursework

Fall Semester Years 4 & 5	CH	Spring Semester Years 4 & 5	CH	Summer Semester Years 4 & 5	CH
TR_BIOSC 9087 Research Seminar OR Departmental/Emphasis Area Seminar	1	TR_BIOSC 9087 Research Seminar OR Departmental/Emphasis Area Seminar	1	TR_BIOSC 9090 Dissertation Research	1
TR_BIOSC 9090 Dissertation Research	1	TR_BIOSC 9090 Dissertation Research	1		
TOTAL CREDIT HOURS	**2**		**2**		**1**

Teaching Experience

While the Translational Biosciences PhD Program does not directly oversee undergraduate or medical teaching, some Emphasis Areas include TA roles as required or elective components of their course-based curriculum. These roles help students develop teaching and communication skills and are considered part of PhD training. All new Teaching Assistants (TAs) must complete MU's Graduate Teaching Orientation in August or January prior to teaching. International students must also meet English fluency requirements, which may differ from those for admission. Students should consult their Emphasis Area Handbook and Leader for specific TA expectations and opportunities.

Biochemistry and Biophysics: In Year 2, students serve as TAs for undergraduate biochemistry courses (e.g., BIOCHM 4270, 4272, or 4974) and register for 3 credit hours of BIOCHEM 9001 (section 3) to receive credit.

Integrative Physiology: In Year 2, students TA for MPP 3202 during both Fall and Spring semesters and register for 2 credit hours of MPP 9001 in each semester. These credits count as Emphasis Area Coursework.

MD/PhD: Students are not required to serve as Teaching Assistants, regardless of their Emphasis Area affiliation.

Other Emphasis Areas: No formal TA requirement. However, interested students should speak with their Emphasis Area Leader and Program Co-Directors to explore teaching opportunities within TBS or other departments.

Graduate School Minor in College Teaching (GMCT) program: Students interested in advanced teaching training may pursue MU's GMCT Program, which includes 9 credit hours of coursework and a teaching practicum. Participation requires approval from the TBS Program and the student's Research Advisor and typically begins after completing PhD coursework and passing the comprehensive exam. GMCT courses may count toward enrollment in place of TR_BIOSC 9090 and are covered by existing tuition or mentor support.

Course of Study for the Dual MD/PhD Degree

The Translational Biosciences PhD Program serves as the academic home for many (but not all) students in the Tom and Anne Smith MD/PhD Program during their PhD phase.

MD/PhD students complete the M1 and M2 years of medical school at MU, which include Problem-Based Learning (PBL) and Introduction to Patient Care (IPC). The PBL curriculum consists of 8 integrated blocks—seven worth 6 credit hours and one worth 3 credit hours—combining basic and clinical sciences through weekly case-based learning. Table 6 shows how these blocks correspond to core biomedical science topics.

To recognize the depth of M1/M2 training, the MU Graduate School and Translational Biosciences PhD Program grant 30 credit hours toward the PhD. This is equivalent to the didactic coursework completed by traditional PhD students in Years 1–2. In addition, during the summer between M1 and M2, students complete a 10-week Medical Research course, which fulfills the PhD program's rotation research requirement. After passing USMLE Step 1, MD/PhD students begin PhD training (aimed to last 3 years) and then rejoin medical school as M3s.

Table 6: Basic Science topics in the PBL curriculum

MyZou Listing of PBL courses	CH in Myzou	Basic Science Topics	CH equivalents
Block 1: MED_ID 5041 Structure & Function I	6	Biochemistry	6
Block 2: MED_ID 5043 Structure & Function II	6	Microbiology	4
Block 3: MED_ID 5045 Structure & Function III	6	Immunology	3
Block 4: MED_ID 5045 Structure & Function IV	6	Pharmacology	4
Block 4: MED_ID 5551 Pathophysiology I	6	Physiology	4
Block 6: MED_ID 5553 Pathophysiology I	6	Pathology	6
Block 7: MED_ID 5555 Pathophysiology III	6	Neurosciences	3
Block 8: MED_ID 5048 Clinical Epidemiology	3	Statistics	3
MED_ID 5215 Medical Research	0	Rotation Research	2

In the PhD, MD/PhD students are required to complete the following courses:

- *BIO/BCH 8060 (Ethical Conduct of Research)*
- *TR_BIOSC 9476 (Grant Writing)*
- Emphasis Area coursework, as determined by their Emphasis Area and Doctoral Thesis Committee

A sample course of study for a MD/PhD student is shown in Table 7, below. Typically, an MD/PhD student should take their comprehensive exam during the Fall of their second year of their PhD program.

