642:528

METHODS OF APPLIED MATHEMATICS

SPRING 2007

http://math.rutgers.edu/courses/528/

Instructor: Professor E. Speer
Office: Hill Center 520
Telephone: 445–1313 (Rutgers extension 5–1313)
Email: speer@math.rutgers.edu

Office Hours: Monday, Busch 4th period, 1:40–3:00, Hill Center 520
Tuesday, Busch 5th period, 3:20–4:40, Hill Center 520
By chance or appointment in Hill Center 520

General: The main material for the course is the theory of functions of a complex variable;
we will cover most of chapters 21–24 of Greenberg. At the end of the course we will spend a
few lectures on the calculus of variations, following Hildebrand. (These texts are described
in more detail below).

Upper Saddle River: Prentice Hall, 1998. This is our text for the material on complex
variables.

Secondary text: Hildebrand, Francis B., Methods of Applied Mathematics (2nd reprint
edition). New York, Dover Publications, 1992. This is our text for the material on the
calculus of variations. It is not necessary to buy this text; the needed material will be
distributed to you either as a handout or through the web. However, it is a classic book
and, as a Dover paperback, very reasonably priced, so you might consider buying it anyway.

Web site: Course information will be posted on the web page
http://math.rutgers.edu/courses/528/

Homework: Homework problems will be assigned and collected weekly.

Exams: There will be two in-class exams, tentatively scheduled for Tuesday, February
27 and Tuesday, April 10. We will schedule the final exam near the end of the
term; it will be sometime during the final exam period (May 3 through May 9), so you
should not plan to be out of town during this period. Make-up exams will be given only
in the case of well-documented illness or major emergency or (only with permission in
advance) of a major outside commitment.

Grading: Grading will be based on a weighted average of homework and exams:

Homework . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20%
Class exams . . . . . . 20% each . . . . . . . . . . . 40%
Final exam . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 40%