

**Electives**

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## **FIN 431 Corporate Finance**

### **Course Objectives**

The objective of this course is to provide students an understanding of concepts and theories of corporate finance and develop skills to analyse issues in corporate finance for sound financing decisions in businesses.

### **Course Description**

This course offers students advance knowledge on corporate finance and equip them with additional tools and techniques of corporate finance so as to prepare them to analyze financing problems in a wider context. This course deals with introduction to corporate finance, short-term financing, lease financing, long-term financing, convertibles, exchangeables and warrants, and capital structure determination.

### **Course Outcomes**

By the completion of this course, the students should be able to:

- understand the nature of corporate finance along with determinants of optimal capital structure and ethical issues in corporate financing;
- evaluate different options for short-term financing;
- make a choice between the leasing versus buying alternatives;
- evaluate different alternatives for long-term financing;
- analyze warrants and convertibles as options of financing; and
- determine capital structure that enhances the value of the firm.

### **Course Contents**

<b>Unit I: Introduction to Corporate Finance</b>	<b>3 hours</b>
Nature and significance of corporate finance; financial markets and the corporation; determinants of optimal capital structure; and business ethics and corporate social responsibility in financing decisions.	
<b>Unit II: Short-term Financing</b>	<b>8 hours</b>
Need for short-term financing: short-term versus long-term financing; unsecured short-term financing: accruals and deferred income, trade credit, short-term bank loan, commercial paper; secured short-term financing: inventory financing - floating liens, chattel mortgage, trust receipt loan, field and terminal warehouse receipt loan, accounts receivable financing – pledging account receivables, and factoring account receivables.	
<b>Unit III: Term Loan and Lease Financing</b>	<b>8 hours</b>
Term loan: features and sources; lease financing: meaning and forms of lease financing, evaluating lease financing in relation to debt financing - return to lessor, equilibrium annual lease payment, present value of lease alternative, present value of borrowing alternative, and factors affecting lease versus purchase decisions.	
<b>Unit IV: Long-term Debt and Preferred Stock Financing</b>	<b>8 hours</b>
Features of long-term debt; secured and unsecured bonds; major provisions of preferred stock issues; the use of preferred stock in financing decision; comparative advantages and	

disadvantages of long-term debt, bond and preferred stock; and refunding decisions on debt and preferred stock.

**Unit V: Common Stock Financing** **5 hours**

Common stock financing: rights of holder of common stock: nature of voting rights, cumulative voting, pre-emptive right; methods of selling common stocks: public offering, right offering, private placement; comparative advantages and disadvantages of common stock financing; and concept of venture capital financing.

**Unit VI: Convertibles, Exchangeables and Warrants** **8 hours**

Convertible securities: conversion price and conversion ratio, conversion value and premium over conversion value, other features, financing with convertibles, forcing conversion; value of convertible securities: debt-plus-option characteristic, straight bond value, premiums, relationship among premiums; exchangeable bonds: features, use in financing; warrants: features, valuation of a warrant, premium over theoretical value, and relationship between values.

**Unit VII: Capital Structure Determination** **8 hours**

A conceptual look: net operating income approach, traditional approach; the total-value approach: arbitrage support; presence of market imperfection and incentive issues; the effect of taxes; taxes and market imperfection combined; financial signalling; and pecking order approach.

**Basic Texts**

1. Van Horne, J. C., Wachowicz, J. M., & Bhaduri, S. N. *Fundamentals of financial management*. New Delhi: Pearson Education.
2. Ross, S. A., Westerfield, R. W., & Jordan, B. D.. *Fundamentals of corporate finance*. New Delhi: Tata McGraw-Hill Education India.

**References**

1. Brigham, E. F., & Houston, J. F. *Fundamentals of financial management*. New Delhi: Cengage Learning India Pvt. Ltd.
2. Paudel, R. B., Baral, K. J. Gautam, R. R., & Rana, S. B. *Financial management*. Kathmandu: Asmita Book Publishers and Distributors.
3. Pradhan, R. S. *Capital structure management*. Kathmandu: Landmark Publications.

