FINANCE

Department Code: FIN

Introduction
The Finance major area of specialization is designed to prepare business students for a wide variety of careers. Because finance is focused on valuation and decision making, it is applicable to virtually every possible type of organization.

The Real Estate major area of specialization is designed for business students seeking to apply the theoretical and analytical concepts of finance to real estate lending, investment, and development.

The Bachelor of Science in Accounting and Finance (BSAF) degree at Miami Herbert Business School is intended for quantitatively strong first-year students arriving at the Miami Herbert Business School with a clear interest in careers in the financial services industry or in corporate financial management.

Educational Objectives
Finance
The finance discipline is focused on two primary issues. The first is determining value. The second is making the best decisions with respect to value. We study these issues in a variety of contexts and industries.

The three primary areas of finance are financial management, investments, and financial markets and intermediaries. Financial management focuses on how an organization can accomplish its mission. For example, a corporation seeks to create and maintain wealth, and a non-profit organization seeks to improve the world in some way. All organizations want to achieve their mission to the greatest extent possible, and that requires making the best decisions with respect to value. The area of investments studies the purchase and sale of financial securities, such as stocks, bonds, options, and futures from the point of view of an investor. Financial markets are created to facilitate the trading (buying/selling) of financial securities. Financial intermediaries sell claims on themselves to investors, such as stock, life insurance, or a bank deposit. Financial intermediaries then invest the money from such sales in other assets such as loans, real estate, or other financial securities.

Real Estate
The importance of understanding developments in real estate and mortgage markets and the integration of real estate investments into the national and international economy have led to increased interest in this important field. The real estate major area of specialization strengthens ties with important segments of the local business community and prepares students to work in an industry that brings diversification potential to portfolios of stocks and bonds.

Bachelor of Science in Accounting and Finance (BSAF)

The Bachelor of Science in Accounting and Finance (BSAF) (http://bulletin.miami.edu/undergraduate-academic-programs/business/finance/accounting-and-finance-bs/) degree is designed for students who arrive at the business school with a clear interest in careers in the financial services industry or in corporate financial management. The content of the degree is equivalent to a BBA with a double major in Finance and Accounting and a minor in Business Analytics. Because of its emphasis on the development of quantitative skills in data analytics, the degree is intended for quantitatively-oriented students. In order to prepare students for industry internships during their junior year, the BSAF degree is designed to facilitate accelerated coursework in Finance, Accounting, and data analytics during the freshman and sophomore years.

Important Note: To be eligible for any BBA or BSBA major specialization offered by the Finance Department, the following requirements must be met:

- A student must earn a grade of “B” (grade point of 3.0) or higher in FIN 302 (note that a grade of “B-” does not qualify).
- A student must have a cumulative University of Miami GPA of 2.5 or higher before enrolling in FIN 303 or FIN 320.
- All specific coursework for the major area of specialization must be completed with a grade of “C-” or higher (except for the minimum “B” grade required for FIN 302 (http://bulletin.miami.edu/search/?P=FIN%20302), as noted).
- A minimum cumulative GPA of 2.5 is required for all specific coursework taken in the major area of specialization.

Dual Degree
- BBA/BSBA - MSF Dual Degree Programs (http://bulletin.miami.edu/undergraduate-academic-programs/business/finance/bba-bsba-msf-dual-degree/)
FIN 144. Investing in Real Estate. 3 Credit Hours.
This course covers the fundamentals of commercial real estate. The aim of the course is to give you broad exposure to the landscape of commercial real estate markets. After a discussion of the relation between property prices and rents, the first part of the course is focused on property-level analysis of real estate equity as an investment, especially property valuation. This portion will culminate in a valuation case, based on a proposed development project in downtown Miami. After this, we will look at the fundamentals of real estate debt (mortgages) and equity markets (REITs).
Requisite: Summer Scholars Program.
Components: LEC.
Grading: GRD.
Typically Offered: Summer.

