

MARMARA UNIVERSITY
SCHOOL OF BANKING AND INSURANCE
ACTUARY DEPARTMENT COURSE CONTENTS

Year 1; Term 1

1. MID TERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	ATA121	Principles of Atatürk I	2	0	2	0
2	HUK115	Introduction to Law	2	0	2	4
3	IKT111	Introduction to Economics I	4	0	4	7
4	ISL115	Introduction to Business	3	0	3	5
5	MAT117	Calculus I	4	0	4	7
6	MUH123	Accounting I	4	0	4	7
7	TRD121	Turkish Language I	2	0	2	0
8	YDZ1121	English I	2	0	2	0
TOTAL			23	0	23	30

ATA121 - Atatürk's Principles and the History of Turkish Renovation I (2 0 2)

Definition of Revolution, The Reasons cause Turkish Revolution, Movements of Ottoman Reforms and the collapse of Ottoman Empire, World War I, Ottoman Empire in the First World War, The frontiers that were opened, The end of First World War, and the collapse of empires, Agreements on sharing Ottoman Empires, Mondros Agreement, General Mustafa Kemal after First World War and his attitude, Mustafa Kemal landed in Samsun, The Amasya Declaration, National struggle and Congresses, and Kuvay-ı Milliye, From Misak-ı Milli (National Pact) to Turkish Grand National Assembly, (TBMM) Establishment of TBMM, it's structure and activities, Establishment of National Army and Turkish War of Independence, Mudanya Agreement Treaty, The end of Turkish War of Independence, Lozan Peace Treaty, Constitution of Republic, Abolition of the Caliphate.

Course book/s:

Atatürk İlkeleri ve İnkılap Tarihi, Komisyon, Okutman Yayıncılık, 2009

Prof. Dr. Ahmet Mumcu, Atatürk İlkeleri ve İnkılap Tarihi

HUK115 - Introduction to Law (2 0 2)

To introduce the core concepts of law and to clarify the importance and the position of law. As well as to investigate the issues such as; the application of law, the gaps of legal issues and law, the authority given to the judge, the application of honesty principle its impacts and the functions, the methods concerning the application of law, branches of law, Turkish judgement system, the implication methods of law.

Course book/s:

Yavuz Atar, Sami Karahan vd., Temel Hukuk Bilgisi, Konya, 2009

IKT111 - Introduction to Economics I (4 0 4)

The main aim of this lesson is the need for determining the distribution of economic resources, goods and services, especially a choice for which ones, how and in which quantity they will be produced and distributed to. In this concept, this lesson considers to teach most important concepts of economy as an introduction, the basics of theories and some application examples. And also in this lesson, students will also learn in what ways the

society maximizes their utility. Economics Concept, Economic Activities, Economic Analysis, Goods Market, Demand Concepts Market Demand, The Supply Concept, Market Supply, Market Equilibrium, Demand Elasticity Supply Elasticity, Producer and Consumer Surplus, Black Market Surplus King Rule, Cobweb Theorem, Demand Analysis Supply Analysis, Supply Analysis, The Change in The Producer Budget and Expansion Paths, Production Costs, Short Run and Long Run Cost Curves, Economies of Scale, Market Equilibrium, Market Forms, Perfect Competition Market Conditions, Monopoly Market Conditions, Price Discrimination in Monopoly, Imperfect Competition Markets, Oligopoly Markets and Monopolist Competition Markets will be discussed as the main topics during the semester.

Course book/s:

İlker Parasız ve Mustafa Özer, Modern İktisadın Temelleri, İstanbul: Alfa Yayınları, 2005.

İlker Parasız, İktisada Giriş: Prensipler ve Politika, 9. Baskı, Bursa: Ezgi Kitabevi Yayınları, 2008.

ISL115 - Introduction to Business (3 0 3)

History of business, the relation between the business and other branches, fundamental concepts in business, the necessity and the Maslow Pyramid, the production factors in business and the classification in business, the classification concerning the mergers of corporations, business and its environment, the start up of business and the feasibility process, the investment decision, the aims of enterprises, the globalization case in business, essential topics in business.

Course book/s:

Prof. Dr. Mümin Ertürk, İşletmeye Giriş, Beta Yayınevi

MAT117 - Calculus I (4 0 4)

Sequences and series of functions and convergence tests; infinite series and convergence tests; power series and Taylor theorem; functions; limits and continuity; derivative; applications of the derivative; extreme values; mean value theorem and applications; drawing functions graphics; logarithmic, exponential and hyperbolic functions; extremum and relative extremum applications.

Course book/s:

Louis Brand, Advanced Calculus: An Introduction to Classical Analysis, Dover Books on Mathematics, 2006

Ahmet Dernek, Genel Matematik, Nobel Yayın Dağıtım, 2009.

İbrahim Doğan ve Necdet Tekin, Genel Matematik, Beta Basım Yayın, 1996

Mehmet Pekkaya, İşletme ve İktisat İçin Genel Matematik 1, Ekin Basım Yayın, 2009.

A. Canoğlu ve Cevdet Cerit, Matematik Analiz-I, Kendi yayını, 1989.

MUH123 - Accounting I (4 0 4)

The term of accounting, financial tables, the term of account, the recording documents of accounting and the books, the accounting period and the quantitative samples, the fundamental terms and the recognized accounting principles, the scope of inventories, the value added tax applications regarding commodity purchase selling, cash equivalents, securities, receivables, tangibles, financial debts, equity capital, incomes and expenses, end of period transactions.

Course book/s:

Prof. Dr. Ümit Ataman, Genel Muhasebe Cilt I, Türkmen Kitabevi, İstanbul 2003

Prof. Dr. Nuran Cömert Doyrangöl ve Prof. Dr. Gürbüz Gökçen, Genel Muhasebe ve Defter Tutma Uygulamaları, Der Yayınları, İstanbul 1999

Dr. Mehmet Yazıcı, Dr. A. Hayri Durmuş, İşlem Muhasebesi II Baskı, Nihat Sayar Yayınları No: 251, İstanbul 1975

TRD121 - Turkish Language I (2 0 2)

To provide general information about Turkish language and its history, To teach the rules of operation for Turkish language and provide examples, To raise awareness in students about the problems of Turkish language, To provide students with the experience of expressing their thoughts and feelings by effective and formal ways both in verbal and written form.

