Project 2 – Excel: Education Cost Plan Summary

Overview

For this project, you are to prepare an "Educational Cost Plan Summary" in Excel (workbook consisting of five worksheets). In the process of doing the project workbook, you will make decisions about what schools you plan to attend, whether you will live on campus, at-home, or off-campus not at home, what expenses you will incur, how many full-time and part-time hours you will work while in college, and what type of educational loan you may want or need. Much of the information you will need to complete the project can be found on the Web, but some of it you will need to provide on a trial basis. When you have completed the project, you will have a hypothetical set of college expenses, employment income, educational resources, and loan repayment information that can be used to get you thinking about how you plan to pay for your college education. When you complete the project, it should be saved as "Project_2_First_Last" (replace "First" and "Last" with your full name) in Excel format.

The workbook will consist of five worksheets entitled: Educational Cost Plan Summary, College Expense Plan, Employment Income Plan, Educational Resource Plan, and Loan Repayment Plan. Each worksheet will be used to calculate and display information relevant to the title of that worksheet. Information calculated on one worksheet should not be re-calculated on another worksheet. Instead, information should be shared across the workbook by using cell references that reference cells across worksheets. All tables and figures on worksheets will be formatted as shown in the appendix of this document, which contains an "Example Educational Cost Plan Summary" (points will be deducted if you do not follow the formatting provided – You can select a different format for tables, but you must use the format consistently through the workbook). Numbers shown on all worksheets should be the result of calculations preformed within the workbook and implement formulas and functions (including relative and absolute cell referencing where appropriate) to the greatest extent possible. In other words, you may not perform calculations outside the workbook and then enter the results of these calculations into a worksheet. All calculations must be performed on the appropriate worksheets.

The "Example Educational Cost Plan Summary" contained in the appendix of this document is provided as a guideline for the layout and formatting of your project. Please follow it very carefully, as you will lose points if you do not format numbers, labels, tables, and figures appropriately. The numbers contained in the Example Educational Cost Plan Summary may not to be simply duplicated into your project. These numbers are for example purposes only.

Suggested steps for accomplishing the project

1) Open a new Excel workbook and insert additional worksheets as appropriate. Name the worksheets Plan Summary, College Expense Plan, Employment Income Plan, Educational Resource Plan, and Loan Repayment Plan.

2) Enter everything but the actual numbers and charts on all worksheets (except "Loan Repayment Plan" worksheet) as shown in the "Example Educational Cost Plan Summary" (follow the formatting carefully).

3) The data tables in this worksheet are displayed using the "Table Style Medium 13" style available on the "Home" tab, "Styles" group, "Format as Table" button. After applying the table format, I modified the column widths to fill the page, changed the table heading rows to "Heading 3", and changed the last rows to "Total" style (available on the "Home" tab, "Styles" group, "Cell Styles" button). You should use this style consistently throughout the workbook.

4) Prepare the "College Expense Plan" worksheet based on the following assumptions and guidelines.

   a) Visit the CollegeBoard.com Web site and determine the estimated expenses you will encounter while attending East Los Angeles College for the first two years, and a University of your choosing for the second two years. Here is a link to this Web page: Find a College & Determine Expenses. Place hyperlinks to the Web pages where you found this information on your worksheet. Note: From menu, select "College Planning", use "Look up a college by name" section to find ELAC and the university of your choosing, select "Paying" to find expenses.

   b) Be sure to base your expenses on the "Living Status" option you selected on the "Plan Summary"

worksheet.

c) Assume that the cost of everything at a Junior College will increase at a rate of 3.25% per year, except for tuition & fees.

d) Assume that the cost of everything at a university will increase at a rate of 3.25 % per year, except for tuition & fees, which will increase at a rate of 7% per year.

e) Expenses associated with years 2 and 4 should contain formulas. Totals should be calculated using the function approach.

f) Prepare the "College Expense Plan" chart. Be sure to use the "Stacked Column" type that compares the contribution of each value to a total across categories. Be sure to use the additional chart formatting provided or you will lose points.

