Syllabus and course policy
MA211 (Minor): Real Analysis [3-0-0-6]
July – November 2022

Syllabus: Metrics and norms - metric spaces, normed vector spaces, convergence in metric spaces, completeness, pointwise and uniform convergence of sequence of functions; Functions of several variables - differentiability, chain rule, Taylor's theorem, inverse function theorem, implicit function theorem; Introduction to Lebesgue measure and integral - measureable sets, measurable functions, Lebesgue integral, dominated convergence theorem, monotone convergence theorem.

Texts/References:
1. N. L. Carothers, Real Analysis, Cambridge University Press, 2000.
2. J. E. Marsden and M. J. Hoffman, Elementary Classical Analysis, 2nd Ed., W. H. Freeman, 1993.
3. M. Capinski and E. Kopp, Measure, Integral and Probability, 2nd Ed., Springer, 2007.

Instructor: Rajesh Srivastava
For any query/help, you feel free to meet me in my office (E1-208) / call me at 2630 / email me at rksri@iitg.ac.in

Note: Please regularly visit the course website https://www.iitg.ac.in/rksri/MA211(Minor)_2022.htm to see an update about course materials.

Lectures: Classroom**:** 1002. Class timing: Wed (G slot, 12:00 to 12:55), Thu (E slot, 11:00 to 11:55), Friday (G slot, 12:00 to 12:55)

Attendance: It is expected that you attend all the classes. A student will be debarred from appearing in the end semester examination of MA211 if her/his attendance falls below 75 percent and will be awarded an **"F"** grade in this course.

The mobile phone must be in switch-off mode during the class.

Grading: Relative grading will be done based on the total marks obtained in the quizzes, mid-semester exam, and end semester. Exams/quizzes will have the following weightages:

Details:	Quiz-I	MidSem	Quiz-II	EndSem
Weightage	10%	30%	10%	50%
Exam Date	Decide during class	As per Acad. Sec. Schedule	It will be decided during class	As per Acad. Sec. Schedule
Duration	One hour	Two hours	One hour	Three hours

Syllabus for exams: Will be declared in the class.

Some Important Points:

1. No make-up exam will be held for the students who **miss a quiz** or **mid-semester** exam.

2. You are always encouraged to ask the instructor anything regarding this course, anywhere, and anytime. However, you are discouraged from meeting the instructor to clarify a doubt or to ask for a hint of some problem on the day of any exam.

3. Grades of MA211 will be made available to the students only through the Academic Section on the stipulated date. Please do not ask me to let you know the grades.