Table 7: Sample MD/PhD course of study

Term	Course Number	Course Name	Credits
Year 1 Summer	TR_BIOSC 9090	Research	5
Year 1 Fall	TR_BIOSC 9087 or Emphasis Area Seminar	Seminar	1
	Emphasis Area Elective	TBD	3
	TR_BIOSC 9422	Journal Club	3
	TR_BIOSC 9090	Research	2
Year 1 Spring	BIO/BCH 8060	Ethical Conduct of Research	1
	TR_BIOSC 9476	Grant Writing	3
	TR_BIOSC 9087 or Emphasis Area Seminar	Seminar	1
	Emphasis Area Elective	TBD	3
	TR_BIOSC 9090	Research	1
	TR_BIOSC 9422	Journal Club	1
Year 2 Summer	TR_BIOSC 9090	Research	5
Year 2 Fall *	TR_BIOSC 9087 or Emphasis Area Seminar	Seminar	1
	TR_BIOSC 9422	Journal Club	1
	TR_BIOSC 9090	Research	7
Year 2 Spring	TR_BIOSC 9087 or Emphasis Area Seminar	Seminar	1
	TR_BIOSC 9422	Journal Club	1
Year 3 Summer	TR_BIOSC 9090	Research	1
Year 3 Fall	TR_BIOSC 9087 or Emphasis Area Seminar	Seminar	1
	TR_BIOSC 9090	Research	1
Year 3 Spring	TR_BIOSC 9087 or Emphasis Area Seminar	Seminar	1
	TR_BIOSC 9090	Research	1

**Anticipated timing of the comprehensive exam.*

EMPHASIS AREA & FIRST YEAR ADVISOR

Upon admission, students will provisionally select an Emphasis Area aligned with their research interests. The Emphasis Area leader will serve as the student's First-Year Advisor to guide them through coursework, research rotations, and program requirements during the first two semesters. This selection does not obligate the student to choose a Research Advisor from that Emphasis Area.

During Orientation, the First Year Advisors (Emphasis Area leaders) will provide guidance regarding coursework, research rotations and other programmatic or university requirements. Throughout Year 1, the First Year Advisors will monitor each student's performance in courses and in research rotations. It is the responsibility of graduate students to contact their First Year Advisor with any questions or concerns that arise during their first year.

Selection of an Emphasis Area

During their first year in the PhD program, graduate students will make a final decision regarding their Emphasis Area, based on the fit between their developing research interests and the research within a given Emphasis Area. This decision must be made by the end of Spring Semester unless additional rotation time has been approved by the Emphasis Area leader. Students must notify both the Emphasis Area leader and the program coordinator of the PhD program (Christa Smith) of their intention to join an Emphasis Area, with approval granted by both the Research Advisor and Emphasis Area Leader.

The selected Emphasis Area will be identified on the student's diploma after completion of the PhD degree. Additional coursework offered by other Emphasis Areas or other PhD programs to broaden the knowledge base of a student can be incorporated into the student's Program of Study via elective coursework.

Participating Faculty in Each Emphasis Area

Emphasis Areas are composed of MU faculty members who have active biomedical research programs and share common research interests as well as commitment to training PhD students. Faculty members self-identify their Emphasis Area affiliation(s) and are approved by the Emphasis Area leader. An individual faculty member can be part of more than one Emphasis Area, based on common research interests. Each Emphasis Area will maintain a list of MU faculty members who are eligible to serve as chair or co-chair of a PhD student's Doctoral Thesis Committee.

SELECTION OF RESEARCH ADVISOR

Research Rotations

All first-year PhD students must complete three research rotations before selecting a Research Advisor. During Orientation Week, many faculty interested in mentoring students will present their research. Students should compile a list of potential labs and discuss their rotation plans with their First-Year Advisor. Not all faculty interested in students will be able to present at orientation, and students are responsible for contacting faculty to arrange each rotation. Rotations are typically 8 weeks, but duration may vary to accommodate different research formats and faculty schedules.

Grading of Research Rotations

First-year students must enroll in TR_BIOSC 9085 (Research Rotation) in Fall and Spring, under their First-Year Advisor's section. At the start of each rotation, a form outlining goals and expectations must be completed by the student and faculty mentor and uploaded to Canvas. At the end of the rotation, the student and mentor must meet to review performance, complete an evaluation form, and upload it to the course site. The First-Year Advisor will assign the final Satisfactory/Unsatisfactory grade based on rotations completed each semester.

