Course: 37:575:250:02 Finance for Personal and Professional Success

Pre-Requisite: None

Meeting Times: Wednesdays, 7:15 – 10:05 PM, beginning September 6th, 2017

Location: Cook / Douglass Lecture Hall, Room 109

Course Description: Overview of core financial concepts and techniques useful both at work and in personal life; budgeting,

cash flow, credit, insurance, investments, present value; and net worth

Instructor: Joel Schreiber, MBA, CFP ®

Please use the course's Sakai Chat Room folder: For any questions pertaining to class material.

Contact me directly for personal issues or absences: joel.schreiber@rutgers.edu

Office Hours: Wednesdays, 5:30 – 6:30 PM, Livingston Learning Center, in Tillett Hall.

Overarching Math Philosophy/Objectives Overview: Mathematics of Life

<u>Imagine that you are taking a vacation next year</u>. You have many financial choices to make. How big is your vacation budget and how do you want to allocate it? The more money that you save now, the more you will have to spend on your vacation.

Now imagine that you are planning your financial future. You have many choices to make. How will you pay off your student loan? How much of your budget should be allocated to food and utilities? How much can you afford to spend on clothes? Should you buy a house? Should you buy a new car? What investments should you consider? When do you want to retire? All of these decisions require detailed planning.

Financial planning, prudent financial management, and careful spending can help you achieve your financial goals, which affect one's standard of living in the future.

The **financial planning process** enables you to understand the key components of a **financial plan** and to develop a **personal financial plan**. The simple objective of financial planning is to make the **best use of your resources to achieve your financial goals**. The sooner you develop your goals and a financial plan to achieve these goals, the easier it will be to achieve your objectives. Topics in personal finance include financial and career planning, budgeting, tax management, cash management, credit cards, borrowing, major expenditures, risk management, investments, retirement planning and estate planning.

<u>Success in Life</u>. A solid understanding of personal finance topics offers you an increased probability of success in facing life's financial challenges, responsibilities and opportunities. Such successes might include: paying minimal credit costs, not paying too much in income taxes, purchasing automobiles at low prices, financing housing on good terms, buying appropriate and fairly priced insurance, selecting successful investments that match your needs and tolerance for risk, planning for a comfortable retirement, and passing on your estate with minimal transfer costs.

Basic Mathematical models underlie all these financial analyses. The mathematics behind the time value of money can be applied to determining how much **current** savings will be worth in the **future**, or how to reach your goal of saving for a house or starting a business. If you were to win the lottery, should you take the lump sum or annual payments (annuity). If you have to invest, how do you know what is a good return? How much does a credit card really cost? How much money do you need for retirement? Debt also grows through mathematical models. There are tax implications as well.

<u>Critical thinking</u> plays a major role in financial analysis, as there may be more than one way to accomplish a goal. For example, if you decide to reduce your housing expenses you can, for example, either move to a cheaper unit and/or take in a room-mate. If you're saving for retirement, and can't save enough each month to meet your goal; consider alternatives such as: later retirement, reducing current or future expenses, or investing differently.

<u>The measures of performance</u> in this class will be referred to as authentic assessments. That is, student performance is evaluated based upon realistic life decision assignments, including:

- a series of math problems,
- an ongoing case analysis,
- course projects, such as assessing a lease and managing stocks in the stock market; planning for retirement planning
 using the time value of money; finding the best bank to fit your needs,
- Excel applications; one project applies the Pareto Principal (80:20 Rule) to tracking your frivolous expenditures (non obligations of rent or mortgage, insurance, etc.) using Excel.
- developing your personal financial plan.

This is in sharp contrast to the types of assessments based on multiple choice, short answer, etc. in a timed environment. Clearly this type of assessment will provide the student the same type of environment as s/he will have during his/her life.

