GW | Business

Financial Decision-Making
Implications for the Consumer and the Professional

<u>**INSTRUCTOR**</u>
Professor Annamaria Lusardi
Denit Trust Distinguished Scholar and Chair Professor of Economics and Accountancy
Academic Director, Global Financial Literacy Excellence Center (GFLEC)

E-mail: alusardi@gwu.edu
Office hours: Mondays, 3-5pm, or by appointment

<u>**TEACHING ASSISTANT**</u>
Ben Rump (benrump@gmail.com)

<u>**COURSE DESCRIPTION**</u>
This course provides the tools necessary to evaluate the wide range of financial decisions individuals make throughout their lifetime. The course will be built upon a rigorous foundation. Concepts such as interest compounding and the time value of money, the relationship between risk and return, and the benefits of risk diversification will be introduced to provide the context in which individuals make financial decisions. Applications will include, but will not be limited to, computing the monetary value of additional education, valuing prospective business projects, investing in and valuing stocks and bonds, and planning for the future. The course is intended for those interested in becoming financial advisors and/or CPAs.

<u>**EVALUATION AND GRADING**</u>
Because each lecture builds upon or applies concepts learned in the previous lecture, it's critical that each student come to class having learned the material from the previous lecture. For that reason, each lecture will begin with a short quiz on the previous lecture (and, in exchange, there will be no midterm exam). There will be a final exam. Moreover, a project will be required and students will present their project in class. There will also be discussions in class. Final grades will be totaled as follows:

Weekly quizzes	30%
Final exam (during exam period)	30%
Project (due the day of the final exam)	30%
Class participation	10%

There will be a total of 12 quizzes. The quizzes will occur during the first 10 minutes of each class and will be based on the previous lecture. No makeup quiz will be allowed. Instead, only nine of the twelve quizzes will count toward the final course grade. That is, if you miss or do poorly three quizzes, your score on those quizzes is dropped without affecting your overall grade. If you do all quizzes, the lowest three quiz grades will be dropped.

Final exam: The final exam covers the material contained in the lecture notes, class presentations, and other readings distributed in class. Exams must be taken at the scheduled time.

Project: Students are required to do a project. Specific requirements and evaluations will be discussed when the course is in session.

REQUIREMENTS AND READING
While no textbook will be required for this course, a **financial calculator** *is* required. Your financial calculator should be able to perform time value of money calculations (i.e., given all but one of the interest rates (i), the payment amounts (pmt), the number of payments (n), the present value (pv), the final value (fv), the calculator should be able to calculate the remaining variable) and cash flow analysis (input a series of possibly distinct cash flows and calculate the present value or IRR of those cash flows). Qualifying calculators include: Texas Instruments BA II Plus Financial Calculator ($30), Texas Instruments BA II Plus Professional Financial Calculator ($40), and the HP 10bII+ Financial Calculator ($30) (approximate prices from Amazon.com). We will be using the Texas Instruments BA II Plus Financial Calculator for the examples demonstrated in class.

Other materials: Selected articles from academic and business journals and other publications will be added to the readings as the course is in session.

USE OF CELL PHONES AND COMPUTERS
Cell phones must be turned off during class. Laptops and iPads should not be used to check e-mail or surf the web. A short break will be planned during each lecture, given the length of the session.

STUDENT DISABILITIES
Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss specific needs. Please contact the Disability Support Services to establish eligibility. For additional information, please refer to http://gwired.gwu.edu/dss/.

COURSE GRIEVANCE PROCEDURES
If you feel that a grade you received is unfair, you are required to voice your opinion to me personally within 3 days after the graded work is returned. The appeal should include a description of the question(s) that need to be reexamined as well as an explanation of why the original grade was incorrect. In general, the entire document will be checked for grading errors, and correcting these could either raise or lower the overall score.

L 1.0 – Introduction to the Course: You Are Your Own CFO
L 1.1 – Interest Rates
    Description: This lecture introduces interest rates and interest compounding and how they apply to everyday financial decisions.
    Select examples: The power of interest compounding – Who wants to be a millionaire – Returns on different investments

L 2.0 – Quiz
L 2.1 – The Time Value of Money
    Description: This lecture develops the concept of the time value of money. The related concepts of present value (PV), net present value (NPV), and the internal rate of return (IRR) are introduced and applied to solve various problems.
    Select examples: Valuing a business project – The financial value of an education – Returns to Social Security – Calculating a mortgage payment
L 2.2 – Using a Financial Calculator
    Description: This section shows you how to use a financial calculator to solve the problems introduced during the first two lectures.

