TravelEdventures



University of Graz Mathematics ipad Teacher Training

Professional development for teachers and professors

course costs

€ 840.-

This is a fantastic opportunity for mathematics, Science teachers, & teacher trainers for secondary education (General secondary, Vocational/Technical secondary) teachers to gain overseas training with Karl Franzens University in Graz Austria (training is in english)

This training covers an Introduction to iPads in Maths Teaching at a High School, Mathematics E-learning software for High School: Units for High-School Teachers in Mathematics for Teaching and Learning Mathematics in Elementary Functions, Differentiation, Integration, Linear Algebra and Statistics.

Course location

The training course will be held at the University of Graz, Institute for Mathematics and Scientific Computing, Heinrichstrasse 36, 8010 Graz. The language of the training is English.

Getting there

Graz has an international airport that receives flights from many places in europe. Alternatively you can fly into Vienna and catch the train to Graz. The train journey takes about 2.5 hours.

Please, if possible, plan your flights so that you can make it to the welcome dinner. Additional information, accommodation,

points of interest in Graz and Styria will be sent to you via email once you have applied

What you will need

All participants are expected to bring their own laptop along running on Windows Vista or higher. An iPad, 16GB, from version 2.0 onwards is highly recommended for the training.

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Course Objectives

a) iPads in Maths teaching at a high school

a basic overview what you can & cannot do with iPads; technical requirements when using iPads in a class; working with math apps; how to distribute material and tests for the students; how to write and grade tests on iPads using a platform to communicate and share material; presenting students'

results; padagogical approach: working in pairs or alone; using math school books on iPads; Khan academy on iPads

b) Introduction to Mathematica

Overview of the e-learning software M@th Desktop (MD)

Using tools to prepare own tests, exercise sheets, notebooks, palettes

Working with palettes and notebooks on Elem. Functions, Differentiation, Integration, Linear Algebra, Statistics.

Adapting the notebooks and palettes to your own needs.

Possibilities how to use MD for math projects in the class room.

Discussing collaborations.

Thinking of a possible Comenius project between schools.

Course convenor

Reinhard Simonovits has a PhD in Theoretical Physics and is a Mathematics teacher at the Handel-sakademie

Grazbachgasse and a lecturer at Karl Franzens University. He is also a M@th Desktop Developer and instructor for iPads in maths classes. The training course is structured by the company Deltasoft, a commercial offspring from the Comenius 2.1 project 226391-CP-1-2005-1-AT-COME-NIUSC21

where parts of the e-learning units of M@th Desktop were developed.

Summer session training times

Course Session Saturday, July 5 – Saturday, July 12

Session 2: Saturday, August 30 - Saturday, September 6

you will recieve a certificate of attendance for your professional development records.



Daily Programme

1st day

20:00 Welcome dinner

2nd day

Tour through Graz

14:00 Kick off meeting, welcome

14:10 Introducing ourselves

15:00 Outline of the course, recent trends in computer algebra programs and teaching with iPads

16:30 Q&A

3rd day

9:00 - 11:00 Working with iPad apps: good math horses: Wolfram Alpha

11:30 – 13:00 how to share: exchanging files with the PC and the iPad class: Dropbox, Skydrive, im-

portant apps connected with the office software: Pages, Numbers, KeyNotes

13:00 - 14:00 Lunch

4th day

9:00 - 11:30 Recording and presentation of student's result: ShowMe, watching lectures of Khan academy

11:30 – 13:00 a common platform: Edmodo and Google Drive, a grading system: Socrative, how to teach with iPads, iPadagogy, working in pairs, alone, student projects

13:00 - 14:00 Lunch

5th day

9:00 - 11:30 Overview of Mathematica and M@th Desktop

11:30 – 13:00 Tools for creating own material, tests, practice sheets, palettes, The Plot, Algebra, Ta-

ble, Student Helper Palette, working on own small examples

13:00 - 14:00 Lunch

6th day

9:00 - 11:30 Working with units on polynomial, exponential functions

11:30 – 13:00 Units of Logarithmic, Trigonometric Functions, Data Fitting, presentation of own small projects

13:00 - 14:00 Lunch

7th day

9:00 - 11:30 Working with Notebooks and palettes of Differentiation, Integration, Linear Algebra for the classroom

11:30 – 13:00 Comenius School' cooperation projects, course' evaluation and conclusion

13:00 - 14:00 Lunch

19:30 Farewell dinner

8th day

Departure