

**Invitation to a Course on
Mathematics of Pension Plans**
with special consideration of demographic trends

Summer Semester 2011
Salzburg University

- Lecturer:** Sven Jörgen
Managing director of Valida Consulting GesmbH, Vienna
Chairman of the Working Group on Calculation Bases
of the Actuarial Association of Austria (AVÖ)
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.:
18th and 19th March 2011
8th and 9th April 2011
27th and 28th May 2011
- Contents:** The course covers all aspects of mathematics of pension plans required to become a fully qualified actuary according to the education syllabus of the International Actuarial Association and the core syllabus of Groupe Consultatif as well as according to the regulations of the Actuarial Association of Austria (AVÖ), which correspond 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 the main questions and methods in mathematics of pension plans. 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 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 by e-mail (sarah.lederer@sbg.ac.at), 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 25th February 2011:

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

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

Course Structure

1 Basics of Actuarial Mathematics

- a. Multiple decrement
- b. Concepts of reserving

2 Types of pension plans

3 Actuarial cost methods

- a. Unit credit
- b. Projected unit credit
- c. Entry age normal
- d. Individual level premium
- e. Frozen initial liability
- f. Aggregate methods

4 Analysis of gains and losses

- a. Total experience
- b. Investment
- c. Salaries
- d. Mortality
- e. Early, late retirement
- f. Withdrawal

5 Changes

- a. Cost method
- b. Pension benefit
- c. Retirement age
- d. Interest
- e. Salary
- f. Decrement assumptions