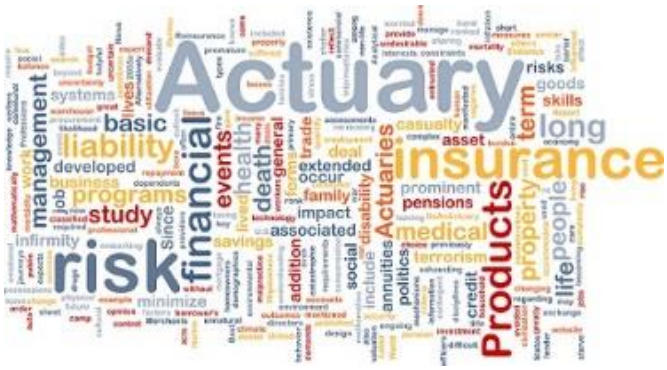


Introduction to Actuarial Science – Orientation

Thank you for signing up for the special Year 11/12 version of *Introduction to Actuarial Science*! During this course we're going to explore what an actuary is and does. You'll hear from some of the most senior and experienced people in the actuarial profession. You'll undertake exercises that get you thinking how an actuary thinks. And by the end of the course you'll have learned enough about the profession to know whether it is a good fit for your skills and interests.

The purpose of this document is to provide you with all of the information you need to know about taking the course. Read on!

How will the course work?

The course consists of 7 lessons, each taking around 2 hours to complete, plus an optional final exam. The course material is on the edX platform and can be found at the *Introduction to Actuarial Science* sign up page. It's free to sign up to the course. Students taking the free version of the course have full access to all course material, although access is restricted to a period of 8 weeks after initially signing up. Make sure you take this into account when choosing when to sign up. It's possible to "upgrade" your level of access by paying a fee of $US49. This gives you access to the course for unlimited time and provides a certificate to you on completion of the course, although this upgrade is in no way necessary to complete the course or be eligible to apply for the scholarship (see below).

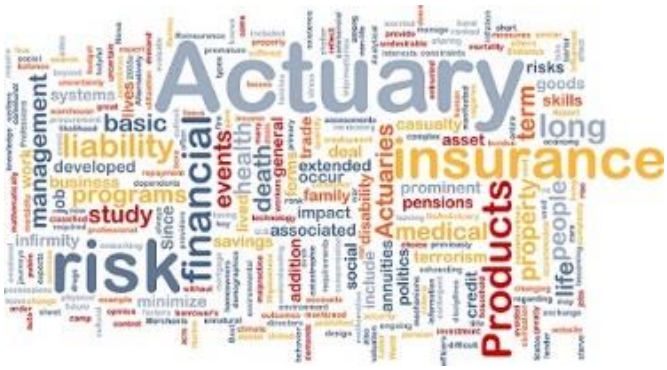
In addition to the online material on edX, later in this document there are sections on each lesson, which are designed to be read before commencing the lesson, and cover:

- Introduction to the lesson material
- Simple and challenging aspects of the lesson
- Key parts of the lesson to cover if you are short of time

You are welcome to work through the course material as quickly or slowly as you wish. How you do this is up to you. At some schools a teacher might guide a group of students through the course together over a set period. Other students might work through the course on their own at their own pace. You are encouraged to ask questions in the course discussion forum on edX. I will be checking the forum each day and so will respond to your questions within 24 hours.

What is "special" about this version of the course?

Since launching in October 2015, the course has been enrolled in by over 54,000 students from over 190 countries around the world. It is designed to be taken in a "self-paced" mode, which means all course material is available for access immediately upon signing up. Feel free to browse around the course immediately after signing up. You'll find a wealth of historical activity in the discussion forum that you might like to browse through, although this is not compulsory.



The “special” part about this Year 11/12 version of the course is that the course lessons will be supplemented by additional guidance (this document) and webinars, giving you more support and an opportunity to directly interact with the course instructor and ask as many questions as you like!

Webinar times and purpose

Webinar times will be confirmed at a later date and you will be advised by email as to the timing. The timing will likely correspond with relevant deadlines for university course selection.

The purpose of webinars is to give course participants the opportunity to meet with me and ask questions in a live environment. Webinars will run for about one hour and will be flexible in structure depending on the needs and wants of participants – you will have the opportunity to ask questions about the course, the actuarial profession and studying at the Australian National University. Given that there is no set schedule for completing the course I have no expectations of how much course content participants will have completed – you’re more than welcome to participate no matter how much of the course you have gone through.

If your school would like to schedule a separate webinar or face to face meeting with me to discuss the actuarial profession, please feel free to contact me at adam.butt@anu.edu.au.

