## **Making Decisions About Your Finances**

ARTSCI 1138.x Professor: Doug Alsdorf

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Day, Time, Place: TBD Office Hours: Arrange via email <u>alsdorf.1@osu.edu</u>

**Course Description:** After you graduate and enter the working world, you will have many financial questions. How much are my taxes? Is an advanced degree a good idea? Am I investing enough money? What are the risks of investing? Should I pay off my student loans early? Should I buy a home or rent? And so on. While all of these questions are practical, they are real life tests of your thinking skills. Learning how to thoughtfully address problems is a hallmark of a college education. Because your personal finance has a measurable balance, e.g., the amount of money in your account, you can assess the decisions that you will make.

**Course Objectives:** In this course we will explore the decision-making process as it applies directly to your money life. What might be a good decision for one person may not be for another. Having more money **is not** the answer for everyone, but understanding the financial consequences of decisions made or not made **is** important for everyone. There are two objectives. (1) After having completed the course, you should have a clearer view of the money matters that await you after you graduate from OSU and move through the next years of your life. (2) To further develop your confidence in your decision making.

**Required Activities:** Students will work together in teams and present their findings with the class throughout the semester. Teams will imagine themselves as family like groups or as groups of singles. In these realistic scenarios, they will have longitudinal salary histories and expenses for the entire group. The main tool that we will use is Excel and its spreadsheets and plots. I have already created these, so most of this will involve you and your team entering a few data points followed by assessing the output. You and your team can also create your own spreadsheets using mine as examples. Through this team approach, you will explore incomes from salaries and investing scenarios and you will explore expenses from taxes, housing costs, and childcare costs. These will be used to understand various retirement scenarios. At the end of the semester, each student will provide me with a one-page summary of their findings and a self-assessment of their decision-making.

**Grading:** Satisfactory or Unsatisfactory (S/U) where participation in class discussions counts for 33% of the grade, group oral-presentations are 33%, and individual one-page write-ups are the remaining 33%.

**Texts and Readings:** I have written an unpublished book on these issues and the PDF of it is freely provided at the link below as well as the accompanying spreadsheets. PDFs of all required readings will be provided, as noted below. Additional highly suggested but not required readings include the book by Malkiel and the book by Bogle.

Alsdorf, D.E., A Lifetime of Money & Dad Advice for Graduating College Students, 2017, unpublished manuscript, PDF and spreadsheets freely available at: <a href="https://osu.box.com/v/AlsdorfFirstYearSeminar">https://osu.box.com/v/AlsdorfFirstYearSeminar</a>

Julian, Tiffany A. and Robert A. Kominski, Education and Synthetic Work- Life Earnings Estimates, American Community Survey Reports, ACS-14. U.S. Census Bureau, Washington, DC., 2011. PDF at: <a href="https://www.census.gov/prod/2011pubs/acs-14.pdf">https://www.census.gov/prod/2011pubs/acs-14.pdf</a>

Lino, M., K. Kuczynski, N. Rodriguez, and TR. Schap, Expenditures on Children by Families, 2015. U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, Miscellaneous Report No. 1528-2015, January 2017, Revised March 2017. The PDF is available at: <a href="https://www.cnpp.usda.gov/sites/default/files/crc2015.pdf">https://www.cnpp.usda.gov/sites/default/files/crc2015.pdf</a>

Malkiel, B.G., A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing (Eleventh Edition), W.W. Norton & Co., 2015.

Bogle, J.C., Common Sense on Mutual Funds: Fully Updated 10th Anniversary Edition, Wiley, 2009.

**Weekly Schedule:** My unpossible book, spreadsheets, and other reading materials are useful tools for answering the following questions. Answers may vary by location, income, and expenses. Each student team will present only three times during the semester, hence the workload is appropriate for a one-credit course. Details for each weekly topic are provided in the table below the syllabus.

Will the money I make from a degree in X be enough? How much does it cost to live in location X? What happens if I take time off from work? Is Social Security enough for my retirement? Is an advanced degree a good idea? Should I pay off my student loans? What are your financial questions?

