Subject: Book Donation program for requestor

Dear Sir/Madam,

We are pleased to inform you that the Book Donation Program, an initiative of Actuaries Without Borders (AWB), a section of the International Actuarial Association, in conjunction with The Actuarial Bookstore, is now ready to handle requests. Please find enclosed the list of topics covered by the program, as well as suggested titles. If you would like to request titles that are not on the list, we'll take this into consideration.

Financial procedure
The costs of shipping requested materials to your location will be partially funded by AWB (50%). Due to uncertainty with respect to custom fees and such, we are obliged to ask you to pay such additional costs in advance. Once the materials have arrived at your location AWB will transfer 50% of the additional cost. A financial agreement will be set up prior to the shipping.

If you are interested in participating in our program, and want to request books, please return by email to awb-book-donation@actuaries.org the following information:

1. Your name, email, phone number, address
2. Name of Institution
3. Name of Institution's Library
4. Librarian's name, email, phone number, address
5. Address to which books are to be sent
6. Titles of books requested and number of books per title.
7. Topic on AWB topic list to which requested book is related
8. Payer's name, email address, phone number, address
9. Payer's account's details to reimburse the shipping costs

You will be able to follow the progress of the donations on the Book Drive donation web page at http://www.actuarialbookstore.com/donate.aspx. As soon as all requested books have been collected, the financial agreement is signed by the payer on your side, and 50% of the shipping costs are credited to our account, we will ship you the donated materials.

We are looking forward to welcoming you to our program!

Best Regards,

Hilda van der Veen
Project Manager AWB Book Donation Program

1. Financial Mathematics (FM)

Aim:

To provide a grounding in the techniques of financial mathematics and their applications.

Topics:

- Deterministic theory of interest rates
- Generalised cash-flow models
- Introduction to contingent claims analysis
- Term structure models
- Risk neutral valuation, including derivative pricing and deflators
- Stochastic calculus for finance
- Stochastic theory of interest
- Dynamic portfolio management
- Introductory applications to insurance and other financial liabilities

Suggested titles

- Augros, J. –C. Les options sur taux d'intérêt. ISBN: 2717817190.
- Bodie, Z.; Kane, A.; Marcus, A. J. Investments. ISBN: 0072861789.
- Booth, P. M.; Chadburn, R. G.; Cooper, D. R. et al Modern actuarial theory and practice. ISBN: 0849303885.
- Bouchard, J.-P.; Potter, M. Théorie des risques financiers. ISBN: 2727201907.
- Boyle, P. P. Options and the management of financial risk. ISBN: 0938959263.
- Brigo, D. and Mercurio, F. Interest rate models: theory and practice. Springer.
- Butcher, M. V.; Nesbitt, C. J. Mathematics of compound interest. ISBN: 0960300015.
- Elliott, R.J. and Kopp, P.E. Mathematics of Financial Markets. Springer.
- Elton, E. J.; Gruber, M. J.; Brown, S. J. et al Modern portfolio theory and investment analysis ISBN: 0471238546.
- Ho, T. S. Y. Strategic fixed-income investment. ISBN:1556231202.
- Ingersoll, J. E. Theory of financial decision making. ISBN: 0847673596.
- Kellison, S. GThe theory of interest ISBN: 0256091501.
- McCutcheon, J. J.; Scott, W. F. An introduction to the mathematics of finance. ISBN: 043491228X.
- Merton, R. C. Continuous-time finance. ISBN: 0631185089.
- Panjer, H. H. (ed) Financial economics: with applications to investments, insurance and pensions.ISBN: 0938959484.
- Parmenter, M. M. Theory of interest and life contingencies, with pension applications: a problem-solving approach. ISBN: 1566983339.
- Poncet, P.; Portrait, R.; Hayat, S. Mathématiques financières. ISBN: 2247015255.