Other software requirements

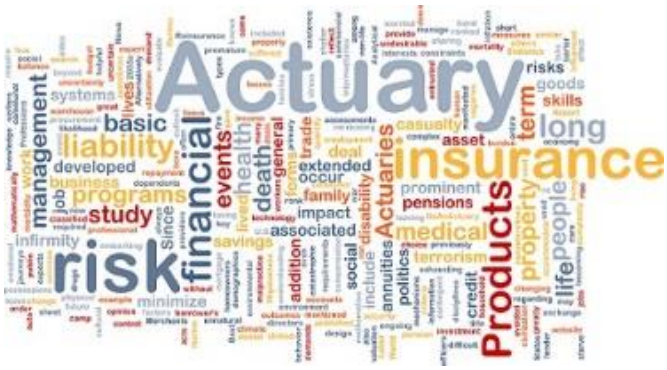
Starting from Lesson 2, we will be using a spreadsheet package to solve problems in the course. I use Excel in the course but you are welcome to use a different spreadsheet package if you wish. Further information is provided in Lesson 2 on edX.

Whilst edX does provide mobile and tablet apps, I do not recommend using them to look at the course material. Some of the mathematical equations and spreadsheet work is very difficult to follow on a tablet and even worse on a phone. In fact, the best set-up you can have is a dual-screen PC/iMac/laptop allowing you to view course material on one screen and work with spreadsheets on another screen. At a pinch you could have the course material on a tablet and then work on spreadsheets on a PC/iMac/laptop. A single-screen set up is fine as well.

Some other exciting information!

The ANU is offers five scholarships worth $10,000 each to Australian students who complete *Introduction to Actuarial Science* and enrol in a Bachelor of Actuarial Studies at ANU. Completing the course involves achieving a grade of at least 40% in the course.

Each of the 7 Lessons of the course contains Assessment Questions that are worth 10% of the overall grade for the course. This means you can pass the course without completing the final exam, which is subsequent to these Lessons and is worth the remaining 30% of the overall grade for the course. All of the assessment and exam questions can be completed at a time of your choosing, subject to the access restrictions described above.



Selection of the scholarship winners will be based on academic merit, but is not linked to your performance in *Introduction to Actuarial Science*, beyond requiring that you achieve a grade of at least 40% as described above.

Information about how to apply for the scholarship can be found in the above link.

What happens next?

Before commencing Lesson 1, you should go through the "Prologue" section in the "Course" tab. The Prologue material is designed to give you an introduction to the structure of the course and to give you a very basic introduction to life insurance, which is the context upon which the course is based. The life insurance content assumes no prior knowledge of life insurance at all, so you should have no problems following it. You'll learn a little bit about me as well. It should take you around 30-40 minutes to complete.

In terms of course orientation, you can have a quick look at the other course tabs at a time of your choosing, although most of these won't be essential to you. The following is worthwhile noting for a couple of the tabs:

- Discussion – the discussion forum is full of posts from other learners. You are welcome to read the forum and post your own questions and comments.
- Actuarial Links – if you want even more information about the actuarial profession some of the links here will be useful. I would particularly recommend the Actuaries Institute link for information about the profession in Australia, and also the "See what we see" link, which is a promotional campaign about the profession run by the Actuaries Institute which contains lots of interesting videos about what actuaries do in Australia.

Once you start looking through the "Course" material you'll see there are three types of questions to answer. These are as follows:

- Assessment Questions – these questions count towards your grade in the course.
- Practice Questions – these questions are typically similar in style to Assessment Questions but give you a chance to practice skills you have learned without the pressure of it counting towards your grade.
- Extension Questions – these questions are harder than other types of questions and also don't count towards your grade. They represent extensions to the concepts covered in other lesson material.

Other than this good luck in the course and I hope to see you in a webinar at some time in future!

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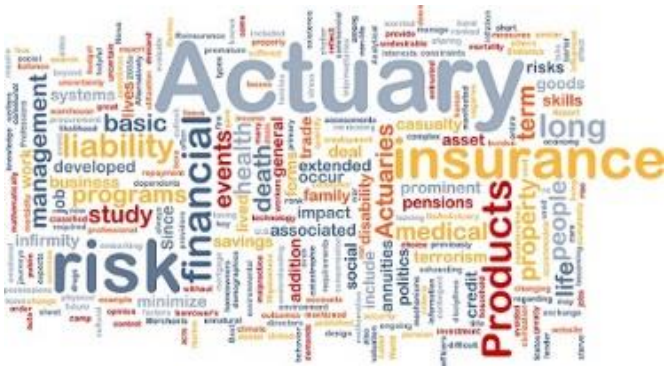
Australian National University
Course Instructor for *Introduction to Actuarial Science*



Introduction to Actuarial Science – Lesson 1

Valuing Cash Flows

The purpose of this section is to provide you with an introduction to Lesson 1 of the course. You should read this first and then go through the Lesson 1 material on edX.

What to expect from Lesson 1 – Valuing Cash Flows

Lesson 1 is about interest and valuing cash flows. For example, if you have $100 today then what might that be worth in 5 years from now? Or, if I owe someone $500 in 10 years from now then how much do I need to set aside today to be certain to have the $500 available in 10 years?

You might be familiar with much of the material from work on compound interest you have done in mathematics already. If not, don't be too concerned as the mathematics in the material this week is not complicated (this is the easiest lesson in the course) and in any case the course videos explain the concepts in very simple terms.

