

TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER
Graduate School of Biomedical Sciences

Guidelines and Requirements for Graduate Students
Immunology and Infectious Disease Program (IID)

I. Program of Study

The Immunology and Infectious Disease (IID) program offers a Doctoral (PhD) degree in Biomedical Sciences. At the time of admission into the PhD program, all students are subject to the requirements listed in the Texas Tech University Health Sciences Center Student Handbook (Code of Professional and Academic Conduct), the Graduate School of Biomedical Sciences Catalog, as well as the guidelines given below.

II. Program

A. Prerequisites for Admission into the IID Concentration:

- All students admitted into the GSBS PhD program are considered “Undeclared” and are required to take all the GSBS Core Curriculum courses in the Fall and complete all GSBS IPE requirements (https://www.ttuhscc.edu/interprofessional-education/core_curriculum.aspx)
- All Undeclared students are required to complete three lab rotations prior to declaring a concentration and choosing a lab.

B. Program Curriculum

- Program Curriculum – *For more in depth description of the courses, please see the GSBS Catalog* <https://app4.ttuhscc.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/PhD-in-Biomedical-Sciences>
- A minimum of 72 hours (48 Didactic, 12 Research, and 12 Dissertation) of graduate work are required for the PhD degree in the Immunology and Infectious Diseases Concentration including:
 - Core courses I(GSBS 5471) Core II (GSBS 5372), Core III, (GSBS 5373), Core IV (GSBS 5174), Core V (GSBS 5275)
 - Lab Rotations (GSBS 5098)
 - Responsible Conduct of Research (GSBS 5101)
 - Two of the three Fundamental Micro and Immunology Courses (GBTC 52XX)
 - Two upper level Micro/Immunology courses (GIID 63XX)
 - 11 hours of Electives/Selected Topics (GIID 63XX courses or a graduate level course outside of the concentration that is relevant to the student’s degree plan)
 - Seven hours of Microbiology Seminar (GIID 7101)
 - 12 hours of Research (GIID 7000)1
 - 2 hours of Dissertation (GIID 8000)
- Per GSBS requirements, all IID PhD students must have published an original peer-reviewed

first author research publication prior to scheduling their defense. The manuscript must be in a peer-reviewed journal that is indexed by PubMed or Web of Science. Please see the GSBS Catalog for any exceptions to this policy.

Required Courses

Course Number	Course Name	Credit Hours
GSBS 5471	Core I: Molecules	4
GSBS 5372	Core II: Cells	3
GSBS 5373	Core III: Genes	3
GSBS 5174	Core IV: Biomedical Seminar	1
GSBS 5275	Core V: Laboratory Methods	2
	Total	13

Course Number	Course Name	Credit Hours
GSBS 5098	Techniques in Biomedical Research	6
GSBS 5101	Responsible Conduct of Research	1
	<i>Two of the Fundamental & Immunology course</i>	4
GBTC 5212	Fundamentals of Bacteriology (2)	
GBTC 5213	Fundamentals of Virology/Parasitology (2)	
GBTC 5214	Fundamentals of Immunology (2)	
GIID 70101	IID Seminar	1
	Total	12

Course Number	Course Name	Credit Hours
GSBS 5098	Techniques in Biomedical Research	6
	Total	6

Course Number	Course Name	Credit Hours
GIID 63XX	Two upper level courses	3
GIID 63XX		3
GIID 7101	Seminar	1
GIID 7000	Research	2
	Total	9

Course Number	Course Name	Credit Hours
GIID 63XX	Two upper level courses	3
GIID 63XX		3
GIID 7101	Seminar	1

GIID 7000	Research	2
	Total	9

C. Major Advisor and Advisory Committee

- In accordance to GSBS Policy the PhD Advisory Committee shall be composed of at least four graduate faculty members (although at least five is preferable), with at least three members from the IID concentration and at least one of the members from outside the concentration. The advisory committee for the Master’s program will consist of a minimum of three faculty members from the IID concentration.
- The graduate advisor will meet with all IID students once a year to monitor student progress and identify any problems within the concentration.
- Student committee meetings are mandatory and will be required twice a year, without excuse. Scheduling is the responsibility of the student and the mentor. The GSBS office and the graduate advisor will monitor the committee meetings. The student is required to provide a handout to the mentor and committee at least one week before the meeting that summarizes the goals of the project and details of progress made since the last meeting.
- Committee meeting minutes will be detailed. Minutes will specifically note any problems and demands made by the committee and/or mentor along with a timeline for addressing these issues. Minutes must be filed with both the GSBS office and the IID Department. Problems with students or their progress are expected to be documented in detail in the committee meeting minutes. Problems that cannot be resolved by the student, mentor and committee, will be resolved by a special meeting between the student, mentor, committee, graduate advisor and departmental chair.

