Juha-Matti Huusko
Noljakankaari 38F33, 80140 Joensuu juha-matti.huusko@uef.fi
8.4.2022

**Motivation letter**

**I am applying to this position**, because I consider myself a good candidate to teach first year courses in mathematics. Also, I can develope course materials for such courses and for engineers.

Jyväskylä University has its own online course platform TIM which I would be interested to contribute. In particular, I am interested about dynamic pictures and interactivity with the user.

My mathematical research involves complex analysis and differential equations and is closely related to the research in your department.

**About my teaching.** During 2015–2021, I have taught a broad variety of courses in mathematics in the Department of Physics and Mathematics in University of Eastern Finland (Introduction to Topology, Algebra a, Euclidean geometry, Measure and Integration Theory a, Basic Course in Fourier Analysis, Differential Calculus in Several Variables). Before this, I have supervised exercises in the mentioned courses and in the courses Analysis III, Numerical Analysis, Topology, Complex Analysis a, Introduction to Mathematics and Primitive Analysis. The scope of the lectured courses is 33 ECTS and the scope of the exercises is in total 33 ECTS + 36 ECTS.

**About developing course materials.** Moreover, I have recently worked as a university teacher in the following projects developing online course materials:

* *Multidisciplinary university level thematic entity of linear analysis* state subsidy(Ministry of Education and Culture of Finland), 2021-2022. The university teacher position started June 1st 2021 and will end May 31st 2022. In this multidisciplinary project I prepared the reorganization of the mathematics courses *Linear algebra a and b* and the physics courses *Basics in numerical calculations* and *Data and Error Analysis in Natural Sciences* (bilingual Fin/Eng) to online format.
* *University of Eastern Finland Continous learning separate funding*, 2019-2020. The university teacher position started 1.8.2019 and ended 31.7.2020. In this collaborative project of Department of Physics and Mathematics (Joensuu) and Department of Applied Physics (Kuopio), I prepared online materials for the courses *Integral calculus* and *Basics in mathematics*.

These online course materials are for first year courses in mathematics. Moreover, a version of Linear algebra a was established as *Vectors and matrices* for engineering students from UEF and Tampere University.

Since 14.3.2022, I have worked part time (20%) in UpTech. The work topic is to develope mathematics studies for engineering students in UEF, and to collaborate with FITech (The Finnish Institute of Technology) and TUN.