

Biostatistics	
Course Code	DIC 8012
Credits	Three (lectures: 3 hr per week)
Organizers	Pei-Jen Lee Shaner
Lecturers	Pei-Jen Lee Shaner
Time	14:10-17:00, Wednesday
Place	Room 802, NTNU Gongguan Branch Library (need NTNU ST ID to enter)
Prerequisites	None
Description	This course aims to provide students tools for analyzing biological datasets and hypothesis testing. After this course, the students should have a firm understanding of basic statistical methodology used in biology.
Objectives	<ol style="list-style-type: none"> 1. Lectures are designed to provide students statistical tools for analyzing biological datasets. 2. Students will apply the methodologies learned in lectures to aid their research.
Grade	Quiz 60% Final project 40% (re-analyzing and commenting on published work)
Reference	The Analysis of Biological Data, 2 nd Edition, by Michael C Whitlock and Dolph Schluter, Roberts and Company Publishers, Greenwood Village, Colorado, USA

Date	Topic
9/16	Week 1 A brief introduction to statistics
9/23	Week 2 Displaying and describing data I
9/30	Week 3 Displaying and describing data II
10/7	Week 4 Probability
10/14	Week 5 Hypothesis testing
10/21	Week 6 Proportions, frequencies and categorical data analysis I
10/28	Week 7 Proportions, frequencies and categorical data analysis II
11/4	Week 8 (Quiz #1) Analyzing normal populations I
11/11	Week 9 Analyzing normal populations II
11/18	Week 10

	Analyzing normal populations III
11/25	Week 11 (Quiz #2) Correlation and regression I
12/2	Week 12 Correlation and regression II
12/9	Week 13 Correlation and regression III
12/16	Week 14 (Quiz #3) Computer intensive methods
12/23	Week 15 Likelihood
12/30	Week 16 Independent project I
1/6	Week 17 Independent project II
1/13	Week 18 Independent project III