Relationship to SAS Learning Objectives:

- Goal x (Apply effective and efficient mathematical or other formal processes to reason and to solve problems.) Specifically the focus is on the mathematics underlying the process of investment, and borrowing/saving money. The student will learn to apply concepts from algebra necessary to specify and solve equations related to loans, savings, mortgage, credit and insurance using compound interest.
- Goal w (Formulate, evaluate, and communicate conclusions and inferences from quantitative information)

 LSER Objective Formulate, evaluate, and communicate conclusions and inferences from quantitative information about work

School of Management and Labor Relations Objective:

• Goal II Apply appropriate quantitative and qualitative methods for research on workplace issues.

Other Learning Objectives:

- Familiarize students with core concepts of interest, present value, risk, diversification, and insurance,
- Improve student skills in using spreadsheets and other tools in common use for analyzing financial information, and
- Introduce students to major types of financial instruments including stocks, bonds, mutual funds, and to investments in real estate.

Assessment of Learning Objectives: Project assessments will be used to evaluate these objectives.

Text - Required: Madura, J., **Personal Finance**, Pearson-Addison/Wesley, 6th edition, 2017, ISBN: 9780134082936. The text is needed by the <u>first week of class</u>. The 6th edition is preferred, as specific homework problems have changed from the 5th edition.

Please read chapter 1, Personal Finance text, prior to our first class.

Text – Optional: Dworsky, L. N., **Understanding the Mathematics of Personal Finance**, Wiley, 2009, ISBN 978-0-470-49780-7.

Special Needs – Rutgers, the State University of New Jersey abides by the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments (ADAA) of 2008, and Sections 504 and 508 which mandate reasonable accommodations be provided for qualified students with disabilities and accessibility of online information. If you have a disability and may require some type of instructional and/or examination accommodation, please contact me early in the semester so that I can provide or facilitate in providing accommodations you may need. If you have not already done so, you will need to register with the Office of Disability Services, the designated office on campus to provide services and administer exams with accommodations for students with disabilities. Here are the particulars:

Lucy Stone Hall, Livingston Campus, 54 Joyce Kilmer Ave., Suite A145, Piscataway, NJ 08854-8045

E-mail Address: dsoffice@rci.rutgers.edu Phone: (848) 445-6800 • Fax: (732) 445-3388

Assessments: This class is hands-on and features assessment of projects and Take Home Exams, rather than a lecture course that uses exams to assess learning. Course assessment is calculated as a weighted average of the following projects:

Notes	Please read carefully.		
	Note 1: Please go to Sakai Assignments Folder. There are four main assignments: Take Home Exam 1, 2, 3, and 4. All submissions must be typed, saved, and uploaded in Sakai, with your name on all pages.		
	Note 2: The in-class projects such as current events, summaries of guest speakers, are listed separately.		
	Note 3: You should not submit handwritten responses torn from the book.		
Take Home Exam #:	Exam Components	Due Date	Weight (%)
Take Home Exam 1	Take Home Problems , based on Chapters 3, 4, & 5 Frank Fortune case , Part 1, based on Chapters 2 and 4.	September 27	80
	Personal Finance Worksheets, based on chapters 1 and 2.		20
Take Home Exam 2	Frank Fortune Case, Part 2 – Chapters 8 and 10	October 18	75
	Personal Finance Worksheets, Chapters 5 and 8		25
Take Home Exam 3	Take Home Problems, Chapters 14 and 16 Fortune case, Part 3 – Chapter 13	November 15	50
	Pareto Analysis - Conduct Self Study Stock Market Project - Writeup Personal Finance Worksheet, Chapter 14	November 1 November 8 November 15	25 15 10
Take Home Exam 4	Take Home Problems, Chapters 17 and 19 Fortune case, Part 4 – Chapters 18 and 20	December 4	50 50
	Personal Vision Board		2
	In-Class Math Literacy Assessment (Must be present in class)		3
In-Class Projects	In-Class Current Events (Sign up for date and group activity)		2
Must Be Present!	In-Class Summary of Two Most Important Topics Learned in Class (Must be present in class) Attendance and Class Participation (Must be present and		2
14%	participate in class!)		5
Total: 100%	Note: For any non-working websites, please first check Yahoo and/or Google as alternatives. Otherwise, please e-mail me.		