Course book/s:

Akalın, Şükrü Halûk (2009). "Türk Dili: Dünya Dili". Türk Dili, Mart, 195-204.

Aksan, Doğan, "Türkçenin Anlambilim Açısından Özellikleri Üzerine," blm. Her Yönüyle Dil: Ana Çizgileriyle Dilbilim, III, Türk Dil Kurumu yayınları: 439/3, Ankara, 1982, 220-222.

Demir, Nurettin. "Popüler Dil Tartışmalarına Dil İlişkileri Açısından Bakış". Cumhuriyetimizin 80. Yılında Türkçemiz. Ankara: Ankara Ticaret Odası-Anadolu Çağdaş Eğitim Vakfı, 37-44.

Develi, Hayati (2006). Dil Doktoru. İstanbul: 3 F Yayınevi, "Kaybolan Diller, Kaybolan Sesler" ve "Türkçenin Gücü" başlıklı yazılar.

Sağol, Gülden (Editör), Türk Dili Kitabı, Duyap Yayıncılık, İstanbul, 2006.

YDZI121 - English I (2 0 2)

In our lesson, our purpose is to teach English starting from beginner level till pre-intermediate level. Here are our grammar subjects; simple present tense, present continuous tense, has got- have got, there is-there are, imperatives.

Course book/s:

Lesley Shepton, Back Up Grammar, Orient Express, 2010.

Sevil F. Soylu, Danış Soylu, New Inside English Grammar, 2011.

Year 1; Term 2

2. MID TERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	ATA122	Principles of Atatürk II	2	0	2	0
2	HUK116	Law of Obligations	2	0	2	4
3	IKT112	Introduction to Economics II	4	0	4	7
4	MAT118	Calculus II	4	0	4	7
5	MUH124	Accounting II	4	0	4	7
6	TRD122	Turkish Language II	2	0	2	0
7	YDZI122	English II	2	0	2	0
8	YON116	Management and Organization	3	0	3	5
TOTAL			23	0	23	30

ATA122 - Atatürk's Principles and the History of Turkish Renovation II (2 0 2)

Constitutional developments in Turkey, domestic policy of Turkish Republic (1923-1995) World War II, and it's result, main features of Revolutions and Turkish Revolution, The movements that influence Turkish Revolution, State of law and Democracy, Establishment of Turkish law and Turkish National Education System, Restructuring of Turkish Economic System, Transformations of Turkish life of society (surname law, new turkish alphabet „etc) General features of Principles of Atatürk, Republicanism, Nationalism, Populism and Etatism, Laicism, Revolutionism-Reformism and Critics against Atatürkism.

Course book/s:

M. K. Atatürk, Nutuk.

Suna Kili, Türk Devrimi Tarihi, İş Bankası Kültür Yayınları, 1981.

Cemil Öztürk v.d., İmparatorluktan Ulus Devlete Türk İnkılap Tarihi, Pegem Akademi Yayınları, 2010.

Türkiye Cumhuriyeti Tarihi, c.1-2, Atatürk Araştırma Merkezi Yayınları.

HUK116 - Law of Obligations (2 0 2)

This course teaches the students under the general provisions the occurrence of rights and depths, obligation and liability, legal transactions, freedom of contract and the different sources of obligations, which are composed of contracts, torts and unjust enrichment. The obligations of special nature, such as solidarity, conditional obligations, penalty clauses for non-performance and the assignment of claims and assumption of obligations will also be discussed to provide the students with a sound understanding in Obligation Law and its applications within the framework of business. At the end of this course, the students will be able to develop analytic skills in problem solving regarding to Contracts and Obligations Law.

Course book/s:

Doç. Dr. Haluk N. Nomer, Borçlar Hukuku, Genel Hükümler, İstanbul 2007

Prof. Dr. Turgut Akıntürk, Borçlar Hukuku, Genel Hükümler ve Özel Borç İlişkileri, İstanbul 1999

IKT112 - Introduction to Economics II (4 0 4)

The factor market, factor demand and supply, factor incomes; national income; the account of GNP, GDP, personel income, the factors that national income depends on; the equilibrium and disequilibrium of national income, multiplier- accelerator; the inflationist and deflationist deficit; the employment and unememployment; the definition, the kinds and the effects of inflaton, the defence strategies; the deflation; the devaluation; the revaluation; international economic relations; the external trade theories, the external trade policy and instruments; international capital movements, exchange market, economic growth, devlopment and welfare.

Course book/s:

Prof. Dr. Erdoğan Alkin, İktisat, İstanbul: Filiz Kitapevi, 1992.

Prof. Dr. İlker Parasız, İktisada Giriş, 7.b., Bursa: Ezgi Kitapevi, 2003.

MAT118 - Calculus II (4 0 4)

Integral; integration technics; integration by substitution; partial fractions in integration; trigonometric and hyperbolic integration by substitution; integration of rational, irrational and trigonometric functions; definite

integral and applications; system of linear equations; matrix and determinant; eigen value; eigen vectors; linear transformation; matrix of linear transformation; diagonalization.

Course book/s:

E. F. Haeussler & R.S. Paul, Introduction to Mathematical Analysis, Pearson Education Canada, 1996.

A. Canoğlu, C. Cerit, Matematik Analizi II, Alfa Yayınları, 2010.

MUH124 - Accounting II (4 0 4)

Concept of inventory, types of inventory, inventory and evaluation, period end closing and reopening of accounts, inventory of cash account, inventory of foreign currency, inventory of cheque accounts, inventory of banks accounts, inventory of shares and bonds, inventory of receivables, inventory of note receivables, inventory of stocks, stock evaluation methods, goods movement applications.

Course book/s:

Prof. Dr. Nuran Cömert, Prof. Dr. Cemal İbiş, "Genel Muhasebe Belgeler ve Defter Tutma Uygulamaları", Nihat Sayar Yayın ve Yardım Vakfı Yayınları, İstanbul 2007.

Prof. Dr. Ümit Ataman'ın "Genel Muhasebe (Muhasebede Dönem Sonu İşlemleri)", Cilt 2, Türkmen Kitabevi, İstanbul 2005.

TRD122 - Turkish Language II (2 0 2)

To provide students with exercises in correct spelling and punctuation, to encourage reading books as a habit, teaching students how to think scientifically, critically, creatively and interpretatively.