Going through each of the course items in this Lesson, including time for attempting questions and reviewing solutions, should take you around 90-120 minutes, depending on how much work you put into the extension questions.

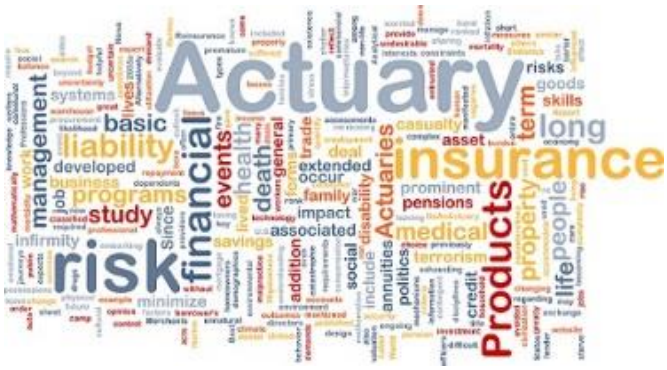
Tell me about the hard stuff!

You should have no problems with any of the Practice Questions and Assessment Questions, apart from Assessment Question 1.6, which requires you to combine two techniques from the Lesson that are not explicitly combined in any other video or question. The Extension Questions this Lesson are all mathematical proofs that you might like to have a look at the solution for so as to better understand some of the formulae that I move through in the video material quite quickly. In particular, some students find that the mathematical proof in Extension Question 1.3 helps them better understand the formulae provided in Video 1.5. However, none of the Extension Questions are necessary for your understanding for later in the course.

What if I am short of time?

The course is designed to be taken by going through each of the Lesson items sequentially. However I recognise that you may be short of time, so I've listed below all items for Lesson 1, along with rating them as "Vital", "Recommended" or "If you have time". In particular, I've left a number of the early videos below as "Recommended" rather than "Vital" as they cover material you're already likely to be familiar with and the questions will test whether you need to go back and view the videos.

Note that I've left the Extension Questions off the list as all of them are "If you have time" and are also discussed in "Tell me about the hard stuff!" above.



Item	Rating	Notes
Interview with Estelle Pearson	Recommended	
Video 1.1	Recommended	Can skip this if you can do PQ1.1 & AQ1.1 without it
Video 1.2	Recommended	Can skip this if you can do PQ1.1 & AQ1.1 without it
PQ1.1 & AQ1.1	Vital	
Video 1.3	Vital	
PQ1.2 & AQ1.2	Vital	
Video 1.4	Recommended	Can skip this if you can do PQ1.3,1.4 & AQ1.3,1.4 without it
PQ1.3 & AQ1.3	Vital	
PQ1.4 & AQ1.4	Vital	
Video 1.5	Vital	
PQ1.5 & AQ1.5,1.6	Vital	

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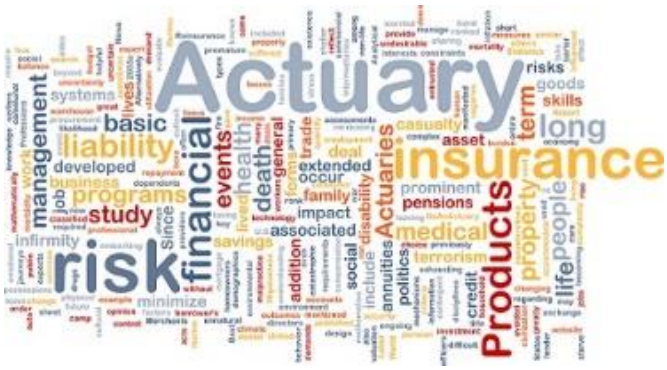


Introduction to Actuarial Science – Lesson 2

Applications of Valuing Cash Flows

The purpose of this document is to provide you with an introduction to Lesson 2 of the course. You should read this first and then go through the Lesson 2 material on edX.

What to expect from Lesson 2 – Applications of Valuing Cash Flows

In Lesson 1 we looked at how single or multiple cash flows can be valued at a point in time. That point in time might be after the cash flow is due (accumulated value) or before the cash flow is due (present value). In Lesson 2 we're going to look at how the valuation of cash flows can be applied to solve more interesting and realistic problems. The mathematics in the material this week is no more complicated than what you saw in Lesson 1, although in Lesson 2 you tend to be solving problems related to some sort of life insurance contract rather than just valuing cash flows.

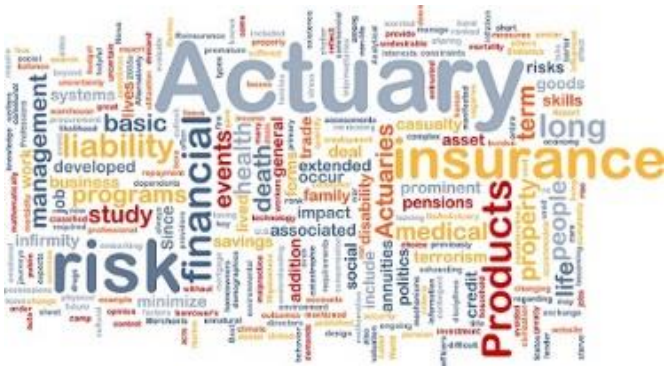
Going through each of the course items in this Lesson, including time for attempting questions and reviewing solutions, should take you around 90-150 minutes, depending on how much work you put into the extension questions.

