**Assignment 2**

Assignment 2 is due after Lesson 11 and is worth 20% of your final mark. You should begin work on Assignment 2 early, and periodically return to and work on aspects of it as you progress through the course. Review all parts of Assignment 2 before you begin.

Assignment 2 is a comprehensive case analysis based on the [Allen Family Scenario](#Allen_Family).

When your assignment is complete, you will have prepared a comprehensive financial plan for this family, similar to Griffin Family Financial Plan. (See Assignment 2 page for PDF of the Griffin Family Financial Plan.)

**General Instructions**

Prepare your assignment in a word processing file and follow the instructions on the Assignment page to upload your file when you are finished and ready to submit it.

1. Gather and organize relevant qualitative and quantitative information. Outline the cost and timing of all goals. Make sure financial statements are as complete and accurate as possible (e.g., loan payments, balances). Refer to [Planning Steps](#Steps)for details.
2. Analyze the information, including financial statement ratio analysis. Comment on tax planning, cash and debt management, risk management and insurance, investment management, retirement planning, and estate planning issues. Refer to [Planning Steps](#Steps)for details.
3. Align financial resources and goals. Work out a budget (for at least 5 years) that includes the cost and timing of the Allen family’s goals. Make adjustments to net worth when required. Refer to [Planning Steps](#Steps)for details.
4. Make overall recommendations to the Allen family that will help them achieve their goals and improve their financial situation. Refer to [Planning Steps](#Steps)for details.
5. Address the Allen family’s misconceptions and answer any lingering questions they may have about their financial plan.
6. Round all final amounts up to the next dollar.
7. State any reasonable assumptions that you make.

Your submission for Assignment 2 should be 12 to 15 pages long, including calculations.

**Creating a Plan**

A financial plan is essentially a road map for achieving personal financial goals. It is a strategy that shows individuals how to achieve their goals in line with their financial resources. Creating a plan requires four steps, including

1. gather and organize all relevant information
2. analyze the information
3. align financial resources and goals
4. make recommendations for achieving goals and improving financial management.

**Planning Steps in Detail**

**Step 1: Gather and organize relevant information**

Before you can formulate a plan, you must determine the financial resources that are available to help activate the plan and achieve the goals. The balance sheet and income statement help assess an individual’s financial resources; these financial statements were explained in Lesson 1. While gathering financial information, always assess its accuracy and completeness.

Both qualitative and quantitative information is provided in the [Allen Family Scenario](#Allen_Family) and supporting exhibits. Some information will be ready for you to use; other information will have to be organized and summarized.

Qualitative issues concern the individual’s goals and risk tolerance. Personal goals drive the plan, and the overall purpose of creating a plan is to devise a strategy that will help achieve those goals. In attempting to fund goals, individuals will have to make investment decisions. Investment choices will be influenced by the individual’s risk tolerance (ability, willingness, and unique circumstances) to go after higher returns, where needed, with increased risk.

Relevant quantitative information may be found in such places as insurance contracts, tax returns, investment reports, statements issued by employers such as pension plan documents, bank records, and existing legal documents such as a will. It is critical to construct a personal balance sheet and income statement (also known as a personal cash flow statement). While gathering financial information, one should always assess the accuracy and completeness of the information.

**Step 2: Analyze the information**

This step is a two-tiered process. On one level, the financial information contained in the balance sheet and income statement will be evaluated using the ratios and techniques identified and discussed in the course. On another level, all relevant financial information will be assessed with a view to identifying issues that could be better managed. The issues to be considered are related to the general areas of tax planning, debt and cash management, risk management, investment management, retirement planning, and estate planning.

The following is a summary of some key strategies under each of these general topic areas. Consider the following key strategies as you analyze the [Allen Family Scenario](#Allen_Family).

***Tax***

* Make maximum use of credits and deductions.
* Split income without invoking attribution rules.
* Defer income by making maximum use of RRSPs, RRIFs, and other registered products.
* Defer capital gains on investments.
* Avoid taxation on investment income through the use of TFSAs.
* Subject to risk tolerances, select investments that have tax-favoured returns such as eligible dividends and capital gains.
* Set up a bona fide loan with family members.
* Consider second generation income on investments.
* Income splitting after retirement through the use of spousal RRSPs.