How much are my taxes? How much do kids cost? Should I buy a home or rent? What are the risks of investing? Am I investing enough money? How much will I need to retire? Is a 401(k) the same as an IRA?

Week	Topic	Description and Readings
1	Introduction	How to make and use Excel spreadsheets. Chapters 1 and 7
2	Demonstrations	Form student teams. I will show you how I have answered a couple of the questions. Section 2.G
3	Discussion on Sources of Information	Together, we will discuss how to assess financial information. <u>Goal:</u> Discover how different people have different approaches to the same question. Julian & Kominski and Section 2.F
4	Income Presentations	Some student teams will present their answers to the same income and tax question. <u>Goal:</u> to

		discover how different incomes and taxes impact decision-making. Section 2.H
5	<u>Location</u> Presentations	Remaining student teams will present their answers to the same location question. <u>Goal:</u> to discover how living in different locations impacts decision-making. Section 2.F and pages 53-56
6	Demonstrations and Discussion	I will present my answers to a couple of the questions. <u>Goal:</u> to discover how someone such as me who is three decades into their career addresses the questions. Section 3.B and pages 166 to 171 of Section 4.F
7	Housing Presentations	Some student teams will present their answers to the same home mortgage question. Goal: to discover how different mortgages impact decision-making. Section 3.B and pages 166 to 171 of Section 4.F
8	<u>Childcare</u> Presentations	Remaining student teams will present their answers to the same question on childcare costs. Goal: to discover how much it will cost to raise children, including paying for their college education. Lino et al. and Section 3.E
9	Demonstrations and Discussion	I will present answers my friends have given me to some the questions. <u>Goal:</u> to discover how people further in their careers address the questions. Sections 2.A, 2.B, 4.A, and pages 150 to 156 in Section 4.C
10	Investing Discussion	Together, we will discuss and address questions dealing with investments. <u>Goal:</u> to discover how different investors have different answers to the same question. Sections 2.A, 2.B and 4.A
11	Investing Presentations	Some student teams will present their answers to the same question on active vs. passive investing methods. <u>Goal:</u> to compare active versus passive investing methods. Sections 3.C and pages 139 through 145 of Section 4.C
12	Investing Presentations	Remaining student teams will present their answers to the same question on taxable vs. tax-deferred accounts. <u>Goal:</u> to compare 401(k)s, to

		IRAs, and to taxable accounts. Section 3.D and pages 150 through 155 of Section 4.C
13	Retirement Discussion	I will present my concerns regarding retirement and Social Security. <u>Goal:</u> to assess how much money you will need in your retirement. Sections 6.A and 6.B
14	Class wrap-up	One-page write-ups are due.

Week	Details on Weekly Activities. All spreadsheets, tables, & plots are provided.
1	We will casually discuss our hopes and plans for our personal futures, e.g., what do you hope to be doing in your twenties, in your thirties and so on. We will talk about first guesses on incomes and expenses for these hopes and plans. I will show students how to create Excel spreadsheets that are used to solve basic financial problems. All of the formulae are algebraic expressions and none require sophisticated programming such as macros.
2	Based on my career and the careers of my friends, I will present answers to the question of "Is an advanced degree a good idea". Students will form diverse teams with members who understand Excel and those who do not; with members who are comfortable with numbers and members who do not think about numbers; etc. Teams can decide if they represent a family unit consisting of adults and children or if they represent a partnership of two adults or if they are a collection of singles.
3	We will discuss the question of "Will the money I make from a degree in X be enough". The assigned readings, internet searches, and personal knowledge will form the foundations of our decision making. Using the supplied spreadsheets, we will explore the financial consequences of decisions and how those decisions might evolve throughout our lives.
4	During the previous two weeks, half of the student teams will have focused their decision making on understanding incomes and related taxes. They will present their findings based on their team representation, e.g., singles, couples, families. Teams will use incomes from weeks 2 and 3 as inputs to the provided spreadsheets and determine their effective tax rates. The remainder is how much money their team has to spend. Presentations should include screen prints from the provided Excel tables and information sources on incomes.
5	During the previous three weeks, the other half of the student teams will have focused their decision making on understanding costs of living in different parts of

