

**FINC 3511 Project - Part 2 - Buying a New Car – Due April 4, 2012 by 11:59 pm**  
**Submit the completed project in CourseDen under the heading Project Dropbox.**

This class is “Corporate Finance” but many of the techniques we study (such as time value of money) are directly applicable to personal finance. This exercise is intended to introduce you to calculating payments and locating some of the consumer information available on the internet. While the information pertains directly to purchasing a vehicle, much of the same type of information is available for other major consumer items. Being informed is the key to receiving the “best deal” available whether you are purchasing a stereo system, an automobile, or a home. Always do your homework when contemplating a purchase.

When planning to purchase a vehicle, first narrow your choices to a preferred set. The vehicle chosen is primarily a function of personal preferences, so I can offer little assistance in that area (e.g., some people prefer sports cars while others prefer pickup trucks). You should at least consider the safety and reliability of the vehicle, but these may not be the primary determinants of your choice.

Regardless, you should be aware of several items before entering a showroom. First, get a copy of the dealer’s invoice or other indicator of the price you should pay for the new vehicle. Second, estimate the value of any vehicle you are plan to trade. Third, determine the interest rate you should expect to pay if you finance a portion of the vehicle’s cost. Fourth, understand the “games” that salespeople play. (Remember, that the job of a salesperson is to sell. They are not there to give the vehicles away. Sometimes their compensation is based on commissions or bonuses that may be tied to the sales price of the vehicle. The “best price” for them is the highest price you will pay. This does not make them “evil.” It is simply a fact that you should understand.)

The sites listed in this project are only a few of the ones that are available. I do not guarantee that the information from these sites is the “best” available, but it is helpful. For the purpose of this project, you may choose any vehicle as your intended purchase. (Keep in mind that the project is more useful if you choose a type of vehicle that you may actually consider purchasing in the foreseeable future.) To complete the project, choose a vehicle you wish to “purchase” and follow the steps below. (NOTE: If you have trouble printing any of the pages listed, close your browser. Then, restart the browser, go to the page, and try again to print.)

**STEP ONE:**

List your name and the name of the vehicle you are researching. Briefly explain why you chose this vehicle.

**STEP TWO:**

Although you are not actually purchasing the vehicle, it is good to understand the basic process of negotiating with a salesperson. Several books, magazines, and internet sites give information about the car buying process. For this project, I have given you a short “article” to read and you will need to access information from internet sites. Read the summary, “The Car Buying Process,” that is attached at the end of this project description. Write a four or five sentence paragraph that summarizes the main points from the article.

**STEP THREE:**

Research the safety characteristics of your chosen vehicle. (If you were actually planning to purchase a vehicle, I would also suggest that you consider its reliability record. One of the better sources of reliability information is Consumer Reports. Unfortunately, their internet service is fee based so we will not use it in this course. (However, for around \$4 per month you can access their reliability database. Considering the cost of vehicles today, a \$4 investment is probably warranted when you do decide to buy a car.) Two useful sites for determining the safety ratings of various vehicles are those for the Insurance Institute for Highway Safety (<http://www.iihs.org/>) and National Highway Traffic Safety Administration (<http://www.safercar.gov/>).

First, research the Institute for Highway Safety test results for your vehicle. Go to their internet site (<http://www.iihs.org/>). Click on Vehicle Ratings. Select the make and model of your vehicle, or choose the vehicle class to which it belongs. Click on the model of your vehicle for the tests available and record any results for frontal offset, side impact, and rear crash protection. (If your vehicle is not shown, it has not been subjected to these tests. IF YOUR VEHICLE HAS NOT BEEN TESTED, EITHER: (a) report the results for an older model of your vehicle; or, (b) report the test results for another vehicle made by the same manufacturer which is closest in construction to your choice.)

Second, go to the NHTSA site (<http://www.safercar.gov>). Click on “Search 5-Star Safety Ratings” and find your vehicle by choosing the make/model/year search option near the top of the page. Record the frontal crash and side crash ratings for your vehicle. (NOTE: 5 stars is the best rating.) (If your vehicle is not listed, choose the nearest available model year or the nearest vehicle by the same manufacturer.)

Summarize in a few sentences the safety characteristics of your vehicle. Indicate whether these ratings would affect your decision if you were really planning to buy?

#### **STEP FOUR:**

Get the dealer’s invoice for the vehicle you would like to purchase and get an estimate of the value of your trade-in. There are numerous sites which give “Dealer Invoice” information. Some offer free information. Others charge varying fees. We use Kelley Blue Book’s site since it is free (another free site is [www.edmunds.com](http://www.edmunds.com)). I cannot say that it is completely accurate.