Tell me about the hard stuff!

The majority of the material in this lesson is no more complicated than Lesson 1, although Assessment Question 2.2 requires you to use the present value of a series of cash flows formula from Lesson 1 in a creative way.

In Video 2.4 and after in the lesson you will be valuing cash flows using spreadsheets. If you are familiar with Excel or equivalent then you probably will not find this too difficult. However, if you have never used a spreadsheet package before I encourage you to spend additional time on Video 2.4 and attempt to build the downloadable spreadsheet yourself using Video 2.4 as a guide. We will be using spreadsheets extensively throughout the rest of the course so getting a good start here is important. Depending on your background in spreadsheets, you might find Assessment Question 2.5 quite hard. I recommend that if you do not feel capable of tackling this question on your own that you at least work through the video solution whilst making the changes yourself. Being able to do questions like this will help you enormously later in the course.

Extension Question 2.1 is another mathematical proof, which is not necessary, but you might find interesting if you are keen to understand the underlying mathematics behind the cash flow calculations. The other extension questions all involve adjustments to the Video 2.4 spreadsheet model. As always, none of them are strictly necessary, although if you're planning on attempting only one of them I would recommend Extension Question 2.3 as this will help affirm some of your learning from earlier in the lesson.



What if I am short of time?

The course is designed to be taken by going through each of the Lesson items sequentially. However I recognise that you may be short of time, so I've listed below all items for Lesson 2, along with rating them as "Vital", "Recommended" or "If you have time".

Note that I've left the Extension Questions off the list as all of them are "If you have time" and are also discussed in "Tell me about the hard stuff!" above.

Item	Rating	Notes
Interview with Dan Mayoh	Recommended	
Video 2.1	Vital	
Video 2.2	Recommended	You might find that Video 2.1 gives you enough information to answer PQ2.1 & AQ2.1,2.2 without needing Video 2.2
PQ2.1 & AQ2.1,2.2	Vital	
Video 2.3	Recommended	Video 2.4 might give you enough information to skip Video 2.3
Video 2.4	Vital	If you have experience with spreadsheets you might be able to skip through this quickly – see above
Video 2.5	Recommended	Can skip this if you can do PQ2.2 & AQ2.3,2.4 without it
PQ2.2 & AQ2.3,2.4	Vital	
AQ2.5	Vital	See comments in "Tell me about the hard stuff!"

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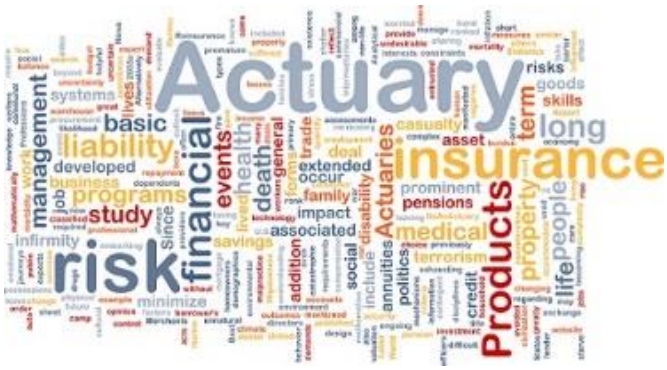


Introduction to Actuarial Science – Lesson 3

Analysis of State Transitions

The purpose of this document is to provide you with an introduction to Lesson 3 of the course. You should read this first and then go through the Lesson 3 material on edX.

What to expect from Lesson 3 – Analysis of State Transitions

In Lessons 1 and 2, we assumed all cash flows are known with absolute certainty. This is rarely the case in actuarial work. Most life insurance policies have cash flows that depend on whether the policyholder is alive or not. For example, the annuity certain in Lesson 2 might only be paid to the policyholder if they are alive. In Lesson 3, we move away from cash flow analysis and consider models of mortality, so that later on in the course we can combine probabilities of death with cash flow models.

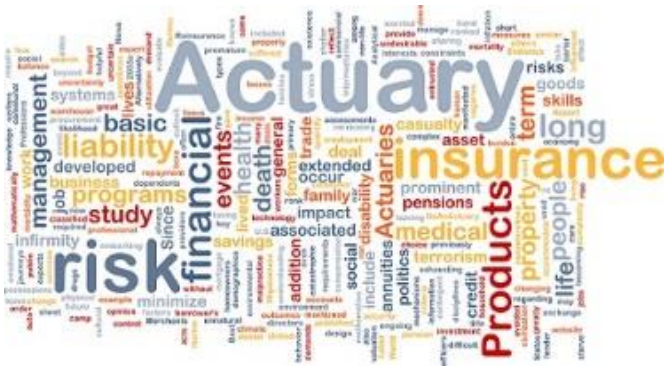
Going through each of the course items in this Lesson, including time for attempting questions and reviewing solutions, should take you around 60-120 minutes, depending on how much work you put into the extension questions.

