

Finance 442 SYLLABUS
Life and Health Insurance
University of South Carolina
Fall 2018

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Required Text Life Insurance
Kenneth Black, Jr. Harold D. Skipper, Kenneth Black III
15th Edition, Lucretian, LLC, 2015
Additional readings may be posted on Blackboard or otherwise assigned

Class Hours Tuesdays and Thursdays: 11:40AM – 12:55PM (Sect. 1) in DMSB 135
and 1:15PM – 2:30PM (Sect. 2) in DMSB 114

Office Hours Tuesdays and Thursdays: 10:00AM – 11:30AM or by appointment

Course Description

This course provides an introduction to the life and health insurance branches of the insurance industry. The class presupposes no prior knowledge of life or health insurance. We do assume, however, that students will have already completed the Foundations Course in Risk and Insurance, Finance 341.

In the course, we will use the term “Life Insurance” in a broad context. Thus, our focus will include more than traditional life insurance, which pays on the death of the insured. We will also examine insurance which pays while an insured is still alive, notably annuities. In addition, we will review insurance which pays in the event of loss of health, disability or incapacity.

As the course unfolds, we will revisit financial and statistical concepts introduced in earlier business classes. In particular, we will re-examine probability theory and the present value methodology. We will apply these concepts to define, evaluate and manage three kinds of life insurance risks: mortality, morbidity and longevity.

Life insurance purchases should generally be made within the context of a broad and comprehensive financial planning strategy/methodology. Financial planning assumes that individuals should: (1) maximize the accumulation of assets during their productive working years and (2) rationally liquidate assets during retirement to achieve their desired standard of living.

We also make a detailed examination of health insurance markets in the United States, which are presently highly unstable. We will study in depth the Affordable Care Act (“Obamacare”) and the many recent efforts to fix, amend, repeal and replace that Act.

This course will also survey on the regulatory structure of life, health and disability insurance products and the structure of those markets. Important topics including the impact of persistently low interest rates on life insurers and the current challenges facing the Affordable Care Act will also be discussed. Emerging (and controversial) topics such as the use of genetic testing information and unstructured data (e.g., from social media, for example) for underwriting purposes will be covered.

Specific Learning Outcomes

By the end of the course, students should be able to:

- Explain the economic foundations of life insurance. Explain the theory of human capital. Show how the concept of human life value is derived from the theory of human capital.
- Identify the various alternatives for dealing with the financial consequences of death. Explain the advantages and costs of life insurance as a way to treat the financial consequences of death.
- Know and identify mortality, longevity and morbidity risks. Explain how these categories are used to determine the type of life insurance contract to purchase.
- Have command of the key characteristics and uses of term insurance. Explain the renewability, conversion and reentry provisions. Discuss group term insurance. Contrast term insurance with whole life insurance.
- Know the key characteristics and uses of whole life insurance. Explain how limited payment life policies differ from ordinary life policies. Compare and contrast participating and non-participating whole life policies.
- Describe the characteristics and uses of the universal life policy. Explain the key characteristics of universal life and explain how these are used to create flexibility. Contrast the characteristics of universal life with whole life.
- Describe the major contract provisions commonly found in Life insurance policies. Explain how limits, deductibles and coinsurance impact coverage. Describe the most common policy riders and how they are used.
- Explain how annuities work. Know their role in addressing longevity risk. Explain how annuities differ from life insurance. Describe the basic characteristics of fixed annuities and variable annuities. Explain the purchase phase, accumulation period and liquidation period of the annuity.
- Describe the health care environment and the economic factors driving health care costs. Explain the structure of the private health insurance provider system. Understand the basic mechanics and operation of the 2010 Patient Protection and Affordable Care Act (ACA) and recent legislative reform efforts.
- Describe comprehensive medical insurance and its main components. Explain how deductibles, coinsurance, out of pocket maximums and accumulation provisions impact

coverage. Describe how the overall maximum benefit, coordination of benefits and subrogation impact coverage.