Go to the Kelley Blue Book internet site (<http://www.kbb.com/>). Click on “What should I pay for a new car?” Choose “by make” and choose the make and model for your vehicle. Select options and then click on “See price now.” This will show you the “Fair purchase price.” Now click on “See price range.” Click the button beside “Asking prices” to see the dealer prices. Now record the “fair purchase price,” the invoice price, and the MSRP.

Return to the initial page of the Kelley Blue Book internet site (<http://www.kbb.com/>). Click on “What is my current car worth?” Select the year, make, and model of your trade-in vehicle and click “Next.” (Your trade-in vehicle is the vehicle you currently drive. If you do not have a vehicle, choose a vehicle driven by a relative or friend.) Click on “Trade-In Value.” Scroll down the page and click on “get Blue Book Value.” Enter relevant information about your vehicle (trim, equipment, condition). After you have entered all information, click “see trade-in value.” Record the trade-in value for your vehicle for excellent, good, and fair conditions.

Return to the home page of KBB. Choose “What should I pay for a used car?” Enter your car’s information and then click “next.” At the next page, click “see price now.” Enter the car’s style and options and then click “choose price type.” Click “suggested retail” and then click “get Blue Book Value.” Record the suggested retail value of the vehicle.

One site that will help us determine a reasonable estimate of the price we should pay for the new vehicle is CarsDirect.com ([www.carsdirect.com](http://www.carsdirect.com)). The site allows you to actually purchase a car online and will give you a firm price quote for most vehicles. The price is usually a very good “ballpark figure” of the price you would have to pay for the vehicle at a dealer. To get a “CarsDirect” price go to <http://www.carsdirect.com>. Select the make of the vehicle and click go. Choose the make of vehicle and then enter your zip code if asked and click continue. Click “Continue.” Choose the type vehicle you want and on the following page choose all of the options that you previously chose for your vehicle. Record the MSRP and “CarsDirect Price” for the vehicle. (In some cases the “CarsDirect Price” is called a “target price.”) The “CarsDirect” price (or target price) is the price for which they are willing to sell the vehicle. (NOTE: Kelley Blue Book [www.kbb.com](http://www.kbb.com) provides its “New Car Blue Book Value” which is meant to indicate what the “average” actual price paid is for the new vehicle. Edmunds [www.edmunds.com](http://www.edmunds.com) gives a “TMV” price estimate. This is the “True Market Value” based on what others are paying “on average” for the vehicle. You prefer to do better than “average.”)

The Dealer Invoice and Retail prices for the new vehicle and the Trade-In and Retail values for the used vehicle generally vary substantially. Usually you will find that the dealer will initially try to get you to pay as close to Retail for the new car as possible, while offering you as little as possible for your vehicle. This is where negotiating skills are valuable. If you use the “CarsDirect” price as your expected price for the new vehicle, the trade-in value of your vehicle is a good estimate of what you should expect the dealer to allow you for your trade-in vehicle. In effect, you are operating on “wholesale” prices for both vehicles. (However, you can sometimes get a better price than listed on “CarsDirect.” You should only use this price as an estimate.)

Now, calculate an estimate of the “drive-out” net cost for the vehicle.

#### **TAXES**

The difference in the price you pay and your trade-in value is taxable. (Note: Cash rebates are generally treated as “down payments,” so they do not lower your tax basis. “Dealer incentives” are usually considered a price discount and do lower your taxes.) We will calculate taxes on the difference in the trade-in value for your used vehicle from the “CarsDirect” price for the new vehicle. (Keep in mind that the dealer’s documentation will generally start from the MSRP price, so your trade-in value will show up as an “inflated amount” to account for the “discounted” price of the vehicle.) Multiply the difference in the “CarsDirect” price and the trade-in value by 0.07 to calculate the sales tax. We are using a 7% sales tax rate, but it is lower in some Georgia counties.

#### **DOCUMENT PREPARATION AND TAG AND TITLE (etc.)**

Most dealers will charge a document preparation fee and title, tag, etc. fee. The document preparation fees vary across dealers. The tag and title fee is usually less than \$50. For this project, assume that the total of all of these fees is \$500. (Watch these fees carefully. They vary from dealer to dealer.)

#### **PAYOFF FOR TRADE-IN**

Remember that you will have to add into the “cost” any payoff that you have for your trade-in. For this project just assume that you still owe the equivalent of one-half of the trade-in value for your used car.

#### **STEP FIVE:**

Get information regarding current loan rates for automobile purchases. Go to the CapitalOne Auto Finance site (<http://www.capitaloneautofinance.com/Loan/Home/Default.aspx>). Click on “Learn more about new auto loans” under the heading “New Auto Loans.” DO NOT click on “Apply Now.” Record the rates listed for “48 or 60 months” and “66 or 72 months.” (Always check to see if the car manufacturer is offering special financing rates. The special rates may be better than those available elsewhere. However, note that sometimes if you take special financing offers, you do not get the cash rebates or dealer incentive discounts.)