***Debt and cash management***

* Minimize service charges.
* Do not keep an excessive amount invested in low-return savings accounts.
* Choose the type of credit card that offers the desired features at the lowest cost.
* Use cheaper debt to pay off high-rate debt such as credit card balances.
* Substitute deductible debt for non-deductible debt.
* Use strategies to reduce the interest cost of loans.

***Risk management***

* Identify potential risks and the economic loss that could result.
* Identify the frequency and severity of potential risks.
* Consider strategies for managing the significant risks.
* Assess the features of existing insurance contracts (limits, exclusions, and deductibles).
* Identify any inadequacies in existing life, medical, disability, property, and liability insurance coverage.
* Suggest the type and amount of any needed additional coverage.

***Investments***

* Establish individual risk tolerances.
* Assess the kinds of risks to which the current portfolio is exposed (interest rate, inflation, business, financial, liquidity, market, political, exchange rate, call).
* Assess the suitability of investments in light of risk tolerance.
* Establish investment objectives—identify the motive for trying to accumulate greater wealth or cash flow.
* Assess the current asset allocation of the portfolio and suggest a more appropriate allocation.
* Suggest ways to better diversify the investment portfolio.
* Suggest specific types of investments that would better meet personal needs and objectives, and provide a better risk-return payoff.

***Retirement***

* Identify the sources and amounts of retirement income (government, employer, sheltered, and non-sheltered investments).
* Suggest appropriate strategies for deregistering/rolling over RRSPs.
* Identify retirement living expenses.
* Calculate any retirement income shortfall.
* Develop a strategy to cover any shortfall.
* Suggest possible strategies for generating more income in retirement.

***Estate***

* Determine if a valid and up-to-date will exists.
* Determine if appropriate guardians, powers of attorney, and executors are named.
* Determine if beneficiaries are named in RRSPs and insurance policies.
* Consider the appropriateness of trusts to care for special needs.
* Suggest suitable types of trusts that could be used.
* Assess whether holding property jointly or in common is appropriate.
* Develop strategies to minimize probate fees.
* Consider a living will/personal directive.
* Consider letters of last instructions.

**Step 3: Align financial resources and goals**

Create a budget to support and accompany your plan. Forecast expected income, expenses, and surplus cash. Insert the costs of goals into the budget in the proper time frame. If the goals throw the budget out of balance, adjustments must be made. Another approach is to prioritize goals and to limit oneself to a subset of the entire wish list.

Remember that if you fund goals from cash or investments, you must adjust net worth. When cash or an investment is liquidated to purchase an asset (e.g., a new car) there will be no change in net worth; if the finances are expensed for something like a vacation, then net worth will be reduced.

**Step 4: Make recommendations**

The last step is to bring all identified problems, opportunities for improvement, and a proposed budget together in the form of a recommended strategy. The resulting plan outlines the things that can be done to achieve the individual’s goals and better manage tax, investment, cash, debt, insurance, retirement, and estate issues. In the context of an actual financial planning relationship between a client and a planner, both parties will work at the strategy and fine-tune until it is acceptable and feasible.

**Assignment 2: The Allen Family Scenario**

**Background Information**

Greg Allen (39) and his wife Sharon (39), live with their children Tracy (15) and Daniel (12) in a neighbourhood of middle- to high-income homes in Capital City. Sharon works at home in a small Internet-based travel business she started 4 years ago. She earns $12,000 per year, after tax. Greg is a carpenter and frequently works on high-rise buildings. He earns $65,000 per year, after all deductions.

Greg’s father is retired and Greg’s mother is not able to function independently, so his father must attend to her needs for much of his day. Greg supports his parents by providing them with a part-time helper, reflected in the parental care section of the Allen family’s personal expenses (see [Exhibit 1](#Exhibit_1)). Greg does not see this changing in the foreseeable future.