D. Assessment Student Progress

- The student’s mentor and advisory committee are responsible for overseeing the student’s progress. They will make the most substantive contributions to, and the most important decisions regarding the student’s academic career. The committee membership must include at least three IID members and one member from an outside concentration or qualified individuals from TTU. Faculty members at other institutions may be members with the permission of both the mentor and the graduate advisor.
- Every year the student and their mentor(s) will meet with the GSBS Student Affairs Advocate to discuss student status and to address any questions or concerns the student may have.

E. Qualifying Exam

For the detailed Qualifying Exam time line, please see the GSBS Course Catalog (on website located under “Doctoral Degree” section; on page 23 of 79 in the Full Catalog PDF version).

<https://app4.ttuhs.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/General-Policies>

- The purpose of the Qualifying Examination is to ensure that students have mastered the fundamentals in a major area of interest, and they are adequately prepared to begin working full-time on doctoral research. The following policies and procedures apply to ALL current Biomedical Sciences Ph.D. students, regardless of which concentration they have chosen.
- A student is eligible to stand for this examination after receiving approval of the doctoral degree plan from the GSBS Office and completing most of the course work prescribed by the

approved plan. Students may take the Qualifying Examination as soon as they have completed core coursework, however, ***it must be completed by the end of the third year.***

- The qualifying exam shall be written in the NIH F30 (MD/PhD)/F31 (PhD) format. A complete application including all the forms (abstract, specific aims, research plan, biosketch, training plan, etc.)
- The oral exam should be presented as a typical public seminar (40-45 minutes) followed by an open Q&A discussion. This presentation will be followed by a closed-door committee examination.
- With the consent of the mentor and the student, the Advisory Committee will serve as the Qualifying Examination committee, with the exception that the Chair of the Committee will be elected by the committee members. The mentor is ineligible to be the Chair. The Examination Committee votes (pass/fail) on both the written and oral exam components. If a student receives more than one negative vote for one component, this will constitute failure of the respective exam component. The student may repeat each component only once.

7. Completion of the degree program:

- The IID concentration will follow all GSBS policies and procedures. Additional details on the following are available in the GSBS catalog:
<https://app4.ttuhsu.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/General-Policies>
- In addition to the GSBS grade policy, the concentration reserves the right to terminate any student that receives a failing grade in any course.

Graduate Faculty of the Program

Graduate Advisor: Joe Fralick, Ph.D.

Full Membership
Almodovar, Sharilyn, Ph.D.
Bright, Robert, Ph.D.
Fralick, Joe, Ph.D.
Grisham, Matthew, Ph.D.
Hamood, Abdul, Ph.D.
Pruitt, Kevin, Ph.D.
Rolfe, Rial D., Ph.D.
Siddiqui, Afzal, Ph.D.
Associate Membership
Cordero, Joehassin, M.D.
Dufour, Jannette, Ph.D.
Griswold, John, MD
Guindon, Josee, D.V.M., Ph.D.
Lowe, Devin, Ph.D.
Rahman, Rakhshandra, Ph.D.
Reid, Ted, Ph.D.
Rumbaugh, Kendra, Ph.D.
San Francisco, Michael, Ph.D.
Schneider, Brandt, Ph.D.
Trasti, Scott, DVM

Williams, Simon, Ph.D.

Winn, Richard, M.D.

Adjunct Membership

Wakeman, Catherine, Ph.D.

Helpful links

GSBS Student Resource Center: <https://www.ttuhsu.edu/biomedical-sciences/student/default.aspx>

All GSBS required forms for students: <https://student.ttuhsu.edu/biomedical-sciences/current/default.aspx>

GSBS Academic Calendar: <https://www.ttuhsu.edu/biomedical-sciences/calendar.aspx>

GSBS Catalog: <https://app4.ttuhsu.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/General-Policies>