Course book/s:

Anadolu Üniversitesi Açık Öğretim Fakültesi. Türk Dili.

Cemal Süreyya, "Deneme Deyince," Varlık, 898 (1982), 14. Suut Kemal Yetkin, "Şiir Sanatı," Şiir Üzerine Düşünceler, İstanbul, 1969, 9-14.

Özkan, Mustafa (1999). Tarih İçinde Türk Dili. Gözden geçirilmiş 2. baskı. İstanbul: Filiz Kitabevi.

Türk Dili Kitabı. Editör: Gülden Sağol Yüksekaya. Duyap Yayıncılık. İstanbul, 2006. (Yazarlar: Emine Gürsoy Naskali, Timur Kocaoğlu, Ceval Kaya, Mesut Şen, Göksel Öztürk, Arzu Erdoğan Öztürk, Aylin Koç, Erdal Şahin, Hilal Oytun Arslan, Arzu Çiftioğlu, Funda Gökçe Bağcı, Dilek Herkmen, Mehmet Kocakaplan, Yasemin Özdemir Bulut, Nurgül Yıldız)

Yavuz, Kemal vd., Türk Dili ve Kompozisyon Dersleri, Bayrak Yayınları, İstanbul, 2005.

Zeynep Korkmaz, Mehmet Akalın, Ahmet B. Ercilasun, Hamza Zülfikar, Tuncer Gülensoy, İsmail Parlatur ve Necat Birinci ile birlikte, Yükseköğretim Öğrencileri için Türk Dili ve Kompozisyon Bilgileri. [Yükseköğretim Kurulu Yayını.] Ankara: Yükseköğretim Kurulu Matbaası, 1990.

YDZI122 - English II (2 0 2)

Simple past tense, future tense (will-be going to) modals. after all the grammar subjects we do exercises for developing their english skills. In addition to grammar subjects some useful vocabulary that will help them in speaking are given.

Course book/s:

Lesley Shepton, Back Up Grammar, Orient Express, 2010.

YON116 - Management and Organization (3 0 3)

The concept of management and classic schools of management, modern approaches in management, perfectionist approach in management, organization types in enterprises, chaos management, the liability and the authority in management, the decision making in management, communication in management.

Course book/s:

Erol Eren, Yönetim ve Organizasyon, Beta Yayınevi, 2008.

Richard Daft, Organization Theories, New Jersey Hall, 2005

Tamer Koçel, İşletme Yöneticiliği, Beta Yayınevi, 2006.

Year 2; Term 3

3. MIDTERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	FIN213	Financial Management I	3	0	3	5
2	HUK241	Commercial Law I	2	0	2	4
3	IKT215	Microeconomics	4	0	4	6
4	IST219	Statistics I	3	0	3	5
5	MAT227	Calculus III	4	0	4	5
6	SGR217	Introduction to Insurance I	2	0	2	5
TOTAL			18	0	18	30

FIN213 - Financial Management I (3 0 3)

Functions of finance department and financial objectives in firms, financial management and types of companies, time value of money, time value of money, financial analysis and control, financial planning, funds flow statement, cash flow statement, receivables management, inventory management, working capital management, capital budgeting, valuation of risky investment projects.

Course book/s:

Niyazi Berk, Finansal Yönetim, 10. Baskı, Türkmen Kitabevi, 2010

HUK241 - Commercial Law I (2 0 2)

Business Law I course describes the sources of commercial law. Commercial business and merchant concepts are examined. In addition, the brand concept, the concept of unfair competition and its results are described. Finally, merchant assistants examined.

Course book/s:

Prof. Dr. Ayşe Nur Berzek, Ticaret Hukukunun Genel İlkeleri, İstanbul 2002

Prof. Dr. Nevin Soygür, Ticaret Hukuku, C. II, Şirketler, İstanbul

Prof. Dr. Sabih Arkan, Ticari İşletme Hukuku, Ankara 1999

IKT215 - Microeconomics (4 0 4)

Introduction to Micro Economics, principles of supply and demand, various market demand curves and demand and supply elasticity, demand theory and consumer behaviour: utility maximization and choice, demand under conditions of risk and uncertainty, producer behaviour: single variable input production, two variable input maximizing production and production, traditional cost theory, modern cost theory, theory of the firm and market organization; price theory under perfect competition, price theory under full-monopoly conditions, market power and pricing, terms under monopolistic competition theory of price, price theory in the oligopoly markets, recent developments in firm and market theories, game theory and strategic behavior, distribution theory, general equilibrium and welfare; marginal productivity theory under perfect competition, imperfect competition theory of input markets, market failures, incomplete and asymmetric information, conditions at which market system not work well and market power, externalities and public goods, market regulation and privatization.

Course book/s:

İlker Parasız. Mikroekonomi, 7. Baskı, Bursa: Ezgi Kitabevi Yayınları, 2007.

IST219 - Statistics I (3 0 3)

The definition of statistics, the expanding role of statistics, uses of statistics; data acquisition and basic concepts; data, data sets, data sources, unit, quality, observation, population, sample, variable, qualitative variables , quantitative variables, discrete variables, continuous variables, dependent variables, independent variables, cross-sectional data, time series data, errors in data - systematic error, random error, primary data, secondary data, experiment, observation, survey, monography technique, quota sampling, simple random sampling, (systematic sampling), variability, observed frequencies, cumulative frequencies, frequency distributions, classification, array, ungrouped frequency distribution, grouped frequency distribution, tables/graphics; frequency tables, stem and leaf table, cross-classification, correlation table, bar chart, pie chart, line chart, histogram, frequency polygon, data analysis II (summary measures); measures of central tendency (arithmetic mean, weighted arithmetic mean, geometric mean, quadratic mean, harmonic mean, mode, median, quantiles), measures of variability (range, interquartile range, mean absolute deviation, standard deviation, variance, coefficient of variation), measures of skewness, measures of kurtosis, concentration coefficient, index numbers, elementary index, fixed base index, variable base index, chain index, aggregative index, unweighted aggregate index, weighted aggregate index, price and quantity index es, wholesale price index, consumer price index.