- Quittard-Pinon, F. Marchés des capitaux et théorie financière.   ISBN: 2717845755.
- Reilly, F. K. Investment analysis and portfolio management. ISBN: 0324171730.
- Roger, P. L'évaluation des actifs financiers. Modèles à temps discret. ISBN: 2804124274.
- Sharpe, W. F. Investments. ISBN: 0130101303.
- Shimko, D. Finance in continuous time: a primer. ISBN: 1878975072.
- Shreve, S. Stochastic calculus for Finance. Springer.
- Trowbridge, C. L. Fundamental concepts of actuarial science.
- Zima, P.; Brown, R. L. Mathematics of finance.ISBN: 0075515148.

2. Probability and Mathematical Statistics / Statistical Methods (P&S)

Aim:

To provide a grounding in probability and mathematical statistics. To provide the skills and expertise in the use of statistical methods for the understanding of risk in a range of actuarial work.

Topics:

- Concepts of probability
- Random variables and their characteristics
- Methods and properties of estimation
- Correlation and regression analysis
- Hypothesis testing and confidence intervals
- Data analysis
- Statistical models, such as regression and time series
- Survival and multi-state models
- Risk models (individual and collective)
- Parametric and non parametric analysis of data
- Graduation principles and techniques
- Estimation of frequency, severity and survival distributions
- Credibility theory
- Ruin theory
- Concepts of stochastic processes
- Simulation methods

Suggested titles

- Andersen, P. K.; Brogan, O.; Gill, R. D. et al Statistical models based on counting processes. ISBN: 0387978720.
- Dana, R. A.; Jeanblanc -Picque, M. Marchés financiers en temps continu: valorisation et équilibre. ISBN: 2717837108.

- Demange, G.; Rochet, J. -C. Méthodes mathématiques de la finance.ISBN: 2717831320.
- Devolder, P. Finance stochastiques. ISBN: 2800410620.
- Embrechts, P.; Kluppelberg, C. and Mikosch, T. Modelling extremal events for insurance and finance. Springer.
- Gourieroux, C.; Monfort, A. Séries temporelles et modèles dynamiques.ISBN: 2717828710.
- Hossack, I. B.; Pollard, J. H.; Zehnwirth, B. Introductory statistics with applications in general insurance. ISBN: 052165534X.
- Karlin, S.; Tay lor, H. M. A first course in stochastic processes. ISBN: 0123985528.
- Lamberton, D.; Lapeyre, B. Introduction to stochastic calculus applied to finance. ISBN: 0412718006.
- Miller, I.; Miller, M.; [Freund, J. E.] John E Freund's mathematical statistics with applications. ISBN: 0131246461.
- Saporta, G. Probabilité, analyse des données et statistique. ISBN: 2710805650.
- Tassi, P. Méthodes statistiques. ISBN: 2717809600.
- Roger, P. Les outils de la modélisation financière. ISBN: 2130429165.

3. Economics (Ec)

Aim:

To provide a grounding in the fundamental concepts of microeconomics, macroeconomics and financial economics.

Topics:

- Microeconomics
- Macroeconomics
- Financial Economics
- Expected utility theory
- Efficient Markets Hypothesis
- Asset return models and asset pricing models
- Behavioural finance: prospect theory, investor heuristics and biases

Suggested titles

- Begg, D. K. H.; Fischer, S.; Dornbusch, R. Economics. ISBN: 0077099478.

4. Accounting (Acc)

Aim:

- To provide the ability to interpret the accounts and financial statement of companies.

Topics:

- Basic principles of accounting

- The role of accounting standards

- Different types of business entity

- Basic structure of company accounts

- Interpretation and limitation of company accounts

Suggested titles

- Brealey, R. A.; Myers, S. C. Principles of corporate finance. ISBN: 0071151443.

5. Modelling (Mod)

Aim:

To provide an understanding of the principles of modelling and its applications.

Topics:

- Model structures

- Selection process

- Calibration

- Validation

- Scenario setting

- Sensitivity testing

- Limitations

- Computer applications of modelling

- Documentation and audit trail

6. Actuarial Mathematics (AM)

Aim:

To provide the skills and expertise in the application of the mathematics of contingent payments to common problems in actuarial practice.