Selection of a Research Advisor

After completing three research rotations, students must identify a Research Advisor to supervise their dissertation project. This decision should be mutual between the student and Research Advisor, and based on shared research interests and compatible mentoring styles.

Eligibility Requirements: The Research Advisor must be a member of the MU Doctoral Faculty and the student's Emphasis Area. If a co-mentor arrangement is proposed by the student and two willing co-mentors, it can be

permitted if at least one of the faculty members meets the requirements of being a member of both the MU Doctoral Faculty and the student's Emphasis Area.

Process for Selection: After completion of research rotations, the student is expected to notify both their First-Year Advisor and the PhD Program Coordinator of their selected Research Advisor. The advisor-student relationship is a mutual agreement. Both parties must discuss expectations and complete the Mentor-Mentee Compact and submit the associated form to the Program Coordinator at the time of selection.

Financial Responsibility: It is expected that the Research Advisor will have external grant support or other funds to support a student and related research expenses. The Research Advisor must obtain formal approval of financial responsibility from their Department Chair, via submission of the Memorandum of Understanding form submitted to the Program Coordinator. This MOU indicates that the Department Chair approves the advisor's ability to support the student stipend and tuition and is required because the Department assumes financial responsibility if the advisor loses funding during the student's training.

Failure to Select an Advisor: Students who do not secure a Research Advisor after 3 rotations may be placed on probation, pending review by the Executive Committee. Students may request a fourth rotation with approval from their First-Year Advisor. This rotation must conclude by the end of Spring Semester unless an extension is granted by the Executive Committee. If a Research Advisor is not secured after a fourth rotation, the Executive Committee may recommend the student withdraw or be dismissed, following Graduate School policy: https://gradstudies.missouri.edu/policy/probation-termination-policies-for-graduate-students/.

Responsibilities of the Research Advisor

The Research Advisor plays a critical role in guiding the student's scientific development and professional success. Responsibilities include:

- *Provide Mentorship and Training*: Foster an inclusive, supportive, and intellectually rigorous environment for the student to develop and conduct original, reproducible research suitable for peer-reviewed publication and dissemination.
- *Establish Clear Expectations*: Define mutual expectations early, including timelines for coursework, research milestones, comprehensive exams, and dissertation progress. Discuss lab policies, including authorship, data ownership, and publication practices.
- *Support and Evaluate Progress*: Offer regular feedback and impartial evaluations of student performance, including an annual written progress report submitted to the Emphasis Area leader and the Translational Biosciences PhD program.
- *Ensure Appropriate Credit and Recognition*: Acknowledge the student's contributions in presentations, publications, patents, or grant applications and uphold fair authorship practices.
- *Provide Financial Support*: Secure funding for the student's stipend, tuition, and research expenses. Advisors are expected to provide support at the time a student joins their lab, and a clear plan for securing support through year five.
- *Uphold Professional Conduct*: Treat all students equitably, regardless of race, religion, gender, sexual orientation, nationality, or other personal characteristics. Promote a culture of integrity, respect, and accountability.

Responsibilities of the PhD Student

PhD students are responsible for their academic development, research integrity, and professional conduct. Expectations include:

- *Engage Actively in Research and Training:* Take ownership of academic progress and research projects. Communicate regularly with the advisor, meet deadlines, and follow through on agreed-upon responsibilities.
- *Uphold Scientific Integrity:* Conduct research honestly and responsibly. Ensure that data collection, analysis, and reporting are accurate, ethical, and reproducible. Maintain appropriate records of research activities.

- *Acknowledge Contributions:* Credit collaborators and colleagues in presentations, publications, and other professional settings, and adhere to authorship and citation standards.
- *Demonstrate Professionalism:* Respect the time and commitments of faculty and staff. Be proactive in seeking feedback, resolving conflicts, and addressing challenges in research or academic performance.
- *Understand the Mentor's Role:* Recognize that the advisor provides academic guidance, research oversight, and financial support. Be aware that research outcomes may contribute to grant reports, proposals, and lab publications, with proper acknowledgment of student contributions.

(See: Guidelines for Good Practice in Graduate Education, https://gradstudies.missouri.edu/current-students/scholarly-integrity-ethics/guidelines-for-good-practice-in-graduate-education/)

Changing Research Advisors

If the student or Research Advisor believes the advising relationship is no longer workable, they may request to dissolve the relationship by contacting the Empasis Area Leader. The Empasis Area Leader will meet separately with the student, the Research Advisor, and the student's Doctoral Thesis Committee to assess the situation. If the student is making satisfactory progress, the student and Emphasis Area Leader will identify a new Research Advisor with appropriate expertise and funding. If the change of Research Advisor includes a change of Emphasis Area, the new Emphasis Area leader will determine whether additional coursework is needed. If no suitable advisor is found, or if the student is not making satisfactory progress, the student may be asked to withdraw or may be dismissed, following MU Graduate School policies: MU Probation and Dismissal Guidelines (https://gradschool.missouri.edu/policy/probation-termination-and-appeals/).