## **FIN 432 Microfinance**

### **Course Objectives**

The purpose of the course is to provide students the principles and practices of microfinance institutions and microfinance services. The course also emphasizes on improving skills of the students to prepare microenterprises business plan for self-employment opportunities.

### **Course Description**

This course provides an understanding of the basic principles, practices and services of microfinance industry. It begins with an introduction to microfinance in general and microfinance lending models in particular. Then it proceeds to discussion of various types microfinance institutions and explores their role in development of different sectors of an economy. The course also gives an overview of regulatory regime of microfinance in Nepal. Finally, it deals with entrepreneurship and develop business plan suitable for micro financing.

### **Course Outcomes**

By the completion of this course, the students should be able to:

- explain the nature of microfinance and microfinance models;
- identify the role of microfinance institutions in social and economic development;
- choose appropriate model of microfinance institutions and develop microfinance products;
- familiarize with the microfinance programs in Nepal and appreciate their role in different aspects of national development;
- understand the rules and regulations of microfinance industry in Nepal and apply them in the establishment and operation of microfinance institutions in Nepal;
- prepare micro/ small enterprise business plan; and
- demonstrate ability to conduct the case studies of microfinance institutions.

### **Course Contents**

#### **Unit I: Introduction to Microfinance 6 hours**

Concept and meaning of microfinance; history of microfinance; need of microfinance; key principles of microfinance; microfinance client; microfinance products: microcredit, micro saving, micro insurance, payment and transfers; and distinction between traditional financing and micro financing.

#### **Unit II: Micro Entrepreneur and Microfinance 6 hours**

Concept and importance of micro enterprises and entrepreneurs; business plan for micro enterprises, preparation of business plan.

#### **Unit III: Microfinance Credit Lending Models 6 hours**

Individual lending model; Grameen Bank solidarity lending model; village banking model; cooperative model; self-help group model; rotating savings and credit association, and lending models in Nepal: wholesale lending – RSRF and RMDC, retail lending.

**Unit IV: Microfinance Institutions** **6 hours**  
Objectives of the microfinance institutions; importance of microfinance institutions; attributes of a good microfinance institutions; institutional types; formal financial institutions; semiformal financial institutions; and informal financial providers.

**Unit V: Microfinance and Development** **4 hours**  
Microfinance and women empowerment; microfinance and health; microfinance and microenterprise development; microfinance and education; microfinance and networking; micro insurance policies and practices; and challenges and way outs.

**Unit VI: Microfinance in Nepal** **8 hours**  
National microcredit policy; poverty and microfinance in Nepal; development of microfinance sector in Nepal; preview of microfinance models in Nepal; and critical elements of success in Nepal's micro financing.

**Unit VI: Regulations of Microfinance Institutions** **6 hours**  
Need for regulation; regulations of microfinance industry and small enterprises: registration, operation and reporting; regulating authorities; and relevant acts and byelaws.

**Unit VII: Processes and Interest Rates for Microfinance** **6 hours**  
Sources and process of microfinance; Challenges and difficulties in the process; Cost of finance: interest rate, subsidy schemes and plans, transaction costs for micro entrepreneurs, challenges in costs and interest rate, and way outs.

## References

1. Ledgerwood, J. *The new microfinance handbook*. Washington, DC: The World Bank.
2. Panda, D. K. *Understanding microfinance*. New Delhi: Wiley India.
3. Marguerite S. R. *The microfinance revolution*. Washington, DC: The World Bank.
4. Shah, R. K. *Microfinance in Nepal*. New Delhi: Serials Publications.
5. Agrawal, G. R. *Entrepreneurship development in Nepal*. Kathmandu: MK Publishers and Distributors.
6. Sharma, P. R. *Impact of microfinance on women empowerment*. Pokhara: Team Organizing Local Institution.
7. Sharma, P. R. *Sustainability of microfinance institutions: an opinion survey*. Pokhara: Team Organizing Local Institution.
8. Government of Nepal. *National microcredit policy 2007*. Kathmandu: Nepal Rastra Bank.
9. Hisrich, R. D. Peters, M. P., & Shepherd, D. A. *Entrepreneurship*. New Delhi: Tata McGraw Hill Education.