Tell me about the hard stuff!

Lesson 3 is far, far, far more mathematically intense than Lessons 1 and 2. If you have done some integral calculus, you shouldn't have too many problems understanding the concepts up until Video 3.4. There are also no mathematical questions up until this point. Everything up until this point is about concepts rather than mathematical problems.

From Video 3.5 we introduce the most complex mathematics in the course. This is the sort of mathematics you would expect to see in the 2nd year of an actuarial degree. So if you struggle from here do not be concerned! I have to put this content in the course to make sure I am making it clear to potential actuaries, that yes there is hard mathematics involved! If you find the material from Video 3.5 onwards easy then you should be doing an actuarial degree already!

We start by introducing the constant e, which you may not have come across yet at school. e, like π, is a constant and has an actual numerical value = 2.71828….. Video 3.5 is the intense mathematical video in the Lesson, and shows a complicated proof for how mortality probabilities are calculated. Do not be concerned if you do not understand the proof. Just take the formula on board and move on to Practice Question 3.1. If you can understand the answer to Practice Question 3.1, then you should be able to cope with Assessment Questions 3.4 and 3.5. Assessment Question 3.6 is VERY hard so do not be at all concerned if you do not even know where to start. The Extension Questions are also difficult, especially Extension Question 3.2 which involves another difficult mathematical proof similar to that from Video 3.5.



The main thing to take out of all of this is that if you feel lost for much of this Lesson then do not worry! You'll be perfectly capable of continuing on in the course. Lesson 4 has a little bit of difficult mathematics but not as much as this Lesson. And from Lesson 5 onwards you won't see any calculus again throughout the rest of the lessons.

What if I am short of time?

The course is designed to be taken by going through each of the Lesson items sequentially. However I recognise that you may be short of time, so I've listed below all items for Lesson 3, along with rating them as "Vital", "Recommended" or "If you have time". You'll note that very little in Lesson 3 is marked as "Vital". This is because you will have no problems continuing in the course even if you struggle with the mathematics of this Lesson.

Note that I've left the Extension Questions off the list as all of them are "If you have time" and are also discussed in "Tell me about the hard stuff!" above.

Item	Rating	Notes
Interview with Taleitha O'Meara	Recommended	
Video 3.1	If you have time	
AQ3.1	If you have time	
Video 3.2	Recommended	
Video 3.3	Recommended	If you skip this have a look at the notation in the Lesson 3 summary so you know what μ_x, ${}_tp_x$ and ${}_tq_x$ are – they are important for future lessons
AQ3.2,3.3	Vital	
Video 3.4	If you have time	
Video 3.5	If you have time	This video involves a complicated mathematical proof – check the Lesson 3 summary if you care about the result but not the proof
PQ3.1, AQ3.4,3.5,3.6	Recommended	
Video 3.6	Recommended	

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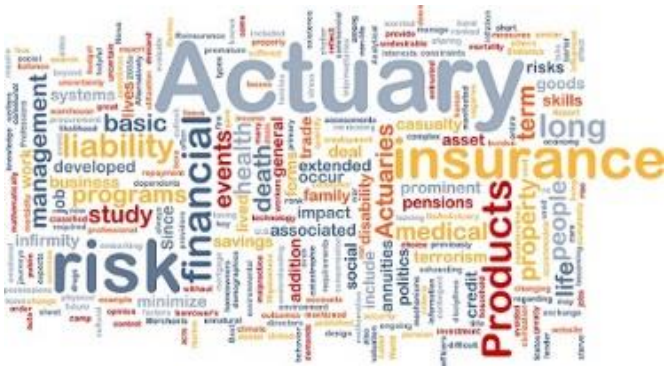


Introduction to Actuarial Science – Lesson 4

The Life Table

The purpose of this document is to provide you with an introduction to Lesson 4 of the course. You should read this first and then go through the Lesson 4 material on edX.

What to expect from Lesson 4 – The Life Table

In Lesson 4 we're still looking at mortality probabilities like we did in Lesson 3, but using a different approach called "The Life Table". Life Tables are commonly used by actuaries to represent the mortality of a population and are much easier to deal with mathematically than transition intensities. There is much less calculus in Lesson 4 than there was in Lesson 3!

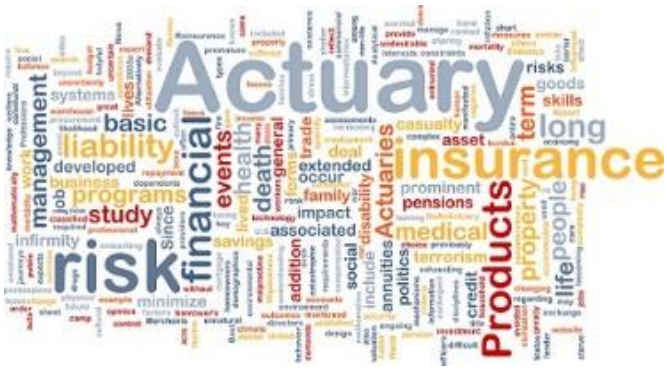
Going through each of the course items in this Lesson, including time for attempting questions and reviewing solutions, should take you around 90-120 minutes, depending on how much work you put into the extension questions.

