

STAT 3480 - Statistical Methods for Research Workers II
115 Armes - University of Manitoba
Winter Term 2011
Tu. Th. 11:30 am - 12:45 pm

INSTRUCTOR	Dr. Shaun S. Wulff Office: 335 Machray Hall Phone: 474-6040 E-mail: wulff@uwyo.edu
OFFICE HOURS	Tu. Th. 1:00 pm - 2:30 pm or by appointment
PREREQUISITE	STAT 3470 (005.347)
REQUIRED TEXT	<i>Applied Linear Statistical Models - Fifth Edition</i> (2005) by M.H. Kutner, C.J. Nachtsheim, J. Neter, and W. Li. MacGraw- Hill. ISBN 0-07-310874-X. Note: A copy of the textbook is on reserve in the Science library. A compact disk is also available which contains a student solution manual and all data set files from the text.
COMPUTING	The software program SAS will primarily be used in class, assignments, and exams. The programs JMP and R may also be utilized or referenced.
DESCRIPTION	This is an introductory statistics course on experimental design and analysis. Topics include design principles, single factor studies, treatment comparisons, model diagnostics, multifactor studies, block designs, and the analysis of covariance. This material can be found in chapters 15 to 24 of the required text.
EVALUATION	Assignments 40% Midterm Exam 20% Final Exam 40%
	The voluntary withdrawal date is March 18, 2011.
ASSIGNMENTS	Regular homework assignments will be given throughout the course. All must work must be legible and follow the given instructions. Clear and correct written explanations must be provided for statistical analyses as directed. Students may work together on the assignments, but the attaining of computer output and the final write up must be done individually. Late assignments will only be accepted with approval of the instructor which is to be arranged prior to the due date.
EXAMS	There will be two exams consisting of a midterm and a final. Students may not collaborate on exams. The use of cell phones and other electronic communication devices will not be permitted during in class examinations.
ACADEMIC DISHONESTY	Violations of the collaboration rules stated above will be subject to university regulations concerning academic dishonesty. This includes other forms of plagiarism, cheating, and impersonation. For details, see the web site

<http://umanitoba.ca/faculties/science/undergrad/resources/webdisciplinedocuments.html>

Tentative Schedule for STAT 3480

<u>Month</u>	<u>Week</u>	<u>Date</u>	<u>Day</u>	<u>Topic</u>	<u>Sections</u>	<u>Assignment</u>
January	1	6	R	Ch 15 - Introduction		
	2	11	T	Ch 16 - Single Factor	1, 2, 3	
	2	13	R		3, 4, 5, 7	
	3	18	T		5, 6	
	3	20	R		10	
	4	25	T	Ch 17 - Trt Comparisons	1, 2, 3	H1 Due
	4	27	R		4, 7	
February	5	1	T		5	
	5	3	R		9	
	6	8	T	Ch 18 - Diagnostics	1, 2, 3, 6	H2 Due
	6	10	R		5	
	7	15	T	Review		
	7	17	R	Midterm Exam		
	8	22	T	<i>Midterm Break</i>		
	8	24	R	<i>Midterm Break</i>		
March	9	1	T	Ch 19 - Two Factors Balanced	2, 3	
	9	3	R		4, 6, 7	
	10	8	T		6, 7, 9, 10	
	10	10	R	Ch 23 - Two Factors Unbalanced	1, 2, 3	H3 Due
	11	15	T		3	
	11	17	R	Ch 24 - Multi-Factors	1, 2, 3	<i>Withdrawal Date</i>
	12	22	T		3, 4, 5, 6	
	12	24	R	Ch 21 - RCBD	1, 2, 3, 5	H4 Due
	13	29	T		5, 8	
	13	31	R	Ch 22 - ANCOVA	1, 2, 3	
April	14	5	T		3, 4	
	14	7	R	Review		H5 Due
				Final Exam		