TEACHING PHILOSOPHY

ORNELA MULITA

1. Teaching Philosophy

I feel very lucky that my job happens to be one of the biggest passions in my life, and I could not think of anything more rewarding than the opportunity to transmit my passion and my acquired knowledge to others.

My profile as a researcher has both shaped and been shaped by my teaching experiences. As I am a firm believer that we receive as much as we give, I have seen how my research had renewed my personal love of mathematics which in turn has inspired my teaching. On the other hand, my teaching experiences beautifully motivate my research, since I feel that I need to become every day better in order to become the best role model for my students.

One of my biggest goals as a teacher is that my students through my example can see mathematics in a different light: as a challenging and exciting subject that can be easily accessed with the right guidance, the right tools, the right devotion and the right strategy. My broad range of teaching experiences has helped me develop a few principles and strategies that help me as I strive to guide them through this path. My teaching philosophy is built around a great commitment to students, ensuring accessibility, changing the student's approach to the subject, incorporating constant verbal and digital interaction in class and providing meaningful feedback.

1.1. **Commitment to students and ensuring accessibility.** I believe that students and teachers/researchers share the same kind of challenges to face during their path. I work hard to show my students that I care about them and I strongly desire to see each of them succeeding, as I see my past, my present and my future self in each of them. Driven by such a desire, I make a priority to be available for help to my students outside of class and even outside of office hours. Watching my students grow under my mentoring brings me satisfaction.

Date: April 22, 2020.

1.2. **Commitment to transforming the student's approach to the subject (from fear to positive energy).** Unfortunately, most students are intimidated by mathematics and show a lack of self-confidence in the subject. In order to fight this pattern, I strive to help them approach the subject with love and desire to internalize and understand it, rather than fear. I strongly believe that when we change the energy with which we approach a problem or challenge, the outcome changes radically.

To this end, for every new and difficult concept, I always create a step by step path that goes from very simple and carefully chosen examples to the final complicated concept. This is how I've solved some apparently very difficult problems in my research. I want my students to realize that the most beautiful mathematical ideas are simple at their core and most of them are built upon previous ideas.

I structure my lectures in such a way that it feels like we are discovering new techniques step by step together and I am here to guide them, but we are in this journey together. I believe that my greatest strengths as a teacher are the clarity in my presentation style and the ability to focus on the right concepts.

After achieving a strong conceptual understanding, I want my students to master practical problems solving skills. Since "practice makes perfect", I carefully select a large variety of questions, exercises and problems and I encourage them to solve at home or at the blackboard together. This is a great way for them to develop their own understanding and intuition.

1.3. **Incorporating interaction and providing feedback.** I am a big believer in the importance of constant discussion and interaction with students during my lectures. I encourage my students to ask questions and interrupt me whenever they find it necessary. I try to constantly incorporate exercises to be solved at the blackboard by my students alone or guided by my help.

During my years of teaching, I have taught different level courses ad met students with different backgrounds and I have had very positive feedback from my students over years. My experience has helped me grow as a teacher and I continually strive to learn better teaching skills.

I am confident in my ability to teach undergraduate and graduate level numerical analysis courses. I am also ready and willing to teaching different levels of mathematical subjects for most undergraduate

courses. In addition, I would be very interested in mentoring undergraduate and graduate research. I feel very fortunate to have the opportunity to teach mathematics, and look forward to continuing to learn and grow as a teacher in my future career.

2. Teaching experience

5. Spring-Summer 2020 "**Programmazione in MATLAB**" (in Italian) *"Attività didattica integrativa"* Laurea Triennale in Matematica, Università degli studi di Trieste.

4. Fall 2019 "**Preparatory Course on Linear Algebra**" (in English) *Lecturer*, Master's degree on Data Science and Scientific Computing, Università degli studi di Trieste.

3. Fall 2018 "**Preparatory Course on Linear Algebra**" (in English) *Lecturer*, Master's degree on Data Science and Scientific Computing, Università degli studi di Trieste.

2. Fall-Winter 2017 "**Programmazione in MATLAB**"(in Italian) *"Attività formativa complementare"* joint with Analisi Numerica 1, Laurea Triennale in Matematica, Università degli studi di Trieste. Course Professor: Prof. Marino Zennaro.

1. Fall-Winter 2014 "**Istituzioni di Matematiche**" (in Italian) *"Attività tutoriale"*, Laurea triennale in Geologia e S.T.A.N., Università degli Studi di Trieste. Course Professor Prof. Alessandro Logar.