

## Invitation to a Course on Health Insurance Mathematics

Winter Semester 2009/2010  
Salzburg University

- Lecturer:** Karl Metzger  
Chief actuary of health insurance  
UNIQA Group Austria, Vienna  
Visiting professor at Salzburg University
- Dates:** On the following weekends Friday from 3 p.m. to 7 p.m. and Saturday from 9 a.m. to 1 p.m.:  
30<sup>th</sup> and 31<sup>st</sup> October 2009  
27<sup>th</sup> and 28<sup>th</sup> November 2009  
29<sup>th</sup> and 30<sup>th</sup> January 2010
- Contents:** The course covers all aspects of health insurance mathematics required to become a fully qualified actuary according to the education syllabus of the International Actuarial Association and the core syllabus of Groupe Consultatif, according to the regulations of the Actuarial Association of Austria (AVÖ), as well as according to the regulations of the German Actuarial Association (DAV). For continuing professional development (CPD) the course counts as 21 hours. The course is suited to all those who want to acquire knowledge of health insurance mathematics. Previous knowledge of life insurance mathematics is advantageous, but not conditional. Please find the structure of the course below.
- Course fees:** €444 without hotel accommodation, €714 with 3 overnight accommodations (from Friday to Saturday) in the Castellani Parkhotel including breakfast. Coffee breaks are included in the fees for all participants.
- Information:** For further information, please contact Sarah Lederer by fax (+43 662 8044 155) or e-mail ([sarah.lederer@sbg.ac.at](mailto:sarah.lederer@sbg.ac.at)) with your telephone number. Your questions will be answered as soon as possible.

Registration: Please send the attached registration form by post or fax it to +43 662 8044 155, and arrange for the amount to be transferred (at no cost to the recipient) to the following account before 9<sup>th</sup> October 2009:

Salzburg Institute of Actuarial Studies (SIAS)  
IBAN: AT 792 040 400 000 012 021 BIC: SBGSAT2S

Location: Lecture Hall 402 in the Faculty of Science  
A-5020 Salzburg, Hellbrunner Straße 34

## Course Structure

- Historical overview
- Differences between social/compulsory and private health insurance
- Risk factors, types of benefits
- Tariffs
- Calculation of health insurance according to non-life insurance
- Bases of calculation for health insurance according to life insurance
- Calculation of constant net premiums
- Expense loadings and gross premiums
- Actuarial reserve
- Zillmerization
- Changes to the bases of calculation and adjustments of premiums
- Change of tariffs
- Accounting
- Performance-related profit sharing
- Own resources, solvency
- Embedded Value, internal models, “best estimate” provisions and risk margins
- Private health insurance in Europe whereby the situation in the following countries in particular will be examined:
  - Austria
  - Germany
  - Italy
  - Switzerland