Course book/s:

Bilge Aloba Köksal, İstatistik, Çağlayan Kitabevi, 2003

Necla Çömlekçi, Temel İstatistik, Bilim Teknik Yayınevi, 2005

Özer Serper, Uygulamalı İstatistik I, Ezgi Kitabevi

Şahamet Bülbül, Tanımsal İstatistik

Ümit Şenesen, Betimleyici Sorgulayıcı İstatistik, 1998

MAT227 - Calculus III (4 0 4)

Multivariable functions; limit and continuity in multi-variable functions and differentiability; partial derivatives and chain rule; gradient and directional derivative; Taylor theorem for multivariable functions; finding extreme values of multivariable functions; multiple integrals; line integral and surface integrals; Green's theorem.

Course book/s:

Advanced Calculus, Wilfred Kaplan, Addison Wesley (yayınevi), 5th edition, 2002

Lineer Cebir, Seymour Lipschutz, Nobel Yayın Dağıtım- Schaums dizisi, İstanbul, 2. Basım,

Çözümlü Yüksek Matematik Problemleri, Birsen Yayınevi, Leyla Zeren, 1985

Yüksek Matematik, Cevdet Koçak, İTÜ Vakfı, 2. Baskı, 1986

SGR217 - Introduction to Insurance I (2 0 2)

In this course, the general introduction to insurance, insurance development in Turkey, the basic definitions and information related to insurance, general insurance principles are taught. Also in the historical development of insurance examined. In general, the types of insurance are discussed.

Course book/s:

Acınan, Hilmi, Sigortanın Temel Prensipleri, Güneş Sigorta Yayınları, İstanbul, 2005.

Bölükbaşı, Ayşegül ve Baturalp Pamukçu, Sigortanın Temel Prensipleri, Türkmen Yayınevi, İstanbul, 2009.

Güvel, Prof. Dr. Enver Alper ve Afıtap Öndaş Güvel, Sigortacılık, Seçkin Yayınevi, Ankara, 2008.

Nomer, Cahit ve Hüseyin Yunak, Sigortanın Genel Prensipleri, Ceyma Matbaacılık, İstanbul, 2000.

Özbolat, Murat, Temel Sigortacılık, Seçkin Yayınevi, Ankara, 2009.

Year 2; Term 4

4. MIDTERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	FIN214	Financial Management II	3	0	3	6
2	FIN218	Financial Statements and Analysis	2	0	2	2
3	HUK246	Commercial Law II	2	0	2	2
4	IKT216	Macroeconomics	4	0	4	6
5	IKT228	Economics Doctrine	2	0	2	3
6	IST220	Statistics II	3	0	3	5
7	MAT228	Calculus IV	4	0	4	4
8	SGR220	Introduction to Insurance II	2	0	2	2
TOTAL			22	0	22	30

FIN214 - Financial Management II (3 0 3)

The relationship between risk and return, cost of capital, capital structure, decisions operating and financial leverage, dividend policy, short-term financing, medium-and long-term financing, valuation of securities, financial markets and institutions, fund management in insurance, case analysis.

Course book/s:

Niyazi Berk, Finansal Yönetim, 10. Baskı, Türkmen Kitabevi, 2010

FIN218 - Financial Statements and Analysis (2 0 2)

Introduction. Balance Sheet. Income statement. Statement of net changes in working capital. Statement of fund flow. Statement of cash flow. Table of dividend policy. Statement of changes in shareholders equity. Analysis of financial statement. Horizontal financial statement analysis. Vertical financial statement analysis. Trend analysis. Ratio analysis.

Course book/s:

Öztiñ Akgüç, Mali Tablolar Analizi, 12. Baskı, İstanbul, 2006

HUK246 - Commercial Law II (2 0 2)

The stock corporation and the ruling principles, the types of corporations and their foundation, the conditions upcoming from the founding obligations and the relations between the organs of company, the board of directors, membership, selection, dismissal and the duties, the responsibility of the board of directors, the needs for the obligations, the case of obligations, the auditing in corporations, internal and external auditing the plenary assembly in corporations, operations and the right of the selection in the plenary assembly, the adjudications of the decisions regarding the plenary assembly and the conditions of disability, the term of share in corporations, types, the rights and the debts of shareholder, the expiration of corporations and the limited companies, the valuable papers, exchange documents, policies, bill guarantee, turnover, admission, right of application and lapse of time, the term of bond, facts, turnover, payment and the policy adjudications to be applied will be examined.

Course book/s:

Prof. Dr. Ayşe Nur Berzek, Ticaret Hukukunun Genel İlkeleri, İstanbul 2002

Prof. Dr. Nevin Soygür, Ticaret Hukuku, C. II, Şirketler, İstanbul

Prof. Dr. Sabih Arkan, Ticari İşletme Hukuku, Ankara 1999

IKT216 - Macroeconomics (4 0 4)

Introduction to the Macro Economy, national income concepts and measurement of national income, balance sheet of the economy, a simple Keynesian system, the classical system and the expansion of Simple Keynesian System: taking into account money, interest and price changes in national income analysis, money supply and the problem of stability of money supply, money demand, IS-LM curves analysis, demand side economic equilibrium, and the importance of the effect of real ankes as neoclassical auto regulator, traditional and modern theories of aggregate supply and the economic equilibrium under rational expectations, rational expectations and modern macro-economics, inflation, expectations extension of analysis and production-inflation, underemployment, the philips curve and the taylor rule, modern business cycle theory, experienced great economic crises of the twentieth century, Orthodox and Heterodox Theories of macro-economic policy, public debt problem and solutions, problem of economic stabilization: the new Macro-Economic compromise and inflation targeting, introduction to dynamic macro-economics: theories of internal and external growth, expansion: overview of modern macro-economic developments, the new settlement in macro economy, open macro economic fundamentals, analysis of IS-LM-BP in an open economy, aggregate demand in an open economy, analysis of economic fluctuations with the help of aggregate supply curves and aggregate demand curves in an open economy.

Course book/s:

İlker Parasız, Makro Ekonomi: Teori ve Politika, Bursa, Ezgi Kitabevi Yayınları 2007.

IKT228 - Economics Doctrine (2 0 2)

Terms and classification of economic systems-history of economic systems-fundamentals of economic systems-Mercantilism, Capitalism -Socialism -Heterodox Theory, Marginalism-Keynesian Theory-Monetarist Theory-Development Theories-Growth Theories-Post Keynesian Theory-New Classic Macro Theory-Rational Expectations Theory-Constitutional Economy-Supply Economy.