#### **STEP SIX:**

Use the pricing and loan rate information you have to estimate the monthly payments you would make if you financed the amount calculated in STEP FOUR. Estimate your payments based on financing the balance for 48, 60, 66, or 72 months. (Although I never recommend that you finance a vehicle for over five years.) Use the interest rate found in STEP FIVE and interest rates 1% and 2% higher than that from STEP FIVE. This means you will calculate twelve payments. (NOTE: There are several sites with loan calculators available. One can be found at the CapitalOne Auto Finance site in STEP FIVE on the page with interest rates. It is found by clicking on “Calculate” your new car loan payment.)

#### **FORMAT – Project Part Two**

**The format you should follow for your report to me is shown on the next page. Please submit the completed project through CourseDen under the heading Project Dropbox.**

**YOUR NAME**  
**FINANCE 3511 – Class Section**  
**DATE**

**STEP 1. Vehicle Name and Why It Was Chosen**

**STEP 2. Car Buying Process Summary**

**STEP 3. Vehicle Safety Summary and Discussion**

**STEP 4. Pricing Information**

**NEW CAR**

**Total Dealer Invoice**

**Total Dealer Retail**

**USED CAR**

**Retail Value**

**Trade-In Value**

**CALCULATION OF “DRIVE-OUT” PRICE**

**Show your calculation of the price based on the information given to you in STEP FOUR of the project. (An example is shown below.)**

**EXAMPLE:**

CarsDirect price (new vehicle)	\$22,400
Subtract Trade-in value (old vehicle)	<u>\$10,000</u>
Equals Net Difference	\$12,400
Plus Taxes (22,400-10,000)(0.07)	\$ 868
Plus other fees (assumed to be \$500)	<u>\$ 500</u>
“Drive-out” net price (not including trade-in payoff)	\$13,768
Plus payoff on trade-in (assume ½ of trade-in value is the payoff)	<u>\$ 5,000</u>
Amount to be financed (assume no down payment beyond trade-in value)	\$18,768

**STEP 5. Interest Rates**

**List the Current Interest Rates for New Vehicle Purchase from Dealer from CapitalOne.**

**STEP 6. Calculate the payments. Example: Based on \$18,768 financed. (Use the current rates you found in Step 5 in your project, not the ones below.)**

<b>Payments</b>	<b>Current rate</b>	<b>+1%</b>	<b>+2%</b>
	<b>5.54%</b>	<b>6.54%</b>	<b>7.54%</b>
<b>48 months</b>	436.82	445.43	454.14
<b>60 months</b>	358.84	367.57	376.43
	<b>6.44%</b>	<b>7.44%</b>	<b>8.44%</b>
<b>66 months</b>	338.45	347.37	356.43
<b>72 months</b>	314.95	323.96	333.11

## The Car Buying Process

Various “methods” are used by car salespeople. In general, however, a description of the process can be condensed into a simple set of steps (which are actually taught to many salespeople during their training sessions). The number of steps varies according to the source, but the basics are virtually the same. Remember, car salespeople are not “evil.” They are simply doing their job. To get the “best deal,” you must also work.

### **Step One: Establishment**

Most people are more likely to buy if they feel comfortable with the salesperson. For that reason the salesperson is urged to quickly establish a “relationship” with you. A firm handshake, name exchange (usually including the repeating of your name), and an introduction to any other parties with you is compulsory. A good salesperson will pay equal attention to spouses (or significant others), but often will pay less attention to someone brought along to “help you” (unless the other person is a party to the deal such as a co-signer).

### **Step Two: Investigation**

Here the salesperson will try to determine your interests. A good salesperson will ask questions to assess your tastes, financial characteristics, and intentions regarding time of purchase. Beyond an assessment of your tastes, questions may include some of the following. How much do you want your payments to be? How much do you want to pay? How much do you want for your trade-in? How much do you plan to pay down? (Usually the less information you give at this stage, the better off you will be.)

### **Step Three: Presentation and Demonstration**

This step usually starts with the isolation of the vehicle. This is done to focus your interests. The salesperson will often lead you around the vehicle pointing out its styling, safety, and convenience features. This is to let you know as much about the vehicle as possible before you drive it.