Greg and Sharon have not done major work on their house since they purchased it 12 years ago, and they want to build a new garage as soon as possible. They feel the work can be done for $16,000, spread evenly over the next 2 years, if Greg does some of the work himself. They would like to pay for the cost by cashing in an investment. The garage is an important goal, especially for Greg who wants to use part of it for a workshop. The house is fully insured with a named perils policy and the contents are covered for actual cash value. The family purchased this coverage through Greg’s union because it was the cheapest available.

Greg and Sharon are very interested in providing their two children with a good university education. A local university advises that the cost of tuition and student living expenses, currently $8,000 per year, will increase at least with inflation. Greg feels the children will value their education more if they contribute to the cost, so he is committed to providing a fund sufficient to pay half of the cost for each child (in actual dollars at the time it is needed), for each year the child is enrolled in a 4-year university program. He wants this entire fund available when the first child begins university. As is customary, the Allen children will start university at the beginning of the year they turn 18; tuition and living costs must be paid at the beginning of each year.

The Allen family has always driven used cars. They put a lot of miles on their vehicles because Greg often works out of town and prefers to drive his own car in case he needs to get home in a hurry. He is also able to load his own tools in the trunk and back seat when he travels by himself. The family’s last car was purchased 4 years ago, and they will be making their last monthly payment of $306 next week. Greg has been talking to a dealership about buying a new car at a cost of $32,500. He was offered $10,000 for the old car on trade, which seems to him like a reasonable deal. Greg would be financing the balance of the purchase over 7 years at a rate of 4.5% with monthly payments and interest compounded semi-annually.

Greg has been offered the chance to purchase a used vehicle from his employer. The car is 2 years old and the cost is $20,000. Greg’s employer has offered to carry the loan with no down payment required. Greg will make bi-weekly payments for 5 years with interest being compounded monthly. The interest rate is 5%.

The family lives in a province where the total sales tax (GST/PST) is 7%. Greg would like to buy a new car but he thinks the company offer will result in lower monthly payment.

Greg carries car insurance with a deductible of $500 and liability coverage of $250,000.

Unlike most of their friends, the Allens take no real vacations and only manage to get away camping for a couple of days in the summer. They want to take an extra 2-week vacation each year for the next 3 years, while their children are still at home. They estimate the cost of such a vacation to be $7,500 per year.

**Cash and Debt Management**

Greg keeps all his cash in a chequing account because he says “you never know when you might need it.” Greg also looks to his 5-year locked-in GICs and Canada Savings Bonds for emergency funds. Interest on these investments is paid at the end of the term. Sharon’s cash is in a savings account. Greg’s chequing account has a $20 monthly fee and pays no interest. There is also an additional charge of $1.50 for any cheques that he writes.

For credit purposes, Greg has a gold card and a companion card for Sharon. The fee is $150 a year for the main card and $75 for Sharon’s card. The yearly interest rate is 19.9%. The card gives travel rewards and has an insurance waiver for rental vehicles. The Allens never carry a significant credit card balance because they do not like debt.

When Greg and Sharon bought their home 12 years ago, they opted for a 15-year amortization period so the home would be paid off as soon as possible. The payment schedule was heavy, but the additional income from Sharon’s business allowed them to continue to make the scheduled payments. They would like pay the mortgage off soon.

The mortgage balance was $28,972 when the mortgage term expired last week. The Allens are negotiating the renewal now at the new and lower rate of 6.00%. They would like to pay it off in 2 years, instead of the 3 that remain. They would like to make semi-monthly payments (twice per month). (They cannot remember what their new monthly payments would be; the old one was $893.) The house cost $130,000 and it has appreciated at 3.25% per year. While the value of the house is expected to continue to grow at this rate, future inflation is expected to be approximately 2.50% a year.

**Risk Management and Insurance Issues**

There is a very high risk of accidents in Greg’s work. Safety improvements have resulted in fewer accidents, but any accidents are serious. Despite the risk, the company does not offer any disability coverage because accidents are so infrequent. The company does have a 3-month sick leave provision. Greg feels adequately protected because he has liability coverage against accidents in his homeowner’s package.