## FIN 433 Investment Management

### Course Objectives

The course aims to provide students the fundamental knowledge on investing in securities. Specifically, it aims at enabling students to understand financial markets, identify securities for investment, estimate risk and return from the securities and appraise them to form portfolio for investment.

### Course Description

This course being the first course in investments begins with a broad overview of investment environment and covers different investment alternatives and their markets. Then it deals with the risk and return of an individual asset as well as that of portfolios, and the selection of optimal portfolio. It discusses how assets are priced by using capital assets pricing model. Finally, it deals with how debt and equity securities are valued for investment decision making purpose.

### Course Outcomes

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

- understand investment environment in which they have to undertake investment decisions;
- classify assets on the basis of their features for investment purpose;
- construct stock market indexes and interpret them;
- understand how securities are issued in the market and how they are traded in exchanges;
- calculate risk and return on of an individual asset and that of a portfolio;
- diversify risk by creating efficient portfolios;
- price securities using capital assets pricing model;
- value bonds and calculate yields on bonds; and
- value common stocks using dividend discount models and price-earning models.

### Course Contents

**Unit I: Investment Environment** **4 hours**  
Meaning of investment; investment alternatives; securities markets; securities market institutions; investment process; the risk-return trade-off; ethical issues in investing, and Nepalese investment environment.

**Unit II: Assets Classes and Financial Instruments** **8 hours**  
The money market: treasury bills, certificates of deposit, commercial paper, bankers' acceptance, Eurodollars, the Libor rate, yield on money market instruments; the bond market: treasury notes and bonds, inflation-protected treasury bonds, federal agency bonds, international bonds, municipal bonds, corporate bonds, mortgages and mortgage-backed securities; equity securities: common stock – characteristics and listing, preferred stock, depository receipts; stock and bond market indexes: stock market indexes – price-weighted index, value-weighted index, equally-weighted index; Nepal Stock Exchange index, bond market indicators; and derivative markets.

**Unit III: Securities Markets** **6 hours**  
Concept of securities markets; issue of securities; privately held firms and publicly traded companies; shelf registration; initial public offerings; trading of securities; types of markets; types of orders; trading mechanisms; the rise of electronic trading; ECNs; new trading strategies; globalization of stock markets; trading costs; buying on margin; short sales; functions of Nepal Stock Exchange; and role of Nepal Securities Board.

**Unit IV: Risk and Return** **6 hours**  
Concepts of risk and return; measuring investment returns: holding period return, returns over multiple periods, annualizing rates of return, expected return, time series of return; inflation and real rates of return; measuring risk: variance, standard deviation, coefficient of variation; portfolio return and risk of a portfolio of risky and risk-free assets.

**Unit V: Efficient Diversification and CAPM** **8 hours**  
Diversification and portfolio risk; asset allocation with two risky assets; covariance and correlation; the risk-return trade-off with two-risky-assets; the mean-variance criterion; the optimal risky portfolio with a risk-free asset; efficient diversification with many risky assets; the efficient frontier of risky assets; choosing the optimal risky portfolio. The Capital Asset Pricing Model: the model, assumptions, implications, and the security market line.

**Unit VI: Bond Prices and Yields** **8 hours**  
Bond characteristics; treasury bonds and notes; corporate bonds; international bonds; innovation in the bond market; bond pricing; bond pricing between coupon dates; bond pricing in excel; bond yields: yield to maturity, yield to call, realized compound return versus yield to maturity; bond prices over time; yield to maturity versus holding-period return; zero-coupon bonds and treasury STRIPS; after-tax returns; default risk and bond pricing; junk bonds; determinants of bond safety; bond indentures; yield to maturity and default risk; credit default swaps.

**Unit VII: Equity Valuation** **8 hours**  
Valuation by comparables; limitations of book value; intrinsic value versus market price; dividend discount models; the constant-growth DDM; stock prices and investment opportunities; life cycles and multistage growth models; price-earnings ratios: the price-earnings ratio and growth opportunities; pitfalls in P/E analysis; other comparative valuation ratios; free cash flow valuation approaches; comparing the valuation models; limitations of DCF models.

