

MA 715: ANALYSIS II
SPRING 2019, SECTION 001, SYLLABUS

Lectures: Monday, Wednesday and Friday, 10:40 AM – 11:30 AM, 00232 Daniels Hall.

Course Description: Lebesgue measure and integration, Lebesgue-dominated convergence and monotone convergence theorems, Fubini's theorem, extension of the fundamental theorem of calculus, L^p spaces, duality and weak convergence, completeness and approximation.

Prerequisite: MA 515 Analysis I.

Principle Text:

- Real Analysis, by H.L.Royden and P.M. Fitzpatrick.

Supplementary Text:

- Introduction to Measure Theory and Functional Analysis, P. Cannarsa and T. D'Aprile.
- Measure, Integration, and Real Analysis, Sheldon Axler.

Instructor information:

- Instructor: Tien-Khai Nguyen
- Office: 3248, SAS Hall
- Phone: 9195132287
- Email: khai@math.ncsu.edu

Office hours: Monday: 12:00 -13:00 PM, Tuesday: 15:00 -16:00 PM and Thursday: 15:00 - 16:00 PM.

Assignments:

- There will be 6 assignments, due *Jan 28, Feb 11, Feb 25, March 08, March 25, and April 15*. The assignments will be typed in LaTeX. If you need help, feel free to stop by my office hours or email me to set up an appointment
- Late homework will NOT be accepted. I will make no exceptions for this rule.

Tests and Exams: There will be two in-class tests and a final exam.

- **M, Feb 18: Test 1**
- **M, April 01, Test 2**
- **M, May 03, 08AM–11AM: Final exam** - cumulative, closed books and notes.
- **Missed tests/exams:**
 - + There will be NO makeup tests/exams. If you have any conflicts with the assigned dates of the tests please contact me by email at least two weeks before the exam.
 - + If you miss a test without a valid excuse, a zero will be averaged into your grade.
 - + If you are forced to miss a test, an excuse from a doctor or other appropriate authorities must be presented.
 - + If the excuse is accepted, your other course work will be adjusted so that you will not be penalized.
- All tests are closed book/notes.

Grading policy: The final grade will be based on

- Assignments (60% of final grade).
- Two in-class test (10 % each).
- Final exam (20%).

Bonus points: Attendance and especially class participation will be used in determining border grades. Bonus point will be awarded for work on the board in class and extra homework.

Final grades will be assigned as follows:

Total performance	Letter grade	Total performance	Letter grade
$\geq 97\%$	A+	$\geq 74\%$	C+
$\geq 93\%$	A	$\geq 70\%$	C
$\geq 88\%$	A ⁻	$\geq 67\%$	C ⁻
$\geq 85\%$	B ⁺	$\geq 64\%$	D ⁺
$\geq 80\%$	B	$\geq 60\%$	D
$\geq 77\%$	B ⁻	$\geq 55\%$	D ⁻
		$< 55\%$	F

Email and Moodle: I will frequently use email to contact with announcements or other information, so please check your email regularly. Moreover, I will post all pertinent materials, announcements and homework on Moodle, so make sure you check the site regularly as well (<http://moodle.wolfware.ncsu.edu>).

Academic Integrity: Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct at <http://policies.ncsu.edu/policy/pol-11-35-01>.

Accommodations: Reasonable accommodation will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must inform the instructor and register with the NCSU Disability Services Office.

Other important dates

- M, Jan 21: Holiday (Martin Luther King, Jr. Day).
- M-F, Mar 11–15: Spring break
- F, April 19: Spring holiday.
- F, April 26: Last day of classes.