Tell me about the hard stuff!

Video 4.2 provides a link between the most basic calculus of Lesson 3 (e.g. Assessment Question 3.4) and the Life Table. If you can understand Video 4.2 then you will be well placed for the rest of the Lesson. If the calculus is bothering you then you will find Practice Question 4.2 and Assessment Question 4.2 difficult. If you are comfortable with attempting these questions, then it is more important to get the spreadsheet calculations of these questions working than doing the "by hand" calculations, as it will prepare you better for later spreadsheet work in the course. Similar advice applies to Assessment Question 4.3. Extension Question 4.1 is similar to Assessment Question 4.3 but with harder calculus.

Video 4.4 shows how probabilities can be calculated from a Life Table that has already been provided (i.e. the calculus has already been done for you!). All Practice Questions and Assessment Questions from here do not require any calculus and so are much easier mathematically. Assessment Question 4.7 is hard because it introduces the "expectation" concept, which you likely will not be familiar with.

Extension Question 4.2 is not all that hard if you steal the answer from Extension Question 4.1 as your starting point. However, Extension Question 4.3 is probably the hardest mathematical question in the course. You have been warned!



What if I am short of time?

The course is designed to be taken by going through each of the Lesson items sequentially. However I recognise that you may be short of time, so I've listed below all items for Lesson 4, along with rating them as "Vital", "Recommended" or "If you have time".

Note that I've left the Extension Questions off the list as all of them are "If you have time" and are also discussed in "Tell me about the hard stuff!" above.

Item	Rating	Notes
Interview with Trevor Matthews	Recommended	
Video 4.1	Vital	
AQ 4.1 & PQ4.1	Vital	
Video 4.2	Vital	
PQ4.2 & AQ4.2	If you have time	
Video 4.3	Vital	
AQ4.3	If you have time	
Video 4.4	Vital	
AQ4.4,4.5,4.6	Vital	
AQ4.7	Recommended	

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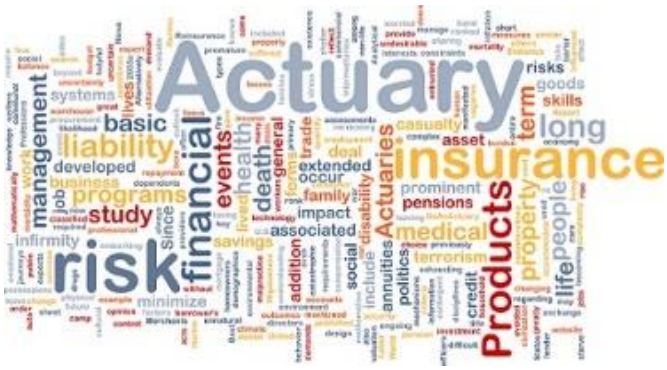


Introduction to Actuarial Science – Lesson 5

Valuing Uncertain Cash Flows

The purpose of this document is to provide you with an introduction to Lesson 5 of the course. You should read this first and then go through the Lesson 5 material on edX.

What to expect from Lesson 5 – Valuing Uncertain Cash Flows

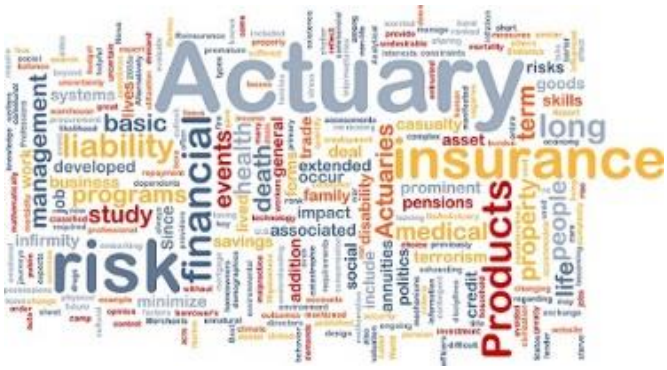
It might have felt like Lessons 1 and 2 and then Lessons 3 and 4 were completely unrelated to each other. The first two lessons looked at valuing cash flows whilst the next two lessons looked at mortality probabilities. In Lesson 5 we bring this material together. For example, imagine that the claims in the annuity certain we dealt with in Lesson 2 were only paid to policyholders who are alive. We are now introducing an element of uncertainty into the payment of cash flows, which is a key aspect of much actuarial work. In this Lesson we will also introduce uncertainty into the interest rate that is earned on actual reserves, which is another form of uncertainty that actuaries must deal with.

The material this Lesson is perhaps a little longer than in previous Lessons, although you shouldn't have too many problems with the mathematics. Going through each of the course items in this Lesson, including time for attempting questions and reviewing solutions, should take you around 100-150 minutes, depending on how much work you put into the extension questions.

Tell me about the hard stuff!

