FIN 250. Introduction to Quantitative Finance. 3 credits. Spring only.
The purpose of this course is to provide a broad introduction to the markets and instruments of engineered finance. The focus of the course is to expose students to the properties and uses of the array of non-traditional financial instruments that are increasingly trading in both the exchange and over-the-counter markets. Prerequisites: Minimum grade of “C” in MATH 235, MATH 236, ECON 201 and ECON 200.

FIN 301. Principles of Finance. 3 credits.
The purpose of this course is to provide a foundation in the principles and tools of finance, which include financial analysis, the time value of money, capital budgeting and capital structure. Open to students with a B.S. or B.A. economics major with a concentration in finance as well as students majoring in health sciences. Open to students as a repeat/forgive for COB 300B. Prerequisites: Junior standing and COB 241.

FIN 302. Spreadsheet Skills in Finance. 1 credit.
The purpose of this course is to offer experience with the spreadsheet applications in finance, including financial functions, statistical functions, reference functions, ActiveX, PivotTables and macros. Prerequisites: Minimum grade of “C” in COB 300 and FIN 360. Open only to finance majors.

FIN 310. Principles of Real Estate. 3 credits.
The purpose of this course is to assist students in developing a foundation in real estate principles, apply finance and economic principles to valuation and evaluation of real estate and analyze contracts and financing in residential and commercial real estate transactions. Prerequisites: “C” or better in both FIN 360 and COB 300B.

FIN/ECON 325. Money and Banking. 3 credits.
The purpose of this course is to examine the economic role of money, banking, and monetary policy within current institutional settings and under alternative theories explaining the interrelationships between money, the financial system and economic activity. Prerequisites: ECON 201 and ECON 200.

FIN/MATH 328. Time Series Analysis. 3 credits.
The purpose of this course is to examine regression and exponential smoothing methods for forecasting nonseasonal and seasonal time series, stochastic processes, and Box-Jenkins’ autoregressive and moving average models. Prerequisites: MATH 238 or MATH 300 and MATH 318.

FIN 345. Finance for the Non-Financial Manager. 3 credits.
The purpose of this course is to build a foundation of theoretical concepts and analytical techniques to aid management decisions on financial problems. Topics include: working capital and fixed asset management for profit expansion. Not recommended for students seeking admission to MBA programs. Students will not receive credit for
this course if they also take FIN 301 or COB 300B. Prerequisites: ACTG 244 or COB 242, junior standing (60 hours) and a cumulative 2.0 GPA in all courses taken at JMU. Restricted to non-college of business majors.

FIN 355. International Financial Management. 3 credits.
The purpose of this course is to provide a comprehensive examination of the investing and financing decisions of a multinational business entity. Particular emphasis is on global financial markets and instruments, exchange-rate risk management, short-term and long-term financing for multinational firms and asset-liability management in an international environment. Prerequisite: COB 300B. International business majors only.

FIN 360. Analytical Methods in Finance. 3 credits.
The purpose of this course is to introduce the finance major to quantitative methods in finance as applied to financial instruments and capital markets. Emphasis is placed in the theoretical determination of asset prices, risk and return, as well as the estimation and analysis and asset prices. Prerequisites: Minimum of a “C” in COB 291; minimum grade of “C” in ECON 385 (economic majors); prerequisite or corequisite: COB 300B or FIN 301. Not permitted for quantitative finance majors.

FIN 362. Financial Analysis. 3 credits.
The purpose of this course is to prepare the finance major to use and interpret economic and accounting information that is essential in financial analysis and valuation. Prerequisites: Minimum grade of “C” in COB 300B and FIN 360, and minimum grade of “B” in COB 241 and COB 242.

The purpose of this course is to provide an in-depth study of the theories of capital structure, long-term financing decisions, working capital management and current topics such as mergers and bankruptcy. Computer applications. Prerequisites: Minimum grade of “C” in COB 300B and “C” in FIN 360 (finance majors); minimum grade of “C” in FIN 250 (quantitative finance majors).

