

MATH 430, ALGEBRA, SPRING 2021

Course webpage: <https://www.math.wustl.edu/kumar/courses.html>

You will find a link to Math 430 there, where I will post this document and all other relevant documents like homework, tests etc.

- **Text:** Topics in Algebra, I. N. Herstein, John Wiley, Second Edition.
- **Time:** MWF, 12-12.50, Remote, synchronous.
- **Office Hours:** Tuesdays 2-3pm or by appointment.
- **Exams:** Midterm: Weekend of March 13-14. Final: May 13. At present I plan to post the exams in crowdmark on March 12 (midterm) and early May (Final) and you will have 24 hours to finish the exam once you start and due dates are as mentioned above.
- **Homework:** I plan to give weekly homework which will be posted on the class web page by Friday of the week and due by Wednesday next week. These too will be expected to be submitted in crowdmark.
- **Grading:** The homework will count for 60% of the final grade and the two tests (midterm and final) counting for 20% each. The letter grades will be roughly determined as follows:

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>F</i>
≥ 90	≥ 80	≥ 70	≥ 60	< 60

- **Rough schedule:**

<i>Week of</i>	<i>Monday</i>	<i>Wednesday</i>	<i>Friday</i>
<i>Jan 25</i>	1.1, 1.2	1.3	2.1, 2.2
<i>Feb 1</i>	2.3, 2.4	2.4	2.5, 2.6
<i>Feb 8</i>	2.6	2.7	2.7
<i>Feb 15</i>	2.8	2.9	2.10
<i>Feb 22</i>	No class	2.11	2.11
<i>Mar 1</i>	2.12	Wellness	2.13
<i>Mar 8</i>	2.14	2.14	Review
<i>Mar 15</i>	3.1, 3.2	3.3, 3.4	3.5, 3.6
<i>Mar 22</i>	No class	3.7, 3.8	3.9
<i>Mar 29</i>	3.10	3.11	5.1
<i>Apr 5</i>	5.2, 5.3	5.3, 5.4	5.5
<i>Apr 12</i>	Wellness	5.6	5.6
<i>Apr 19</i>	5.7	5.8	6.1
<i>Apr 26</i>	6.2	6.3	6.4
<i>May</i>	Review	—	—

- **How I plan to run the class remotely:** This will be my first time teaching remotely (last semester I taught in person), so I need to overcome some learning curve and hope you will bear with me.

As you know, most mathematics lectures depend heavily on board work, but remotely this seems less than ideal. I plan to use my notebook, so that I can write if necessary. It would be more beneficial and engaging if we had an atmosphere of discussions than the usual method. So, here is what I plan to do.

I have the schedule (somewhat ambitious, and may change as semester progresses) above. I expect all of you to read the relevant sections before coming to class. We will spend a few minutes discussing any issues with the previous class. Then, I will spend 20 or so minutes on the topics to be covered with some proofs. Then we will work out some typical examples on the material covered. This means, you really have to attempt to learn some of the proofs before you come to class and I will fill in some of the details and answer your questions.

Since the class is fairly small, I hope we will be able to discuss all the questions that may come up, but for this, clearly,

you must be thinking with me. If I find we are seriously faltering in a week or so (and I hope that is not the case), we may alter the process. I welcome all suggestions to improve.