

Invitation to a Course on Life Insurance Mathematics

Summer Semester 2008
Salzburg University

- Lecturer:** Dr. Ulrich Orbanz, Munich
President of the German Actuarial Association
Visiting professor at Salzburg University
- Dates:** Friday from 4 p.m. to 7 p.m. and Saturday from 9 a.m. to 1 p.m. on the following weekends:
7th and 8th March 2008
4th and 5th April 2008
11th and 12th April 2008
30th and 31st May 2008
6th and 7th June 2008
20th and 21st June 2008
- Contents:** The course covers all aspects of life insurance mathematics required to become a fully qualified actuary according to the core 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). The course is suited to all those who want to acquire knowledge of life insurance mathematics. Previous knowledge of insurance mathematics is not required. Please find the structure of the course below.
- Course fees:** €984. The course fees cover the 6 overnight accommodations from Friday to Saturday in the Castellani Parkhotel including breakfast.
The fees for participants who do not need accommodation are €444.
- Information:** For further information, please contact Sarah Lederer by fax (+43 662 8044 155) or e-mail (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 15th February 2008:

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

1 Basics of financial mathematics

- 1.1 Interest rates
- 1.2 Present value
- 1.3 Annuities
- 1.4 Project appraisal
- 1.5 Interest in continuous time

2 Types of life insurance

- 2.1 Term insurance
- 2.2 Endowment
- 2.3 Annuities
- 2.4 Unit linked insurance

3 Premiums and valuation reserves

- 3.1 Mortality
- 3.2 Present values in life insurance
- 3.3 Equation of value
- 3.4 Pure premiums
- 3.5 Office premiums
- 3.6 Valuation reserve
- 3.7 Commutation functions
- 3.8 Policy alterations

4 With profit business

- 4.1 Analysis of surplus
- 4.2 Surplus distribution
- 4.3 Funding of bonuses

5 Mortality tables

- 5.1 Types of mortality tables
- 5.2 Age shifting
- 5.3 Selection tables
- 5.4 Laws of mortality

6 Supplement

- 6.1 Profit testing and Embedded Value
- 6.2 Reinsurance
- 6.3 Disability insurance

From 4th April 2008 the course lectures on Fridays are accompanied by exercises from 2 p.m. to 4 p.m. Registration to the exercises will take place on 7th March 2008. There is no extra cost for the exercises.