- Describe the basic components of disability income insurance, including the elimination period, benefit period and monthly benefit amount. Explain the significance of key policy definitions, such as injury and sickness, preexisting condition and disability.
- Describe the design and coverages of long term care insurance. Explain the three levels of nursing care provided by most often provided by the policy. Explain how the definition of basic living activities impacts coverage.
- Describe the life insurance underwriting process. Explain why life insurance underwriting is needed. Explain the importance of information in counteracting adverse selection. Compare and contrast judgment classification versus a numerical rating system.
- Describe the key elements of life insurance management. Understand the corporate structure, governance and organization goals of the commercial life insurance companies comprising the industry. Explain how life insurance companies make money. Explain how life insurance companies serve as both financial and actuarial intermediaries. Explain the challenges that persistently low interest rates place on life insurers.
- Describe financial management in a life insurance company. Explain the role of capital. Apply the basic terms of operating capital, reserve capital, and risk capital. Explain the function of asset/liability matching and hedging in managing risk. Explain how life insurers are using economic capital to address their capital management issues.
- Explain the significance of the actuarially fair price and the concept of actuarial equity. Understand and calculate, using a mortality table, specific probabilities of living and dying. Calculate the net single premium. Calculate the net level premium.
- Explain the financial planning framework. Apply it to make life insurance recommendations. Demonstrate understanding of the life cycle hypothesis. Calculate the total life insurance required using both the human life value approach and the needs approach.
- Explain the retirement planning process. Describe the environmental factors driving funding uncertainty. Apply risk management to the exposure of not have sufficient financial resources for retirement. Explain the use of annuities and life insurance to augment retirement savings.
- Explain the common business related applications of life insurance. Describe the forms of business organizations operating in the U.S. Explain the nature and use of Key Person Indemnification, Business Continuation Disability Income, Buy/Sell Agreements and Split Dollar Life Insurance
- Describe some of the cutting edge and controversial underwriting issues surrounding the sale of life insurance today

Grading Requirements

Grading will be based on four requirements:

Written Assignment (Due Fri. Nov. 30 by 3PM)	20%
1 st exam (Tues., Sept. 25)	25%
2 nd exam (Thurs., Nov. 1)	25%
Final exam (11:40AM Sect: Dec. 11, 12:30-2:30PM; 1:15PM Sect., Dec. 13, 12:30-2:30PM)	<u>30%</u>
Total	100%

There will be one written assignment (a term paper). Your written assignment will suffer a 10% penalty per day if late. Your written assignment will be graded on content and quality of writing and must be typewritten. Poorly written assignments will be returned and you will be required to rewrite.

There will be three examinations in the course. Each exam will cover roughly one third of the course material. The exams will be cumulative in the sense that material covered later in the course builds upon earlier material presented. The exam questions will cover the assigned chapters in the text, as well any background material covered in class and posted to Blackboard or otherwise assigned.

The exam must be taken in class on the assigned date. No make-up exams will be given in this course.

Grade Scale

If you achieve an overall percentage in the ranges below, you will receive the letter grade associated with that range. It is possible that grades will be curved at the end of the semester, so that some scores in a particular range will obtain a letter grade associated with a higher range.

90-100	A
87-89	B+
80-86	B
77-79	C+
70-76	C
60-69	D
< 60	F

Student Responsibilities

Consistent with the standards jointly developed and approved by the Student Leadership Council and the faculty of the Darla Moore School of Business, students are expected to:

- ***spend a minimum of two hours outside of class studying for each hour of classroom time;***
- ***exhibit classroom behavior that is respectful to faculty and fellow students;***
- ***refrain from the use of phones and other electronic equipment during class, unless permitted by the instructor;***
- ***arrive at class on time, actively participate in class, and not leave class early;***
- ***keep up with assigned readings and complete assignments on time;***
- ***contribute fully to team assignments;***
- ***respect the university's staff and be responsible stewards of its facilities; and***
- ***abide by the University of South Carolina Honor Code***

Use of Electronics

Students are not allowed to use any electronics in the classroom unless for an activity specifically sanctioned by the professor. Students who use phones, computers, and other devices in an unsanctioned manner (such as surfing the internet or sending text messages) are subject to a grade penalty (up to 10% of the total points available in the class).

Course Outline (Readings are listed in parenthesis)

The following course outline is subject to change at the instructor's discretion. Students will be given prior notice.

The Language and Economics of Life Insurance (BSB Ch. 1)

Life Insurance and Uncertainty
Life Insurance versus Non-Life Insurance
Broad definition of Life Insurance
Concept of Human Capital
Human Life Value
Huebner's Five Human Life Value Admonitions

Overview of Life Insurance and Life Insurance Policy Types (BSB Ch. 2)

Financial Consequences of Death
Mortality Based Policies (Term Life Insurance, Cash Value Life Insurance)
Morbidity and Longevity Based Policies

- Annuities
- Medical Expense
- Long Term Care

Requirements for an Insurable Risk
Introduction to Life Insurance Pricing

Personal Life Insurance Products (BSB, Ch. 3&4)

Term Insurance
Universal Life Insurance
Whole Life Insurance
Life Insurance on Multiple Lives
Endowment Insurance
Attributes Common to Personal Life Insurance Policies

Life Insurance Policy Provisions (BSB: Ch. 5)