SELECTION OF A DOCTORAL THESIS COMMITTEE

Timing

After selecting a Research Advisor, a PhD student must identify a Doctoral Thesis Committee. The Research Advisor and the PhD student should work together to identify faculty with complementary research expertise relevant to the likely project(s) that will form the student's doctoral dissertation. The faculty membership of a student's Doctoral Thesis Committee should be identified by the end of the Fall Semester during the PhD student's second year, with the first meeting to be held prior to the end of the Spring Semester of the student's second year.

Composition of a Doctoral Thesis Committee

Each Doctoral Thesis Committee must include the following members:

- The Research Advisor serves as chair of the committee.
- 2 members must be from the student's Emphasis Area (2 with MU Doctoral Faculty Status)
- 1 member must be from a different Emphasis Area or a department outside the Research Advisor's primary appointment
- An optional fifth member may be a non-MU faculty with Graduate Faculty Status C

All committee members have equal voting rights. Any changes to the committee must be approved by the Emphasis Area leader and Program Director. A Change of Committee Form (https://gradschool.missouri.edu/wp-content/uploads/2020/05/cocformdigitalsignature520.pdf) must be submitted to the MU Graduate School for approval.

Responsibilities of the Doctoral Thesis Committee

The Doctoral Thesis Committee supports the student and Research Advisor in developing a course of study, defining and conducting research, and evaluating results. The committee also administers and evaluates the comprehensive exam, reviews research progress, and assesses the final dissertation. Students must schedule at

least one committee meeting per year. The student will submit an annual post-meeting progress report, separate from the Research Advisor's annual MyVita evaluation. This form can be found in the program Canvas site.

EXAMINATIONS AND DOCTORAL FORMS

Graduate School Doctoral Forms

The MU Graduate School has four Doctoral Forms that record specific landmarks of the PhD student's progress toward the PhD degree. These forms are described below, in Table 8 and links to the form can be found at the end of this document. The PhD student is responsible for bringing the appropriate forms to the committee meetings and returning the signed forms to the Program Coordinator, who will send each completed form to the Graduate School while retaining a copy.

Table 8: Doctoral Forms and their Deadlines

Form	Form Title	Deadline
D1	Qualifying Examination Results and Doctoral Thesis Committee Approval	Prior to the end of the Fall Semester of the student's second year
D2	Plan of Study for the Doctoral Degree	Prior to the end of Spring Semester of the student's second year
D3	Doctoral Comprehensive Examination results	Prior to the end of Fall Semester of the student's third year
D4	Report of the Dissertation Defense	When ready

Qualifying Exam (D1 Form)

The Qualifying Exam determines if a student is prepared to begin dissertation research. In the Translational Biosciences PhD program, students qualify by:

- Earning a B- (2.7) or higher in all required first-year courses
- Maintaining a 3.0 GPA across all graduate coursework.

Failure to meet these standards results in immediate probation, with two semesters (Fall/Spring) to remediate. Additional conditions may be set by the Executive Committee. Students who fail to meet probation terms will be dismissed. This determination is typically made during the student's first Doctoral Thesis Committee meeting in Spring or Summer of Year 1, and no later than early Fall of Year 2, when both D1 and D2 forms are usually completed.

Plan of Study (D2 Form)

In consultation with the Emphasis Area leader and Doctoral Thesis Committee, each PhD student must develop a Plan of Study outlining all completed and planned coursework from matriculation through graduation. This must meet requirements set by the Emphasis Area, the Translational Biosciences PhD Program, and the MU Graduate School. Students may request to transfer up to 30 credit hours of prior graduate coursework from a regionally accredited institution. However, the MU Graduate School still requires 15 credit hours of additional 8000/9000-level didactic coursework. Exceptions must be approved by the Dean of the Graduate School. Course changes from the D2 Plan of Study require submission of a Course Substitution Form. The didactic coursework outlined in the Plan of Study must be substantially completed before taking the Comprehensive Exam.

Comprehensive Exam (D3 Form)

The Comprehensive Exam assesses whether the student has developed broad biomedical knowledge and deep expertise in their chosen discipline. Students typically take the exam after Spring of Year 2, and no later than the end of Fall of Year 3.

