

	Fall Term*	Spring Term*	Summer Term*
<b>GS1</b>	<p><b>Required Coursework:</b> GRD 717: Principles of Sci Integrity (Bioethics) MSTP 798: Non-dissertation Research Biostatistics Course (See Page 2) Journal Club</p> <p><b>Elective/Advanced Course(s):</b> A total of 3 advanced courses, which should be decided by mentor and thesis committee.</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p>	<p><b>Required Coursework (See MS2 Schedule):</b> GBS 740A: Intro to Immunology I (1.8.18 – 2.2.18) GBS 740B: Intro to Immunology II (2.5.18 – 3.2.18) GBS 744: Mucosal Immunology (3.5.18 – 3.30.18) GBS 774: Lymphocyte Biology (4.2.18 – 4.27.18)</p> <p>GRD 701: Presentation &amp; Discussion Skills MSTP 798: Non-dissertation Research</p> <p>Journal Club</p> <p><b>Elective/Advanced Course(s):</b> A total of 3 advanced courses, which should be decided by mentor and thesis committee.</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>Dissertation Committee Formed- By end of semester</b></p>	<p><b>Required Coursework:</b> MSTP 798: Non-dissertation research</p> <p>Journal Club</p> <p><b>Elective/Advanced Course(s):</b> A total of 3 advanced courses which should be decided by mentor and thesis committee.</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p>
<b>GS2</b>	<p><b>Required Coursework:</b> GBSC 722: Dev of Comm. Skills for Bio Research MSTP 798: Non-dissertation research</p> <p>Journal Club</p> <p><b>Elective/Advanced Course(s):</b> A total of 3 advanced courses which should be decided by mentor and thesis committee.</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>Submit Annual Progress Report Committee Meeting (October/November)</b></p>	<p><b>Required Coursework:</b> GBSC 722: Dev of Comm. Skills for Bio Research MSTP 798: Non-dissertation research</p> <p>Journal Club</p> <p><b>Elective/Advanced Course(s):</b> A total of 3 advanced courses which should be decided by mentor and thesis committee.</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>**Qualifying Exam/Admission to Candidacy by April 7<sup>th</sup></b> <i>Written due to committee by Feb 1<sup>st</sup>. Revisions due back to the committee by Mar 21<sup>st</sup>. Anticipated Date of QE/Candidacy- April 7<sup>th</sup></i> <b>Committee Meeting (April/May)</b></p>	<p><b>Required Coursework:</b> MSTP 799: Dissertation research</p> <p>Journal Club</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p>
<b>GS3</b>	<p><b>Required Coursework:</b> GBSC 722: Dev of Comm. Skills for Bio Research MSTP 799: Dissertation research</p> <p>Journal Club</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>Submit Annual Progress Report Committee Meeting (October/November)</b></p>	<p><b>Required Coursework:</b> GBSC 722: Dev of Comm. Skills for Bio Research MSTP 799: Dissertation research</p> <p>Journal Club</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>Committee Meeting (April/May)</b></p>	<p><b>Required Coursework:</b> MSTP 799: Dissertation research</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p>
<b>GS4</b>	<p><b>Required Coursework:</b> GBSC 722: Dev of Comm. Skills for Bio Research MSTP 799: Dissertation research</p> <p>Journal Club</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>Submit Annual Progress Report Committee Meeting (October/November)</b></p>	<p><b>Required Coursework:</b> GBSC 722: Dev of Comm. Skills for Bio Research MSTP 799: Dissertation research</p> <p>Journal Club</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>Committee Meeting (April/May)</b></p>	<p><b>Required Coursework:</b> MSTP 799: Dissertation Research</p> <p><b>Seminar:</b> Recommended. Attend Immunology Seminar or other, but do not register</p> <p><b>Dissertation Defense**</b> (public &amp; private) <b>Graduation</b></p>

\* Students must register for 9 hours each semester; any hours over must be approved by the MSTP Director.

- Permission from MSTP Director, Theme Director, and Thesis Mentor needed to register for Career Development Courses (e.g., GRD and CIRTL)

\*\*Students must be admitted to candidacy for a minimum of 1 year before thesis defense.

**Additional theme requirements**

- Publications: Two accepted or published papers
- Presentations: At least one (1) presentation at a national or international scientific meeting

**Additional MSTP Requirements**

- MSTP 794 (1): Translational Research Seminar Series (Fall, Spring, Summer)
- MSTP 795 (1): Continuing Clinical Education (Fall, Summer)
- MSTP 798 (1-8): Non Dissertation Hours
- MSTP 799 (1-8): Dissertation Hours (must be Admitted to Candidacy)
- Submission of F30/F31 **on or before** April of GS2 Year
- Committee Meetings every 6 months

**Biostatistics Courses available for MSTP Students:**

**GBSC 731: Introductory Biostatistics for Graduate Biomedical Sciences.** - This course has been specifically designed for the GBS students. Fall.

Note: often BST 611 and 612 are taken together.

**BST 611. Intermediate Statistical Analysis I.** - Students will gain a thorough understanding of basic analysis methods, elementary concepts, statistical models and applications of probability, commonly used sampling distributions, parametric and non-parametric one and two sample tests, confidence intervals, applications of analysis of two-way contingency table data, simple linear regression, and simple analysis of variance. Students are taught to conduct the relevant analysis using current software such as the Statistical Analysis System (SAS). 3 hours. Fall.

**BST 612. Intermediate Statistical Analysis II.** - This course will introduce students to the basic principle of tools of simple and multiple regression. A major goal is to establish a firm foundation in the discipline upon which the applications of statistical and epidemiologic inference will be built. Prerequisite: BST 611 or Permission of Instructor. 3 hours. Spring.

Note: often BST 621 and 622 are taken together.

**BST 621 - Statistical Methods I.** - Mathematically rigorous coverage of applications of statistical techniques designed for biostatistics majors and others with sufficient mathematical background. Statistical models and applications of probability; commonly used sampling distributions; parametric and nonparametric one and two sample tests and confidence intervals; analysis of contingency tables; simple linear regression and analysis of variance. Prerequisites: A year of calculus and linear algebra. 3 hours. Fall.

**BST 622 - Statistical Methods II.** - Continuation of concepts in BST 621, extended to multiple linear regression; analysis of variance, analysis of covariance, multiple analysis of variance; use of contrasts and multiple comparisons procedures; simple and multiple logistic regression, and an introduction to survival analysis. Prerequisites: BST 621. 3 hours. Spring.