The greatest challenge in this Lesson comes from extending what you did in Excel back in Lesson 2. You should not have too many problems with the concept of an Expected Present Value, although you might find applying this in Excel a little challenging (see the material from Video 5.2 up to Assessment Question 5.5), particularly if you haven't done much of the Excel work in Lessons 2 and 4. Extension Question 5.1 asks you to extend this work to allow for the cost of running the insurance company. Whilst this material is not strictly necessary to continue throughout the rest of the lesson and future lessons, it is worth trying to understand it as it is fundamental to much actuarial work.

The Lesson turns in a different direction from Video 5.5 onwards, introducing concepts about "random numbers" you may not be familiar with. Don't be concerned! These concepts are not particularly difficult to grasp and will be vitally important for Lessons 6 and 7. Make sure you are able to do and understand the random number questions; Practice Question 5.4 and Assessment Questions 5.6 and 5.7. If you want to get a head start on Lesson 6 then have a go at Extension Question 5.2.



What if I am short of time?

The course is designed to be taken by going through each of the Lesson items sequentially. However I recognise that you may be short of time, so I've listed below all items for Lesson 5, along with rating them as "Vital", "Recommended" or "If you have time".

Note that I've left the Extension Questions off the list as all of them are "If you have time" and are also discussed in "Tell me about the hard stuff!" above.

Item	Rating	Notes
Interview with Sharanjit Paddam	Recommended	
Video 5.1	Recommended	
AQ 5.1	Recommended	
Video 5.2	Recommended	
PQ5.1 & AQ5.2	Recommended	
Video 5.3	Recommended	
PQ5.2 & AQ5.3,5.4	Recommended	
Video 5.4	If you have time	
PQ5.3 & AQ5.5	If you have time	
Video 5.5	Vital	
Video 5.6	Vital	
PQ5.4 & AQ5.6	Vital	
Video 5.7	Vital	
AQ5.7	Vital	

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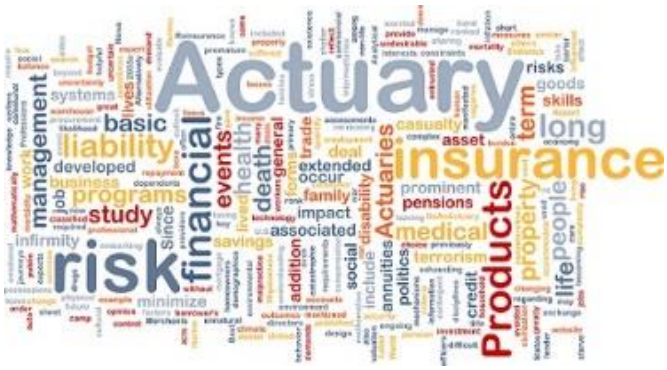


Introduction to Actuarial Science – Lesson 6

Modelling a Life Insurance Company 1

The purpose of this document is to provide you with an introduction to Lesson 6 of the course. You should read this first and then go through the Lesson 6 material on edX.

What to expect from Lesson 6 – Modelling a Life Insurance Company 1

Everything in the course so far has been building towards this lesson's material, where we do a full model of a life insurance company. This is what actuaries really do in life insurance! I personally think this is the most interesting lesson in the course as it draws together everything you have learned so far but in a real (although much simplified) context.

Going through each of the course items in this Lesson, including time for attempting questions and reviewing solutions, should take you around 120-150 minutes.

Tell me about the hard stuff!

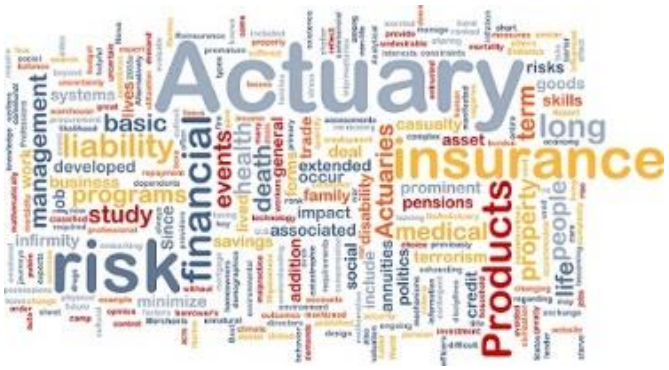
Like in Lesson 5, the biggest challenge in this lesson is from Excel work rather than mathematics. The Excel workbooks you will work with in this lesson are far larger and more complicated than any you have seen so far in the course.

The lesson is centered around two long videos. Video 6.2 (19 minutes) shows how to create a single full projection of the insurer. This is largely based on the random number material from Lesson 5 – i.e. we take random interest rates and random numbers of deaths to project the cash flows for the insurer. Video 6.4 (23 minutes) shows how to create 200 different projections of the insurer and requires 11 separate worksheets to do so. It is recommended for both of these videos to watch the video on one screen and attempt the Excel work on another screen by following along.

