

## Spatio-Temporal Methods in Epidemiology

The following is an example of a structure for a course in spatio-temporal epidemiology. This follows the structure of a thirteen week graduate level course that was given at the University of British Columbia in 2013 in which there were two 1.5 hour lectures per week. The participants in that course were statistics graduate students and students of public health who had a strong statistical background.

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

<b>Chapter</b>	<b>Sections</b>	<b>Suggested timing</b>
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 – 4.6 inclusive	2 weeks
CHAPTER 5 - THE BAYESIAN APPROACH IN PRACTICE	All	2 weeks
CHAPTER 6 - STRATEGIES FOR MODELLING	6.1 – 6.7 inclusive	1 week
CHAPTER 7 - IS 'REAL' DATA ALWAYS QUITE SO REAL?	7.1 – 7.3 inclusive	1 week
CHAPTER 8 - SPATIAL PATTERNS IN DISEASE	All excluding 8.2	1.5 weeks
CHAPTER 9: FROM POINTS TO FIELDS: MODELLING ENVIRONMENTAL HAZARDS OVER SPACE	9.1 – 9.14 inclusive	1.5 weeks
CHAPTER 10 - WHY TIME ALSO MATTERS	10.1 – 10.4 inclusive & 10.7	1 week
CHAPTER 11 - THE INTERPLAY BETWEEN SPACE AND TIME IN EXPOSURE ASSESSMENT	11.1, 11.2, 11.3.1, 11.4	1 week