1. Einstein's favorite  
-pwr of time, death by debt  
-thermonuclear bomb = what debt does to your life  
-Adam Star vs Biff

2. the chicken or the egg: happiness & success

3. Act your wage (or below if u want to win)  
- read Tom Stanley's "the millionaire next door"  
-car

4. Hardened criminals & worse

5. Evil Oxygen  
- money isnt everything but it rates reasonably close to oxygen: you notice it a lot morewhen you don'thave enough, margret thatcher& good samaratin. money is not the root of all evil, it is the love of money  
  
6. amplification  
  
money makes u more of what you already are. most of the good in this world is done by people with money, try to meet with a congressman & change something without money, try to influence anything & you will quickly discover how much more influence you will have  
  
7. Spidy's Uncle  
with great power comes great responsibility,   
  
8. Bogle's folly, & Fama's random walk- Lake wobegone  
  
9. Zigs Target: "If you aim at nothing you will hit it every time"   
you need a plan.   
  
10. Michael's man in the mirror:   
you are your greatest asset & your worst enemy.  
  
11. Back to the future:  
what would i do differently  
-read or listen to some books   
-debt is death, or actually risk, ladder analogy  
-avoid taking advice from fat people & broke people  
-avoid whole life insurance  
-avoid the car "flease" buy a used car for cash.  
-avoid the credit card,   
functional MRI, pain centers  
-avoid mean nasty people & environments, work with nice people & try really hard to be nice & happy, you will do better work & be more successful.  
-experiences over stuff, social relationships  
-make a ton of money & save the world!

***Bobby and Willie!***

Bob and William are students together at the local high school.

Bobs family is poor, but he is an above average student and he applies for a lot of scholarships to small schools and junior colleges.

He likes to fish, and hunt and he likes dogs. In fact, he likes dogs more than women and he has a hunting dog named Sam. Sam is spoiled rotten.

Well, Bob gets a scholarship to a local junior college and he gets a job working part time for a sporting goods store.

He goes to junior college for two years (paid for/free/no debt because he got a scholarship and he works part time) he gets a certification for fixing air conditioners and heaters and gets a job after two years of community college at age 20. He makes 40,000 per year and starts saving 20% of his total pretax income in a Roth IRA. He saves until he is 65 and retires. How much will he have at retirement, assuming:

1. Initial investment = 0

2. Saves 20% of 40, 000 from age 20 to age 65 { hint: each mo saves: 0.2 x 40,000/12}

3. Average rate of return (compounded annually) is 7%

William is an amazing student (top of his class). He likes to fish (like me). His dad is a big shot attorney and urges William to attend IVY league schools BUT he is NOT paying for all of it (he will pay for half of undergrad expenses). William gets accepted to Harvard undergrad (60,000 per year + living expenses = 80,000 per year, dad pays for 40k so he is on the hook for 40k x 4 years for undergrad). William is a superb student but “cannot” work while at Harvard AND get all A’s in pre-law, so he does not work, instead he has student loans. William is truly a great student and he is accepted to Yale law school (best school in nation!) and he takes out loans for two years of law school so he has 2 x 100,0000 for law school

Therefore our great student William ends up with a grand total of:

(4 x 40,000 )+ (2 x 100,000) = 360,000 student loans. William gets a great job right out of law school, but is a junior associate (not a partner) in the firm and is expected to make 80,000 per year until he makes partner and after making partner he will get 200,000 per year. William has a 7% interest rate on his loans.

William marries a beautiful intelligent woman from Boston who expects a nice house, nice car, nice clothes, etc. and so he borrows for a new car(s), new house and he buys himself a big boat (he deserves it after all and he is an attorney). So, William does not get around to saving for retirement until he gets all this stuff paid for and until he pays off his student loans (which have grown to over 400,000). After 5 years at the firm he makes partner, After another 10 years he pays for all these other status artifacts, and then finally after another 5 years the student loans are gone so he has zero debt and zero in retirement savings and he is how old? Well, he graduated at age 18 so that means: 18 + 4 years for college + 2 years for law school + 20 years of paying for status artifacts/paying student loans he is 44 years old. BUT he makes $200,000 as a lawyer (full partner, thank you!) He starts saving like crazy for retirement in his 401k: 20% of his pretax $200,000 income. He saves starting at age 44 until he retires at age 65. How much will he have at age 65 assuming:  
1. Initial investment = 0 (he starts with nothing)

2. Saves 20% of 200,000 from age 44 to age 65 {each mo saves: 0.2 x 200,000/12}

3. Average rate of return (compounded annually) is 7%

Who has more money Bob or William?

Answer: go to <https://www.investor.gov/additional-resources/free-financial-planning-tools/compound-interest-calculator>

**TIME**, one important rascal…..No greater friend, No worse Foe!

**TIME** = The most precious currency we own.

Summary of lecture:

1. Live like a resident (act your wage, or below it!) (Millionaire next door)

2. Pay off your debts (guaranteed tax free return) (Dave Ramsey baby steps)

3. Save a small emergency fund (3 mo of expenses)

4. Save like crazy: Vanguard total stock market index, Vanguard total international stock index and Vanguard total bond market index

5. I think a stock bond allocation of 80-100% stocks plus 0-20% bonds is reasonable for young doctors because you have a lot of human capital (bond like)

6. For the Stocks: 80% total stock index + 20% total international stock index  (vanguard)

7. Rebalance once per year on your birthday to keep asset allocation constant

8. Vanguard index funds! Costs mater! Taxes matter! Fees matter!

9. Advisors are to be treated like Hardened Criminals, be careful!

10. Do NOT try to beat the market, pick individuals stocks, time the market, (losers game), instead buy index funds

11. Dollar cost averaging (put some in every month) and Value averaging (see book, beyond lecture) are great ways to invest into index funds

12. Happy people are more successful, your life is good, be happy. Build social relationships, do good for others (altruism, gratitude, and deep work bring fulfillment) Must Read: The Happiness Advantage, Shawn Achor