Format and Committee: In accordance with MU Graduate School policy, the exam includes both written and oral components:

- All Emphasis Areas require students to write and defend a research proposal.
- The exam is typically administered by the student's Doctoral Thesis Committee, but additional faculty may participate per Emphasis Area guidelines.
- Each Emphasis Area defines its own proposal format and evaluation criteria.
- Both components must be completed within one month of each other and while MU is officially in session.

Evaluation: Each exam component is evaluated separately. A Pass requires no more than one vote to Fail per component. If two or more votes to Fail are cast for either component, the result is a Fail for that component.

Advancement to Candidacy: Students who pass both components are advanced to candidacy upon submission of the signed D3 form to the Graduate School. Students must obtain signatures from all committee members and submit the form to the Program Coordinator, who will forward it to the Graduate School.

Failure and Retake Policy: Students who do not pass receive written feedback. They may retake the exam once, between 12 and 16 weeks after the first attempt. The format remains the same. Failure on either component during the second attempt results in dismissal from the program.

Exceptions and Guidelines: Any exceptions to the exam timeline must be requested in writing to the Emphasis Area leader, who will seek approval from the Executive Committee. Changes to Emphasis Area-specific exam procedures must be approved by the Emphasis Area leader, provided they align with MU Graduate School policies.

Maintaining Candidacy: Once advanced, students must maintain continuous full-time enrollment until they complete and defend their dissertation.

Submission of a Fellowship

All PhD students are encouraged to submit a fellowship application to an external funding agency by the end of their third year. To build grant-writing skills students complete TR_BIOSC 9476 (Fellowship and Grant Proposal Writing) in Spring of Year 2. Additional proposal development occurs during the Comprehensive Exam, where students receive structured feedback on a written research proposal. After passing the exam, students are well-prepared to submit a competitive fellowship application. Research Advisors must commit to support their effort to submit a fellowship, if the student is eligible.

Dissertation (D4 Form)

The final steps of the PhD are writing and defending a dissertation based on original research.

Readiness for Defense: The Doctoral Thesis Committee determines when a student is ready to defend. Typically, students begin planning once they have made substantial contributions to one or more published or accepted peer-reviewed research papers. A committee meeting is required to review the proposed dissertation format and content before approval to proceed.

Written Dissertation:

- Must follow MU Graduate School guidelines: https://gradschool.missouri.edu/current-students/thesis-dissertation/thesis-dissertation-guidelines/
- May include published or submitted work with proper attribution and permissions. The student's specific contributions to co-authored work must be clearly stated.
- Individual Emphasis Areas may have additional formatting requirements.
- Must be submitted to the committee at least two weeks before the oral defense.

Oral Defense:

- Must occur while MU is in session.
- Begins with a public seminar open to faculty, staff, and students.
- Followed by a closed session with the Doctoral Thesis Committee.
- A Pass requires no more than one vote to Fail. Votes are recorded on the D4 form. The committee must also sign the dissertation approval page.

Revisions requested by the committee must be completed with the Doctoral Thesis Committee's approval before submitting the final dissertation and D4 form to the Graduate School. A final copy must also be submitted to the Program Coordinator.

EVALUATION OF SATISFACTORY PROGRESS

Annual Progress Report

PhD students must demonstrate satisfactory progress in both coursework and research to remain in the program. Progress is formally evaluated annually, though additional reviews may occur as needed. The MU Graduate School requires all PhD students to submit an annual report via MyVita: https://gradschool.missouri.edu/annual-review-of-graduate-student-progress/

- Student self-report due in late March, including coursework, research progress, and plans for the upcoming year.
- Advisor evaluation due in early May (completed by the Research Advisor or First-Year Advisor if one has not yet been selected).
- Reports are reviewed by the Evaluation Leader or Program Co-Directors by the end of May.

The advisor's evaluation should address academic and research performance, highlighting both accomplishments and areas for improvement.

Satisfactory Progress

Progress in the PhD and the Annual Evaluation require successful progress in both Coursework and Research as outlined above and in the Emphasis Area Handbooks. Key indicators include:

Academic Progress: Students must maintain a 3.0 GPA and earn at least a B- (2.7) in all courses. Failing to meet these standards results in probation. Students have one academic year to remediate coursework, or they may be dismissed. The First-Year Advisor oversees academic progress until a Research Advisor and Doctoral Thesis Committee are selected; thereafter, evaluation is done by the Research Advisor and Doctoral Thesis Committee.

Research Progress (Year 1): Students must pass all research rotations and select a Research Advisor by the end of the third rotation. Failure to do so may result in probation or, after a fourth failed rotation, dismissal.

