SYLLABUS
MATH 7/8762 Survival Analysis

Fall 2019
Professor: Dr. Dale Bowman
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Office hours: MW 4-5pm and by appointment

Text: Modelling Survival Data in Medical Research, by David Collett, CRC press, 3rd edition recommended but other editions are fine.

Topics covered will include: Basics of survival functions, non-parametric estimation of survival functions, parametric estimation of survival functions, comparison of survival of two or more groups, proportional hazard models, non-proportional hazard, risk factors relating to dichotomous outcomes, bivariate survivor functions.

Evaluation:

There will be two in class tests and one final exam.

Weekly homework will be assigned to be turned in. These homeworks must be typed in a mathematical typesetting program such as latex. Those taking the course at the 8000 level are required to use latex.

Additionally there will be two projects during the semester where the student will analyze survival data and write a report detailing what methods were used, what model checking methods were used, results obtained and other information to be discussed. This report must be typed (in latex for 8000 level students). Either SAS or R must be used to analyze the data for these projects.

Each of the three tests, homework, and two projects will count for 1/6 of the student's final grade. The student's letter grade will be obtained according to the following scale:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
below 60%	F

No makeup tests will be given and no late homework or project will be accepted. If a student must miss an exam for an excused reason, the student's final grade will be computed without the exam. In this event each of the remaining 2 exams, homework and 2 projects will each count 1/5th toward the final grade. If a student misses an exam without an excuse, a grade of zero will be assigned for that exam. If a student fails to turn in a homework assignment by the due date, a zero will be

assigned for that homework. If a student fails to turn in a project by the due date, a zero will be assigned for that project. Ample time will be provided for the student to complete homework and projects.

This syllabus is designed to be a guideline for the course. The instructor reserves the right to make changes to the syllabus that may be deemed necessary as the semester progresses.