Concepts from FIN 303 Applied to Personal Finance

Fin 303
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Outline

1. The personal finance curriculum at CSUN.
2. What are the basic parts of a financial plan?
3. How to calculate net worth.
4. How much do you need to save for retirement?

This presentation shows how you can use techniques from FIN 303 for personal financial planning.

Part 1 introduces the personal finance curriculum at CSUN

Part 2 discusses how the personal financial plan works and lists the basic parts of the financial plan.

Part 3 introduces the concept of net worth and connects it to a company's balance sheet.

Part 4 shows how to use TVM calculations to plan for retirement.

1) The Personal Finance Curriculum at CSUN

- FIN 102
- FIN 302
- Advanced Courses
  - Insurance
  - Benefits and Retirement Planning
  - Investments
  - Taxes
  - (Real Estate)
- CFP

This slide provides general information on our personal financial planning courses but you are not required to know it for the exam.

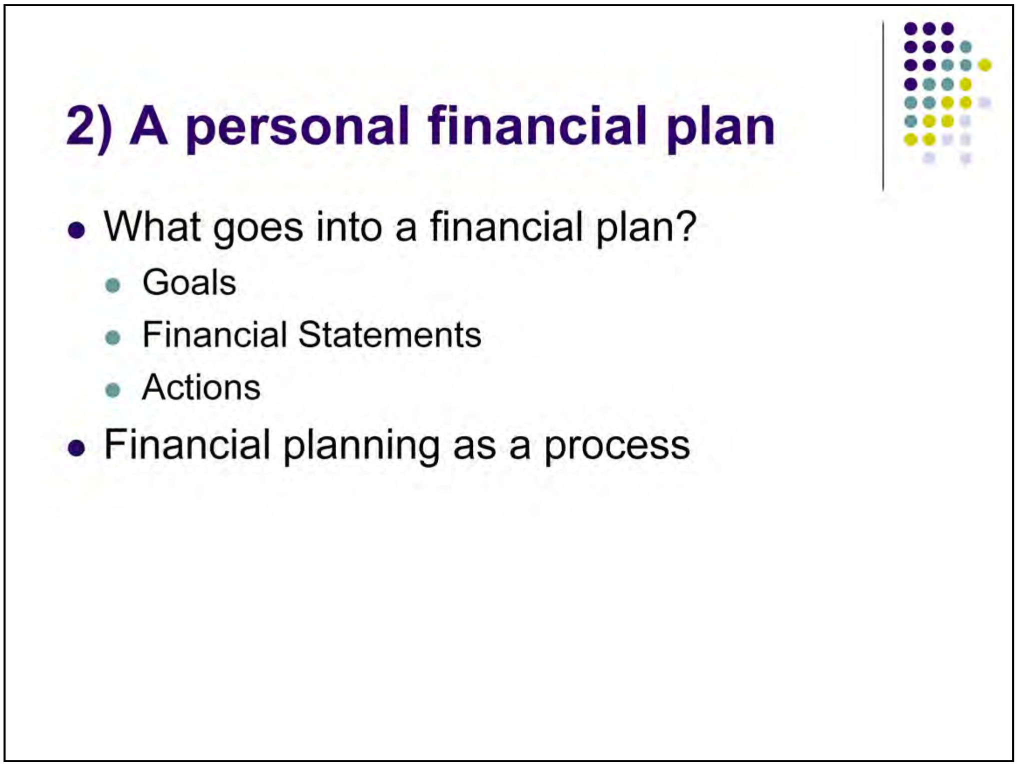
FIN 102 is a GE course designed for all students that provides basic education on personal finance with a focus on skills you will need now as you go through college.

FIN 302 is a GE course designed for all students that provides basic education on personal finance with a focus on skills that you will need throughout your entire life.

In addition, we offer a number of specialized courses that can serve as electives for Finance majors or minor. Individualized courses focus on insurance, benefits and retirement planning, investments (a required course for both majors and minors) and tax planning. In addition, the Business Law Department offers a course in the principles of real estate. While not a finance elective, real estate can be an important part of a financial plan.

For those considering a career in advising others on their personal finance decisions, the Department offers a program leading to the Certified Financial

Planners (CFP) designation. Students interested in a career in financial planning or insurance should contact the appropriate Department advisor.



In an earlier Powerpoint, we went through the parts of a business plan and the business planning process. Individuals also have financial plans to help them with managing their finances.

A key part of the financial planning process is determining your financial goals. It is important to have specific and measurable goals so that you can evaluate your progress towards achieving them.

There are many possible goals. A short-run goal might be to pay off your credit card debt. A medium-run goal might be to save for a down payment on a house. A long-run goal might be to build up enough savings to live off of during retirement.

As with a business plan, individuals have financial statements to guide them in their financial plan. The basic personal financial statement is a budget, which serves a similar role as the income statement for a company. The budget records how much you earn and how much you spend with the difference between the two being the amount you save. The second major financial statement is the statement of net worth, which we'll talk about shortly.

(Continued in the notes)

Given your goals and your current financial position, you then need to list specific actions it will take to achieve your goals. For example, from your financial statements you see that your have $1,000 in credit card debt but your goal is to have no credit card debt. Your actions then would be to not add any additional payments to your credit card and to use some of the savings to pay the debt down. On a later slide, we'll see how a goal of having enough savings for retirement is connected quantitatively to actions you take now.

It's important to remember that financial planning is an ongoing process, not a one-time activity. You'll need to keep track of your actions to see if you are on target to meet your goals. For the credit card example, this is straightforward. Are you paying the debt down each month? How close is the debt to zero? For the retirement example, the principle is the same – is your wealth increasing fast enough to meet your goal by retirement – but the calculation can be more complicated.

