

**STAT 614/BIOL 663****SYLLABUS****SPRING 2003**

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**Textbook:** Environmental Statistics using S-PLUS by Millard and Neerchal  
 Chapman and Hall CRC press 2000.

Journal articles to be assigned periodically.

Stat 614/Biol 663 students will meet the instructors for an additional hour on Wednesdays—time and room to be arranged—to read and discuss journal articles. They will take the in class mid term. The expectation is that the Statistics and Biology students will collaborate on a project and produce a 'publication quality' report.

#### Grading Scheme

Class projects		50%
Mid Term (in class)	April 2	25%
Final (in class/proj)	May	25%

*The following statement is in accordance with new University policy:*

*By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.*

*Please note that for this class, the rights to check picture identification during any examination/quiz and using available tools on checking for plagiarisms are reserved.*

Following is an outline of topics to be covered, a rough schedule and associated reading assignments from the text book. In case there are no chapters mentioned, the instructor will assign reading from reference materials. This is subject to change to adjust for unforeseen events like snowstorms or foreseen consequences like we just need to go over a topic one more time.

### Schedule

Week of	Topics	Chapter	Instructor
1/27	Overview, Splus Intro	Ch 1-2	NN
2/3	Exploratory Data Analysis	Ch 3	NN
2/10	Univariate Methods: Prob dns	Ch 4-5 & 7	BB
2/17	Univariate Methods: Conf Ints	Ch 4-5 & 7	BB
2/24	Univariate Methods: hyp testing	Ch 4-5 & 7	BB
3/3	Sampling Designs & DQO	Ch2, Ch 8	NN
3/10	ANOVA		BB
3/17	Regression Methods	Ch 9	BB
<b>3/24</b>	<b>Spring Break</b>		
<b>3/31</b>	<b>Review+Exam I</b>		<b>BB/NN</b>
4/7	Censored Data	Ch 10	NN
4/14	ANOVA		BB
4/21	Spatial data	Ch 12	NN
4/28	Hot spots	Ch 12	NN
5/1	Risk Assessment	Ch 13	NN
5/12	Review		BB
<b>5/19</b>	<b>Final Exam</b>		