Target Week	Notes: 1. Guest lecturers may result in modifications to the schedule. As a courtesy to our guest lecturers, please turn off all laptops and communication devices. 2. Underlined and Highlighted items require student involvement.		
1 9/6/2017	Chapter 1 (Overview of a Financial Plan); Basics of Excel Course Sakai site: Announcements, Resources, Assignments, Gradebook and Chat Room		
	Financial Literacy Pre-test – How much do you know?		
	Excel Tutorial: personal finance applications.		
	Components of a financial plan.		
	"Begin with the end in mind": Your Personal Vision Board		
	Personal Financial Planning (PFP) Chapter 1: Brainstorm goal setting (short-term, intermediate-term, and long-term)		
	Good debt; bad debt! Is all debt bad?		
	Your Case: Meet Frank Fortune		
	Stock Market Project: Set up your "My Yahoo Portfolio" and start tracking your stocks!!		
	Sign Up Form for Current Events		
	For Next Class (9/13): Complete your Vision Boards Read chapters 2 and 4 Financial Planning Problems 1 – 10, pp. 115 - 116		
2 9/13/2017	Chapter 2 (Planning with Personal Financial Statements); and Chapter 4 (Using Tax Concepts for Planning)		
	Personal Balance Sheet and Cash Flow Statements.		
	Creating a Budget How Budgeting Fits within Your Financial Plan and drives achievement of your goals		
	Using Microsoft Excel: Examples of Excel based Balance Sheet and Cash Flow Statement.		
	Psychology of Personal Finance: Are you a spender or a saver? Why?		
	PFP Chapter 2: Begin to fill in your personal cash flow statement and balance sheet.		
	How Tax Planning fits within your Financial Plan		
	Psychology of Personal Finance: Is it wise to get a large tax refund every year?		

Frank Fortune Case: Discuss Frank's Cash Flow and Credit Situation.

Sign Up Form for Current Events (continued)

Vision Board Presentations

For Next Class (9/20):

- Read chapter 3.
- Financial Planning Problems 1 − 13, p. 84.

3 9/20/2017

Chapter 3 (Applying Time Value of Money Concepts)

4 Types of TVM Problems:

Future and present value of a single dollar amount

Future and present value of an annuity (multiple payments)

Only 2 Steps to solving TVM problems (Determine which of the 4 it is, then solve it in Excel)

Using Microsoft Excel: Using Excel to calculate any time value of money problem

Intro to: Stock Market, Stock Market Project

Sign Up Form for Current Events (continued)

Vision Board Presentations

Pareto Project introduction - Begin to collect your expense data

For Next Class:

- Complete, and upload take home exam 1
- Read chapters 5 and 6

4 9/27/2017

Chapters 5 (Banking and Interest Rates); and 6 (Managing Your Money)

How to select a bank

Types of financial institutions and their banking services; Interest rates; Money market investments and their risk

How to choose a bank, given minimum deposits, balances, monthly fees, check-writing charges?

PFP Worksheet ch. 5 - Bank Services Scorecard

Poll Everywhere: whose bank is best?

The Economy Today: Today's Fed, "Why are my bank's savings rates so low?"

Psychology of Personal Finance: Are low interest rates on savings driving you to riskier investments?

Frank Fortune Panel Discussion: Frank's Cash Flow and Credit Situation (Poll Everywhere)

Sign Up Form for Current Events (continued)

Take Home Exam #1 Due 9/27/2017 - All "take home exam 1" assignments must be posted in the Sakai Assignments Folder prior to 7:00 PM

For Next Class:

• F P Problems page 171, 1 – 10

- Read chapters 7 8
- Begin tracking your stocks!!

5 10/4

Chapter 7 (Assessing and Securing Your Credit) and 8 (Managing Your Credit)

Do you know your credit score and credit history?

