0981學期 課程基本資料

系所 / 年級 健管系碩士(健管) 1年級
學分數 3學分
科目中文名稱 應用統計學專論
科目英文名稱 Applied Statistics
主要授課老師 李采娟
起始週 / 結束週 / 上課地點 / 上課時間
第1週 / 第18週 / H315 / 星期1第02節
第1週 / 第18週 / H315 / 星期1第03節
第1週 / 第18週 / H315 / 星期1第04節
人數上限 30 人
已選人數 6 人

教學綱要

一、教學目標 (Objective)
The objective of this course is to provide an introduction to the study of biostatistics. It provides comprehensive coverage of the major components involved in dealing with collections of numbers and ways in which to summarize, explore, and explain them, probability, sampling, methods of statistical inference and biostatistical concepts that are applied in public health and clinical research.

二、先修科目 (Pre Course)
No

三、教材內容 (Outline)
Students need to learn the concepts of numerical summary measures, probability, theoretical probability distributions, sampling distribution of the mean, confidence intervals, hypothesis testing, comparison of two means, nonparametric methods, analysis of variance, contingency table, multiple 2x2 contingency tables, correlation, simple linear regression and multiple linear regression.

四、教學方式 (Teaching Method)
Each week includes a 40-minute quiz, and two 50-minute lectures. We’ll read two published papers to see how these analytic methods are applied in research. Students will have the opportunity to use the computer if the lab is available. These labs reinforce the material covered in the lectures, review the homework assignments, and provoke discussion.

五、參考書目 (Reference)

2009/9/21 Introduction to the Course 李采娟
2009/9/28 Principles of Biostatistics: Numerical Summary Measures 李采娟
2009/10/5 Principles of Biostatistics: Probability 李采娟
2009/10/12 Principles of Biostatistics: Theoretical Probability Distributions 李采娟
2009/10/19 Principles of Biostatistics: Sampling Distribution of the Mean 李采娟
2009/10/26 Principles of Biostatistics: Confidence Intervals 李采娟
2009/11/2 Principles of Biostatistics: Hypothesis Testing 李采娟
2009/11/9 Principles of Biostatistics: Comparison of Two Means 李采娟
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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Instructor</th>
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<tr>
<td>2009/11/16</td>
<td>Mid-term examination (No examination)</td>
<td>李采娟</td>
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<tr>
<td>2009/11/23</td>
<td>Principles of Biostatistics: Nonparametric Methods</td>
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<td>2009/11/30</td>
<td>Principles of Biostatistics: Analysis of Variance</td>
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<td>2009/12/7</td>
<td>Principles of Biostatistics: Contingency Table</td>
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<td>2009/12/14</td>
<td>Principles of Biostatistics: Multiple 2x2 Contingency Tables</td>
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<td>2009/12/21</td>
<td>Principles of Biostatistics: Correlation</td>
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<td>2009/12/28</td>
<td>Principles of Biostatistics: Simple Linear Regression</td>
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<td>2010/1/4</td>
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<td>2010/1/11</td>
<td>Principles of Biostatistics: Logistic Regression</td>
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<td>2010/1/18</td>
<td>Final examination</td>
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七、評量方式 (Evaluation)
12 quizzes (60%), one paper-reading report (10%), and one final examination (30%)