FIN 300. Fundamentals of Finance for Non-Finance Majors. 3 Credit Hours.
This course provides an overview of modern finance for non-business majors. Topics include: how financial markets work, understanding financial pages in newspapers and the Internet, how stock and bond prices are determined, how investment portfolios are structured, concepts of risk and return, how companies manage their cash and investments and international finance. Not for credit for business students.
Requisite: Non Business Majors.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 302. Fundamentals of Finance. 3 Credit Hours.
Introduction to the basic tools and concepts in finance. This is the core class in finance for our undergraduate program. Topics include the financial framework of a business entity, taxes, the time value of money, capital market theory, financial risk measures, and capital budgeting. Note: to be eligible to major in finance, a student must earn a grade of B or higher in this class (a grade of B- does not qualify).
Prerequisite: MAS 201 or MAS 311 or MTH 224 or ISE 311 or ISE 310 or PSY 292 and ACC 211 or ACC 221 or Pre/Corequisite ACC 223.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

FIN 303. Intermediate Financial Management. 3 Credit Hours.
This course provides an overview of financial decision-making by corporations. Building on topics covered in the introductory finance classes, this course develops the foundations of optimal financial policy and applies these principles to corporate financial decision-making including capital structure, capital budgeting, dividend policy, leasing, securities issuance and the role of investment banks, and mergers and acquisitions. Note: a student must have obtained a B or higher grade in FIN302 to major in Finance. Earning an A in this class or any other class or classes does not eliminate that requirement.
Prerequisite: FIN 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 308. Intermediate Financial Management for Entrepreneurs. 3 Credit Hours.
This course is primarily for students majoring in entrepreneurship. It provides an overview of financial decision-making by entrepreneurs. Building on topics covered in the introductory finance classes, this course develops the foundations of optimal financial policy and applies these principles to entrepreneurial financial decision-making involved with such things as capital structure, working capital budgeting, leasing, hedging and risk management, securities issuance and the role of investment banks, and mergers and acquisitions. Note: Students cannot take both FIN 308 and FIN 303, so this class is not open to students who have taken FIN 303.
Prerequisite: FIN 302 and Requisite: Entrepreneurship Major.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 320. Investment and Security Markets. 3 Credit Hours.
This course introduces students to both practical and theoretical aspects of investment with an emphasis on financial markets. Topics include valuation of financial securities such as stocks, bonds and options; modern portfolio theory; the process and institutional characteristics of investing. Note that this course does not address the details of individual security valuation and selection, i.e., this course is not about stock picking or about how to get rich by investing in the markets. Instead, this course attempts to help you develop a lasting conceptual framework in which to view the investment process and to analyze future ideas and changes in investment environment. This class is essential to any student considering a finance concentration. Note: A student must have obtained a B or higher in FIN302 to major in Finance. Earning an A in this class or any other class or classes does not eliminate this requirement.
Prerequisite: FIN 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.
FIN 330. International Finance. 3 Credit Hours.
This course applies the principles of finance to international business decisions. Topics include the analysis of foreign exchange rates, balance of payments, characteristics and use of international financial institutions and instruments, the analysis and management of financial risk in the international environment, and financing multinational corporations. Note: a student must have a B or higher in FIN 302 to major in International Finance and Marketing (or Finance). Earning an A in this class or any other class or classes does not eliminate this requirement.
Prerequisite: FIN 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 336. Sustainability and Finance. 3 Credit Hours.
Sustainable finance is an emerging subfield of corporate finance. Today's investors and firms are dealing with the risks and opportunities of environmental, social and governance (ESG) issues. Meanwhile, more and more investment managers have stepped in to offer impact products in their portfolios as investors begin to evaluate how they can invest in ways that can meet financial goals and support social and environmental change.
Bridging the gap between traditional capitalism and a new context of shared economic and social value, sustainable finance is quickly becoming a core part of the mission of financial institutions and companies. This course couples established and emerging theory on how finance can be used to address sustainability challenges. Students build upon the skills developed in a traditional investments course and study traditional investment topics from the lens of impact investing. Specifically, using the analytical tools of financial investments and portfolio management, students learn to identify and evaluate the impact of social factors on portfolio decisions. In addition, students learn about the psychology of impact investing, as impact preferences may influence the tradeoffs between financial and social returns. Potential asset pricing implications of investor preference for impact are also discussed. It covers diverse aspects of sustainable finance, including ESG measurement, socially responsible and impact investing.
