

# First-Year Biostatistics Courses and Software Requirements for EPID Students

The usual first-year BIOS courses for Epidemiology students are BIOS 600 (Principles of Statistical Inference) and BIOS 645 (Principles of Experimental Analysis). These courses are taught at a basic level, assume no prior statistical training, and do not rely on calculus or linear algebra.

[Note: The BIOS 600 recitation is a help session and enrollment in the recitation is not required.]

If you have recent university-level calculus, a strong quantitative foundation, and an interest in statistical methods, you should consider an alternative sequence: BIOS 662 (Intermediate Statistical Methods) and BIOS 663 (Intermediate Linear Models). This sequence provides a more complete and rigorous introduction to fundamental statistical concepts that will serve you well throughout your further training and career. It also provides the necessary foundation for applied Biostatistics courses relevant to epidemiologic practice, such as BIOS 664, 668, 670 and 680. [Note: BIOS 650 (Basic Elements of Probability and Statistical Inference I) can be taken instead of BIOS 662; however, BIOS 662 is recommended.]

EPID students take an advanced statistics course (generally in their 2<sup>nd</sup> year) as determined with their mentor (e.g., BIOS 664, BIOS 665, BIOS 667, SOWO 917, SOCI 717).

## Notes:

- Students may request an exemption of a required BIOS course based on previous coursework and/or experience.
- Students may declare a minor in Biostatistics, which requires 15 hours of biostatistics courses.
- For further information on the process for exempting a course or declaring a minor, reach out to the Academic Coordinator or send an email to [epidemiology@unc.edu](mailto:epidemiology@unc.edu).

Although expectations for software skills in EPID and BIOS courses vary from course to course and from year to year within a course, SAS predominates. EPID 715/6 requires demonstration of basic competence in SAS and provides support only in SAS. EPID 718 has no software restrictions, but homework data sets are provided in SAS and Stata formats and teaching assistant support is usually available only in SAS. EPID 722 requires SAS competence at an intermediate level.

Most Epidemiology students take EPID 700 in their first semester to acquire sufficient SAS skills for EPID 715 and subsequent courses. An exemption exam is available in the summer prior to matriculation for students to with SAS experience to prove competency. For further information on the exam, contact Dr. Yvonne Golightly ([golight@email.unc.edu](mailto:golight@email.unc.edu)) or Dr. Mollie Wood ([mwood@unc.edu](mailto:mwood@unc.edu)), who coordinate it.

## Questions? Contact:

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