#### **Basic Text**

Bodie, Z., Kane, A., & Alan, J. M. *Essentials of investments*. New York: McGraw Hill.

#### **References**

1. Alexander, G. J., Sharpe, W. F., & Bailey, J. V. *Fundamentals of investments*. New Delhi: Prentice Hall of India Ltd.
2. Jordan, B. D., & Miller, T. W. *Fundamentals of Investments*. New York: McGraw-Hill Irwin.
3. Reilly, F. K., & Keith, C. B. *Investment analysis and portfolio management*. New Delhi: Cengage Learning (India).

## FIN 436 Fundamentals of Financial Derivatives

### Course Objectives

The objective of the course is to familiarize students with the basic financial derivative instruments and their pricing principles. In particular, this course focuses on the economics of pricing derivative instruments, such as option, future, forward, swap. This course also enables to design the strategies using the different types of financial instruments for hedging risk.

### Course Description

This course is the basic course in financial derivatives. Therefore, it begins with an introduction to financial derivatives and derivative markets and moves to basic principles of options and option pricing. Then it deals with forward and future markets, swaps, and over-the-counter derivative instruments; and finally, deals with derivative markets in the context of Nepal.

### Course Outcomes

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

- understand basic concepts, theories and practices related to derivative securities and derivative markets;
- understand option related terminologies, interpret option quotations and calculate payoff from option positions;
- value options using binomial and Black-Scholes-Merton option valuation models;
- pricing forward and future contracts and use them for hedging against risk;
- understand the significance of various swaps;
- familiarize with over-the-counter derivative instruments;
- calculate the value of different types of derivative instruments;
- analyze options, swaps, forwards and futures for designing investment strategies; and
- understand the derivative markets in Nepal.

### Course Contents

**Unit I: Introduction** **5 hours**  
Concept and development of derivatives and derivatives markets; derivative markets instruments; core concepts in financial and derivative markets; spot and derivative markets; role of derivative market; myths in derivative markets; ethics in derivative markets; career in derivative markets; uses of derivatives in risk management.

**Unit II: Structure of Option Markets** **5 hours**  
Option terminologies; development of options markets; call and put options; over-the-counter options market; exchange-listed option trading; mechanics of trading; option quotation; types of options; transaction costs in option trading; regulation of option markets.

**Unit III: Option Pricing Principles and Model** **12 hours**  
Principles of call and put option pricing; call-put parity; Binomial options pricing model: features, single and multi-period European call and put binomial model; Black-Scholes-Merton options pricing model: assumptions, formula, factors affecting option price.

**Unit IV: Forward and Future Contracts** **12 hours**  
Development of forward and future markets; forward vs. future markets; future traders; mechanics of future trading; principles of pricing forwards and futures: interest, cost of carry, convenience yield, and risk; difference between forward and future prices and the sources of difference; hedging with forward and futures: basis, short and long hedging, hedge ratio, and the risk of hedging.

**Unit V: Swaps** **5 hours**  
Concept and nature; features of swaps; introduction to interest rate swaps, currency swaps and equity swaps.

**Unit VI: Over-the-Counter Products** **4 hours**  
Interest rate options: caps, floors and collars; swap options; exotic options; credit derivatives: credit default swap, credit default exchange swap, credit spread derivatives, total return swap and credit-linked note; difference between securitization and credit derivatives

**Unit VII: Derivative Markets in Nepal** **5 hours**  
Development of derivative market in Nepal; instruments traded in the market; mechanics of trading; regulation of derivative markets in Nepal; issues in derivative markets in Nepal.

#### **Basic Texts**

1. Chance, D. M., & Brooks, R. *An introduction to derivative and risk management.* New Delhi: Cengage Learning India Pvt. Ltd.
2. Kumar, S. S. S. *Financial derivatives.* New Delhi: Prentice-Hall of India.

#### **References**

1. Hull, J. C., & Basu, S. *Options, futures, and other derivatives.* New Delhi: Pearson Education.
2. Parasuraman, N. R. *Fundamentals of financial derivatives.* New Delhi: Wiley India.
3. Manandhar, K. D., & Dahal K. *Financial derivatives and risk management.* Kathmandu: Buddha Academic Publishers.