Interpreting your 3 credit scores

Maintaining good credit: How much, and what types of credit are good?

7 Small Mistakes that will hurt your credit score

The real cost of credit: Review of the power of compounding, working against you!

New Credit Card rules

In-Class Identity Theft Assessment Quiz

Evaluate your preparedness to defend against identify theft
Poll Everywhere – Are you low, medium or high risk for ID Theft?

Stolen email identity – The Case of Mary D.

Electronic pick-pocketing

Evaluation of personal loans, auto loans and 30-year mortgages

Finance Charges; Estimating Credit Repayment

How to best use (and not use) credit cards.

For Next Class:

- Read chapters 9 10
- F P Problems p. 256, 1 − 10
- Current Events Groups 1 4 will present.

6 10/11

Chapters 9 (Personal Loans) and 10 (Purchasing and Financing a Home)

Interest Rates on Personal Loans

Car Loans; Student Loans; Home Equity Loans

Leasing vs. Buying your next car

Evaluate what you can afford to borrow to finance the purchase of a home (bankrate.com)

Monthly payments and overall amortization schedule

10 year ARM vs. 30 year fixed vs. interest-only – which type of mortgage is right for me?

How much can I borrow and what is this home worth? (Use the web!!)

Zillow.com, realtor.com for home price valuations

bankrate.com to estimate monthly payments and amortization schedule.

How can I make sure I'm "getting the best deal" with my mortgage?

The Economy Today: Is now a good time to buy a home?

Buying vs. Renting your home – is one always better than the other?

Current Event Groups 1-4 - Class Presentations

For Next Class:

- Complete, and upload take home exam 2
- Read chapters 11 12
- C E Teams 5 8

7 10/18

Chapters 11 (Auto and Homeowner's Insurance) and 12 (Health and Disability Insurance)

Managing risk; factors that affect auto insurance premiums; homeowner's and renter's insurance

Auto Insurance: Main components, what to do when accident occurs

Homeowner's Insurance: Main components. How to ensure highest value for your premium spent.

Which health and disability insurance should I have?

Disability Insurance (AFLAC!!): In my line of work, do I really need it?

Health Care Insurance Policies

Medicare; Medicaid; COBRA, HIPAA; Affordable Care Act

Update on Obamacare

Long term care insurance: What is it, and when is it most cost-effective to obtain?

Pareto Project Overview - How to track expenses

Current Event Groups 5-8 - Class Presentations

Reminder: Pareto 2-week expense data due 11/1!

Take Home Exam #2 Due 10/18, by 7:00 PM - All "take home exam 2" assignments must be posted on the Sakai Assignments Folders prior to class time.

For next class:

- Read chapters 13 -14
- F P Problems ch. 14 # 1 12
- Begin tracking your 2 weeks' expenses for Pareto Project.
- C E Teams 9 12 (any remaining teams)

8 10/25

Chapters 13 (Life Insurance) and Chapter 14 (Investing Fundamentals)

Types of life insurance and determining the amount of life insurance needed

<u>Psychology of Personal Finance</u>: Can you openly and honestly discuss your own life insurance need? Should you obtain "term" or "permanent" life insurance (or a bit of both?)

Types of Permanent life insurance; tradeoffs between return and risk

How does life insurance fit into my overall financial plan?

Personal Investing

When and how should you start "investing?"

How do you know your investing "risk tolerance?"

Overview of today's most popular types of investments (stocks, bonds, mutual funds, ETF's)

Stock Market Project: Now that you've tracked it, how do you analyze the performance of "My Yahoo Portfolio?"

For next class:

- Read chapters 15 16
- Print screen your My Yahoo Portfolio's
- F P Problems ch. 16 pp. 468-469 # 3, 4, 10
- C E Teams (any remaining teams)

Reminder: Please bring your PCs/MACs if you have one and your collected Pareto data next class.

9 11/1

Chapter 15 (Investing in Stocks) and 16 (Investing in Bonds)

What are stocks?