FIN 336 may not be used as a choice course to count toward any Finance-related major or minor.
Prerequisite: FIN 302.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 344. Real Estate Investment Analysis. 3 Credit Hours.
This course introduces the theoretical concepts and analytical techniques used to make a decision to purchase an ownership interest in a commercial real estate project. There is heavy reliance on Excel applications. Each student will complete a written evaluation and investment analysis of an existing or proposed commercial real estate project in Miami-Dade, Broward or Monroe County.
Prerequisite: FIN 302 and FIN 320 or FIN 303 or FIN 308 OR Co-requisite: FIN 320 or FIN 303 or FIN 308.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 347. Introduction to ARGUS. 1 Credit Hour.
ARGUS software is used extensively in the development, financing and management of commercial real estate, especially in the office, industrial and retail sectors. The introduction to ARGUS class exposes the student to the basic concepts and terminology in the commercial real estate market and to the typical inflows and outflows an owner who invests in real estate faces over the life of the investment.
Prerequisite: FIN 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 348. Advanced ARGUS. 1 Credit Hour.
At the end of the Advanced ARGUS class the student will be able to assess the viability of detailed rent and operating expense assumptions, make decisions about the impact of financing on investor returns and critically evaluate the investment potential of leveraged office and retail property.
Prerequisites: FIN 302 and FIN 347.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 355. Smif Fund Analyst I. 1 Credit Hour.
The course is designed to introduce the student to the investment management process, including valuation of publicly traded equities. The course is one credit and meets once a week each semester; students must commit to and enroll in the follow-up class. Admission to the course is through a competitive application process.
Pre-requisite or Co-requisite FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.
FIN 356. Sector Head for Student Managed Investment Fund. 1 Credit Hour.
Sector Heads are responsible for helping their sector members select stocks to be pitched and coordinating all aspects of at least one pitch per semester. In addition, sector heads are responsible for helping the first semester analysts complete their research notes accurately and objectively and in a timely manner. Sector heads are the link between analysts and the Chief Investment Officer(s).
Prerequisite: FIN 355 or FIN 425.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 370. Principles of Risk Management and Insurance. 3 Credit Hours.
This course explores the field of risk management and insurance. Students learn about the fundamental nature and measurement of risk, the principal techniques used to manage risk for both corporations and individuals. The course includes foundational concepts important to the risk management industry, an exposure to risk modeling, a broad overview of various types of insurance and their major concepts and terminology, and exposure to how insurance & risk management tools apply to sustainability and DEI issues.
Prerequisite: FIN 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 404. Applications in Corporate Finance. 3 Credit Hours.
An application of the concepts and tools of corporate finance. Primary emphasis on analyzing real-world cases dealing with liquidity issues, capital budgeting, firm valuation, advanced corporate financing, hedging with options and futures, corporate financial strategy, and other current issues in corporate finance.
Prerequisite: FIN 302 and FIN 303 or FIN 308.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 405. Financial Modeling. 3 Credit Hours.
This course focuses on application of finance topics learned in the pre-requisite classes. The class uses a flipped learning method where the lectures and demonstrations have been either recorded on video or explained in example spreadsheets, and students will prepare this material before class. In class students will work collaboratively in groups to solve new problems related to the material covered. We will use peer assessment in the group activity and with the homework. The primary analytical tool for this class is Excel. In addition, students will use Visual Basic for Applications (VBA) to design functions and macros to enhance their models.
Prerequisite: FIN 302 and FIN 320 and FIN 303 or FIN 308.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 408. Introduction to Mergers and Acquisitions. 3 Credit Hours.
This course introduces students to the world of mergers and acquisitions (M&A). More specifically, the course is designed to develop an understanding of (i) the economic, financial, and strategic issues involved in the acquisition of a (public or private) company; (ii) the analytical tools used to value an acquisition target; and (iii) academic research that reports results from large samples of M&A deals. Students will apply their understanding of these issues by analyzing various actual and potential acquisitions.
Prerequisite: FIN 302 and FIN 303 or FIN 308.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