5) Prepare the "Employment Income Plan" worksheet based on the following assumptions and guidelines.

a) Your school is on the semester system. You get a winter break (last 2 weeks and first week of the year), and summer break (Jun, Jul, & Aug).

b) You will work part-time while in school (up to 20 hrs per week) and full-time when on break (40+ hrs per week). Your part-time hours per week will equal the last two digits of your student ID. If this number exceeds 15, use the number 15. If this number is less than 5, use 5. Your full-time hours per week will equal the last two digits of your student ID in reverse. If this number exceeds 45, use the number 45 and if it is less than 25 use 25.

c) Each year after the first year, you will work 7% more part-time hours and 5% more full-time hours. You cannot exceed 20 hours of work in any one week for part-time employment. All table cells should contain formulas except for numbers in the Part-time Hours and Full-time Hours tables that are associated with hours worked during the months of the "1st Year".

d) You will earn minimum wage for all part-time and full-time work and will not be paid overtime for hours worked in excess of 40 hours in a single week (you will get comp time for these hours). You will need to enter two minimum wage rates. One that represents the minimum wage while you are here at East Los Angeles College, and one the represents the minimum wage while you are attending the University of your choosing. Be sure to use the appropriate minimum wage rate when calculating "Income". Here is a link to the U.S. Department of Labor, which can be used to determine the current minimum wage where you will be attending school: State Minimum Wage Laws in the United States.

e) Place part-time hours worked in the "Employment Part-time Hours" table, and place full-time hours worked in the "Employment Full-time Hours" table.

f) Use formulas in the "Employment Income" table to calculate the correct value for each cell. The formulas should relatively reference Full-time and Part-time hours and multiply these hours times a referenced minimum wage rate. Use an absolute cell reference to the minimum wage rate when entering the formula to calculate the "Income" amounts for each year.

g) Prepare the "Total Income by Year" chart. Be sure to use the "Exploded pie with a 3-D visual effect" type that compares the contribution of each value to a total across categories. Be sure to use the additional chart formatting provided or you will lose points.

6) Prepare the "Educational Resource Plan" worksheet based on the following assumptions and guidelines.

a) "Total Expenses" are calculated on the "College Expense Plan" worksheet. Be sure to use cell reference formulas to transfer this information to this worksheet.

b) Visit the CollegeBoard.com Web site to determine the Estimated Family Contribution (EFC) your family will be expected to contribute towards your educational expenses. Here is a link to this Web page: Determine Estimated Family Contribution (EFC). Your EFC will remain constant all 4 years. Do not use actual personal data when determining your EFC. In addition, use zeros in all

financial statement questions.

c) EFN equals the difference between the “Estimated Total Expenses” and EFC each year.

d) Your starting savings account balance is equal to digits three, four, five, and six, of your student ID number (left to right), and will increase to reflect the amount of "Income" you earn each year (Reference the "Employment Income Plan" sheet).

e) “Estimated Loan Amount” each year will equal to digit three and four of your current student ID number + 30, as a percentage, times the balance of your EFN, after deducting for scholarships.

f) “Deductions from Savings” represents the amounts that will automatically be deducted from your savings account to eliminate or reduce the amount of loans you will need to take each year (Reference “Deductions from Savings” in the “Loan & Savings Calculations” table).

g) “Loans” will be used to make-up for the difference between what can be deducted from your savings account and the “Estimated Loan Amount” for each year.

h) Your Scholarship each year will equal the last two digits of your current student ID number, as a percentage, times your EFN.

i) Your Grants and Financial Aid Package each year will each equal 50% of your remaining EFN.

j) “Total Resources” for each year will equal the “Estimated Financial Need” for each year.

k) All number related cells in all tables on this sheet contain formulas or functions, except for starting savings account balance for “Year 1” and “EFC”. See the hint sheet at the end of this document.

l) Prepare the “College Resource Allocation” chart. Be sure to use the “Stacked column with a 3-D visual effect” type that compares the contribution of each value to a total across categories. Be sure to use the additional chart formatting provided or you will lose points.

7) Prepare the “Loan Repayment Plan” worksheet based on the following assumptions and guidelines.

a) Click the “File”, and then click “New”. In the “Search for online Templates” section, type “Loan amortization schedule” and click search. Click the “Loan amortization schedule” template and click “Create”.

b) Right-click the “Loan Amortization Schedule” tab at the bottom of the Window, select “Move or Copy”, select your project file in the “To book:” drop down list, select “(move to end)” from the list of worksheets and click “OK”.

c) Set the “Loan amount” value to the loan total shown on the “Educational Resource Plan” worksheet using a cell reference formula.

d) Do some Web research and determine the lowest rate student loan you can get and enter this amount as the “Annual interest rate”. Assume that you will pay the loan back in three years and make a monthly payment. Set the start date of the loan to the expected date of your graduation from a University (when you will be expected to start paying back the loan). Place the name of the lowest rate loan you find in the “Lender name” cell. Change the page orientation to “Portrait”.

e) Modify cell C9 to show “Monthly saving to avoid loan”. In cell E9, you will calculate how much additional money you should earn and save each month, so that you will have saved enough money to pay back any loans you have taken, on the day you graduate (plan on saving for three years). Use the PMT function to determine this amount. You can assume that the current interest rate is 1.5% and it is paid monthly, you will need the money in 36 months, you are starting at 0, and you want the amount to reach the loan amount in cell D5. Note: The amount will be negative because this is an amount you must pay into a savings account monthly.