Course book/s:

Vural Savaş, İktisatın Tarihi, Siyasal Kitabevi, 2007

IST220 - Statistics II (3 0 3)

Statistical sampling, parameter estimation, hypothesis testing, chi-square test, analysis of variance, simple linear regression and correlation, multiple regression and correlation, time series analysis.

Course book/s:

Bilge Aloba Köksal, İstatistik, Çağlayan Kitabevi, 2003

Necla Çömlekçi, Temel İstatistik, Bilim Teknik Yayınevi, 2005

Özer Serper, Uygulamalı İstatistik 2, Ezgi Kitabevi

Serpil Ergün Bülbül, Çözümsel İstatistik, Alfa Yayınları, 2001

MAT228 - Calculus IV (4 0 4)

First and second order differential equations; high order linear differential equations; applications of differential equations; series solutions to linear differential equations; systems of linear differential equations; laplace transformations and solving systems linear differential equations with Laplace Transformations; Fouries Series and Fourier Analysis.

Course book/s:

Frank Ayres, Diferansiyel Denklemler, Çev: Doç. Dr. Ekrem Pakdemirli, Sanem Çözümlü serisi, Güven kitabevi yayınları, 1978.

Murray R. Spiegel, İleri Analiz Çev: Prof. Dr. Saffet Süray, Schaum's Outline Series, 1979.

Prof. Dr. Erol Yarız, Matematik, Türkmen Kitabevi, 2002.

SGR220 - Introduction to Insurance II (2 0 2)

Fire insurances, casualty insurances, transport insurance, marine hull insurance, engineering insurance, aviation insurance.

Course book/s:

Acıman, Hilmi, Sigortanın Temel Prensipleri, Güneş Sigorta Yayınları, İstanbul, 2005.

Year 3; Term 5

5. MID TERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	AKT317	Actuarial Mathematics I	4	0	4	5
2	AKT325	Demography and Life Tables	2	0	2	2
3	EKM317	Econometrics I	2	0	2	5
4	FIN315	Financial Investment and Risk Management I	2	0	2	4
5	HUK337	Insurance Law	2	0	2	3
6	MAT327	Probability Theory I	2	0	2	3
7	MAT339	Financial Mathematics	2	0	2	3
8	MUH319	Insurance Accounting I	2	0	2	3
9	YDI337	Business English I	2	0	2	2
TOTAL			20	0	20	30

AKT317 - Actuarial Mathematics I (4 0 4)

The definition of interest and discount, simple and compound interest, present value and calculation of accumulative value, annuities, ordinary annuity - immediate and annuity-due, life tables, survival and death probabilities, force of mortality, life annuities.

Course book/s:

N.L. Bowers et. all, Actuarial Mathematics, 2nd edition, 1997

Nilgün Moralı, Aktüeryal Teknikler, Gesid Yay., 1997

H.U. Gerber, Life Insurance Mathematics, Springer, 1997

Kenan Ural, Yaşam Sigortalarının Aktüeryal Prensipleri, Beta Basım A.Ş., İstanbul, 1994

AKT325 - Demography And Life Tables (2 0 2)

Introduction to demography, application of demography in insurance sector, preparing a thesis on the subject and its submission.

Course book/s:

Peter R. Cox, Demography, Cambridge University Press

Insurance control commission activity reports

Insurance legislation

EKM313 - Econometrics I (3 0 3)

The main aim of this lesson is to help students develop and evaluate classic linear, semi logarithmic and logarithmic regression models. Basic concepts about statistics and econometrics, basic features of random sampling, Assumptions of linear regression model, features of estimators, forecasting the parameters of least squares method, deviations from the average, estimating normal equations in terms of original observation, Interpreting the parameters of simple linear regression E-views application, simple correlation and examples, rank correlation and examples, Determination coefficient, testing the significance of parameter estimates and examples, Hypothesis Tests Practical t test, t test and examples, Variable transformation in models, Testing the significance of correlation coefficient, Elasticity and confidence levels for parameters and examples, Analysis of multivariate linear regression model; assumptions of multivariate linear regression model, Deviations from the

average in multivariate models and finding normal equations in terms of original observations, commenting on the parameters of multivariate regression model, Estimation of non-linear regression model, estimating Cobb-Douglas type production function, Estimating and commenting on the patterns of various econometric functions Eviews application, Elasticities and slopes about various econometric models and examples, Scale return and changing return will be discussed as the main topics during the semester.

Course book/s:

Ben Vogelpang, Econometrics Theory and Applications with E-views, Pearson Addison Wesley, 2005

Gujurati, Temel Econometric, McGraw Hill, 2003

Şahin Akaya, Vedat Pazarlıođlu, Ekonometri I, Anadolu Matbaacılık, 2000

FIN315 - Financial Investment and Risk Management I (2 0 2)

To establish a relationship between financial investment and risk management, it is aimed to increase the theoretical and practical skills. The importance of insurance in risk management, risks in the financial system, financial markets and institutions, investment instruments in financial markets which can be used in risk management, traditional and modern portfolio management in terms of risk management, katasrofik risk assessment and evaluation capital markets investment instruments in this context.

Course book/s:

Öztin Akgüç, Finansal Yönetim, 8. Baskı, 2010

Prof. Dr. Niyazi Berk, Finansal Yönetim, Türkmen Kitapevi

Prof. Dr. Niyazi Berk, Risk Yönetimi, Emek Sigorta Yayınları

Yrd. Doç. Dr Ayşe Gül Bölükbaşı, Dr. Baturalp Pamukçu, Sigortacılıkta Risk Yönetimi, Türkmen Kitapevi

HUK337 - Insurance Law (2 0 2)

The general determination of concepts regarding the law of insurance, the identification of importance and the position of the law of insurance in the community, insurance enterprises, the insurance contract, the tools of insurance, life insurance, the investigation of liability insurance.

Course book/s:

Rayegan Kender, Türkiye'de Hususi Sigorta Hukuku, İstanbul 2008

MAT327 - Probability Theory I (2 0 2)

Basic probability concepts, random trials, sample space, event, Bayes' formula, random variables and probability distributions, expected value and variance, chebyshev inequality, moments and moment generating functions, common discrete probability distributions, Bernoulli random trial, Binomial probability distribution, Poisson probability distribution, Hypergeometric probability distribution, common continuous probability distributions, Normal probability distribution.