Topics:

- Nature of the events giving rise to a contingency

- Typical solutions offered by insurance, social insurance, other financial services, or risk management e.g. products, schemes, contacts or transactions that will provide payments or benefits on future financial events in relation to:

    o The risk profile and aims of the parties involved

    o The concepts of risk avoidance, risk transfer and risk retention

    o The level and form of cash flows to be provided

    o Any options or guarantees that may be included

- o The method of financing the cash flows to be provided
- o The choice of assets when payments or benefits are funded
- o The charges that will be levied
- o The capital requirements
- o Actuarial methods for evaluating the prospective cost of solutions, e.g.:
- o Pricing of insurance contracts
- o Financing methods for other products or plans
- o Financial effects of other risk management solutions
- o Actuarial methods for monitoring the results and maintaining financial stability, such as:
- o Reserving
- o Financial Reporting
- o Reinsuring
- o Profitability analysis
- o Financial condition analysis

Suggested titles

- Aitken, W. H. A problem-solving approach to pension funding and valuation. ISBN: 1566982006.
- Allen, E. T. ; Melone, J. J.; Rosenbloom, J. S. et al. Pension planning: pension, profit- sharing and other deferred compensation plans. ISBN: 0072530839.
- Anderson, A. W. Pension mathematics for actuaries. ISBN: 0936031107.
- Bennett, P. Pension fund surpluses. ISBN: 0752000128.
- Black, K.; Skipper, H. D. Life and health insurance. ISBN: 0138912505.
- Bowers, N. L.; Gerber, H. U.; Hickman, J. C. et al Actuarial mathematics. ISBN: 0938959468.
- Carne, S. A.; Ward, G. The work of a pension scheme actuary. ISBN: 0852918801.
- Chabannes, J.-A.; Gauclin-Eymard, N. Le manuel de l'assurance-vie: assurances individuelles; assurances collectives. ISBN: 2247050859.
- Collett, D. Modelling survival data in medical research. ISBN: 1584883251.
- Collignan, D.; Collignan, C. L'assurance vie: contrats individuels. ISBN: 2853841766.
- Daykin, C. D. An Ageing Population - Pension Reform Developments in the UK and internationally. Manchester Statistical Society. ISBN: 0853361754.
- Dorfman, M.S. Introduction to ins urance. Prentice Hall.
- Elandt-Johnson, R. C.; Johnson, N. L. Survival models and data analysis ISBN: 0471349925.
- Haberman, S.; Pitacco, E. Actuarial models for disability insurance. ISBN: 0849303893.
- Hart, D. G.; Buchanan, R. A.; Howe, B. A. The actuarial practice of general insurance. ISBN: 0858130556.
- Huebner, S.S.; Black, K. and Cline, R.S. Property and liability insurance. Prentice Hall.

- Laiter, J.-D. Les clés de l'assurance-vie: produits et techniques. ISBN: 1895354277.
- Lamelot, G.; Leriche, J. Assurance-vie: prévoyance, épargne, retraite. ISBN: 2714430597.
- Le Pape, J.; Leroy, G. Assurance vie et fonds de pension, analyse financière et actuarielle. ISBN: 2902189613.
- Long, C. A. The actuary in practice. Croydon: Tolley. 86 pages.   ISBN: 0854593861.
- Mansfield, C. B.; Cunningham, T. W. Pension funds: a common-sense guide to a common goal. Homewood, IL: Business One Irwin. ISBN: 155623810X.
- Marubini, E.; Valsecchi, M. G. Analysing survival data from clinical trials and observational studies. ISBN: 0470093412.
- McGill, D. M.; Brown, K. N.; Haley, J. J. et al. Fundamentals of private pensions. ISBN: 0199269505.
- Mikosh, T. Non-life Insurance Mathematics. Springer-Verlag, Berlin.
- Partrat, C. and Besson, J. -L. Assurance non-vie : Modélisation, simulation. Economica, Paris.
- Providence, R.I.: Actuarial mathematics. ISBN: 0821800965.
- Rejda, G. E. Social insurance and economic security. ISBN: 0130204412.
- Rosenbloom, J. S.; Hallman, G. V. Employee benefit planning. ISBN: 0137544967.
- Soule, C. E. Disability income insurance: the unique risk. ISBN: 1556239580.
- Steuerle, C. E.; Bakija, J. M. Retooling social security for the 21st century. ISBN: 0877666024.
- Straub, E. Non-life insurance mathematics. ISBN: 3540187871.
- Sundt, B. An introduction to non-life insurance mathematics. ISBN: 3884872559.
- Taylor, G. C. Claims reserving in non-life insurance. ISBN: 0444878467.