## **FIN 438 Trade Finance**

### **Course Objectives**

This course aims to provide students the basic understanding of important concepts and practice of trade finance. The course also equips students with the essential theoretical knowledge and practical skills to properly manage trade finance.

### **Course Description**

This course focuses on both theoretical aspect and practical aspect of trade finance. This course covers introduction to trade finance, theories of international trade, clean payment transactions, documentary collection and documentary credit, important trade documents, pre-shipment trade finance and post-shipment trade finance, forfeiting and factoring, bank guarantees and domestic trade finance, and risk management.

### **Course Outcomes**

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

- understand concept, scope, importance and suppliers and users of trade finance, and methods of payments international trade finance;
- understand the international trade theories;
- analyze the methods of clean payments and apply the different methods of clean payments in international trade;
- understand the concept of different aspects of documentary collection and credit, and handle the documentary collection and credit processes;
- handle and manage the important trade documents;
- understand the basic concepts of pre-shipment and post-shipment trade finance and manage the pre-shipment and post-shipment trade finance;
- understand the theoretical aspects of forfeiting and factoring and apply the different models of factoring to finance the trade;
- describe the procedures of bank guarantee and manage the domestic trade finance; and
- analyse and manage the transport management risk, credit management risk and foreign exchange management risk.

### **Course Contents**

**Unit I: Introduction** **6 hours**  
Concept, scope and importance of trade finance; types of trade finance: domestic trade finance and international trade finance; providers of trade finance: suppliers, banks, syndicates, trade finance houses and buyers; users of trade finance: producer, manufacturer, importers, traders, and exporters; and methods of payment in international trade.

**Unit II: Theory of International Trade** **4 hours**  
The theory of absolute advantage; the theory of comparative advantage; the Heckcher-Ohlin theory; and the factor-price equalization theory.

**Unit III: Clean Payment Transactions** **6 hours**  
Cash-in-advance: characteristics of cash-in-advance, methods of cash-in-advance - wire transfer, credit card, payment by check, when to use cash-in-advance terms; open account:

characteristics of open account, offering open account terms in the competitive markets - export working capital financing, government guaranteed export working capital program, export credit insurance, export factoring, and forfeiting.

**Unit IV: Documentary Collections and Documentary Credit** **8 hours**

Documentary collection: introduction, exporter and exporter's bank, importer and importer's bank, dishonour, protest bill, settlement of bill, risks, usance D/P bill; documentary credit: introduction, parties to letter of credit, interbank communication, process details, types of letter of credit -revocable L/C, irrevocable L/C, confirmed L/C, sight credit and usance credit, back to back letter of credit, transferable L/C and standby L/C, calculation of fee and reimbursement, risk associated with the opening import L/C; regulatory requirements; trade control requirement; and exchange control requirements.

**Unit V: Important Trade Documents** **4 hours**

Trade documents: airway bill, bill of lading, certificate of origin, combined transport documents, commercial invoice, draft ( bill of exchange), insurance policy certificate, insurance policy, insurance certificate, packing list/specification, and inspection certificate.

**Unit VI: Pre-shipment and Post-shipment Trade Finance** **5 hours**

Pre-shipment trade finance: types of pre-shipment finance, requirement for getting packing credit, different stages of pre-shipment trade finance, and special cases; post-shipment trade finance: features, financing of various types of exports, buyer's credit, supplier's credit, types of post-shipment finance, and option for exporters.

**Unit VII: Forfeiting and Factoring** **5 hours**

Brief history of forfeiting, documentary requirement, fee type description, factoring, different models of factoring, benefits of factoring, operating process of factoring, and bill discounting versus factoring.

**Unit VIII: Bank Guarantees and Domestic Trade Finance** **3 hours**

Types of bank guarantee, general guidelines and procedures of bank guarantee, standby letter of credit, and co-acceptance of bill; channel financing, and vendor financing.