Course book/s:

Sheldon, M. Ross, A First Course in Probability, Pearson International Edition, 2005.

E. Freund & R. E. Walpole, Mathematical Statistics, 2nd edition

C.Cerit & M.Yüksel, Olasılık, Alfa Yay., 2005

B. V. Gnedenko, The theory of probability, New York, Chelsea Pub. Co., 1962

MAT339 - Financial Mathematics (2 0 2)

Simple interest, simple discount, equalization of bills, depreciation and investment account, compound interest and compound discount, constant and variable gain annuities, constant and variable instalment liabilities.

Course book/s:

Finans Matematiği, Dr. Bahadın Rüzgar, Türkmen Kitabevi, 2008

MUH319 - Insurance Accounting I (2 0 2)

Introduction to insurance accounting, financial tables, uniform account plan and it's checkout, production accounting, premium production and abrogation, production accounting - unearned premium provisions, life insurance production accounting, the insurance intermediary business of insurance companies, life insurance mathematical provisions, the ongoing risk premiums, reinsurance accounting – production.

Course book/s:

Sigorta Muhasebesi ve Tek Düzey Hesap Planı, TSEV Lecture Notes, 2009, İstanbul

YDI337 - Business English I (2 0 2)

Basic knowledge of English grammar and phrases most used in daily conversation, simple reading materials, ask questions, and asked questions about these materials.

Course book/s:

Related books and articles about actuary.

Year 3; Term 6

6. MID TERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	AKT318	Actuarial Mathematics II	4	0	4	5
2	AKT326	Reinsurance	2	0	2	2
3	BSY324	Research Methodology	2	0	2	2
4	EKM318	Econometrics II	2	0	2	5
5	FIN316	Financial Investment and Risk Management II	2	0	2	4
6	IKT372	Monetary Theory and Policy	2	0	2	2
7	MAT328	Probability Theory II	2	0	2	3
8	MUH320	Insurance Accounting II	2	0	2	3
9	SGR324	Health Insurance	2	0	2	2
10	YDI338	Business English II	2	0	2	2
TOTAL			22	0	22	30

AKT318 - Actuarial Mathematics II (4 0 4)

Life insurances, whole life insurance and term insurance, life insurances with varying benefit, net single premium, premiums payable m times in a year, rezerv concept, prospective and resrospective rezerv calculation methods.

Course book/s:

N.L. Bowers et. all, Actuarial Mathematics, 2nd edition, 1997

Nilgün Moralı, Aktüeryal Teknikler, Gesid Yay., 1997

H.U. Gerber, Life Insurance Mathematics, Springer, 1997

Kenan Ural, Yaşam Sigortalarının Aktüeryal Prensipleri, Beta Basım A.Ş., İstanbul, 1994

AKT326 – Reinsurance (2 0 2)

Introduction to reinsurance, facultative reinsurance, proportional – automatic reinsurance treaties; quota-share reinsurance treaty, surplus reinsurance treaties, facultative reinsurance treaties, the mixture of quota - share and surplus reinsurance treaties, the mixture of proportional and surplus reinsurance treaties, common provisions of proportional automatic reinsurance treaties, non-proportional reinsurance treaties; excess of loss reinsurance, stop loss reinsurance, pool treaties, reinsurance applications.

Course book/s:

Hilmi Acıman, Reasürans, İstanbul, 2005.

BSY324 - Research Methodology (2 0 2)

General definition of research methods, academical research, following ways in academical research, applicable rules in academical research, to source scanning and add data, technical rulse in academical research, orthography rules and formal structure, composing table and figure, text transfer and prepare bibliography, analyzing data and output in SPSS.

Course book/s:

Ayhan Ural, İbrahim Kılıç, Bilimsel Araştırma Süreci ve SPSS ile Veri Analizi

EKM314 - Econometrics II (3 0 3)

Main objective of the course, is to gain ability of establish linear or nonlinear regression model on any finance or macroeconomic subject and also to evaluate the figures of the estimation model. Students will gain the ability of using econometric techniques to establish their research questions, pose relevant hypotheses, and make use of the most appropriate tests to carry out a scientific study by applications on E-views. No autocorrelation, homoscedasticity and the normality assumptions between the disturbances among the topics to be explained. Also multicollinearity functional forms of regression models, model selection criteria, dynamic econometric models and dummy variable regressions among the topics will take place.

Course book/s:

Ben Vogelpang, Econometrics Theory and Applications with E-views, Pearson Addison Wesley, 2005

Gujurati, Temel Econometric, McGraw Hill, 2003

Şahin Akaya, Vedat Pazarlıoğlu, Ekonometri I, Anadolu Matbaacılık, 2000

FIN316 - Financial Investment and Risk Management II (2 0 2)

Financial market instruments for catastrophic risks, alternative risk transfers, risk securitization, catastrophic bonds, catastrophic risk certificates, catastrophic future agreements, comparing traditional risk management technics and alternative risk management technics.

Course book/s:

Sigma Journal, Geneva papers on Risk and Insurance

Yrd. Doç. Dr Ayşe Gül Bölükbaşı, Sigortacılıkta Risk Yönetimi, Türkmen Kitapevi, 2008

IKT372 - Monetary Theory and Policy (2 0 2)

The definition and the functions of money; monetary theories in classical, Keynesian and Monetary school; balance of payments; the aims and the instruments in monetary policy; Central Banking; the balance sheet of the Central Bank; the independancy of Central Banks; budget, the relationship between the Treasury - Turkish Republic Central Bank.

Course book/s:

Prof. Dr. Merih Paya, Para Teorisi ve Politikası, 2.b., İstanbul: Filiz Kitapevi, 1998.

Prof. Dr. Osman Z. Orhan ve Yrd. Doç. Dr. Seyfettin Erdoğan, Para Politikası , 1.b., İstanbul: Avcı Ofset, 2003.

MAT328 - Probability Theory II (2 0 2)

Random variables with joint distributions, two-dimensional discrete random variables, two-dimensional continuous random variables, variance and its properties, conditional expected value, conditional variance and its properties, correlation coefficient, discrete probability distribution; Bernoulli distribution, Binomial distribution, Poisson distribution, Geometric distribution, Negative Binomial distribution, Hypergeometric distribution, Multiple Binomial distribution, Multiple Hypergeometric distribution, continuous probability distribution; Normal distribution, Exponential distribution, approximation in probability distributions; the approximation of Binomial distribution to Poisson distribution, the approximation of Binomial distribution to Normal distribution, the approximation of Poisson distribution to Normal distribution, the approximation of Hypergeometric distribution to Binomial distribution.