Ongoing Research Progress: Students must hold at least one annual meeting with their Doctoral Thesis Committee to present progress and set goals. The Doctoral Thesis Committee and Research Advisor report progress to the Emphasis Area leader. If progress is unsatisfactory, the student may be placed on probation and given a remediation plan. Failure to improve may result in dismissal, pending Executive Committee review.

Dismissal and Appeal Process

The Executive Committee will review any recommendations for dismissal from the Program. This review will include any documentation of the student's academic and research progress. The student may request to meet with the Executive Committee and provide additional information. A majority vote of the Executive Committee is

required for dismissal. A decision to dismiss can be appealed to the MU Graduate Faculty Senate (https://gradschool.missouri.edu/policy/probation-termination-and-appeals/).

GRADUATE STUDENT ASSOCIATION

The graduate students in the Translational Biosciences PhD program have joined with graduate students in other graduate programs in the MU School of Medicine to form a Graduate Student Association. The purpose of this Graduate Student Association is to provide both social and academic support to all graduate students in the School of Medicine. The Graduate Student Association holds annual elections to identify leaders who will speak on behalf of the graduate students to the faculty and administrators of the Program. A representative of the Graduate Student Association may attend every Executive Committee meeting of the Translational Biosciences PhD program, except when the Executive Committee is discussing confidential matters including, but not limited to, discussions regarding individual graduate students, faculty members or staff.

STUDENT CONDUCT AND CONFLICT RESOLUTION

Mizzou provides policies, training programs and other resources designed to guide graduate students in research, intellectual property, academic honesty and professional conduct.
https://gradstudies.missouri.edu/policycategory/academic-integrity-ethics

Expectations for Graduate Students' Professional and Acceptable Behavior

- Devote an appropriate amount of time and energy toward achieving academic excellence and earning the PhD.
- Be aware of time constraints and other demands imposed on faculty members and program staff.
- Take the initiative to ask questions that promote understanding of the academic subjects and advances in the field.
- Communicate regularly with faculty advisors, especially in matters related to research and progress within the graduate program and with any teaching responsibilities.

Conflicts with Faculty

Graduate students are encouraged to work out any conflicts with their Research Advisor. If they cannot come to a mutual agreement, the student should seek assistance from members of their Doctoral Thesis Committee or the leader of their Emphasis Area. The Emphasis Area leader, along with the help of other members of the Executive Committee, will work with the student and mentor until a mutual agreement is established.

HEALTH INSURANCE, VACATION AND LEAVE POLICIES

Health Insurance

Health benefits are available to all MU students through the Student Health Center and the Accident and Sickness Insurance program. Payment of the Student Health Center fee is mandatory for full-time students and optional for part-time students. The Student Health Center treats short-term conditions such as colds and flu and refers students to specialists or hospital care if necessary. Accident and Sickness Insurance has been available for all students for many years, on a voluntary basis for domestic students, but mandatory for international students since 1998. For detailed information about the optional insurance plans, consult https://gradstudies.missouri.edu/funding/student-medical-insurance/. Health insurance subsidies are waived for all qualifying full-time graduate students in the program.

A graduate student may enroll in the Accident and Sickness Insurance for Graduate Assistants while attending MU. Students can enroll when they register or classes, either in person or by phone. If the student wishes to enroll in the insurance through the cashier's office or on myZou, they must do so within 30 days of classes. For more

health and medical insurance information visit https://gradstudies.missouri.edu/funding/student-medical-insurance/

Leave of Absence

The Translational Biosciences Program follows the University of Missouri Graduate School Policies for Leave of Absence: https://gradstudies.missouri.edu/policycategory/requested-leave-of-absence.

A graduate assistant unable to fulfill the duties of his or her appointment due to illness, injury or birth/adoption must notify the Program Coordinator, Research Advisor and Emphasis Area leader as soon as possible. The TBS Program may adjust duties as needed. If the student's assistantship is funded by an external grant (e.g., NIH), the funding agency may have policies that must be followed regarding a leave.

If a full leave is required, the assistantship will be temporarily paused for the duration of the leave up to a maximum of one year. For doctoral candidates (those who have completed their comprehensive examination and filed a D3 in the Graduate School), they must also submit their request for a leave to the Graduate School. The request should come in the form of a: (a) support letter directly from the DGS of the student's academic program, and (b) the request from the student that outlines the need for a leave and the requested length of the leave. Doctoral candidates must be continuously enrolled (2 hours for fall or spring semester, 1 hour for summer). However, students with an approved leave of absence will not be required to "make up" the credit hours missed during the leave. As with all students, they are responsible for completing the number of credit hours and milestones required for the degree upon return.