Which stocks meet my criteria? How do I compare and contrast them? Stocks or mutual funds? How do I assess analysts' comments and earnings estimates, and how objective are they? Analyzing a company's stock in Yahoo Finance; stock valuation measures (Price-earnings, Earnings per Share, dividend)

The Economy Today: Is today's stock market a good buy?

What are **bonds**?

Types of bonds; valuing a bond; risk from investing in bonds; bond investment strategies How does the purchase of bonds protect my retirement income and assets

The Economy Today: Is today's bond market a good buy?

Current Event Groups 9 – 12 – Class Presentations

Pareto Project completion Workshop – Please bring your PCs/MACs if you have one and your collected data.

For next class:

Get started on Take Home Exam 3!

10 11/8

Chapters 17 (Investing in Mutual Funds)

Type of mutual funds; return and risk of a mutual fund

ETF's (Exchange-traded funds): Benefits vs. mutual funds

Endless varieties! Open-end, closed-end, no-load mutual funds, actively managed, indexed funds, - Which one (or mix) is right for me?

How to evaluate mutual funds and ETF's? (Use the web!!)

Morningstar.com ishares.com Google.com

Stock Market project completion.

Review Stock Market Projects – What did you learn?

For next class:

- Complete and upload take home exam 3 all parts!
- Ch. 17 F P Problems

11 11/15

Chapter 18 (Asset Allocation)

How **diversification** reduces risk and improves performance!

90% + of your performance is driven by Asset Allocation and periodic rebalancing (**NOT hot stock tips or market timing**)

Today's losers are tomorrow's winners (everything is cyclical) Is my asset allocation conservative, moderate or aggressive?

Use the web to assess risk and return of your portfolio Yahoo Finance Morningstar.com Take Home Exam #3 Due 11/15 - All "take home exam 3" assignments must be posted on the Sakai Assignments Folder prior to 7:00 PM. **Chapter 19 (Retirement Planning)** 12 Poll Everywhere: At which age do you want to retire? 11/29 Social Security: When will I qualify, when can I get it, and can I count on it? Employer-sponsored retirement plans (defined-benefit and defined-contribution plans) Retirement plans offered by employers; 401(k), 403(b), Keogh Plan, SEP, IRAs, etc. Other retirement investments: Roth IRA, Annuities. Roth IRA or Traditional IRA (or – a mix) Using Excel and Time Value of Money: Quickly project how much you actually need to save for retirement. Current Event Groups 13 - 16 - Class Presentations For next class: Read chapters ch. 20 F P Problems ch. 19 page 550 # 1 - 6 and 8 13 12/6 Chapter 20 (Estate Planning) What are wills, living wills, and powers of attorney, and do I need them? Purpose of a will Other important estate planning documents: Advanced Directives, Healthcare Surrogate. Estate taxes; trust, gifts, and contributions Key provisions of today's estate tax laws (federal and state) What key events and changes in my assets impact the review and change of my will? Famous people who died without a will or an estate plan: James Gandolfini, Picasso, Joe Robbie, etc... Make a Will! Math Literacy Assessment (4 Problem Time Value of Money Quiz) For next class: Complete and upload take home exam 4 Read chapter 21 2 Most Important Topics learned. 14 12/13 Chapter 21 (Integrating the Components of a Financial Plan) Budgeting, managing liquidity; personal financing; protecting your assets and income; managing investments; retirement planning; maintaining your financial documents Math Literacy Assessment make-up (this will be a different quiz!)

In-Class 2 Most Important Topics Project

Take Home Exam #4 Due - All course projects must be posted on the Sakai Assignments Folder by 7:00 PM.

Attendance: Attendance is of critical importance. It is essential to keep up with the class material. Attendance will be taken in each class. If a student misses/will miss a class, then the student needs to send a courtesy e-mail message to the professor. As stated earlier, attendance will count for up to 5% of your course grade!!