7. Investment and Asset Analysis (I&A)

Aim:

To develop the ability to apply actuarial principles to the valuation, appraisal, selection and management of investments and to liaise with other investment professionals.

Topics:

- The objectives of institutional and individual investors
- Types of investment (bonds, shares, property and derivatives)
- Valuation of investments
- Portfolio selection - incorporating assessment of relative value
- Performance measurement
- Portfolio management
- Management of investments with respect to liabilities using techniques such as immunisation, asset-liability management and liability driven investment.

Suggested titles

- Broverman, S. A. Mathematics of investment and credit. ISBN: 1566984750.
- Cox, J. C.; Rubinstein, M. Options markets. ISBN: 0136382053.
- Hull, J. C. Options, futures and other derivatives. ISBN: 0130465925.
- Maginn, J. L.; Tuttle, D. L. (eds). Managing investment portfolios: a dynamic process. ISBN: 0791303225.
- Stoll, H. R.; Whaley, R. E. Futures and options: theory and applications..ISBN: 0538801158.

8. Actuarial Risk Management (ARM)

Aim:

To develop the ability to apply the principles of actuarial planning and control needed for the identification and quantification and management of risks for the operation of risk related programs on a sound financial basis.

Topics:

- The general operating environment of the enterprise
- Assessment of risks; risk types and risk measures
- Design and development of products and/or services
- Pricing of products and services and assumptions underlying the pricing
- Reserving and valuation of liabilities
- Management of risks and methods of reducing risk exposure, such as reinsurance
- Management of the relationships between assets and liabilities
- Monitoring the experience and exposure to risk
- Solvency and profitability of the enterprise and the management of capital
- Principles of regulation of financial institutions

Suggested titles

- Bühlmann, H. Mathematical models in risk theory. Springer.
- Daykin, C. D.; Pentikäinen, T.; Pesonen, M. Practical risk theory for actuaries.   ISBN: 0412428504.
- Gerber, H. U. An introduction to mathematical risk theory ISBN: 0918930081.
- Heilmann, W.-R. Fundamentals of risk theory.   ISBN: 388487151X.
- Herzog, T. N. Introduction to credibility theory. ISBN: 1566983746.
- Herzog, T. N.; Lord, G. Applications of Monte Carlo methods to finance & insurance. ISBN: 1566984335.
- Klugman, S. A.; Panjer, H. H.; Willmot, G. E. Loss models: from data to decisions. ISBN: 0471215775.

9. Professionalism (Pro)

Aim:

To develop awareness of the meaning of professionalism, the importance of professionalism in the work of an actuary and the professionalism issues that may arise in the course of that work.

Topics:

- Characteristics and standards of a profession including the need for:
  - Specialised skill and education
  - Ongoing training and development
  - High quality of advice
  - Exercise of independent judgment
  - Objectivity, integrity and accountability
- Code of conduct
- Discipline process
- Practice standards set by actuarial bodies and other stakeholders
- Considerations for actuaries in international practice
- Regulatory roles of actuaries
- The professional role of the actuary
  - Analysis and resolution of ethical issues
  - Identifying and managing conflicts, misuse of or undue influence on advice
  - Nature of advice
  - The public interest