Students who are attending MU with a F-1 Student visa or J-1 Exchange Visitor visa are strongly encouraged to consult in advance with the International Center about their plans if they are considering a leave of absence. Students enrolled in the University's student health insurance plan should consult the insurance company and/or the Graduate Medical Insurance Subsidy Program staff member in the Graduate School prior to the start of their leave.

Before taking an approved Leave of Absence, students must resolve all support-related matters (e.g., GRA, fellowship, visa status) with their Research Advisor and the Emphasis Area leader. This includes confirming the end date of support and any conditions for reinstatement upon return.

Students must notify the Emphasis Area leader, Program Coordinator, and the Office of Graduate Studies before the end of their leave to begin the re-entry process.

Work Hours, Holidays, Sick Days, Vacation and Parental Leave

Students should establish working hours and work expectations with their rotation and thesis advisors each semester. Per MU Graduate School Policies, students are entitled to a 10 days of paid personal time per academic year, scheduled in advance to minimize conflict with their coursework and research activities. Additional vacation and sick/personal time should be arranged and approved in advance with the Research Advisor and/or Emphasis Area leader. University holidays are published annually. TBS is committed to accommodating all major religious and cultural holidays for our students once absences are arranged with the major advisor, course director and/or other relevant parties.

During an academic year, which includes the summer, enrolled graduate students may be absent from normal student responsibilities for up to 10 consecutive workdays for a single illness or illness-related care. These days count toward the 10 personal days outlined above. Students who are receiving University of Missouri financial support will continue to receive support during that period. Graduate students should inform the relevant faculty who supervise their coursework, research, and/or teaching obligations about any absence due to illness as soon as possible; normal course and grading policies for the relevant department(s) and course instructor(s) will apply. Students who must be absent due to illness or illness-related care for more than ten workdays in succession can

either request a leave of absence from the University or apply for an extension of Sick Leave from the Dean of the Graduate School.

Graduate students are allowed a total of two months maternity/paternity leave, of which up to one month may be paid leave upon the approval of the adviser and/or chair.
https://gradstudies.missouri.edu/policycategory/requested-leave-of-absence

USE OF ARTIFICIAL INTELLIGENCE (AI) IN COURSEWORK AND RESEARCH

To comply with updated MU Requirements for Fall 2025, TBS has developed policies on the use of AI tools in the PhD program. In addition to Program-specific requirements outlined below, students must use AI tools in compliance with ethical, research, and IT guidelines from the University of Missouri and other relevant stakeholders, such as granting agencies and publishers. Per the Office of Academic Integrity, improper use of AI is academic dishonesty, and in cases of suspected academic dishonesty, faculty will follow the procedures of that office.

Graduate Coursework: Each instructor will have a statement in the syllabus about using AI that is consistent with guidelines provided by the Office of the Provost. Students will refer to the syllabus for each course for guidelines on AI use.

Supervised Research **(e.g., research rotations, dissertation research):** Research supervisors and mentors will each have a written statement about how AI may or may not be used in research, discuss the policy and AI use with student and other research collaborators frequently, and receive acknowledgement from students/supervised researchers that they understand the supervisor's expectations. **A copy of this statement must be provided to the Program Coordinator by the end of the Fall 2025 semester**. Policies may vary significantly between groups based on the nature of research and faculty opinions on the use of AI in PhD training. Given the dynamic nature of AI tool development and MU Policies on AI tools, faculty advisors may revise their AI policies as needed and provide updated copies to students and the TBS Program Coordinator.

Comprehensive Exams and Dissertation: Because the Comprehensive Exam and Dissertations are formal assessments of the student's original intellectual work, AI use is subject to documentation and disclosure requirements. Students must use third party tools that are approved for the appropriate Data Class Level (DCL) via DoIT AI Guidelines. Be aware that all unpublished research is considered DCL-2, with some data having a higher classification.

AI Use Documentation

Students must keep accurate, dated records of any AI tool used in preparing their comprehensive exam or dissertation. These records should include:

- Date of use (or closest reasonable recollection if recording later)
- The name and version of the AI tool
- A brief description of its use
- A summary of inputs (e.g., prompts) and outputs
- Whether the use was approved by the advisor (if required)

These records do not need to be submitted as part of the dissertation, but should be available upon request by the mentor, doctoral thesis committee, or DGS.

AI Tool Disclosure

A completed AI Tool Disclosure Table must be included in both the written comprehensive exam and the final dissertation.

