IMP PHD REQUIRED COURSEWORK

The curriculum detailed below satisfies all coursework credit hours and IMP program course requirements in the first two graduate years. However, students may enroll in additional GDBBS courses after the 2nd year with the approval of their advisor and the post-qual DGS.

Semester 1 (Fall – registered by the Program Administrator)

- Basic Biomed & Biol Sciences I: IBS 555 (6 credits)
- Concepts of Immunology: IBS 542 (4 credits)
- Laboratory Rotations: IMP 597r (1 credit)
- Colloquium in Immunology: IMP 792r (2 credits)
- Advanced Graduate Seminar: IMP 790r (1 credit)
- Jones Program in Ethics: JPE 600 (0 credits)

Semester 2 (Spring. Students register themselves beginning in Spring of Year 1)

- Virology: IBS 513 (5 credits)
- Current Topics in Immunology: IBS 747r (5 credits)
- Advanced Graduate Seminar: IMP 790r (1 credit)
- Laboratory Rotations: IMP 597r (1 credit)

Semester 3 (Fall)

- Advanced Graduate Seminar: IMP 790r (1 credit)
- Annual Reviews in Immunology: IBS 777r (2 credits)
- Colloquium in Immunology: IMP 792r (2 credits)
- Advanced Graduate Research: IBS 699r (4 credits)
- TATTO: TATT 600 (1 credit)
- TATTO: TATT 605 (2 credits)

Semester 4 (Spring)

- Advanced Graduate Seminar: IMP 790r (1 credit)
- Hypothesis Design & Scientific Writing: IBS 522R-02P (4 credits)
- Stat Design and Analysis of Experiments: IBS 538 (4 credits)
- Advanced Graduate Research: IBS 699r (1 credit)
- TATTO (if not completed in fall): TATT 605 (2 credits)

Years 3+ (Fall & Spring)

Prior to submitting Application for Candidacy:

- Advanced Graduate Seminar: IMP 790r (1 credit)
- *Adv. Graduate Research: IBS 699r (8 credits)

After submitting Application for Candidacy:

- Advanced Graduate Seminar: IMP 790r (1 credit)
- *Dissertation Research: IMP 799r (8 credits)

*Research credits are variable and should be adjusted based on any additional electives the student may take. Total credits should be at least 9, or, if exceeding 9, be as close to 9 as possible for each semester in years 3+.
Over the summer, students will register for 9 credits of research. Pre-candidacy students should register for Advanced Graduate Research, IBS 699r. Post-candidacy students should register for Dissertation Research, IBS 799r.

Students can be exempted from specific required courses if it is established that equivalent previous course work has been satisfactorily completed. Other electives would then be available for the student to substitute for the exempted required course. **This must be approved in writing by the Director of Graduate Studies and the faculty advisor.**

**Electives**
Electives are to be decided jointly between student and advisor.

**Possible GDBBS Electives Include:**
- IBS 568 Principles of Anti-infectives
- IBS 760R Computational Systems Biology: Modeling Biological Responses
- IBS 524 Cancer Biology II

Other electives can be found on the [GDBBS Internal website](#) under “Students” → “Course Information”.

**On Non-GDBBS Electives**
Students wishing to take for credit electives outside of GDBBS must obtain prior approval from all of the following: (1) their research mentor, (2) an IMP DGS, and (3) the instructor in charge of the course. In general, the program does not encourage students to make substantial commitments to elective courses because these can detract from their focus on their research projects.