

<b>Georg-August-Universität Göttingen</b> <b>Module B.MES-SK.1115: Biostatistics</b>	6 C 4 WLH
<b>Learning outcome, core skills:</b> The module will provide the students with a basic understanding of descriptive, exploratory and confirmatory statistics to enable them to understand statistical details in scientific publications, apply statistical methods to their own data and to interpret results from statistical analyses. The lecture will cover descriptive and exploratory graphical tools and measures as well as the fundamental principles of confirmatory statistics (statistical point estimates, confidence intervals, statistical tests). Furthermore, it will briefly discuss the concepts of statistical predictions and model choice. In addition to the methodological concepts, the lecture will also comprise an introduction to the R language for statistical computing.	<b>Workload:</b> Attendance time: 56 h Self-study time: 124 h
<b>Course:</b> B.MES-SK.1115.Lec <b>Introduction to biostatistics (Lecture)</b>	2 WLH
<b>Course:</b> B.MES-SK.1115.C <b>Applied biostatistics with R (Exercise)</b>	2 WLH
<b>Examination: Term paper (max. 10 pages)</b> B.MES-SK.1115.Mp: Biostatistics <b>Examination prerequisites:</b> Regular attendance during the exercise and regular submission (80%) of assignments (1 page each)	6 C
<b>Examination requirements:</b> The students demonstrate their ability to understand, apply and interpret statistical methodology in a statistical analysis. In the exercises, they will solve both theoretical and applied problems while for the term paper they will independently conduct their own statistical analysis and document the corresponding results.	
<b>Admission requirements:</b> none	<b>Recommended previous knowledge:</b> none
<b>Language:</b> English	<b>Person responsible for module:</b> Prof. Dr. Thomas Kneib
<b>Course frequency:</b> each winter semester	<b>Duration:</b> 1 semester[s]
<b>Number of repeat examinations permitted:</b> cf. examination regulations	<b>Recommended semester:</b> 3
<b>Maximum number of students:</b> 25	