

MAT 4310, Numerical Methods

Course Information

Prof Wm C Bauldry

Mathematical Sciences

Spring, 2013

Catalog Entry

MAT 4310. Numerical Methods (3).S.

Development and application of numerical methods. Topics covered include computer arithmetic and error, interpolation and approximation, roots of non-linear equations, and numerical integration. Also covered: solution techniques for either linear systems of equations or ordinary differential equations. Prerequisite: MAT 2310 or permission of the instructor. (NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

Syllabus

We will cover material from our text and special topics considering parts of chapters 1 through 6, chapters 7, 10 & 11, and, if time allows, 8 & 15. (See the text's [Table of Contents](#).)

Text

Numerical Mathematics and Computing, Cheney & Kincaid, 6th ed, Brooks Cole, (2007).

Contact Information

Professor: Dr Wm C Bauldry

Office: Walker 237

Office Hours: To be announced and/or by appointment.
Check my [online calendar](#).

Phone: (828) 262-2355 *office*
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QR code vCard

Grading

2 midterm exams	≈	200 pt.
Quizzes & homework	≈	100 pt.
Projects & Reports	≈	100 pt.
Comprehensive Final Exam	≈	150 pt.
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Total	≈	550 pt.

There are two requirements:

① Accumulate the necessary points:

90%: A-

80%: B-

70%: C-

55%: D

*These are anticipated cut-off scores
and may be lowered (but not raised).*

② Pass the final exam (at least 50%)

Note: Attendance is expected, but not graded.

Generic Comments

- We will be using: Maple 16™ (you can use *Sage*, but the syntax is different); Python (with IDLE or Spyder IDEs). (See *Quick Reference Sheets*)
- Attendance is not graded; however, mathematics can only be learned through active participation — not by osmosis. Study groups are good!
- Cell phones must be silent during class and must be turned off for quizzes and tests. Using a cell phone during a quiz or test is academic misconduct. The instructor's cell-phone will be turned on during quizzes and tests for emergency notification.
- If you find a concept difficult, come in for help. Don't wait until an exam or quiz to prove that you don't understand something.
- If you cannot attend a test, make arrangements *before* an exam to make it up. There are no post hoc make-ups. Missed quizzes or homework assignments will not be made up. Keep close track—the days of exams & quizzes or due dates for homework may change.

University Policies

See the Academic Affairs Policy Page

● **Academic Integrity Code**

See the complete Academic Code

Students . . . agree to abide by the following Code:

- Students will not lie, cheat, or steal to gain academic advantage.
- Students will oppose every instance of academic dishonesty.

● **Disability Services**

See the Office of Disability Services

“Appalachian State University is committed to making reasonable accommodations for individuals with documented qualifying disabilities”

● **Attendance Policy**

See the ASU Attendance Policy

“Class attendance is an important part of a student’s educational experience. Students are expected to attend every meeting of their classes and are responsible for class attendance.”

● **Student Engagement with Courses**

See Student Engagement

The “foremost activity of students is an intense engagement with their courses. In practical terms, students should expect to spend two to three hours of studying for every hour of class time.”