



भारतीय प्रौद्योगिकी संस्थान कानपुर
Indian Institute of Technology Kanpur
Centre for Educational Research
and Teaching Excellence

CERTEX Pedagogy Talk Series

Pedagogical Experiments in Mathematics: Experiences with MTH111M for the Y26 Batch



Date: October 15, 2026



Time: 4:30 PM (Tea will be served at 4:15 PM)



Venue: L-10 (Lecture Hall Complex)



Speaker:
Prof. Amit Kuber

Abstract:

MTH111M is the first mathematics course at IITK for UG freshers, and getting a zero in its quiz is described by students as a “canon event” — a proper induction into college life. But why? There seem to be several reasons.

Based on the feedback received from earlier batches, the recent offering of this course was rethought on multiple fronts: connecting this abstract subject with real-life applications through storytelling, demonstrations and experiential activities. I hope some of the hands-on activities also bring back memories of our own calculus classrooms.

Evaluation was also revamped through modified question papers and group-work assessment. Several discussions on pedagogy and evaluation in CERTEX as well as in the ARC contributed to the design, along with active support from CERTEX members.

The purpose of this talk is to share some of these experiments and my experiences with them, including what seemed to work and what did not. Most importantly, I actively seek feedback from colleagues on what is worth retaining, changing, or trying differently.

About the Speaker:

Amit Kuber is an Associate Professor in the Department of Mathematics at IIT Kanpur. His research interests include representation theory, combinatorics and model theory. He has taught a wide range of mathematics courses at undergraduate and postgraduate levels, as well as courses in practical ethics, and has supervised students on a variety of mathematical projects. He has received several accolades for teaching and mentoring. He is interested in the holistic development of students and in the role of clear communication in learning and teaching mathematics.