Course book/s:

A. Bener, Matematiksel İstatistik Cilt-2, 2002

J.E. Freund & R. E. Walpole, Mathematical Statistics, 2nd edition

C.Cerit & M.Yüksel, Olasılık, Alfa Yay., 2005

MUH320 - Insurance Accounting II (2 0 2)

The damage accounting in nonlife insurances. The damage accounting in life insurances. The statistical operation in damage accounting. The provision of balance. The provision of discount and bountycount and bounty.

Course book/s:

Sigorta Muhasebesi ve Tek Düzey Hesap Planı, TSEV Lecture Notes, 2009, İstanbul

SGR324 - Health Insurance (2 0 2)

Global and local history and development of health insurances will be explained with examples and legal environment. Dynamics of health and insurance market and their relations will be expressed. Also relation and interactions with Social Security System, health providers and competitors will be described. Social and commercial perception of health insurance by the customers will be analyzed to exploit the interaction between insurer and insured. Expectations of the insured shaping this business line will be exemplifying. Finally basic functions like Underwriting, Tariff and Product Development, Operations, Claims, Pre-authorization, Network Management and Marketing will be explained in details.

Course book/s:

Annual Reports by AIRCT

Treasury Statistics

www.hazine.gov.tr

www.tsrbsb.org.tr

YDI338 - Business English II (2 0 2)

Translation methods, insurance, insurable risk, life insurance companies, motives for buying life insurance, glossary for insurance terms, insurance risk-cargo insurance policy, health insurance policy, liability insurance policy, general review.

Course book/s:

Related books and articles about insurance and actuary.

Year 4; Term 7

7. MID TERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	AKT413	Risk Analysis and Actuarial Modelling I	2	0	2	6
2	AKT419	Actuarial Calculations in Casualty Insurance I	2	0	2	6
3	AKT425	Current Financial Problems I	2	0	2	2
4	IKT411	Turkish Economics	2	0	2	4
5	SGR415	Social Security Systems	2	0	2	4
6	SGR423	Liability Insurance	2	0	2	4
7	SGR427	Loss Applications	2	0	2	4
TOTAL			14	0	14	30

AKT413 - Risk Analysis and Actuarial Modelling I (2 0 2)

Risk & utility and measurement of risk, risk and expected return, diversification & risk, capital budgeting, stochastic process (Markov Chain), scenario analysis, simulation analysis, relative Matlab application.

Course book/s:

Bowers N.L., Gerber H.U., Hickman J.C., Jones D.A. and Nesbitt C. J., 1997, Actuarial Mathematics

Dickson, C.M., 2004, Insurance Risk and Ruin, Cambridge University Press, Cambridge.

Ross, Introduction to Probability Models, 10th edition

AKT419 - Actuarial Calculations in Casualty Insurance I (2 0 2)

Outstanding claim reserve and IBNR in nonlife insurance companies, generating data triangles, outstanding claim estimation with standard Actuarial Chain Methods which is based on paid and incurred claim , age to age factors, factors to ultimate, development weight calculations, error mean squares estimation for standard Actuarial Chain Methods and Bornhuetter Ferguson method subjects are explained.

Course book/s:

Jacqueline Friedland, Estimating Unpaid Claims Using Basic Techniques, Casualty Actuarial Society, 2009

Thomas Mack, Distribution Free Calculation of the Standard Error of Chain Ladder Reserve Estimates.

Klaus D.Schmidt, Mathias Zocher, Ferguson as a General Principle of Loss Reserving, Bornhuetter.

AKT425 - Current Financial Problems I (2 0 2)

Instructor regulations, new traffic accident form, Turkish Society and insurance, insurance pricing, free tariffs, claims department, MASAK , SGS, Court, TRAMER.

Course book/s:

Related current financial news and articles.

IKT411 - Turkish Economics (2 0 2)

Structural forming, economic development history, policies of industrialization in Turkish–Agriculture Sector and Agricultural Development in Turkish Economy, External Trading Regime and Payment Balance Sheet in Turkish Economy, Money and Currency Policies in Turkish, Monetary and Borrowing Policies in Turkish Economy, Banking Sector and historical development in Turkish Economy.

Course book/s:

Prof. Dr. İlhan Uludağ, Prof. Dr. Erişah Arıcan, Türkiye Ekonomisi, Der Yayınları, 2003

SGR415 - Social Security Systems (2 0 2)

Definition of social security, purpose, historical development, retirement basic concepts of systems, country comparisons can be used data, social security problems in our country, social security reform components and the fundamental changes, posted in social security retirement and pension calculations.

Course book/s:

5502 sayılı Sosyal Güvenlik Kurumu Kanunu ve 5510 sayılı Sosyal Sigortalar ve Genel sağlık Sigortası Kanunu

Prof. Dr. Ali Güzel, Prof. Dr. Ali Rıza Okur, Doç. Dr. Nurşen Canıklıoğlu, Sosyal Güvenlik Hukuku, Beta yayınları, 11. Baskı, Ocak 2008

Sosyal Güvenlik Reformu: Sorunlar ve Çözüm Önerileri, T.C Başbakanlık Ankara, Nisan 2005

Sosyal Güvenlik reformu: Uygulama Öncesi Yeni Yaklaşım-17.5.2007 tarihli Sosyal Güvenlik Kurumu duyurusu

Prof. Dr. Tankut Centel, Sosyal Güvenlikte Yapısal Değişim, MESS yayınları, İstanbul, 1977

SGR423 - Liability Insurance (2 0 2)

The contents of the liability insurances such as Motor Vehicles Compulsory Liability Insurances, Motor Vehicle Excess Liability Insurances, Green Card Insurance, Transportation Compulsory Liability Insurances for Road Vehicles, C.Hazardous Substances Legal L.Ins.,C.Liquid Gas L.L.Ins.,C.Certificate L.L.Ins.,C.Private Guards L.L. Ins., Employer's Liability Ins., Third Party Liability Ins., Product Liability Ins., Professional Indemnity Ins., Other Liability Ins., as per technical point of view as well as the subject of insurance, coverage, legislation, tariffication and applications and different characteristics of Liability Insurances among other lines of insurances.