8) Prepare the “Plan Summary” worksheet based on the following assumptions and guidelines.

a) Enter East Los Angeles College as your current college and enter the name of the University you plan on attending after ELAC. Hyperlink the Community College and University names to the institutions home page.

b) Set hyperlinks to the other four worksheets in this workbook.

c) Visit the CollegeBoard.com Web site and determine what the average costs are to attend a four-year private, four-year, public, and two-year public school. Place this information into your spreadsheet. Hyperlink the title "Average College costs 2020-21" back to the location where you found this information. You can find this information at College Costs: FAQs section.

d) Use cell reference formulas to put appropriate values into all cells of the Summary Data" table, except for the "Net Position" cells. These cells should indicate a zero balance, which means that your total estimated expenses for college will be met by expected family contributions, or an estimated financial need package consisting of scholarships, loans, your income while at school, grants, or other financial aid package.

e) Prepare the "Summary Data" chart. Be sure to use the "Line" type with markers displayed at each data value. Be sure to use the additional chart formatting provided or you will lose points.

f) Place the worksheet tabs in this workbook in the following order from left to right: Plan Summary, College Expense Plan, Employment Income Plan, Educational Resource Plan, and Loan Repayment Plan

How to submit

You will need to submit this Excel document by uploading it to the "Excel – Project 2" section of Canvas by the due date. Submission received after the due date (up to 24 hours late) will lose 50% of the score. If I find that you have plagiarized any part of your project, you will not receive any points for this assignment.

Comment

The project is setup to demonstrate the skills you should have learned by reading/watching videos and doing the Microsoft Excel assignments. Do not wait until the last possible moment to accomplish tasks associated with this project.

Grading

The project is worth 100 points. Higher scores will demonstrate a solid understanding of Excel formulas, functions, charts, and formatting skills.

Your Full Name Project 2 - Excel: Education Cost Plan Summary

Example Educational Cost Plan Summary

Student Name:	First name Last name
Today's Date:	Enter the date you completed this task
Community College Name:	East Los Angeles College
University Name:	The school you plan to attend for the last 2 years
Living Status:	On-campus, At-home, or Off-campus not at home