Required: Excel 2007 (or higher) is preferred. For MACs, Google Docs or Numbers is a good alternative for problems, case questions, and team projects. Reading assignments must be completed prior to each lecture.

Communication Devices: No communication devices (cell phones, palm pilots, beepers, pagers, etc.) can be used in the classroom, except when designated (example: Poll Everywhere) by the Professor.

Assessment:

Posting of Grades: Please check MyRutgers for your final grades.

Assessment Policy:

Letter Grade	Scores Based on Course Components
Α	90-100
B+	85-89
В	80-84
C+	75-79
С	70-74
D	60-69
F	< 60

Note: The thresholds for final letter grades will be re-scaled if a conventional standard seems unreasonable.

Academic Integrity: All students are responsible for locating, reading, and abiding by the University Policy on Academic Integrity for Undergraduate and Graduate Students. The policy is available on-line at http://cat.rutgers.edu/integrity/policy.html

Recommendations: Requests for recommendations must be made in writing after completion of the course.

Take Home Exams: All Take Home Exams are posted on Sakai under "Assignments." Take Home Exams must be uploaded on time in their entirety.

Penalty: For every day that an assignment is late there is a 10% penalty that will accrue, with a max of one week. Submissions must be complete; no partial assignments can be submitted.

Communication:

1. NETID Needed

Rutgers uses the Sakai system. In order to use this system, you must have a NETID and PW. A NETID is an account on one of the main systems at Rutgers (Pegasus, Eden, Andromeda or RCI).

- If you have a NETID, you can currently ensure that you will be able to login to the system.
- If you do not have a NETID, please use the following page to attain one: http://netid.rutgers.edu/
- If you have any problems, please contact your local RUCS Help Desk. You can reach them at help@nbcs.rutgers.edu or 732-445-Help

<u>Sakai</u>
To facilitate class learning, please access and print course documents needed for class from the course management system known as Sakai. Course documents are posted in folders under Resources.

Quick Start for Sakai:

https://sakai.rutgers.edu/access/content/public/quickmember.html

Sakai website:

http://sakai.rutgers.edu/portal

If you do not see this course listed, then the site in likely in the "More" dropdown box to the right of your tabs. You can rearrange the order of your sites or hide sites from previous semesters by using the Preference tool in My Workspace and clicking on the "Customize Tabs" action button.

CTAAR

The Center for Teaching Advancement and Assessment Research supports teaching and learning through a variety of areas. Free for students are software workshops in Excel, Word, PowerPoint, Access, etc. http://ctaar.rutgers.edu/workshops/ws_descr_IT.html

Student E-Mail and Phone Numbers:

a. A student can forward mail from his/her Eden/Pegasus address to a preferred e-mail address. Go to http://www.eden.rutgers.edu/tools.php and click on forwarding. Enter your NetID and PW. Then fill in your preferred e-mail address.

<u>Cautions</u>: Hotmail has problems with e-mails with attachments. Also, some corporations spam e-mails with attachments.

- If you have any problems, please contact your local RUCS helpdesk at help@nbcs.rutgers.edu

Students, also, have the responsibility to then inform the professor of any changes to their phone numbers (day and evening). Please use "37:575:250:06" in the Subject section to avoid being spammed. <u>Please sign your full name in all e-mail correspondence.</u>

<u>Please do not Reply All to the Instructors.</u> Otherwise, several members of the staff and instructors will receive your correspondence.

Please check your e-mail regularly, especially on the day of class, to learn if there are any changes in the class schedule, class requirements, or for other general announcements.

Study Groups: Forming study groups will facilitate learning by keeping you focused, involved, and current in the course.

Classroom Etiquette: Common courtesy is expected at all times. Please turn off all cell phones and other communications devices during class. This facilitates efficient learning, best performance in the course, and timely completion of classes.

Parking Impacts: Special events may impact parking.

Snow Emergency University/Campus Closings: 732-932-INFO (New Brunswick); http://campusstatus.rutgers.edu