FIN 370. Real Estate Finance. 3 credits.
The purpose of this course is to offer a comprehensive examination of the decision-making processes involved in purchasing and financing real assets. The focus is on the cost of funds and optimal financial structure of complex real estate projects. Prerequisites: Minimum grade of “C” in COB 300B and FIN 360.

FIN 371. Principles of Investments. 3 credits.
The purpose of this course is to provide an investor’s view of the operation of the capital markets. This course covers the theories and practice of investments, including analysis of financial instruments and real assets and their effective combination into portfolios. Prerequisites: Minimum grade of “C” in FIN 301 and “C” in FIN 360 (economics B.A. and B.S. majors); minimum grade of “C” in COB 300B and “C” in FIN 360 (finance majors); minimum grade of “C” in FIN 250 (quantitative finance majors).

FIN/ECON 372. International Finance and Payments. 3 credits.
Examines international financial markets, instruments and institutions; determination of spot and forward exchange rates, interest arbitrage, hedging and speculation; and alternative policies for achieving equilibrium in international payments. Prerequisites: ECON 201 and ECON 200.

FIN 375. Madison Investment Fund Management. 3 credits.
The course is an accelerated introduction to the investment environment with a focus on fundamental analysis of stocks, overlay strategies to enhance portfolio performance
and familiarization with the trading and pricing of the wide variety of instruments in the modern financial marketplace. The course is limited to members of the Madison Investment Fund. Prerequisites: FIN 371 and department head permission with membership in the Madison Investment Fund.

FIN 378. Fixed Income Analysis. 3 credits.
The purpose of this course is to examine the market for and the price/yield determinants of various fixed income securities including Treasury debt, corporate bonds, agency debt, municipal bonds and mortgage and asset-backed securities. Topics include securitization, the term structure of interest rates, and portfolio management strategies such as duration, convexity and immunization. Prerequisite: FIN 371.

FIN 380. Elemental and Derivative Securities Analysis. 3 credits.
The purpose of this course is to undertake an in-depth examination of the broad array of financial instruments traded in contemporary finance markets that are available for financing, investing, and managing financial price risk. Prerequisites: Minimum grade of “C” in COB 300B and “C” in FIN 360 (finance majors); minimum grade of “C” in FIN 250 (quantitative finance majors); minimum grade of “C” in FIN 301 and “C” in FIN 360 (economics B.S. and B.A. majors).

FIN/MATH 395. Mathematical Finance. 3 credits. Spring only.
The purpose of this course is to present an overview of the role of mathematical concepts in financial applications. Topics include continuous time finance, optimization, numerical analysis and applications in asset pricing. Prerequisites: MATH 237 and FIN 380.

FIN/MATH 405. Securities Pricing. 3 credits. Fall only.
The purpose of this course is to present a quantitative treatment of the theory and method of financial securities pricing to include an examination of closed-form pricing models such as the Black-Scholes and its various derivatives as well as numerical solution techniques such as binomial methods. Prerequisite: FIN/MATH 395.

FIN 416. Seminar in Real Estate Investment and Development. 3 credits.
The purpose of this course is to provide an investigation of the investment process in real assets with emphasis on investment profitability. The real estate investment cycle is examined in detail to determine the sources of cash flow to the equity investor and how those cash flows may be maximized. Prerequisite: FIN 370.

FIN 450. Financial Risk Management. 3 credits.
The purpose of this course is to explore forward contracts, futures, swaps, and options, which are the basic building blocks for creating financial risk management programs for companies subject to financial risks such as changes in exchange rates, commodity price fluctuations and changes in interest rates. Prerequisites: FIN 371 and a minimum grade of “B-” in FIN 380.

FIN 451. Risk Management II. 3 credits.
The purpose of this course is to present an intermediate treatment of the theory and applications of market, credit, liquidity and operational risk management. It builds upon concepts introduced in previous course work to present the theoretical constructs underlying risk management, as well as the quantitative skills required for risk analysis and the implementation of risk management techniques. Prerequisite: A minimum grade of “B-” in FIN 450.