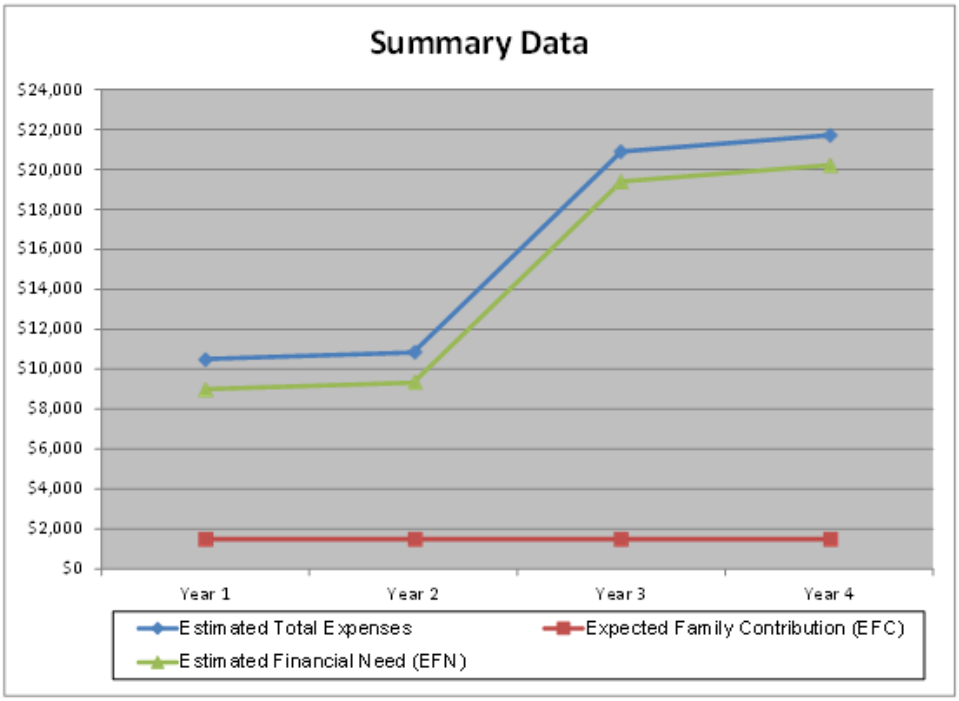
Hyperlinks to worksheets

College Expenses Plan
Employment Income Plan
Educationsl Resource Plan
Loan Repayment Plan

Average College costs 2020-2021

Four-year private school	?
Four-year public school	?
Two-year public school	?

Summary Data	Year 1	Year 2	Year 3	Year 4	Total
Estimated Total Expenses	$10,507	$10,828	$20,888	$21,708	$63,931
Expected Family Contribution (EFC)	$1,500	$1,500	$1,500	$1,500	$6,000
Estimated Financial Need (EFN)	$9,007	$9,328	$19,388	$20,208	$57,931
Net Position	**$0**	**$0**	**$0**	**$0**	**$0**



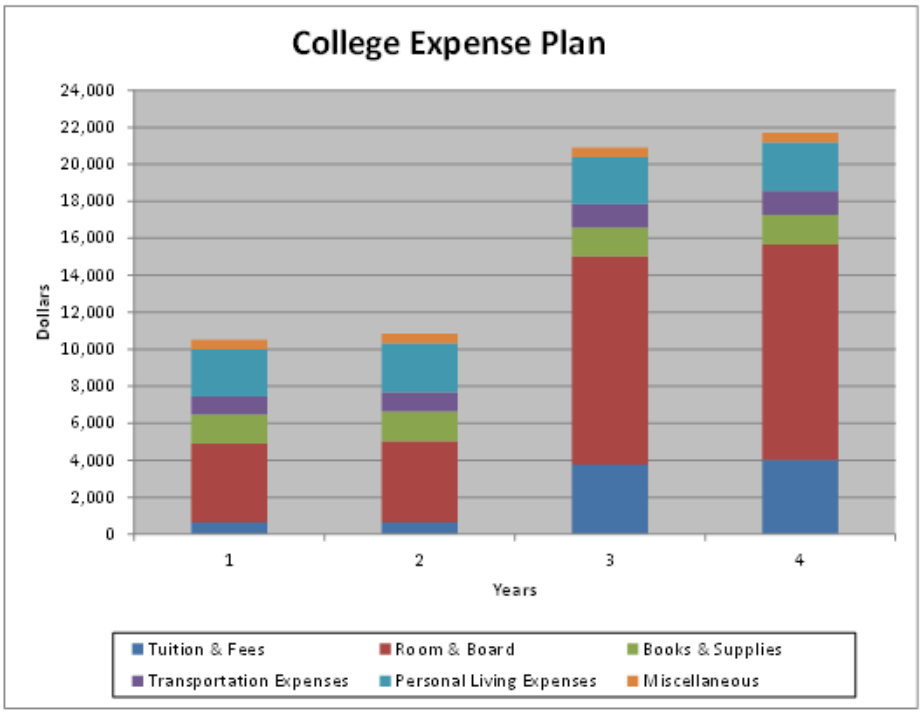
Your Full Name Project 2 - Excel: Education Cost Plan Summary

College Expense Plan

Estimated Annual College Cost Links

East Los Angeles College, CA
The University you plan to attend after ELAC

College Expense Categories	1	2	3	4	Total
Tuition & Fees	$ 629	$ 629	$ 3,754	$ 4,017	$ 9,029
Room & Board	$ 4,266	$ 4,405	$ 11,266	$ 11,632	$ 31,569
Books & Supplies	$ 1,566	$ 1,617	$ 1,566	$ 1,617	$ 6,366
Transportation Expenses	$ 990	$ 1,022	$ 1,262	$ 1,303	$ 4,577
Personal Living Expenses	$ 2,556	$ 2,639	$ 2,540	$ 2,623	$ 10,358
Miscellaneous	$ 500	$ 516	$ 500	$ 516	$ 2,033
Estimated Total Expenses	**$ 10,507**	**$ 10,828**	**$ 20,888**	**$ 21,708**	**$ 63,931**