Table 9: Example of AI Tool Disclosure for Comprehensive Exam and Dissertation

AI Tool Name	Description of Use
Grammarly	Grammar and clarity edits; improved sentence flow in background section
ChatGPT (v4)	Brainstormed potential limitations of proposed experiments (no text copied)
BioRender AI Beta	Auto-suggested schematic layout for figure draft (final figure made manually)
Elicit	Helped identify related articles and summarize abstracts during literature review

AI Use Compliance Checklist

In addition to the AI Tool Disclosure Table, the final versions of the written comprehensive exam and dissertation must include a copy of the AI Use Compliance Checklist (Table 10)

Table 10: AI Use Compliance Checklist

Requirement	Student Initials	Advisor Initials
AI use was documented in research records		
AI use complies with current MU DoIT Policy		
AI use complies with TBS Policy		
AI use complies with Research Advisor Policy		
All AI use is described in the AI Tool Disclosure Table		

Acceptable use of AI:

- *Brainstorming and Idea Generation*: Using AI to explore research questions, clarify terminology, or identify related concepts.
- *Literature Review Support*: organizing papers, suggesting related literature, or organizing citations
- *Grammar and Language Assistance*: Improving sentence structure, grammar, and clarity without changing the scientific meaning or introducing new content.

Unacceptable use of AI:

- *Proposing Experiments or Study Designs*: Experimental rationale and methodology must be developed by the student, in collaboration with their faculty advisor and doctoral thesis committee.
- *Interpreting Data*: Conclusions, insights, or discussions based on experimental findings must reflect the student's original scientific reasoning.
- *De Novo Writing of Dissertation Sections*: AI-generated text that contributes substantially to the dissertation (e.g., full paragraphs, summaries of findings, or discussion points) is not permitted, even if edited by the student.
- *Ghostwriting*: Any use of AI tools that results in the generation of dissertation content presented as the student's own ideas or conclusions is strictly prohibited.

Conditional uses of AI that require approval by Research Advisor

The list below includes examples of AI use that may be acceptable to some Research Advisors but not others. Students should consult their Research Advisors for approval of all AI uses not explicitly approved or disallowed by TBS policy.

- Data management, preprocessing and/or visualization
- Statistical analysis, justification and/or modeling
- AI-assisted coding or script generation
- Image processing and analysis
- Manuscript preparation

UNIVERSITY RESOURCES FOR GRADUATE STUDENT

Contacts

Students are referred to the UM website (http://www.missouri.edu/) for the most up-to-date listings of phone numbers and e-mail addresses.

The University of Missouri-Columbia Columbia, MO 65211 URL: https://www.missouri.edu/	**Mizzou Online** 212 Heinkel, 201 S. 7th St., Columbia, MO 65211 Phone: (573)882-2491 https://online.missouri.edu/
Disability Services S5 Memorial Union Phone: (573)882-4696 https://disabilityservices.missouri.edu/	**Transcripts & Certifications** Office of the University Registrar 125 Jesse Hall https://registrar.missouri.edu/transcripts-certifications
Graduate Admissions Graduate School 210 Jesse Hall Phone: (573)882-6311 or 1-800-877-6312 Fax: 1-877-632-6316 https://gradschool.missouri.edu	**Registrar** Office of the University Registrar 125 Jesse Hall M-F 8:00-5:00 Phone: (573)882-7881 https://registrar.missouri.edu
International Center N52 Memorial Union Phone: (573)882-6007 https://international.missouri.edu	**Financial Assistance** Student Financial Aid 230 Jesse Hall Phone: (573)882-7786 https://admissions.missouri.edu/costs-aid/financial-aid/
Student Veterans Resources & Support Center N-5 Memorial Student Union Phone: (573)884-4383 Fax: (573) 884-4387 https://veterans.missouri.edu/	**Housing** Residential Life, Division of Student Affairs 0780 Defoe-Graham Hall; 901 Hitt Street, Columbia, MO 65211-4050 Phone: (573)882-7275 https://housing.missouri.edu
Food and Clothing Support: Tiger Pantry and Truman's Closet 299 Hitt Street (Hitt Street Parking Structure) Phone: 573-882-2704 https://tigerpantry.missouri.edu/	**Office of Institutional Equity** 320 Jesse Hall and 145 Heinkel Building Phone: 573-882-3880 equity@missouri.edu https://equity.missouri.edu/

Important Links and Forms

Mizzou Academic Calendar
MyZou
Canvas
MU Alert
Annual Review Process and myVITA tutorial
myVITA
Course substitution form
D1 Form
D2 Form
D3 Form
D4 Form
Thesis submission deadlines