Greg’s employer provides optional group life insurance in multiples of an employee’s yearly salary, to a maximum of three times gross salary. Greg has purchased coverage of $200,000, twice his annual gross salary, although he could take a maximum of $300,000. Greg and Sharon are not sure if they are carrying the correct amount, or type, of life insurance.

Greg and Sharon have discussed expected costs in the event of his death. They feel that personal expenses, excluding loan payments, would drop to about 75% of current levels if either one of them were to die. In 6 years, those expenses would drop to 50% once the last of the two children reach 18 and leave home to go to university. They foresee this condition would last until Sharon’s death in about 45 years after that. Sharon would continue to live in their home and they feel she and the children should have the new car and the new garage renovation completed. The education fund would also be a necessity. Sharon would probably be in a 25% average tax bracket after Greg’s death.

Given the projected expense reductions, they see little need to insure against the event of Sharon’s death since Greg would continue to work.

**Investments**

In addition to a pension plan through his employer (see [Retirement](#retirement)) Greg has

* $15,000 in his chequing account
* an RRSP
* $10,000, 10-year government bonds with a coupon rate of 5.00% (semi-annual payments), a current market interest rate (yield) of 6% exists at the present time, and 6 years left to maturity.

Sharon has a savings account with a balance of $1,800. The family’s assets and liabilities are shown in [Exhibit 2](#Exhibit_2). When they purchased their home 12 years ago, they also decided to commit themselves to RRSP contributions. Since then, Greg has contributed $2,000 at the end of each year to his RRSP. They decided that Sharon does not earn enough to contribute to an RRSP. Greg’s RRSP has grown at an annually compounded rate of 5% over the 12 years. In the future it is expected to grow at 6% (see [Exhibit 3](#Exhibit_3)). The RRSP is invested in the BlueBell Canadian Fund. Greg liked the idea that it was a deferred sales charge fund, so he also purchased some for his non-registered account. His latest statement from BlueBell shows that his non-registered holdings are now worth $8,450. The statement also pointed out that the fund has a “beta” of 1.26. Greg doesn’t know the significance of that, but it sounds important.

The Canada Savings Bonds were bought through a payroll deduction plan at work, where a loan is provided by his employer. The payroll deductions are used to repay the employee loan.

**Retirement**

Greg wants to retire when he is 60, and with enough money to provide for 25 years of post-retirement income. Retirement is a high priority, as he sees his career as a young man’s job. Greg feels that he and Sharon will require an annual net income of 60% of their combined net incomes (currently $77,000 as shown in [Exhibit 1](#Exhibit_1)) to maintain their desired retirement lifestyle. While he and Sharon could continue and expand the Internet business after retirement, they really do not want to, unless it is necessary. Both Greg and Sharon would take CPP when they each reach age 60 (21 years from now for both of them). They expect they will be in a 25% average tax bracket at that time with minimal income from CPP and their investments.

Greg’s employer has provided a defined contribution pension plan for the past 11 years. All contributions are done at the end of a year (ordinary annuity). An employee can contribute up to $6,000 per year and the employer will match the employee’s contribution to a maximum of $3,500 per year. Greg contributed $2,000 in each of the first 2 years that the plan was available. Every year since then, he contributed $3,500. The plan has earned a compound average rate of 5.25% per year since inception. The future rate of return is expected to be slightly higher (see [Exhibit 3](#Exhibit_3)). Greg plans to continue to contribute $3,500 of his own money until he retires. His contributions are deducted at source. Once Greg retires he plans to withdraw equal yearly payments for the next 25 years and expects the pension plan to earn 2% annually.

For planning purposes, Greg considers that only the money in his employer pension plan, CPP, and RRSP (BlueBell Equity Fund) will be used for retirement purposes. It is very likely that they will have other financial assets by the time they retire, but they will use these for the extras, such as trips and maybe even health care.