	the United States. Teams will present their results based on internet searches to determine rents (e.g., Zillow); costs for utility bills, food, and entertainment; and traffic maps to determine if public transportation is sufficient or if a car is needed.
6	Home mortgages and student loans constitute a major part of our lives. I will use real life examples to discuss amortization structures and the costs of loans while also showing the differences between loan maturities and refinancing. We will discuss why people buy houses and decide on the role that your home plays in your life.
7	During the previous two weeks, the student teams from week 4 will have focused on understanding the costs of buying a house. Teams will select a home for sale from an internet search and use a couple of different interest rates to see how those change the monthly payments. Each team will have its own geographic location and thus the entire class will compare and decide on costs from across the country. Presentations will include a basic understanding on the quality of the location's school district, its potential for crime, and property taxes. Teams should show the amortization schedules from the first and tenth years of the loans (I'll provide the spreadsheets); a couple of photos of their selected house; and a map showing its location.
8	During the previous two weeks, the student teams from week 5 will have focused on understanding the costs of raising children. Presentations will include a bottom up approach where each team will attempt to add up all of the child rearing costs for each year of a person's life from birth to age 25. Teams will compare these to the top down costs from Lino et al. Teams should also show how much money could have been made by investing the money instead of spending it on child raising expenses. The entire class will discuss and compare the results from the presentations.
9	I will present my friend's answers to questions: Do they invest in their 401(k) and how much does their employer match? What are they doing about their retirement? What do they think of owning their own home? What advice would they give college students? We will discuss their answers and decide whether or not these apply to the various student teams.
10	In the last third of the semester, we will discuss investing and attempt to demystify it. This week, I will present the risks of investing and how to reduce these by volume and by time. We will discuss each team's risk tolerance and decide how that relates to their incomes and expenses.
11	During the previous three weeks, the teams from week 7 will have focused on understanding active and passive investing methods. Presentations will include a simple comparison of actively and passively managed funds using "growth of \$10,000" plots, e.g., from Morningstar. Teams will also demonstrate their understanding of fees, i.e., Figure 4.18, and will discuss their comfort level with

	money management. Together we will decide if active or passive investing is better for each team.	
12	During the previous three weeks, teams from week 8 will have focused on understanding short-term and long-term capital gains taxes and how these relate to taxable and tax-deferred investing accounts, i.e., IRAs, 401(k)s. Presentations will compare taxes and investments between taxable and tax-deferred accounts, e.g., Table 4.5. Together, we will decide if a taxable or a tax-deferred account is better for each team.	
13	I will present my thoughts on how much money it might take to live in your retirement and my concerns about the amounts of money Social Security might provide to you. We will discuss and decide whether or not you think the amounts are realistically achievable for you.	
14	In this last week together, we will discuss what was the most important thing that each student learned during the semester. In your one-page write-up, you will answer the main two questions for yourself: (1) What do you think is the most important money matter that awaits you after graduation? Explain why. (2) Which decisions do you need to make during college and afterwards to address this money matter.	

The presentations should be casual and relaxed. They can be created using screen grabs and quickly pasting the graphics into PowerPoint. They should have a statement regarding what was the most important thing the team learned and what was the most difficult thing to understand. The syllabus presents my suggested set of financial questions, but I am open to your suggestions. Teams will decide where they live, what sort of incomes and expenses they have, and then use these to determine outcomes.

**Biographical Statement:** I am a professor of Geophysics and having published over 70 peer-reviewed papers, I understand how to analyze data, how to model it, and how to assess its errors and thus make informed, scientific interpretations of the data. However, I am **not** academically trained as a finance expert, nor have I published a peer-reviewed paper on personal finance. Instead, I rely upon the experts who have published their original research and then I make decisions regarding the applicability of their work to my life. Having taught introductory courses in earth science for over a decade, I have a solid understanding of undergraduate students.

**Academic Misconduct:** It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall

report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/

**Students with Disabilities:** Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614-292-3307, slds@osu.edu; slds.osu.edu.