FIN 409. Introduction to Private Equity and Venture Capital. 3 Credit Hours.
In this course, you will learn about the private equity (PE) industry, composed of both venture capital (VC) and buyouts (BO). The focus is on how PE investors evaluate, select, value, and structure deals. This course has several goals. First, the course will deepen your current understanding of corporate finance by applying key concepts and tools to a new and increasingly important industry. Second, the course seeks to introduce you to the institutions of the PE industry. This involves examining, for example, how funds are raised and how term sheets are structured. Finally, a goal is to understand the valuation process used by PE investors.
Prerequisites: FIN 302 and FIN 303 or FIN 308.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.
FIN 410. Financial Institutions and Markets. 3 Credit Hours.
This course examines financial institutions, such as banks (commercial, investment, mortgage, savings), credit unions, insurance companies, pension funds, and mutual funds and the money markets in which they operate, and focuses on why they exist and how to manage them. Topics include financial intermediation and transmutation, monetary theory and policy, Federal Reserve management of the money supply, velocity of money, fiscal theory and policy, interest rates, and immunization.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

FIN 412. Financial Planning and Wealth Management. 3 Credit Hours.
This course examines the investment and financial issues arising from financial planning and personal wealth management activities. It covers various topics required for the construction of a comprehensive financial plan including the identification of client financial status and goals, asset allocation, securities trading, managed funds, tax planning, risk management and insurance, and estate planning.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

FIN 415. Trading and Markets. 3 Credit Hours.
This course provides an introduction to the functioning of financial markets and the fast changing field of market microstructure. On the equity trading side, the course covers major exchanges such as NYSE Euronext and Nasdaq OMX, and new players such as BATS and Direct Edge/ISE. Students also learn about dark pools, options and futures exchanges, electronic bond trading platforms, and currency trading systems. In addition, the course provides a summary of different market structures, the role of market participants, different order types, trading strategies, and trading externalities. The course draws on theories and tools from economics and behavioral finance, current institutional practices and market regulation.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 418. Fundamentals of Fintech. 3 Credit Hours.
This course introduces students to Fintech, the emerging world of applications, concepts, developments, business models, and companies at the interface of Finance and Technology. The course format is a mixture of introductory topical lectures, class discussions, and interactive seminar-style student presentations. It covers the main Fintech areas like Peer-to-Peer-Lending, Crowdfunding, Mobile Payment Systems, Cryptocurrencies and ICOs, Robo Advising, Insurtech (insurance technology), and RegTech (regulatory technology). A special emphasis is given to how and by whom these emerging technologies are currently used, and how they may potentially change the landscape of finance and financial services in the future.
Prerequisite: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 421. Investment Portfolio Management. 3 Credit Hours.
This course provides an introduction to quantitative active management of equity portfolios. The course begins with a discussion on the sources of stock market inefficiencies. The course then covers the five key dimensions of the quantitative portfolio management process: forecasting relative stock returns using quantitative signals, measuring portfolio risk relative to a benchmark, portfolio optimization, controlling transaction costs, and measuring and evaluating portfolio returns. The course focuses on practical application and relies heavily on experiential learning and Excel spreadsheets.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 422. Speculative Markets and Derivatives. 3 Credit Hours.
This course is an introduction to derivative securities, and examines the nature of derivatives and applications of such instruments in investment and corporate settings. The emphasis is on derivatives of equity-based securities (such as stocks and stock indices), but coverage includes derivatives of debt-based securities (such as Treasury and Eurodollar securities). Topics include options, futures, forwards, and other derivatives, such as options on futures, foreign currency derivatives, swaps, exotic options, real options, as well as financial engineering using derivatives.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.
FIN 423. Introduction to Alternative Investment. 3 Credit Hours.
The objective of this course is to provide an introduction to alternative financial instruments and how capital market participants utilize them. The course covers a large set of investment choices, with a specific focus on fixed income and alternative instruments, such as commodities, interest rates and currency. While covering each instrument, the course also examines how macro-economic, technological, labor market, taxes and regulatory issues affect specific investment decisions.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

FIN 425. Business and Security Valuation. 3 Credit Hours.
Applications of finance theory to the problem of valuing public and non-public companies. Multiplier models, discounted cash flow analysis, and the strengths and weaknesses of traditional security valuation methods are addressed in detail. Financial spreadsheet programs and data sources are an integral part of the course.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 427. Fixed Income Markets and Analysis. 3 Credit Hours.
This course examines financial markets that trade fixed income securities. A fixed income security is based primarily on a debt contract, such as a bond, debenture, note or Treasury bill. Topics include the valuation, computation of return, and computation of various measures of risk for fixed income securities, as well as the analysis of the term structure of interest rates and various option features commonly included in debt contracts and fixed income securities. Students must have a solid working knowledge of Excel to take this class.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 431. International Financial Management. 3 Credit Hours.
This is an advanced class in international finance from the viewpoint of multi-national organizations, including corporations, investment banks, and commercial banks. Topics include managing the various sources of risk, such as economic, political, and currency; cash receivables, inventory, and payables management; financing; transfer pricing; taxation; currency netting; capital budgeting; and hedging.
Prerequisites: FIN 302, FIN 320, FIN 330.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 433. Case Studies for Financial Professionals. 1 Credit Hour.
This one-credit course explores key concepts at the interface of Corporate Finance and Accounting, using carefully selected case studies. Each case study is designed to serve as the basis for in-depth class discussion and to reinforce fundamental concepts with numerical examples. The course relies on interactive, discussion-based learning that engages students in critical analysis, while developing confidence to apply their knowledge to specific real world examples.
Prerequisites: FIN 303 and FIN 320 and ACC 311 and ACC 312 and Requisite: BSAF degree.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 445. Real Estate Finance. 3 Credit Hours.
This course introduces the theoretical concepts and analytical techniques used to make a decision to finance the purchase or development of a commercial real estate project. There is heavy reliance on Excel applications and the use of the Argus database that is a standard resource in the commercial real estate market. Students are also encouraged to use their semester projects to apply for one of the numerous case competitions.
Prerequisite: FIN 344.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