You'll find that the questions in this Lesson are relatively short compared to previous lessons. They mostly just ask you to adjust something about an Excel file and record the change in an output from the file. The purpose of these questions is to encourage you to understand the Excel files. Assessment Question 6.8 is the exception to this – it requires you to make significant adjustments to the Excel file from Video 6.4 in order to allow for a change in insurance policy design. Depending on how well you understand the Excel work up to this point you might find this question reasonable or very difficult. There are no Extension Questions for Lesson 6 – there's enough material here already!

What if I am short of time?

The course is designed to be taken by going through each of the Lesson items sequentially. However I recognise that you may be short of time, so I've listed below all items for Lesson 6, along with rating them as "Vital", "Recommended" or "If you have time".



Item	Rating	Notes
Interview with Peter Martin	Recommended	
Video 6.1	Recommended	
AQ 6.1,6.2	If you have time	
Video 6.2	Vital	
AQ6.3,6.4 & PQ6.1	Recommendend	
Video 6.3	Vital	
Video 6.4	Vital	
PQ6.2 & AQ6.5	Recommended	
Video 6.5	Vital	
AQ6.6	Vital	
Video 6.6	Vital	
PQ6.3 & AQ6.7,6.8	Vital	

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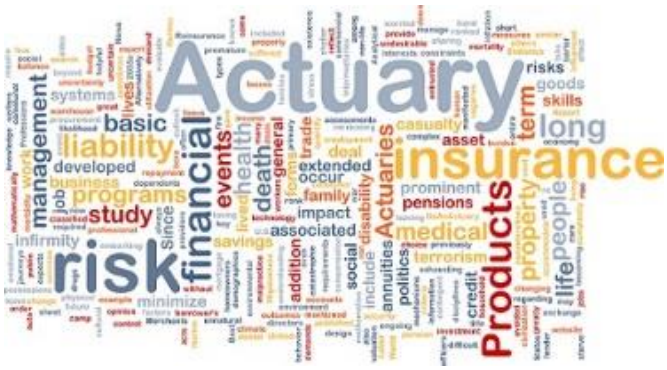


Introduction to Actuarial Science – Lesson 7

Modelling a Life Insurance Company 2

The purpose of this document is to provide you with an introduction to Lesson 7 of the course. You should read this first and then go through the Lesson 7 material on edX.

What to expect from Lesson 7 – Modelling a Life Insurance Company 2

Lesson 7 is a direct extension of Lesson 6 and adds one extra element of realism to the simulation modelling done in Lesson 6. In Lesson 6, we calculated probabilities of sufficiency at Year 0 when the policy was sold, but did no analysis of how the Actual Reserves were tracking for any of the simulations except to note whether they were below zero at the finish of the policy. In Lesson 7, we introduce Expected Reserves, which are compared to the Actual Reserves each year to see if the insurer is performing well or poorly in future years. This is a key activity of actuaries, who want to know how the insurer is travelling on a regular basis, and not be faced by a surprise bankruptcy!

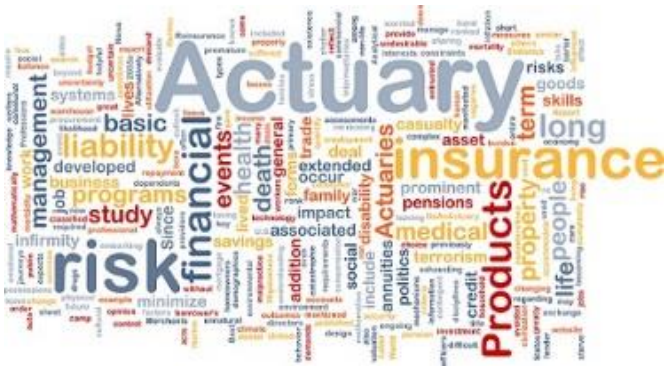
Going through each of the course items in this Lesson, including time for attempting questions and reviewing solutions, should take you around 90-120 minutes, depending on how much work you put into the extension question.

Tell me about the hard stuff!

Unless you are confident with the Lesson 5 and Lesson 6 material, you will likely find Lesson 7 very challenging. Lesson 7 contains significant extensions to the Excel workbooks used in Lesson 6 and some of the concepts around expected reserves can be a little difficult to grasp – they are in fact 2nd or 3rd year concepts in an undergraduate actuarial degree.

For that reason, if you're struggling you might consider skipping through Lesson 7 pretty quickly. In my opinion Lesson 6 is the centerpiece of the course in terms of showing you the sorts of things actuaries do, and Lesson 7 is just an extension of this. You are more than capable of getting a passing grade in the course without completing any of the Lesson 7 assessment questions.

All practice and assessment questions in this Lesson require significant Excel work. Practice Question 7.4 and Assessment Question 7.4&7.5 require you to redesign the Excel work for a different type of policy. Extension Question 7.1 involves some tricky mathematics (although no calculus) about Expected Reserves.



What if I am short of time?

Since this is the final lesson for the course, none of the material can be considered to be "Vital" in terms of preparation for future lessons. I recommend you watch Video 7.1, which introduces the concept of Expected Reserves, and then decide whether to continue with the lesson.

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