Hint: In order to calculate the annual savings amount needed from now until retirement for the Allens, follow the goal-based retirement planning worksheet (textbook Chapter 9). Their CPP will reduce the annual shortfall in pension income during retirement. For his RRSP and employer pension plan, calculate their FVA’s as at the date of retirement—these will become part of the lump-sum needed at the start of retirement (PVA) to cover some of their pension income shortfall. Because of Greg’s (projected) RRSP and employer pension plan values, they will have to save less each year to meet the lump-sum amount (PVA) needed at the start of retirement.

**Estate Issues**

One of Greg’s main concerns is caring for his parents. He worries that if anything happens to him, as the only child, his parents will not have the extra income of $6,000 a year that he provides to them. Greg estimates that he will probably continue to subsidize his parents for the next 15 years.

Greg is also concerned about his mother’s inability to look after her investments if anything were to happen to Greg’s father. While Greg is not as keen on managing his own investments, his father actually is and this is not a problem during his lifetime. Since Greg’s father is interested in finance, Greg named his father as executor of his own will when he and Sharon got married. A great deal has happened since then.

**Exhibit 1**

**The Allen Family**

**Cash Flow Statement (for prior year – to be updated)**

|  |  |
| --- | --- |
| **Income** (net)  Greg  Sharon | 65,000  12,000 |
| **Total** | **77,000** |
| **Expenses** (yearly) |  |
| Housing: |  |
| Mortgage payments |  |
| Property taxes | 3,000 |
| Property insurance | 1,200 |
| Maintenance | 3,000 |
| Utilities (heat, phone, etc.) | 6,500 |
| Automobile: |  |
| Payments |  |
| Gas, insurance, repairs | 4,445 |
| Parental care | 6,000 |
| Health and hygiene | 4,500 |
| Groceries | 4,000 |
| Clothing | 3,500 |
| Miscellaneous (charitable donations, gifts, etc.) | 9,000 |
| RRSP contribution | 2,000 |
| Leisure and travel | 4,000 |
| **Total Cash Outflow 1** |  |
| Surplus (deficit) |  |

1 Does not include all scheduled payments

**Exhibit 2**

**The Allen Family**

**Balance Sheet (to be updated)**

|  |  |  |  |
| --- | --- | --- | --- |
| Assets | **Greg 1** | **Sharon 1** | **Combined** |
| **Liquid** |  |  |  |
| Chequing account | 15,000 |  |  |
| Savings account |  | 1,800 |  |
| **Investments** |  |  |  |
| Registered—RRSPs |  |  |  |
| BlueBell Canadian Equity Fund | 24,000 |  |  |
| Non-registered |  |  |  |
| Government of Saskatchewan bond | 10,000 2 |  |  |
| Canada Savings Bonds | 5,200 |  |  |
| GICs 3 | 8,000 |  |  |
| BlueBell Canadian Equity Fund | 8,450 |  |  |
| Personal |  |  |  |
| Residence 4 |  |  | 130,000 |
| Household furnishings |  |  | 35,000 |
| Car |  |  | 8,500 |
|  |  |  |  |
| Liabilities |  |  |  |
| Current |  |  |  |
| Credit cards—overdue |  |  |  |
| Line of credit—Sharon’s business |  | 1,800 |  |
| Personal loans—car |  |  |  |
| Long-Term |  |  |  |
| Mortgage 5 |  |  | **100,000** |
| **Total Liabilities** |  |  |  |
|  |  |  |  |
| **Net Worth** |  |  |  |

1 Greg and Sharon have their investments registered in separate names

2 Par value

3 Just renewed (non-cashable i.e., locked-in) for 5 years

4 Historic cost

5 Original value

**Exhibit 3**

**The Allen Family**

**Other Financial Information**

|  |  |  |
| --- | --- | --- |
|  | **Greg** | **Sharon** |
| CPP death benefit | 2,500.00 | 800.00 |
| Maximum CPP benefit at age 65 (current, but indexed to inflation) | 801.00 | 165.00 |
| Expected inflation rate | 2.5% | |
| Expected average, pre-tax, nominal return on all sheltered and unsheltered investments including employer pension plan | 6.0% | |
| Estimated funeral expenses | 10,000.00 | |