Your Full Name Project 2 - Excel: Education Cost Plan Summary

Employment Income Plan

Minimum wage while at East Los Angeles College $ 4.50
Minimum wage while at the University of your choosing $ 4.50

Employment Part-time Hours Table

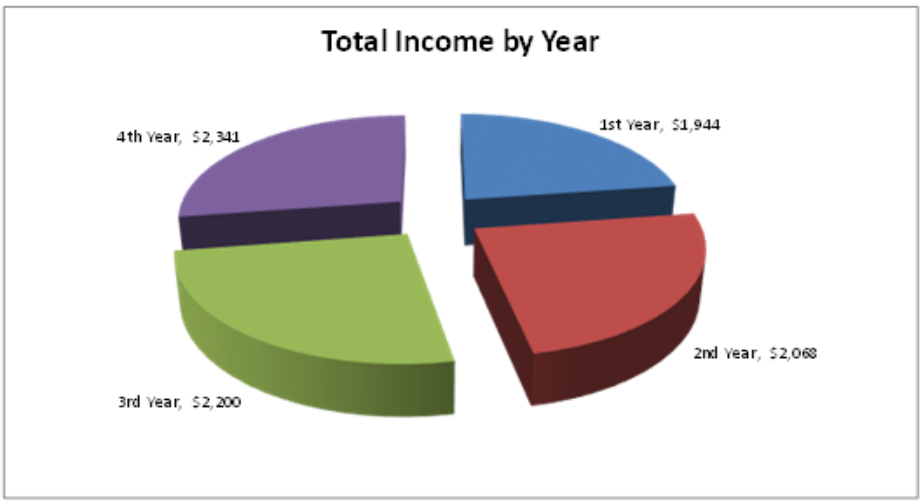
PT Hours	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1st Year	27.0	36.0	36.0	36.0	36.0	0.0	0.0	0.0	36.0	36.0	36.0	18.0	297.0
2nd Year	28.9	38.5	38.5	38.5	38.5	0.0	0.0	0.0	38.5	38.5	38.5	19.3	317.8
3rd Year	30.9	41.2	41.2	41.2	41.2	0.0	0.0	0.0	41.2	41.2	41.2	20.6	340.0
4th Year	33.1	44.1	44.1	44.1	44.1	0.0	0.0	0.0	44.1	44.1	44.1	22.1	363.8
Total	**119.9**	**159.8**	**159.8**	**159.8**	**159.8**	**0.0**	**0.0**	**0.0**	**159.8**	**159.8**	**159.8**	**79.9**	**1318.7**

Employment Full-time Hours Table

FT Hours	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1st Year	9.0	0.0	0.0	0.0	0.0	36.0	36.0	36.0	0.0	0.0	0.0	18.0	135.0
2nd Year	9.5	0.0	0.0	0.0	0.0	37.8	37.8	37.8	0.0	0.0	0.0	18.9	141.8
3rd Year	9.9	0.0	0.0	0.0	0.0	39.7	39.7	39.7	0.0	0.0	0.0	19.8	148.8
4th Year	10.4	0.0	0.0	0.0	0.0	41.7	41.7	41.7	0.0	0.0	0.0	20.8	156.3
Total	**38.8**	**0.0**	**0.0**	**0.0**	**0.0**	**155.2**	**155.2**	**155.2**	**0.0**	**0.0**	**0.0**	**77.6**	**581.9**

Employment Income Table

Year	Hours	Income
1st Year	432	$ 1,944
2nd Year	460	$ 2,068
3rd Year	489	$ 2,200
4th Year	520	$ 2,341
Total	**1,901**	**$ 8,552**



