SAUDER
School of Business
Real Estate Division

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BUSI 221 Real Estate Finance in a Canadian Context

PURPOSE AND SCOPE

The *Real Estate Finance in a Canadian Context* course (BUSI 221) will acquaint students with the basic principles of real estate finance and introduce the tools necessary to apply these principles to situations within real estate markets.

After reading the text and completing the assignments and projects in this course workbook, the student should have a basic understanding of real estate finance concepts. The course is divided into a series of lessons. Listed below is each individual lesson with the learning objectives for what a student should learn from it:

LESSON 1 – Introduction to Mortgage Finance and Market Participants

1. Explain the advantages and disadvantages of relying on mortgage finance for purchasing real property.
2. Describe and illustrate the concept of financial leverage.
3. Discuss the history of the Canadian mortgage market, including the significance of CMHC and the role of the Bank of Canada.
4. Identify the major participants in the Canadian mortgage market and comment on their respective roles: chartered banks, credit unions and caisses populaires, trust companies, mortgage loan companies, insurance companies, mortgage investors and dealers, pension funds, NHA mortgage-backed securities, private lenders, and mortgage brokers.
5. Define mortgage-backed securities and discuss their introduction into the Canadian secondary mortgage market.
6. Compare and contrast residential and non-residential mortgages in the Canadian financial market.
7. Identify and discuss historic trends in mortgage interest rates and in the size of mortgage loans over time.
8. Explain the role of the mortgage market within the larger financial marketplace.
9. Explain the relevance of money markets and capital markets for mortgage finance.
10. Discuss the components of mortgage interest rates and the relationship between mortgage interest rates, investment risk, and investment term.
11. Describe the supply of and demand for mortgage funds.
12. Identify and explain the characteristics of mortgage loans as investments.

LESSON 2 – Real Estate Finance and Government Policy

1. Identify the federal government's general objectives with respect to mortgage lending.
2. Describe the history of housing policy in Canada.
3. Discuss the historic and contemporary roles of CMHC, including programs aimed at mortgage insurance, affordable housing, First Nations, and securitization.
4. Discuss the development of the mortgage loan insurance industry and explain its contemporary role.
5. Describe the underwriting process in insured mortgage loans.
6. Explain and illustrate the mortgage rate insurance program.

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LESSON 3 – Law Review: Property Law, Contract Law, and Mortgage Law

1. Describe the three sources of law in Canada (with the exception of Quebec).
2. Discuss how and why the courts of equity and common law merged.
3. Describe what an estate is and differentiate between interests in real property that are or are not estates.
4. Apply the general two-part test in distinguishing between chattels and fixtures.
5. Explain the basic characteristics (and unities) for joint tenancy and tenancy in common, in addition to how each is terminated.
6. Explain the basic elements of the land title system, the registry system, and the title certification system.
7. Explain the five common items appearing on title.
8. Describe what subdivision of land is and why it is done.
9. Explain what condominium ownership is and how strata corporations operate.
10. Explain the differences between void, illegal, voidable, and unenforceable contracts.
11. Describe the essential elements of a contract and how each contributes to the formation of a contract.
12. Identify how a contract can be terminated.
13. Explain when each of the four remedies available for breach of contract would be employed.
14. Define what a mortgage is and the difference between legal and equitable mortgages.
15. Explain the five types of mortgages and when each may be used.
16. Discuss the purpose of short forms legislation and what each of the sample clauses means.
17. Identify typical additional mortgage clauses and why each would be used.
18. Explain the three unexpressed terms of a mortgage and their use.
19. Define what mortgage fraud is, the types of mortgage fraud, which laws govern mortgage fraud, and typical red flags and tips to prevent mortgage fraud.
20. Discuss the basic application of mortgages to statements of adjustment.
21. Describe the formalities of execution and registration for mortgages.
22. Define what priorities are and how subordination agreements and future advances affect priority.
23. Explain the various rights and duties of the mortgagor.
24. Discuss the process of assignment and discharge of mortgages.
25. Describe the remedies available to a lender upon default by a borrower.
26. Explain the legal and statutory restrictions placed on mortgage transactions.
27. Discuss how mortgage brokers are regulated in Canada.

LESSON 4 – Mortgage Math Review

1. Define and distinguish between simple and compound interest.
2. Define and differentiate between nominal, periodic, and effective rates of interest
3. Calculate equivalent interest rates for different stated interest rates.
4. Calculate present value and future value for interest accruing loans.
5. Define different types of annuities: simple annuity due, general annuity due, ordinary simple annuity, and ordinary general annuity.
6. Calculate the elements of the future value and present value of an annuity: payment, amortization, interest rate, present value, and future value.
7. Define and calculate mortgage constants.

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8. Calculate outstanding balances for a typical partially amortized mortgage.
9. Calculate and discuss the principal and interest components of payments for a typical partially amortized mortgage.
10. Calculate final payments for fully amortized mortgage loans.
11. Calculate and analyze the net present value, profitability index, and internal rate of return for an investment.