Course book/s:

Işın Ulaş, Uygulamalı Sigorta Hukuku (Mal ve Sorumluluk Sigortaları), 2010, İstanbul

SGR427 - Loss Applications (2 0 2)

Branch wise description of the process from claims notification to closing of the claims file with payment. The significance of claims management for companies and development of claims organization structure by years. Becoming a surveyor: the roles of surveyors and surveyor appointment criteria. The advantages and management methods of contracted repair shops service in the auto branch. claims accounting, calculation of loss ratio, system of provisions. All these headings will be analyzed in terms of both theory and applications by use of case studies.

Course book/s:

Timuçin Alpay, Temel Sigortacılık Bilgileri ve Uygulamalı Hasar Yönetimi 1, Yüce Yayınları, İstanbul, 2001.

Year 4; Term 8

8. MID TERM						
No	Code	Name of Lecture	T	A	Cr	ECTS
1	AKT414	Risk Analysis and Actuarial Modelling II	2	0	2	6
2	AKT418	Pension Mathematics	3	0	3	4
3	AKT420	Actuarial Calculations in Casualty Insurance II	2	0	2	6
4	AKT426	Current Financial Problems II	2	0	2	2
5	FIN426	Portfolio Management	2	0	2	4
6	PAZ436	Insurance Marketing	2	0	2	4
7	SGR412	Transportation and Logistics Insurance	2	0	2	4
TOTAL			15	0	15	30

AKT414 - Risk Analysis and Actuarial Modelling II (2 0 2)

This course is intended to cover “**Risk Analysis and Actuarial Modelling**” exam scope prepared and organized by the Treasury as one of the second level exams to be a registered actuary in Turkey. This course also provides supports to inform and prepare the last year actuarial students for insurance sector regarding what the role of actuaries is in the insurance sector and consult them for the actuarial exams.

Course book/s:

Bowers N.L., Gerber H.U., Hickman J.C., Jones D.A. and Nesbitt C. J., 1997, Actuarial Mathematics
Dickson, C.M., 2004, Insurance Risk and Ruin, Cambridge University Press, Cambridge.
Ross, Introduction to Probability Models, 10th edition

AKT418 - Pension Mathematics (2 0 2)

Social securities in Turkey and abroad, calculations of contributions and valuations.

Course book/s:

William H. Aitken, A Problem Solving Approach to Pension Funding and Valuation, 2th edition

AKT420 - Actuarial Calculations in Casualty Insurance II (2 0 2)

Loss ratio in motor branches, theoretic and practical information about calculation of tariff premium and risk premium, exposure, damage frequency and damage severity, the effects of damage frequency and damage severity on technic profitability, identification of loss portfolio with discrete and continuous distribution subjects are explained.

Course book/s:

I.B.Hossack, J.H. Pollard, B. Zehnwirth, Introductory Statistics with Applications in General Insurance, Second Edition.

Geoff Werner, Claudine Modlin, Basic Ratemaking, Casualty Actuarial Society, 2010.

Robert L.Brown, Leon R. Gottlieb, Introduction to Ratemaking and Loss Reserving for Property and Casualty Insurance, 2nd Edition.

AKT426 - Current Financial Problems II (2 0 2)

International economics, financial structure, institution; definition of national income and problem of measuring economic capacity; inflation; budget, balance of payments; monetary policy and, aim and tools of fiscal policy; structure of Turkish Financial Sector and Financial Institutions; Financial Sector and Insurance in USA; Mortgage Crisis in USA and its effects on World Economy; Turkish Economy and Turkish Insurance in 2008 Mortgage Crisis and after; current situation of World Insurance Sector; financial situation of Turkish Insurance Sector and effects of economic crisis on Insurance Sector; financial report analysis of insurance companies; money laundering and precautions against to money laundering; last improvements in Turkish and World Insurance Market.

Course book/s:

Related current financial news and articles.

AKT498 - Project Application (2 0 2)

The term projects are prepared about actuarial subjects by the students as group Works.

Course book/s:

Resources related to the subjects in actuary

FIN426 - Portfolio Management (2 0 2)

The portfolio management process (policy statement, examination conditions etc.), asset allocation, selecting investments in global or local markets, organization and functioning of security markets, an introduction to portfolio management, risk and return of a portfolio, efficient frontier, indifference curve, optimal portfolio selection, capital assets pricing model (CAPM), Security Market Line, Capital Market Line, Beta coefficient and Beta of the market, The Correlation Structure of Security Returns: The Single Index Model and Multi- Index Model, Arbitrage Pricing Theory, Portfolio management strategies, Portfolio management strategies, Evaluation of Portfolio Performance.

Course book/s:

Gürel Konuralp, Sermaye Piyasaları, Analizler, Kuramlar ve Portföy Yönetimi, Alfa Yayınevi, 2.basım, 2005

M.Baha Karan, Yatırım Analizi ve Portföy Yönetimi, Gazi Kitabevi, 2001

PAZ436 - Insurance Marketing (2 0 2)

Introduction to marketing in insurance, marketing tools, intensive understanding, customer behavior, The ways of persuading customer, case study, marketing of life insurance products, marketing of pension plans, marketing of health insurance products, marketing of non-life insurance products, new sales and distribution channels, management of campaigns, management of sales award system and customer relationship management.

Course book/s:

Muhittin Karabulut, Sigorta Pazarlaması

Sigorta Denetleme Kurulu – Reports About Turkish Insurance and Pension Activities

SGR412 - Transportation and Logistics Insurance (2 0 2)

The main objective of the course is to give a detailed information about all types of Marine Insurance. During the Marine Insurance Course the feature of insurance products within Marine Branch would be represented. The detailed interpretation of the basic principles of Marine Insurance would be given and these principles would be related to the practices carried out in Turkish insurance market. First, Cargo Insurance and then Specie Insurance, Hull Insurance, Carriers' Liability Insurances and other Marine Liability Insurances (Ship Repairer, Marina Operator, Port Operators' Liabilities etc.) would be handled. The General Conditions, special conditions and clauses, scope of coverage, underwriting and application of claim settlement would be represented during the courses. In addition, the information about specific Marine Insurance terms would be given.

Course book/s:

Osman Yücesan, Nakliyat Tekne ve Emtea Sigortaları, Emek Matbaacılık, 2004.