**Unit IX: Risk Management** **7 hours**

Transport risk management: scope of coverage, specialist covers, seller's/buyer's contingent interest insurance, consequential loss insurance, charter's liability insurance; credit risk management: concept of credit risk management, types of contract, credit insurance, payment risk, bad debt protection and benefits of credit cover; and foreign exchange risk management options: non-hedging forex risk management technique, forex forward hedges, and forex option hedges.

**References**

1. Indian Institute of Banking and Finance. *Practitioners' book on trade finance*. Bangalore: Taxmann Publication.
2. US Department of Commerce, International Trade Administration. *Trade finance guide: A quick reference for U.S exporter*. Washington DC: International Trade Administration.
3. The Wolfsberg Group. *The Wolfsberg trade finance principles*. New York: The Wolfsberg Group Brigham.

## **FIN 471 Marketing of Banking and Insurance Services**

### **Course Objectives**

This course aims to develop students' understanding of the specific nature and problems of marketing of financial services with a view to develop students' skill in designing a plan and program for marketing of banking and insurance products and services.

### **Course Description**

This course deals with an introduction to basics of service marketing, and financial service marketing, segmentation, targeting and positioning strategies applicable to financial services, preparation of marketing plan, key decision areas related to product, pricing, distribution, and promotions of financial services, and issues related to retail, corporate and rural banking.

### **Course Outcomes**

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

- understand basic concepts, theories and practices related to marketing of financial services;
- understand financial marketing practices, marketing planning process, buyer behavior.
- implement market segmentation, market targeting and positioning for financial services;
- analyze the product, price, distribution and promotion strategies for financial services; and
- understand the significance of corporate banking, retail banking, and bank marketing in rural areas.

### **Course Contents**

**Unit I: Introduction** **6 hours**  
Concept and nature of service products; difference between services and goods; strategic implications of the unique nature of service products.; nature of financial services; nature of services marketing; marketing concept and four pillars of bank marketing; services marketing mix (7ps); and marketing of financial products and services in Nepal.

**Unit II: Understanding the Financial Consumer** **6 hours**  
Need to understand customer behavior in financial institutions; types of financial customers – institutional and individual; buying process of institutional and individual customers; factors affecting selection of bank and insurance services; and know your customers (KYC) guidelines of NRB.

**Unit III: Strategic Marketing Planning for Banks and Insurance** **8 hours**  
Financial customer segmentation; target marketing and brand positioning; concept of strategic marketing planning; types of marketing plan; elements of marketing plan (SWOT analysis, competitive analysis, marketing objectives, strategy formulation, implementation, control and feedback.

**Unit IV: Financial Product Decisions** **8 hours**  
Concept of financial service products; product levels and hierarchy; products systems and its mixes; role of product managers; new product development; new product development process; the product life cycle; and innovation diffusion and adoption process.

**Unit V: Pricing Decisions** **8 hours**  
Concept and role of pricing strategy; challenges of pricing of financial services; pricing and bank's profitability; approaches of pricing (cost based, competition based, value based); different pricing strategies (penetration, skimming, promotional, relationship, price bundling, risk pricing); factors affecting pricing decision; and pricing of insurance products.

**Unit VI: Distribution Decisions** **6 hours**  
Concept and key role of distribution channel strategy in financial services; options of distribution channels; concept of branches; face to face sales channels; alternative delivery channels; telephone banking; mobile banking; internet banking; multichannel banking; branch less banking; insurance agents and their roles and responsibilities; and distribution channel in insurance: bancassurance, agents, partners.

**Unit VII: Promotion Decisions** **4 hours**  
Objective of marketing communication; promotional tools; advertising; planning promotional campaign; media selection; measuring advertising effectiveness; public relations; sponsorship and events; direct marketing; internet as a marketing tool; and customer relationship marketing.

**Unit VIII: Marketing Strategy for Retail, Corporate, and Rural Customers** **8 hours**  
Concept of retail banking; factors affecting retail banking; retail banking practices in Nepal; credit cards and its marketing; difference between retail banking and commercial banking; corporate customer's needs; product and services for corporate customers; rural customers and their need; overview of financial inclusion; and concept of microfinance in Nepal.