Your Full Name Project 2 - Excel: Education Cost Plan Summary

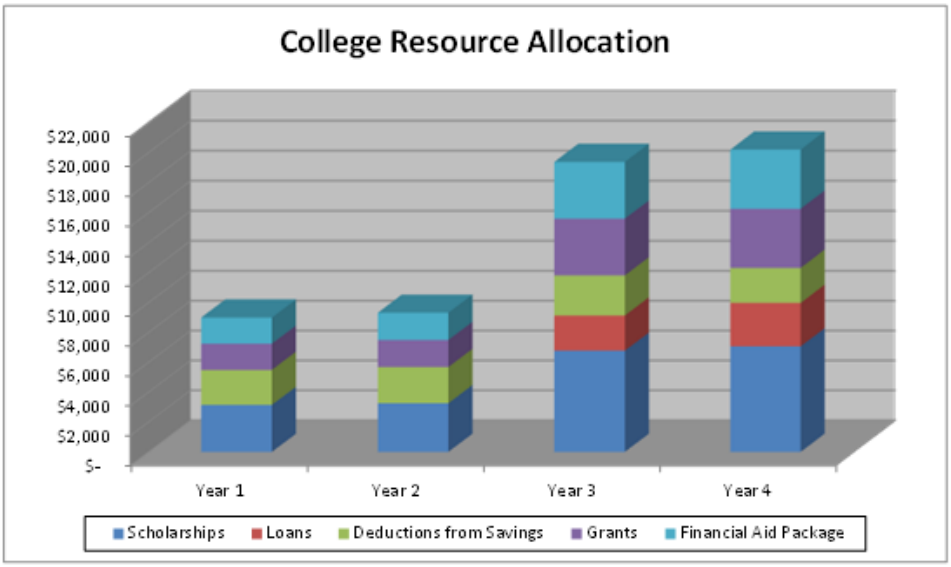
Educational Resource Plan

General Information	Year 1	Year 2	Year 3	Year 4	Total
Estimated Total Expenses	$ 10,507	$ 10,828	$ 20,888	$ 21,708	$ 63,931
Expected Family Contribution (EFC):	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 6,000
Estimated Financial Need (EFN):	**$ 9,007**	**$ 9,328**	**$ 19,388**	**$ 20,208**	**$ 57,931**

Saving Account Information	Year 1	Year 2	Year 3	Year 4
Starting Balance	$ 1,234	$ 836	$ 479	$ -
Starting Balance Contributions from Employment	$ 1,944	$ 2,068	$ 2,200	$ 2,341
Sub-Total Savings	$ 3,178	$ 2,904	$ 2,679	$ 2,341
Deductions from Saving (from table below)	$ 2,342	$ 2,425	$ 2,679	$ 2,341
Running Account Balance	**$ 836**	**$ 479**	**$ -**	**$ -**

Loan & Saving Calculations	Year 1	Year 2	Year 3	Year 4
Estimated Loan Amount	$ 2,342	$ 2,425	$ 5,041	$ 5,254
Sub-Total Savings (from table above)	$ 3,178	$ 2,904	$ 2,679	$ 2,341
Deductions from Savings	$ 2,342	$ 2,425	$ 2,679	$ 2,341
Loans (if line 17 exceeds line 18)	**$ -**	**$ -**	**$ 2,362**	**$ 2,913**

Resources	Year 1	Year 2	Year 3	Year 4	Total
Scholarships	$ 3,152	$ 3,265	$ 6,786	$ 7,073	$ 20,276
Loans	$ -	$ -	$ 2,362	$ 2,913	$ 5,276
Deductions from Savings	$ 2,342	$ 2,425	$ 2,679	$ 2,341	$ 9,786
Grants	$ 1,756	$ 1,819	$ 3,781	$ 3,940	$ 11,296
Financial Aid Package	$ 1,756	$ 1,819	$ 3,781	$ 3,940	$ 11,296
Total Resourceses	**$ 9,007**	**$ 9,328**	**$ 19,388**	**$ 20,208**	**$ 57,931**