L 3.0 – Quiz
L 3.1 – Consumer Borrowing
    Description: This lecture applies the concepts introduced in the first lecture to analyze common consumer borrowing products. It introduces concepts such as loan amortization and APR for loans with monthly payments.
    Select examples: High cost borrowing: fees, payday loans, and rent-to-own – Amortizing a credit card balance – Auto loans and negative equity – Subsidized student loans

L 4.0 – Quiz
L 4.1 – Residential Mortgages
    Description: This lecture focuses on mortgage borrowing. Various mortgage terms – such as mortgage length, fixed or floating rate, and mortgage points – will be analyzed.
    Select examples: Calculating your affordable house price – Mortgage points – Fixed versus adjustable rate mortgages

L 5.0 – Quiz
L 5.1 – Savings and Investment Products
    Description: The lecture introduces common investment products (such as stocks, bonds, and mutual funds) and uses the concepts learned earlier in the course to evaluate these products.
    Select examples: Bond valuation – Common stock valuation – Mutual funds and fees
L 5.2 – Short- and Medium-term Saving
    Description: This lecture shows how to save for short- and medium-term financial goals.
    Select examples: Saving for a child's education – Saving for a mortgage down payment

L 6.0 – Quiz
L 6.1 – Saving for Retirement Part I: Planning
 Description: This lecture focuses on saving for retirement.
 Select examples: Employer matching – Retirement planning – Social Security and early retirement – Retirement age and the savings ratio

L 7.0 – Quiz
L 7.1 – Inflation and the Erosion of Purchasing Power
 Description: This lecture covers inflation and how it affects an individual's income, wealth, debt, and savings.
 Select examples: Inflation and purchasing power – Measuring inflation: the Consumer Price Index – Inflation and income – Inflation and wealth: the decay of savings – Inflation and debt – Inflation and retirement planning

L 8.0 – Quiz
L 8.1 – Personal Taxes
 Description: This segment discusses and analyzes tax issues related to individuals, including marginal taxation, deductions, and capital gains.
 Select examples: Calculating your effective tax rate in a marginal tax system – The mortgage interest deduction – Inflation and capital gains – IRA vs. Roth IRA: tax deferral and exemption

L 9.0 – Quiz
L 9.1 – Basic Probability
 Description: This lecture introduces the foundational concepts in probability theory necessary for understanding risk and how to insure against risk.
 Select examples: Lotteries – black swans
L 9.2 – Risk vs. Return
 Description: This segment examines the theoretical basis of and empirical evidence for the trade-off between risk and returns in investing.
 Select examples: Credit spreads and bond default risk – Stocks vs. bonds in the short and long term – Investment horizon and financial crises

L 10.0 – Quiz
L 10.1 – Risk Diversification
 Description: This lecture develops the concept of risk diversification and discusses how it relates to common financial situations.
 Select examples: Risk diversification in business – Stock diversification – Mutual funds and risk diversification – Employee stock plans and diversification
L 10.2 – Leverage and Risk
 Description: This lecture introduces the concept of leverage and describes its effect on the riskiness of an investment.
 Select examples: Leverage, risk, and return – Buying stock on margin – Housing as a leveraged investment – Leverage and capital requirements in banking

L 11.0 – Quiz
L 11.1 – Saving for Retirement Part II: Risk and Retirement Planning
 Description: This lecture applies the concepts used in the previous two lectures to discuss and analyze risks faced by individuals saving for retirement.
 Select examples: Life-cycle retirement investing – Interest rate risk and retirement – Annuities and mortality risk – Social Security as an inflation-adjusted annuity

L 12.0 – Quiz

L 12.1 – Entrepreneurship
> **Description:** This lecture expands on topics introduced through the course with a specific focus on entrepreneurship.
> **Select examples:** Accrual accounting and business decision-making – Project valuation: the pitfalls of IRR, payback period, and ROI – Comparing capital leases – Concentration of wealth and the risk of ruin

L 13.0 – Quiz

L 13.1 – Mistakes People Make: Behavioral and Other Biases in Consumer Finance
> **Description:** This lecture provides a discussion of cognitive, emotional, and other biases that commonly affect consumer's financial decision-making.
> **Select examples:** Automatic enrollment into pensions and SMT (Save More Tomorrow) - life-cycle funds – the power of peers.

L 14.0 – Final Project Presentations
> **Description:** Students will present their project in class. The final version of the project is due the day of the final exam.