FIN 446. Real Estate Market Analysis. 3 Credit Hours.
This course is an introduction to the fundamental concepts of real estate market analysis. The major topics to be covered include site analysis, economic-demographic, supply and demand analyses. This course shall also include a global prospective of real estate market analysis. This shall be accomplished by means of conducting portions of a market analysis for foreign cities of your individual choosing.
Requisite: Pre/Corequisite: FIN 344.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.
FIN 456. Behavioral Finance. 3 Credit Hours.
The goal of this course is to expose you to selected topics from the upcoming field of behavioral finance. This will include a discussion of prospect theory and different types of behavioral biases such as representativeness, disposition effect, overconfidence, narrow framing, familiarity bias, and the house-money effect. In addition, the course will cover the implications of behavioral biases for asset pricing, corporate finance, and the overall macro-economy. Simple experiments will be conducted in class to illustrate some key behavioral concepts.
Prerequisites: FIN 302 and FIN 320.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

FIN 457. SMIF Fund Portfolio Manager 1. 1 Credit Hour.
The course is designed to introduce the student to the investment management process, including the tools used to compose a diversified portfolio that covers each of the major industrial sectors. The course is one credit and meets once a week each semester. Enrollment in the course is limited.
Prerequisite: FIN 356.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 458. Chief Investment Officer. 1 Credit Hour.
The Chief Investment Officer is responsible for all of the analysts and sector heads in the fund and for coordinating the interaction between the analysts and sectors heads and the portfolio management class. In addition the Chief Investment Officer directs the activities of the sector heads and schedules pitches, prepares instructional videos for specific aspects of the analyst research notes, gives first semester analyst feedback on drafts of their research notes and prepares the student fund annual and semi annual reports.
Prerequisite: FIN 356 or FIN 425.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 460. Financial Decisions using Artificial Intelligence and Machine Learning. 3 Credit Hours.
This is a projects-based course. It teaches students to apply various tools from the artificial intelligence (AI) and machine learning (ML) toolkit to a wide range of financial decisions including portfolio, corporate, and investment decisions. Students will learn to examine the underlying "structure" of the data through simple visualizations and develop AI/ML based financial models to make better financial decisions. The emphasis is on improving the economic interpretation of financial data. While the focus of the course is on applications, students will also learn the "theory" behind these methods so that they can pick the most appropriate and effective AI/ML method in each economic setting. The course will be taught using MATLAB but students can use another programming language of their choice.
Pre-requisite: FIN 320 and MAS 202 or MAS 311 or ISE 311 or MTH 224 or equivalent.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

FIN 496. Directed Studies in Finance. 1-3 Credit Hours.
Supervised readings, individual research project, or independent investigation of selected non-STEM related problems in the discipline. Offered only by special arrangement with supervising faculty member, who approves topic and evaluation process at time of registration.
Components: THI.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

FIN 497. Directed Studies in Finance. 1-3 Credit Hours.
Supervised readings, individual research project or independent investigation of selected STEM-related problems in the discipline. Offered only by special arrangement with supervising faculty member, who approves topic and evaluation process at time of registration.
Components: THI.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

FIN 498. Special Topics in Finance. 3 Credit Hours.
Special topics in selected non-STEM areas of Finance.
Requisite: Sophomore Standing or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.
FIN 499. Special Topics in Finance. 3 Credit Hours.
Special topics in selected STEM areas of Finance.
Requisite: Sophomore Standing or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

FIN 555. Finance Departmental Honors Research Project. 3 Credit Hours.
Research project to fulfill requirements for Departmental Honors in Finance.
Components: THI.
Grading: SUS.
Typically Offered: Offered by Announcement Only.