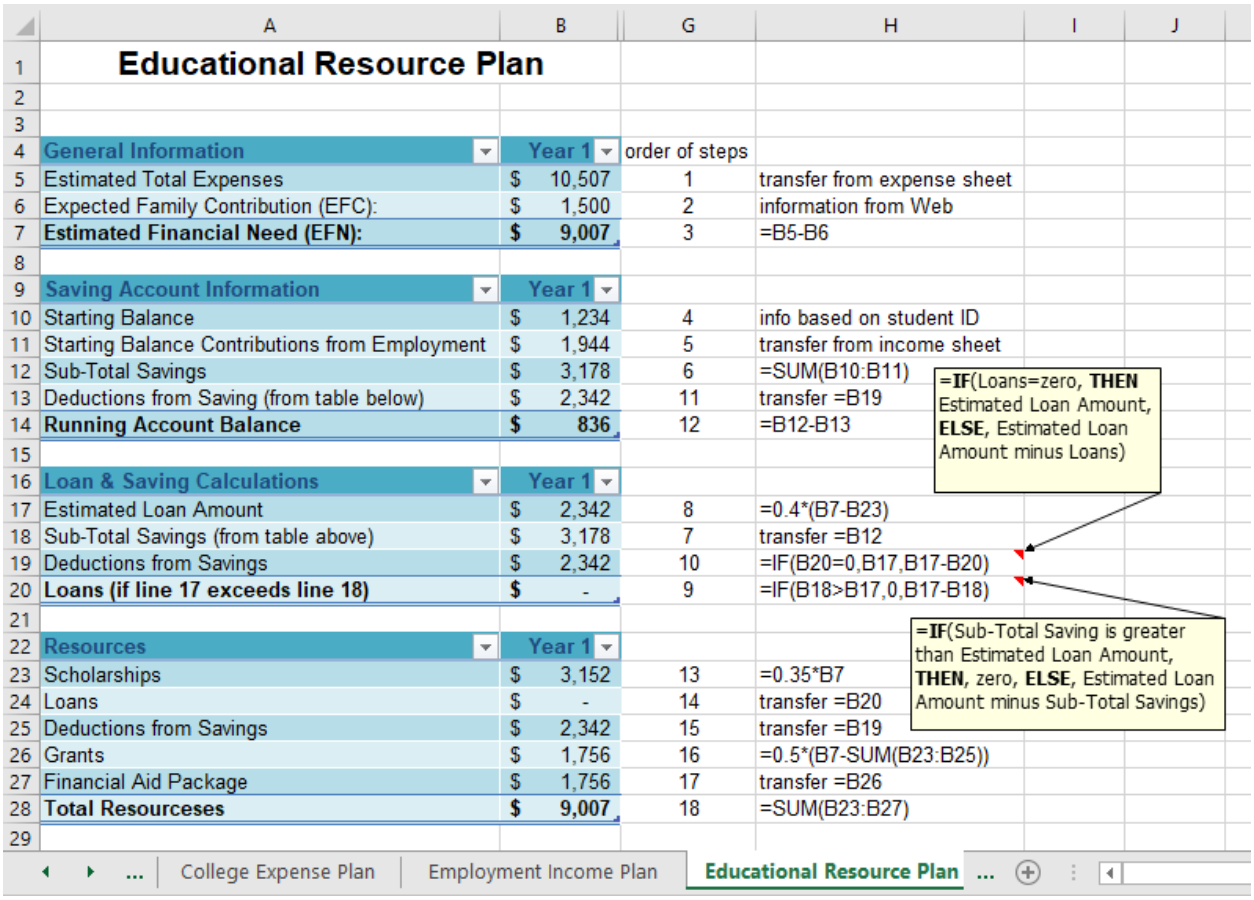


LOAN AMORTIZATION SCHEDULE

ENTER VALUES	
Loan amount	$5,275.59
Annual interest rate	3.50%
Loan period in years	3
Number of payments per year	12
Start date of loan	6/20/2023
Monthly saving to avoid loan	-$143.36

LOAN SUMMARY	
Scheduled payment	$154.59
Scheduled number of payments	36
Actual number of payments	37
Total early payments	-$5,161.07
Total interest	$561.85
LENDER NAME	Navient

