

Syllabus

Instructor: Dr. Jay H. Beder EMS E485 (229)-5280 email: [beder \(beder@uwm.edu\)](mailto:beder@uwm.edu)
Home page: www.uwm.edu/~beder. I will maintain a web page for this class with copies of all handouts. Go to my home page and click on the link to Stat 761.

Office hours: Tues.-Thurs., 3:30-5:00, and by appointment (can also meet electronically – phone or email – rather than in person)

I will be unavailable on the following days in October: 4-5, 13, 18-19, and 25-26. This include lectures on Wed. Oct. 5, 19 and 26. I have scheduled the midterm for October 26. **I propose to hold make-up classes on Friday October 7 and 21.**

Text: George Casella and Roger L. Berger, *Statistical Inference*, 2d edition, Duxbury, 2001. See note below about **used editions and photocopying**.

Coverage: Chapters 1-5. This semester deals primarily with probability theory and distribution theory.

Prerequisites: Grad. status, Math 522 or 622 or concurrent registration. A prior course in probability and statistics is helpful.

Exam dates:

- Midterm (1 hour) - Wed., Oct. 26
- Final (2 hours) - Thurs., Dec. 22, 12:30-2:30 p.m.

Exam policy: Exams are open-book, with calculators. *No make-up exams*, except for medical emergency.

Homework: Due each Wednesday (unless otherwise noted).

Deadlines: Mon., Sept. 19: Last day to add or to change to or from audit.

Mon., Oct. 3: Early drop (no notation on transcript).

Fri., Oct. 28: Last day to drop or withdraw.

Grading: midterm = final = 1/4, homework = 1/2.

Disabilities: If you are a student with a disability, please feel free to contact me early in the semester for any help or accommodations which you may need.

Classroom participation: Your questions and comments are a very important guide for me in presenting and reviewing material. You may feel more comfortable speaking with me privately after class or during office hours, or writing to me. However, questions and comments in class have two advantages: they are more timely, and they are a help to other students.

Email: If you prefer to use a non-UWM email account, please go to www.epanther.uwm.edu/email and issue an email forwarding command. **Please test it** by sending email to yourself (at your UWM email address).

If you request grades or other sensitive information by email, I will be happy to answer, but it is your obligation to be sure of maintaining privacy.

Used editions and photocopying: Used copies of the second edition are available. There have been many changes in the text since the first edition, and so **using the first edition will be a big problem.**

If you are tempted to photocopy the text, please consider the following:

- **It is illegal.** Copyright laws allow only a small proportion ($\leq 10\%$) to be photocopied (for “fair use”).
- **It is unethical.** It deprives the authors of income.
- **It costs the Department** if you use the Department’s copy machines.

So don’t do it.

References. It’s worth browsing. The probability and statistics section of the Golda Meir Library is generally in the QA 260’s and 270’s. Some good choices are:

- V. K. Rohatgi, *An Introduction to Probability Theory and Mathematical Statistics*, Wiley, 1976.
- H. Cramér, *Mathematical Methods of Statistics*, Princeton University Press, 1946.
- S. S. Wilks, *Mathematical Statistics*, Wiley, 1962.
- R. V. Hogg and A. T. Craig, *Introduction to Mathematical Statistics*, 5th ed., Prentice-Hall, 1995.
- M. G. Kendall and A. Stuart, *The Advanced Theory of Statistics*, v. 1 and 2, Hafner (I’m not sure what the latest edition is).

For probability theory alone, consider:

- E. Parzen, *Modern Probability Theory and Its Applications*, Wiley, 1960.
- S. Ross, *A First Course in Probability*, 2d ed., Macmillan, 1984
- H. G. Tucker, *A Graduate Course in Probability*, Academic Press, 1967.
- M. Loève, *Probability Theory I, II*, 4th ed., Springer-Verlag, 1978. (Original edition by Van Nostrand.)

For combinatorial theory, consider:

- Marshall Hall, Jr., *Combinatorial Theory*, 2nd ed., Wiley, 1986, or other texts.
- H. S. Wilf, *Generatingfunctionology*, Academic Press, 1990.