F71LA Life Insurance 1

COURSE DETAILS
Course Code: F71LA
Full Course Title: Life Insurance 1
SCQF Level: 11
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: Yes Postgraduate Taught: Yes Postgraduate Research: No
Additional Information:

COURSE AIMS
The aims of this course are:

• To introduce the principles of actuarial planning and control within insurance companies

To apply this knowledge and understanding to practical situations in life insurance

LEARNING OUTCOMES – SUBJECT MASTERY
On completion of this course the student should be able to:

• Describe the role and responsibility of the actuary within insurance management
• Describe the key features of the environment in which life insurance companies operate
• Demonstrate a thorough knowledge of life insurance products which insurance companies manage
• Describe the factors which contribute to the pricing and design of new products
• Demonstrate an understanding of the management and administration of products through their lifecycle, including reserving
• Describe the principal sources of profit within the insurance industry
• Determine surplus and to perform an analysis of the surplus
• Identify risks and suggest ways of implementing effective risk management

Understand challenges / opportunities that the industry faces e.g. Solvency II

LEARNING OUTCOMES – PERSONAL ABILITIES
• Show an appreciation of the interface between academic theory and industrial practice
• Demonstrate the ability to learn independently and as part of a group
• Manage time, work to deadlines and prioritise workloads
• Present results in a way that demonstrates that they have understood the technical and broader issues of the life insurance environment

Show an appreciation of the various potential conflicts within the management of insurance companies

SYLLABUS

Key concepts in life insurance

• Introducing the balance sheet, risk & uncertainty, and the individual versus the collective

Asset shares

• Describing how asset share is built up, including using a recursive formula
• Describing the main uses of asset share

Policy values

• Describing the use of a valuation basis
• Describing the gross premium and new premium policy valuation methods
• Describing the recursive relationship between policy values over time

Strain, surplus and profit

• Describing the effect of the differences between the gross premium and new premium valuation methods
• Describing the concept of surplus, and sources of surplus

• Analysis of surplus
• Describing the interaction between the premium, valuation and experience bases
• Describing and applying how to analyse surplus into its various sources

Assets
• Describing the main asset classes in which life insurance companies may invest
• Describing the principles of investment, with reference to matching liabilities and level of free assets

Bonus and cost of bonus
• Describing different with profits bonus distribution systems, in particular the concept of reversionary and terminal bonuses
• Describing conventional and unitised with profits products

Life insurance products
• Describing the key features of the main products which a life insurance company writes, including
  • Savings, protection and income products
  • Without profit and with profit products
  • Conventional and linked products

General business environment
• Describing the background in which the insurance company operations, including
  • Distribution channels
  • Legislation and regulation
  • Professional matters

Sources of risk
F71LA Life Insurance 1

- Describing the main sources of risk within an insurance company

Risk management

- Describing ways in which the main sources of risk within an insurance company can be managed or mitigated

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Level</th>
<th>Title</th>
<th>School</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>F71LB</td>
<td>11</td>
<td>Life Insurance 2</td>
<td>School of Math and Comp Sci.</td>
<td>Assessed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Edi</th>
<th>SBC</th>
<th>Ork</th>
<th>Dub</th>
<th>Malay</th>
<th>IDL</th>
<th>COLL</th>
<th>ALP</th>
<th>OTH</th>
<th>Method</th>
<th>Weight</th>
<th>Exam Mins</th>
<th>Type</th>
<th>Diet</th>
<th>Synoptic Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examination</td>
<td>80</td>
<td>180</td>
<td>Assessment</td>
<td>Semester 1</td>
<td>F71LB</td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coursework</td>
<td>20</td>
<td></td>
<td>Assessment</td>
<td>Semester 1</td>
<td>F71LB</td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examination</td>
<td>100</td>
<td>180</td>
<td>Reassessment</td>
<td>Semester 3</td>
<td></td>
</tr>
</tbody>
</table>