FIN 455. Advanced International Financial Management. 3 credits.
The purpose of this course is to focus on the analysis of major international financial management issues and risk faced by businesses operating in global markets. The emphasis is on the management of foreign exchange transactions, operating and translation exposures by multinational corporations, the functions of various currency hedging instruments, and the application of international funding and investment techniques. **Prerequisites:** Minimum grade of “C” in COB 300B and FIN 360.

**FIN 460. Commercial Banking.** 3 credits.
The purpose of this course is to study the objectives, functions, policies, organizational practices and government regulation of commercial banks. An intensive study is undertaken of the asset and liability structure of commercial banks. Special emphasis is placed on how banks are adapting to the changes in their operating and regulatory environments. **Prerequisites:** Minimum grade of “C” in COB 300B and FIN 360.

**FIN/MATH 465. Seminar in Actuarial Science I.** 3 credits.
The course covers the theory and application of contingency mathematics in the areas of life and health insurance and annuities from both a probabilistic and deterministic approach. Together with FIN/MATH 466, the two-course sequence helps to prepare the student for the professional actuarial examinations. **Prerequisite:** FIN/MATH 395 or consent of instructor. **Prerequisite or corequisite:** MATH 426.

**FIN/MATH 466. Seminar in Actuarial Science II.** 3 credits.
A continuation of FIN/MATH 465 with additional coverage of contingency mathematics in the areas of life and health insurance, annuities, pensions and risk theory from both a probabilistic and deterministic approach. The two-course sequence helps to prepare the student for the professional actuarial examination. **Prerequisite:** FIN/MATH 465. **Prerequisite or corequisite:** MATH 427.

**FIN 471. Portfolio Management.** 3 credits.
The purpose of this course is to cover the application of investment concepts within a case format. The course focuses on investment management, bringing together economics, capital markets and valuation to form a basis for decision making in financial asset selection, risk/reward analysis, portfolio selection and formation. **Prerequisite:** FIN 371.

**FIN 475. Financial Modeling and Risk Analysis.** 3 credits.
The purpose of this course is to introduce students to practical methods used to identify, quantify, predict, value, diversify, and manage risk in the financial environment. Students use sensitivity analysis, Monte Carlo and Latin Hypercube simulations, bootstrapping, time series forecasting and dynamic optimization techniques as applied to capital budgeting and structure, pro forma financial statements, multi-objective portfolio allocation, discounted cash flow analysis and real options. **Prerequisites:** FIN 365 and FIN 371.

**FIN 480. Seminar in Financial Engineering.** 3 credits. Spring only.
The purpose of this course is to explore financing engineering which is the process of adapting existing financial instruments and developing new ones to meet the needs of participants in domestic and international financial markets. This process is taught within a case and project format in order to simulate actual market participation as closely as possible. **Prerequisite:** FIN/MATH 405.

**FIN 488. Advanced Financial Policy.** 3 credits.
The purpose of this course is to examine the financing of business enterprises and the financial condition of existing firms using a case format. The objective of this
examination is to elicit a policy decision which effectively addresses the issues identified in the case. Prerequisites: 12 hours of FIN courses, including FIN 360 and FIN 365 and completion of 105 hours. Open only to graduating finance majors.

**FIN 490. Special Studies in Finance.** 1-3 credits.
Designed to give capable students in finance an opportunity to complete independent study under faculty supervision. Admission by recommendation of the instructor and permission of the director. Forms may be obtained in the department office before registration.

**FIN 498. Special Topics in Finance.** 3 credits.
The purpose of this course is to provide an opportunity for students to explore areas of current topical interest or to exploit special situations. Course content will vary. For current course content, consult your adviser or the department head. Prerequisite: FIN 250 or FIN 360; additional prerequisites may vary with the specific offering.

**FIN 499. Honors.** 6 credits.
See catalog section “Graduation with Honors.” Credits will not count toward the finance major.