There are a lot of details involved in financial planning; no single Powerpoint deck could begin to cover them all. Here are three links that briefly discuss the major concerns addressed in a financial plan. Read through them and know the six areas of financial planning listed in the third set of slides.

Note: While there is a lot of valuable financial information on the web, not all sources are equally good and some are simply trying to sell you a product. Webpages mentioned in class are used to illustrate particular ideas and should not be considered recommendations. Do your research before engaging in any financial transaction!

3) Net Worth

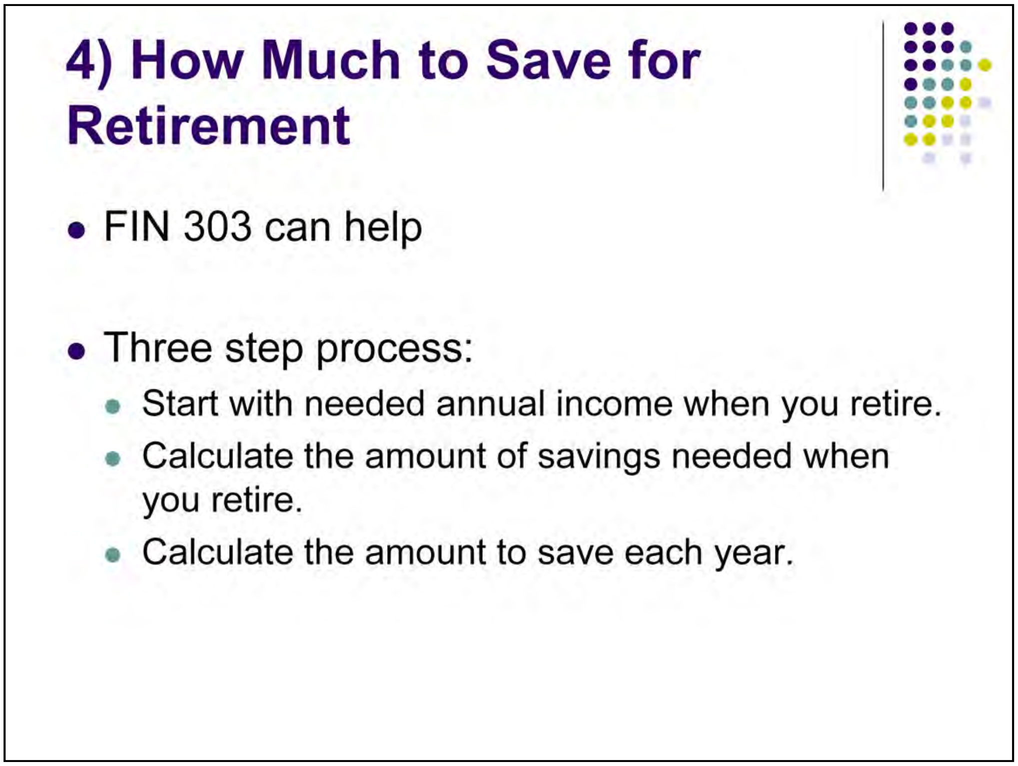
- Similar to a company's balance sheet
- Net Worth = Assets - Liabilities

For a company, the balance sheet summarizes the financial position of the firm at a point in time. As you know, the balance sheet lists the assets and liabilities of the firm with the difference between the two equaling the book value of the firm's equity.

The equivalent financial statement for an individual is the statement of net worth. This lists the assets and the liabilities of the individual with the difference between the two being the net worth of the individual.

For example, an individual owns a house worth $450,000 with a $350,000 mortgage and has $200,000 in investments. The individual's net worth is calculated as

  $450,000
+$200,000
- $350,000
=$300,000



Planning for retirement is an important part of any financial plan. You can use the TVM techniques you learned in FIN 303 to help you plan. We'll set up a simple problem to show you how.

The situation is that we are employed now but we know we will have to live off our savings when we retire. The question is, how much must we save now in order to have accumulated enough money by the time we retire. This is a three step process.

1)Determine how much income our retirement savings much generate each year when we are retired.

2) Determine how much we need in savings when we retire in order to generate that much income.

3) Determine how much we will have to save now in order to have sufficient savings when we retire

The next slide will give a numerical example. In practice, things are more complicated because of uncertainty, taxes and a variety of other factors. These issues are addressed in more advanced classes, but they still rely on the FIN 303 TVM calculations.

An example

- You want your investments to generate $4,000 per month when you are retired. How much must you save each month while you are working?

Say that you need to generate $4,000 per month in retirement and $1,000 will come from social security and you have no other pension. This leaves $3,000 per month, or $36,000 per year, that will need to come from savings. How much savings do you need to have?

If savings earn 4% per year, then you would need $900,000 in savings to generate $36,000 every year. If you plan on running your savings down to 0, and you plan to live 30 years after retiring, you would need $622,513. n=30; i = 4; pv = 622,513; pmt = 36,000; fv=0.

If you have 40 years to save until retirement, and you earn 4% on your investments, you would need to save $6,551 per year . n=40; i=4; pv=0, pmt = 6,551, fv=$622,513.

Of course, if you are targeting running your savings down to 0, it doesn't leave any room if you live longer, or your expenses are greater than expected, or if your investment earnings are smaller than expected. You may want to follow a more conservative strategy, although this will require accumulating more savings before retirement, or having lower expenses after retirement.