#### **Basic Texts**

1. Bapat, D. *Marketing of financial services*. New Delhi: Bizmantra (Dreamtech Press), India.
2. Ehrlich, Evelyn, & Fanelli, Duke. *The financial services marketing hand book - tactics and techniques that produce results*, Princeton: Bloomberg Press.

#### **References**

1. Pezzullo, Mary Ann. *Marketing financial services*. American Bankers Association, (Published for The Indian Institute of Bankers), Macmillan.
2. Manandhar, K. D. & Pokharel, S. B.. *Marketing Financial Services*. Kathmandu: Asmita Publication and Distributors.

## **FIN 472 IT for Banking and Insurance Services**

### **Course Objectives**

The objective of the course is to provide students with the understanding of Information Technology (IT) and its application in banking and insurance sector. The course focuses on the understanding information system specific to banking and insurance services. This course also attempts to help students understand and cope with emerging trends in IT and IT-related risks.

### **Course Description**

The course begins with the introduction of Information Technology, Information Systems and different types of information system including TPS, MIS/DSS, ESS, KMS and AI based systems. The course also covers IT systems used especially in banking and insurance sector that includes EFT, RTGS, SWITCHING, Payment and clearing, E-commerce, and related system implemented in local context. This course also deals with risk posed by IT to e-banking and e-insurance systems.

### **Course Outcomes**

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

- understand basic concepts, theories and practices related information systems;
- understand basics of core banking and core insurance systems and their implementations;
- explain basics of EFT, RTGS, SWITCHING and Payment Systems;
- explain basics of interbank systems, e-delivery channels for insurance and banking sector;
- identify different risks related to information systems and different mitigation measures applied to protect organization's information systems; and
- demonstrate the knowledge of IT related local regulatory framework.

### **Course Contents**

**Unit I: Introduction** **6 hours**  
Introduction of information systems (IS); IS components; qualities of information; evolution of IS; IS and level of management; IS for banking and insurance value chain; IS and next generation banking; emergence of alternative and electronic delivery channels; concept of intranet; and internet and extranet.

**Unit II: IT Enabled Banking Solutions** **12 hours**  
Core banking solution; technology behind core banking solution; core system for insurance companies; functional modules in core banking software; functional modules in insurance systems. Concept of payment and settlement systems: SWIFT and interbank fund transfer systems, and electronic cheque clearing systems; banking and insurance for the poor; technology for value chain financing for financial inclusion; and IT for anti money laundering (AML).

**Unit III: Implementing IT Enabled banking solutions** **6 hours**  
Core system planning; requirement analysis and specification; core system design; system testing/UAT; system conversion for core systems; system maintenance; system performance

evaluation and review; hardware, software and IT services selection factors; and change management practices during IS implementation for banking and insurance sector.

**Unit IV: Emerging IT trends in Banking and Insurance** **10 hours**

Concept of electronic wallet; stored value account systems; mobile payments; card technology (debit, credit, prepaid); real time gross settlement (RTGS); mobile application for E-banking and E-insurance; data mining and business intelligence for banking and insurance; anomaly and fraud detection; and SMS and mobile delivery options for banking and insurance companies.

**Unit V: Security of E-banking and E-insurance** **6 hours**

Need to regulation for electronic banking/insurance; risks posed by IT in banking and insurance; security challenges to IT systems and prevention measures; controls in core systems; controls in to ATM operations; controls in mobile systems; controls in internet banking systems; concept of business continuity planning and disaster recovery planning; audit of information systems; and requirement of PCI-DSS and PA-DSS standards.

**Unit VI: IT in Banking and Insurance – Local Regulatory Framework** **8 hours**

NRB IT guidelines; national payment system development strategy; settlement of payments; retail systems; government payments; securities depository; clearing and settlement mechanisms; interbank money market; international remittances; oversight of the national payments system; co-operative framework for the payments system; and E-banking guidelines.