LESSON 5 – Residential Mortgage Underwriting

1. Define the term mortgage underwriting and describe the two major general classifications for mortgage underwriting.
2. Explain the 5 C's of credit.
3. Explain the importance of pre-approved mortgages in residential underwriting.
4. Identify and explain lender risks in residential mortgage underwriting.
5. List the relevant information required in a residential loan application.
6. Describe the importance of a credit report for mortgage underwriting.
7. Analyze the property that serves as security for the residential mortgage loan.
8. Describe the differences in how private lenders underwrite mortgage loans.
9. Define and describe loan-to-value ratios.
10. Identify and calculate the debt service ratios used in residential mortgage underwriting.
11. Apply and calculate the maximum loan using residential underwriting criteria.
12. Calculate how maximum loan amounts can be increased by extending amortization periods, increasing the term, and taking out a second mortgage. Describe and calculate how mortgage loan insurance affects the maximum mortgage loan available.

LESSON 6 – Commercial Mortgage Underwriting

1. Describe the unique nature of commercial covenants and define gross, net, and triple net leases.
2. Discuss why commercial lending activities are less uniform that residential lending activities.
3. List the factors that influence the qualification of commercial borrowers.
4. Analyze and calculate the cash flows relied on for commercial underwriting: gross potential rental income, vacancy and bad debts, operating expenses, and net operating income.
5. Identify and discuss the income lending constraints used in commercial underwriting: safety margin, debt coverage ratio, and loan-to-value.
6. Apply and calculate the maximum commercial loan using the underwriting criteria.
7. Describe the unique nature of commercial covenants.

LESSON 7 – Mortgage Loan Repayment Plans

1. Discuss borrower and lender objectives in mortgage financing.
2. Evaluate various mortgage repayment plans introduced by lenders.
3. Describe and perform calculations on interest accruing loans, interest only loans, straight line principal reduction loans, and constant blended payment repayment schemes.
4. Explain how payment frequency can impact the amortization on a loan.
5. Describe common features of variable rate mortgages and summarize their advantages and disadvantages.

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6. Analyze VRMs with amortization period adjustments, payment adjustments, and outstanding balance adjustments.
7. Calculate payments and outstanding balances on "teaser rate" VRMs.
8. Describe graduated payment mortgages and calculate a GPM's payments.
9. Describe sinking fund assisted mortgages and perform basic calculations related to them.
10. Describe the advantages and disadvantages of reverse mortgages and perform basic calculations related to them.
11. Explain and calculate how participation loans and shared appreciation mortgages can increase lender's yield.
12. Explain how inflation affects mortgages and describe how a price level adjusted mortgage addresses inflation.

LESSON 8 – Loan Management and Refinancing Options

1. Explain how partial prepayment is handled in mortgage loans.
2. Calculate the impact of partial prepayment on the outstanding balance of mortgage loans.
3. Describe and calculate prepayment penalties assessed by lenders for full prepayment of mortgage loans.
4. Explain and calculate how arrears and default impacts the outstanding balance of mortgage loans.
5. Discuss situations where borrowers refinance mortgages and the options available.
6. Compare alternatives for refinancing on the basis of yield and the amount of additional funds available.
7. Describe wrap-around mortgages.
8. Define and calculate the book value, market value, and investment value of a mortgage.
9. Calculate the cost of funds advanced for a borrower involved in a bonused mortgage.
10. Calculate the yield to a lender when a mortgage broker arranges the mortgage.

LESSON 9 – Development Financing

1. Identify and explain the financial elements of the land development process.
2. Identify the three major sources of funds for development.
3. Describe the equity reserves used for development projects.
4. Explain how a line of credit may assist in development financing.
5. Describe construction (interim) financing.
6. Describe the underwriting process used in construction financing.
7. Explain the importance of feasibility studies in construction lending.
8. Describe the features of a marketability analysis and outline their usefulness in development finance.
9. Explain the borrower qualification process used by construction lenders
10. Discuss how construction lenders set the loan amount, interest rate, and term.
11. List and describe the items that provide additional security for construction loans.
12. Describe cost overruns and their impact in development finance.
13. Compare subdivision and strata development loans with other construction loans.
14. Identify and describe alternative financing arrangements used by developers.

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LESSON 10 – Leasehold Finance

1. Identify general types of leases, defining their features and contrasting the advantages and disadvantages of each.
2. Identify and explain the main types of term certain leases.
3. Define an occupation lease.
4. Calculate the maximum mortgage that may be secured by leasehold improvements, given a lender's underwriting criteria.
5. Discuss the history of ground leases in Canada and internationally, including on First Nations land.
6. Analyze the cash flows on a ground (building) leases and compare these to a mortgage. Describe how mortgage lenders address ground leasehold situations.
7. Explain how subordination agreements may be used in leasing situations.
8. Discuss and analyze sale-leaseback contracts, as compared to first mortgages.
9. Calculate the market value of a leasehold estate in a profit rent situation.
10. Identify what creates leasehold value and describe the two valuation methods for valuing leasehold interests.
11. Calculate the market value of different leasehold interests for a ground lease and an improved lease.