Policy Content and Format Overview
Provisions That Make Payment More Secure
Provisions That Make Payment Less Secure
Provisions That Provide Flexibility
Common Life Insurance Policy Riders

Retirement Products (BSB; Ch. 6)

Overview of Retirement Risk
Nature and Purpose of Annuities
Structure of Fixed Annuities and Variable Annuities
Suitability and Disclosure Regulation of Annuities
Guaranteed Minimum Withdrawals
Retirement Plans

Health Insurance I: Medical Expense Insurance (BSB, Ch. 7)

- Health Insurance Environment and Economics
- Patient Protection Act and Affordable Care Act
- Comprehensive Medical Insurance Coverage
- Group Health Insurance
- Individual Health Insurance
- Government-related Health Programs in the US

Health Insurance II: Disability Income and Long Term Care (BSB, Ch. 8)

- Disability Income
- Important Disability Definitions
- DI Benefit Provisions
- Long Term Care Insurance
- Definition of Long Term Care
- LTC Coverage
- State Involvement in Long Term Care

Life Insurer Management (BSB: Ch. 9)

- Kinds of Life Insurance Companies
- Other Life Insurance Providers
- Corporate Governance
- The Production Process
- Life Insurers as both Actuarial and Financial Intermediaries
- Short History of Life Insurance Industry

Life Insurance Underwriting (BSB, Ch. 11)

- The Need for Underwriting
- Guiding Principles in Underwriting
- Factors Affecting Insurability
- Sources of Underwriting Information
- Methods of Risk Classification
- Reinsurance

Life Insurance Financial Management (BSB, Ch. 13)

- Capital and Risk Management
- Functional View of Capital
- Value at Risk and Default Risk
- Capital Cost Allocation Problem
- Economic Capital

Life Insurance Actuarial Fundamentals (BSB, Ch. 15)

- Measurement of Risk in Life Insurance
- Net Single Premium for Term Life
- Net Single Premium for Whole Life
- Net Single Premium for Immediate Annuity
- Net Level Premium
- Mortality Table: Appendix 15a: 2001 Commissioners Standard Ordinary (CSO)

Life Insurance Policy Evaluation I: Legal Aspects (BSB, Ch.18)

- Requirements for a Valid Contract
- Insurable Interest
- Offer by the Applicant to the Insurer
- Misrepresentation, Concealment and Warranties
- Life Insurance and the Law of Agency
- Market Conduct, Product Suitability and Consumer Litigation
- Creditor Rights in Life Insurance

Personal Financial Planning and Life Insurance (BSB, Ch. 20)

- Wealth and the Life Cycle
- Personal Financial Planning in a Risk Management Context
- The Personal Financial Planning Process
- Determining the Total Insurance Need
- Capital Liquidation Approach
- Capital Retention Approach

Retirement Planning (BSB, Ch. 23)

- The Uncertain Environment for Retirement Planning
- The Retirement Planning Process
- Retirement Planning Risk Management
- Savings through Nonqualified Annuities
- Savings through Life Insurance

Life Insurance in Business Planning (BSB, Ch.24)

- Key Person Indemnification
- Business Continuation Arrangements
- Buy/Sell Agreements
- Split Dollar Life Insurance

University of South Carolina Honor Code

It is the responsibility of every student at the University of South Carolina Columbia to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in connection with any academic program. Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline.

This Honor Code is intended to prohibit all forms of academic dishonesty and should be interpreted broadly to carry out that purpose. The following examples illustrate conduct that violates this Honor Code, but this list is not intended to be an exhaustive compilation of conduct prohibited by the Honor Code:

1. Giving or receiving unauthorized assistance, or attempting to give or receive such assistance, in connection with the performance of any academic work.
2. Unauthorized use of materials or information of any type or the unauthorized use of any electronic or mechanical device in connection with the completion of any academic work.
3. Access to the contents of any test or examination or the purchase, sale, or theft of any test or examination prior to its administration.
4. Use of another person's work or ideas without proper acknowledgment of source.
5. Intentional misrepresentation by word or action of any situation of fact, or intentional omission of material fact, so as to mislead any person in connection with any academic work (including, without limitation, the scheduling, completion, performance, or submission of any such work).
6. Offering or giving any favor or thing of value for the purpose of influencing improperly a grade or other evaluation of a student in an academic program.
7. Conduct intended to interfere with an instructor's ability to evaluate accurately a student's competency or performance in an academic program.

Whenever a student is uncertain as to whether conduct would violate this Honor Code, it is the responsibility of the student to seek clarification from the appropriate faculty member or instructor of record prior to engaging in such conduct.

Suspected violations of the honor code will be reported to the Office of Academic Integrity. Violations of the honor code will result in disciplinary measures.