**References**

1. Sriram, M., & Revathy, R. *Core banking solution: evaluation of security and controls*: Delhi: PHI Learning Pvt. Ltd.
2. Alan Calder, Geraint Williams. *PCI DSS: A pocket guide*; IT Governance Publishing.
3. Nepal Rastra Bank. *Nepal payment system development strategy*. [www.nrb.org.np/bfr/bfrcirculars.php?tp=2071-72&&vw=15](http://www.nrb.org.np/bfr/bfrcirculars.php?tp=2071-72&&vw=15).
4. Doing Digital Finance Right. CGAP. [www.cgap.org%2Fpublications%2Fdoing-digital-finance-right](http://www.cgap.org%2Fpublications%2Fdoing-digital-finance-right).

## FIN 473 Special Topics in Insurance

### Course Objectives

The aim of this course is to provide students an opportunity to learn emerging issues in special areas of insurance. It also aims to develop students' skill in analyzing those issues and new products and processes in insurance business.

### Course Description

This course is built on the core courses of insurances and covers special topics which were not addressed in those courses. The first part of the course covers governance of insurers, analysis of insurers' financial statements and performance indicators including benchmarking. The second part of the course covers social insurance, retirement plans, micro insurance, and deposit and credit guarantee in Nepal.

### Course Outcomes

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

- understand the governance structure of insurers;
- analyze financial statements of the insurers against performance indicators and benchmarks;
- understand important aspects of social insurances;
- explain different types of retirement plans;
- understand basic principles and models of micro insurance delivery; and
- describe the deposit and credit guarantee provisions in Nepal.

### Course contents

#### **Unit I: Governance of Insurers** **6 hours**

Rights of share holders; protection of insured interest; board of directors: composition, qualification and appointment; executive management; disclosure; regulation and supervision; and current issues, innovations and emerging trend in areas of governance of insurers.

#### **Unit II: Financial Statements of Insurers** **6 hours**

An overview of insurers' financial statements and reports: balance sheet, income statement, annual report, long-form audit report; accounting standards and Beema Samiti's directives governing the preparation and publication of insurers' financial statements and reports; and current issues, innovations and emerging trend in financial statements of insurers.

#### **Unit III: Performance Indicators and Benchmarking** **6 hours**

Performance indicators related to marketing and distribution; financial performance indicators: solvency margin, risk based capital, capital adequacy ratios, CARAMELS parameters of insurers, efficiency and client value; rating system in insurance; and current issues, innovations and emerging trend in performance indicators and benchmarking.

#### **Unit IV: Social Insurance** **8 hours**

Concept of social protection and social insurance; social vs commercial insurance; old-age, survivors, and disability insurance; types of benefits; medicare; unemployment insurance; workers compensation; universal health insurance; social insurance practices in developed

and developing countries; status of social protection in Nepal; role of insurance companies in social insurance; and current issues, innovations and emerging trend in social insurance.

#### **Unit V: Retirement Plans**

**8 hours**

Fundamentals of private retirement plan; types of qualified retirement plans; defined-contribution plan; defined-benefit plans; profit-sharing plans; other types of plans; retirement plans for the self-employed; simplified employee pension; simple retirement plans; funding agency and funding instruments; and current issues, innovations and emerging trend in retirement plans

#### **Unit VI: Micro insurance**

**8 hours**

Micro insurance introduction and characteristics; basic principles; models of micro insurance delivery: partner-agent model, community based model, institutional options; micro insurance product: agriculture and live stocks; and current issues, innovations and emerging trend in micro insurance.

#### **Unit VII: Deposit Insurance**

**6 hours**

Fundamentals of deposit insurance; global practices of deposit insurance; Deposit and Credit Guarantee Corporation: establishment, objectives and functions; and current issues, innovations and emerging trend in deposit insurance.

#### **References**

1. Rejda, G. E. *Principles of risk management and insurance*. New Delhi: Pearson Education.
2. Vaughan, E. J. & Vaughan, T. M. *Fundamentals of risk and insurance*. John Wiley & Sons.
3. Sethi, J. & Bhatia, N. *Elements of banking and insurance*. Delhi: Prentice-Hill.
4. Harrington, S. E. *Risk management and insurance*. New Delhi: Tata McGraw- Hill Publishing Company Limited
5. Insurance Act, 1992 and Insurance Regulation, 1993.
6. Publications of Deposit and Credit Guarantee Corporation Nepal.
7. Publications of International Labor Organization.
8. Publications of International Social Security Association.