Writing in Mathematics: Spring 2020

- **Instructor**: Professor Chris Kottke
- **Office**: HNS 104
- **Email**: ckottke@ncf.edu
- **Phone**: 914-487-4516
- **Course Webpage**: Canvas Course
- **Meetings**: Mon/Thu 12:30-1:50, HNS 106
- **Office Hours**: Mon/Thu 11-12, W 2-3

Course Description: In this class we will analyze and practice the discipline of expository mathematical writing, both through guided reading and discussion of examples, and through regular writing assignments. We will learn to typeset mathematics in LaTeX and examine genre conventions, audience, style, structure, and the elements of effective writing from the small scale (typesetting of equations, expository paragraphs) to the large scale (the research paper and the survey article). This class will provide a solid preparation for writing a thesis in mathematics. Students will be expected to have some prior experience writing mathematical proofs; third year students are particularly encouraged to participate, but all are welcome.

Learning Outcomes: Through this course you will:

- typeset documents including complex mathematical formulae and diagrams in LaTeX,
- write expository mathematical content for a chosen audience in an appropriate style,
- structure and write a research paper,
- navigate the network of mathematical literature and develop an annotated bibliography,
- review and synthesize cutting edge mathematical literature in the form of a survey article,
- evaluate mathematical writing and provide constructive peer feedback, and
- write collaboratively.

Assessment: Your assessment will be based on participation in regular reading assignments (including short written reflections and class discussion), technical LaTeX problem sets, and written assignments. In addition to some smaller writing assignments, there will be two major writing assignments:

- A single topic research paper (this need not be an original result, but it will be written in the style and format of a mathematical research paper)
- A survey article on a topic of your choice

Pieces of writing will be evaluated according to the rubric on the following page.

Policies: Students in need of academic accommodations for a disability may consult with the office of Students Disability Services (SDS) to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation. Students may request an appointment with SDS in-person (HCL3), via phone at 941-487-4496, or via email at disabilityservices@ncf.edu.