

MATH 481 Vector and Tensor Analysis (Spring 2021)

Zoom details on Compass, MWF 2:00 PM

[University of Illinois at Urbana-Champaign](#), [Department of Mathematics](#)

Instructor [Anil Hirani](#) ([email](#)); **TA** Luka Zwaan ([email](#)).

Office Hours See Compass course page for details

Course communication There will be a [Moodle](#) page for the course and a [Campuswire](#) class feed for most course communication and for collaborative discussions.

Homeworks There will be 9-10 graded homeworks. You will upload your homework solutions to Moodle and a selection of problems will be corrected by the grader. You are encouraged to discuss the homeworks with others and course staff, but you should write up solution on your own. Late homeworks will only be accepted if arrangements have been made with me before the deadline. However, exceptions can be made in other cases, for example, medical or family emergency. Your lowest homework score will be dropped.

Textbook There is no required textbook. I will post my lecture notes on Compass soon after each lecture. Some helpful reference books are: (i) *Tensor Analysis on Manifolds* by Bishop and Goldberg (Dover); (ii) *Manifolds, Tensor Analysis, and Applications* by Abraham, Marsden, Ratiu (Springer); (iii) *The Geometry of Physics* by Frankel (Cambridge).

Topics: Approximate list and order of topics is on the official course [syllabus](#). The ordering and emphasis may change somewhat as we go through the semester.

Exams There will be two midterm exams and a final exam, all proctored by Proctorio. Conflict exams will be available if arrangements have been made with me at least one week in advance of the scheduled exam.

Grading Class participation 5%, Homeworks 15%, Two Midterm Exams: your lower score worth 20%, higher score worth 25%, Final Exam 35%.

Page maintained by [Anil N. Hirani](#)

Last modified: Fri Jan 22 13:52:29 CST 2021