

Statistical Methods in Epidemiology

The following is an example of a structure for a course that might be delivered to epidemiologists with an intermediate level of statistics or statistics students who had an interest in epidemiological analysis..

Reference is given to the material in the chapters in the book together with suggested times that might be dedicated to that material.

Chapter	Sections	Suggested timing
CHAPTER 1 - WHY SPATIO-TEMPORAL EPIDEMIOLOGY?	All	0.5 week plus background reading
CHAPTER 2 - MODELLING HEALTH RISKS	All, excluding 2.6 & 2.7	1 week
CHAPTER 3 - THE IMPORTANCE OF UNCERTAINTY	3.1 – 3.4 inclusive	0.5 weeks
CHAPTER 4 - EMBRACING UNCERTAINTY : THE BAYESIAN APPROACH	4.1 – 4.5	0.5 weeks
CHAPTER 5 - THE BAYESIAN APPROACH IN PRACTICE	5.1, 5.2, 5.3, 5.7, 5.8,	2 weeks
CHAPTER 6 - STRATEGIES FOR MODELLING	6.1 – 6.6 inclusive	2 weeks
CHAPTER 7 - IS 'REAL' DATA ALWAYS QUITE SO REAL?	7.1 – 7.3 inclusive	1 week
CHAPTER 8 - SPATIAL PATTERNS IN DISEASE	8.1, 8.3.1, 8.4	1 week
CHAPTER 9: FROM POINTS TO FIELDS: MODELLING ENVIRONMENTAL HAZARDS OVER SPACE	9.1 – 9.10 inclusive	1.5 weeks
CHAPTER 10 - WHY TIME ALSO MATTERS	10.1 – 10.4 inclusive	1 week
CHAPTER 11 - THE INTERPLAY BETWEEN SPACE AND TIME IN EXPOSURE ASSESSMENT	11.1, 11.2, 11.3.1	0.5 weeks
CHAPTER 12 - ROADBLOCKS ON THE WAY TO CASUALITY : EXPOSURE PATHWAYS, AGGREGATION AND OTHER SOURCES OF BIAS	12.1 – 12.4 inclusive	1.5 weeks