

Course objective	Geisel competency	Course Objective
1	1a,1b, 5b	Define and explain the common terms used in epidemiologic research.
2	1a,1b, 5b	Define and compare the major study designs used in epidemiologic research, their strengths and limitations.
3	1a,1b, 5b	Define the common methods used in biostatistical analysis, and explain the circumstances in which those methods should be used.
4	1a,1b, 5b	Explain the general approaches that are used to formulate and test hypotheses and the factors that affect whether a study can validly test a given hypothesis.
5	1a,1b, 5b	Explain how factors such as random variation and error may affect summary measures and measures of association.
6	1a,1b,1e, 3d,5b, 6c	Explain the epidemiological principles underlying screening, diagnostic testing, and decision analysis, and give practical interpretations of the results of these tools as they relate to individual patients.
7	1a,1b, 1f, 5b, 6c	Define and interpret the common terms and measures used in population statistics and public health.
8	1a,1b,5b,6c	Explain the types of bias that occur in medical research and their effects on research results.
9	1a,1b,5b	Discuss confounding and its effect on the interpretation of study results.
10	1a,1b,4j,5b,6c	Interpret and judge the quality of published medical research studies and identify the major strengths and weaknesses of a research report.
11	1a,1b, 3d, 5b	Explain the limitations that affect our ability to generalize research findings to an individual patient.
12	1a,1b,1e, 5b, 6c	Apply the findings of research studies to the prevention and treatment of disease in medical practice.
13	1a,1b,1e,2h,3d,5b,6c	Provide interpretations of data from medical research, diagnostic testing, and screening that can be understood by a range of individuals from other health care providers to patients and their families.
14	3f,3g	Communicate effectively and collegially with physician colleagues.