The demonstration phase consists of your driving the vehicle. Usually, the salesperson will go with you. However, many dealers will let you drive the vehicle alone if you provide a copy of your driver’s license and proof of insurance. Driving the vehicle without the salesperson allows you and any others in your party to talk openly about what you like about the vehicle without fear that it will later be used against you in negotiations. During this phase carefully check the sticker price and look for any “dealer add-ons.” Common add-ons include fabric protection, paint sealant, dealer prep, etc. Most of these items can be negotiated down to zero if the vehicle is in sufficient supply.

### **Step Four: AIf I, Would You?@ (Negotiation and Write-up)**

If you indicate that you want to think about the purchase or leave to drive a competitor’s vehicle, the salesperson will usually try to move negotiations forward by asking if you are willing to buy the car today if you are offered a great deal. This is the true start of the negotiation phase. If you are really interested, tell them that you will buy if the deal is good enough. Otherwise, you usually will not be offered the “best deal possible” because the dealer is afraid you will take the offer elsewhere to use as a bargaining chip.

Often at this point the salesperson will ask for the keys to a potential trade-in vehicle. Be smart regarding what you leave in a vehicle. Although most dealers will not allow employees to rifle through your belongings, they are trained to notice all that is “in plain view.” Don’t be surprised if after the test drive the salesperson begins to talk about fishing or camping if you leave a copy of Field and Stream in your seat. (Sometimes copies of flyers or printouts with information for competing vehicles may be strategically left in view to let the dealer know that you are not “locked-in” on their vehicle.) Often, you will not see your keys again for a while. Dealers seem to think that holding your keys increases your commitment. If you start to leave, it also gives them time to send the manager to ask what is wrong or try to switch you to a different salesperson to try to help restart negotiations. If this bothers you, remember that the keys are yours and you have every right to ask for

them. If the salesperson returns and says something about the value of your car, the test drive is over. Ask for the return of your keys. If they are hesitant, refuse to negotiate until the keys are in your hands.

In most instances, expect that the salesperson will constantly go back and forth to the “sales manager” for approval in the negotiation stage. Although some of this is necessary, much of it is grandstanding. Again, this makes it appear that the salesperson is “on your side” since they are battling so hard with the sales manager to get you a great deal. Also, it is not uncommon during negotiations for the “sales manager” to make an appearance and tell you how tough a negotiator you are. Do not fall prey to this form of flattery. Stick to your guns. One strategy often used by customers is getting up to leave because they are tired of negotiating. Remember, this only works if you are willing to walk away. If your bluff is called and you stick around, the salesperson knows that you are interested and probably will pay a price close to that currently “on the table.”

One method of negotiation (which some dealers truly dislike) is to negotiate only on the basis of the “bottom-line” or “drive-out” price. To deal in this manner, you need to know all “required” fees such as sales taxes, and license and inspection sticker fees. Always be wary of any “add-in” fees that often “appear” when the deal is written-up. (A common example is document preparation. This basically is a way for the dealer to increase the profit on the vehicle. Document preparation generally should not be a separate fee if you are negotiating on a “drive-out” price basis.)

Finally, never sign anything until the deal has been clearly delineated. When the written deal is placed in front of you, ask questions about anything that appears different from what you negotiated. Sign the documents only if you are completely satisfied that the numbers reflect your negotiations. (Often I sign only after adding a line that the deal is contingent upon my receiving financing terms which I deem acceptable. In effect, you can always still walk by indicating that you are unhappy with the financing terms offered. This also makes the dealer more inclined to offer you the best interest rate possible.)

### **Step Five: Closing**

At this point you are usually escorted to the Business Office (or finance manager). Often the first loan rate you are offered is not the best available. If you have done your homework and checked rates from other sources, you will know. If you are offered a rate you deem too high, simply tell the finance representative that you can do better elsewhere. Usually, they will “try again” until they locate some “special rate” which is at least equivalent to what you can find elsewhere.

At this time you are generally also offered some range of credit life, health, accident, and disability insurance. Usually the rates for such products are very high. You can often get better rates (or higher coverage limits) by visiting your insurance agent. Also, you may be covered by other policies to an extent which would make these products redundant. However, you must make this decision.

Next, you will usually also be offered an extended warranty contract. There is a question as to how necessary the contract is, but this is a decision that only you can make. Keep in mind the price of these contracts is negotiable. On my most recent purchase, the initial quoted price was \$2,100. The final agreed upon price was \$895. You may also be offered tire warranties, service contracts, etc. Again, the “true value” of many of these “add-ons” is open to debate. Do not allow yourself to be pressured into buying something you do not want.

At this point, the “final” documents will be printed and you are asked to sign. Again, read carefully and be sure that the documents reflect exactly what you expected. If there are questions, clear them up before you sign.

### **NOTES:**

Never change from a plan to purchase to a leasing arrangement simply to have lower monthly payments. A lease may make sense but you should carefully consider this alternative.