**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, 8.31, 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 |