JUSTUS-LIEBIG-
UNIVERSITÄT
GIESSEN

GGS

Gießener Graduiertenzentrum
Sozial-, Wirtschafts- und Rechtswissenschaften

Workshop

Theoretical Modelling with Mathematical Proofs

Organizational Details

Instructor: *Bettina Klose, PhD (University of Zurich)*

Date: July 8 to July 11, 2014, each from 09:00 to 12:00 and 14:00 to 16:00

Location: tba

ECTS: 6 ECTS

Objective

The aim of this short course is to provide participants with the basic ideas behind theoretical modelling and review fundamental mathematical concepts necessary to understand most typical models as well as to develop and analyse own models. A further objective of the course is to gain practice in the writing of rigorous mathematical proofs.

Content

Different basic applied mathematical methods will be introduced with an emphasis on the most important results and their proofs. Examples of economic models that put these tools to work will be discussed where appropriate. Based on the participants' knowledge and interests and as time will permit the following topics shall be covered:

-        Constrained optimisation problems, the implicit function theorem, the envelope theorem, comparative statics
-        Fixed Point Theorems
-        Differential Equations

To gain the ECTS Credit points participants have to:

-   Do Homeworks
-   Take-home final exam

Target group

Doctoral candidates and postdoctoral researchers at the GGS

Course language

English

Registration

By June 2, 2014 via e-mail at info@ggs.uni-giessen.de