PMT NO	PAYMENT DATE	BEGINNING BALANCE	SCHEDULED PAYMENT	EXTRA PAYMENT	TOTAL PAYMENT	PRINCIPAL	INTEREST	ENDING BALANCE	CUMULATIVE INTEREST
1	6/20/2023	$5,275.59	$154.59	-$143.36	$11.22	-$4.16	$15.39	$5,279.75	$15.39
2	7/20/2023	$5,279.75	$154.59	-$143.36	$11.22	-$4.18	$15.40	$5,283.93	$30.79
3	8/20/2023	$5,283.93	$154.59	-$143.36	$11.22	-$4.19	$15.41	$5,288.12	$46.20
4	9/20/2023	$5,288.12	$154.59	-$143.36	$11.22	-$4.20	$15.42	$5,292.32	$61.62
5	10/20/2023	$5,292.32	$154.59	-$143.36	$11.22	-$4.21	$15.44	$5,296.53	$77.06
6	11/20/2023	$5,296.53	$154.59	-$143.36	$11.22	-$4.23	$15.45	$5,300.76	$92.51
7	12/20/2023	$5,300.76	$154.59	-$143.36	$11.22	-$4.24	$15.46	$5,305.00	$107.97
8	1/20/2024	$5,305.00	$154.59	-$143.36	$11.22	-$4.25	$15.47	$5,309.25	$123.44
9	2/20/2024	$5,309.25	$154.59	-$143.36	$11.22	-$4.26	$15.49	$5,313.51	$138.92
10	3/20/2024	$5,313.51	$154.59	-$143.36	$11.22	-$4.28	$15.50	$5,317.79	$154.42
11	4/20/2024	$5,317.79	$154.59	-$143.36	$11.22	-$4.29	$15.51	$5,322.07	$169.93
12	5/20/2024	$5,322.07	$154.59	-$143.36	$11.22	-$4.30	$15.52	$5,326.37	$185.46
13	6/20/2024	$5,326.37	$154.59	-$143.36	$11.22	-$4.31	$15.54	$5,330.69	$200.99
14	7/20/2024	$5,330.69	$154.59	-$143.36	$11.22	-$4.33	$15.55	$5,335.01	$216.54
15	8/20/2024	$5,335.01	$154.59	-$143.36	$11.22	-$4.34	$15.56	$5,339.35	$232.10
16	9/20/2024	$5,339.35	$154.59	-$143.36	$11.22	-$4.35	$15.57	$5,343.70	$247.67
17	10/20/2024	$5,343.70	$154.59	-$143.36	$11.22	-$4.36	$15.59	$5,348.06	$263.26
18	11/20/2024	$5,348.06	$154.59	-$143.36	$11.22	-$4.38	$15.60	$5,352.44	$278.86
19	12/20/2024	$5,352.44	$154.59	-$143.36	$11.22	-$4.39	$15.61	$5,356.83	$294.47
20	1/20/2025	$5,356.83	$154.59	-$143.36	$11.22	-$4.40	$15.62	$5,361.23	$310.09
21	2/20/2025	$5,361.23	$154.59	-$143.36	$11.22	-$4.41	$15.64	$5,365.64	$325.73
22	3/20/2025	$5,365.64	$154.59	-$143.36	$11.22	-$4.43	$15.65	$5,370.07	$341.38
23	4/20/2025	$5,370.07	$154.59	-$143.36	$11.22	-$4.44	$15.66	$5,374.51	$357.04
24	5/20/2025	$5,374.51	$154.59	-$143.36	$11.22	-$4.45	$15.68	$5,378.96	$372.72
25	6/20/2025	$5,378.96	$154.59	-$143.36	$11.22	-$4.47	$15.69	$5,383.43	$388.41
26	7/20/2025	$5,383.43	$154.59	-$143.36	$11.22	-$4.48	$15.70	$5,387.91	$404.11
27	8/20/2025	$5,387.91	$154.59	-$143.36	$11.22	-$4.49	$15.71	$5,392.40	$419.82
28	9/20/2025	$5,392.40	$154.59	-$143.36	$11.22	-$4.51	$15.73	$5,396.91	$435.55
29	10/20/2025	$5,396.91	$154.59	-$143.36	$11.22	-$4.52	$15.74	$5,401.43	$451.29
30	11/20/2025	$5,401.43	$154.59	-$143.36	$11.22	-$4.53	$15.75	$5,405.96	$467.04
31	12/20/2025	$5,405.96	$154.59	-$143.36	$11.22	-$4.54	$15.77	$5,410.50	$482.81
32	1/20/2026	$5,410.50	$154.59	-$143.36	$11.22	-$4.56	$15.78	$5,415.06	$498.59
33	2/20/2026	$5,415.06	$154.59	-$143.36	$11.22	-$4.57	$15.79	$5,419.63	$514.39
34	3/20/2026	$5,419.63	$154.59	-$143.36	$11.22	-$4.58	$15.81	$5,424.22	$530.19
35	4/20/2026	$5,424.22	$154.59	-$143.36	$11.22	-$4.60	$15.82	$5,428.81	$546.01
36	5/20/2026	$5,428.81	$154.59	-$143.36	$11.22	-$4.61	$15.83	$5,433.43	$561.85



	A	B	G	H	I	J
1	**Educational Resource Plan**					
2						
3						
4	**General Information**	**Year 1**	order of steps			
5	Estimated Total Expenses	$ 10,507	1	transfer from expense sheet		
6	Expected Family Contribution (EFC):	$ 1,500	2	information from Web		
7	**Estimated Financial Need (EFN):**	**$ 9,007**	3	=B5-B6		
8						
9	**Saving Account Information**	**Year 1**				
10	Starting Balance	$ 1,234	4	info based on student ID		
11	Starting Balance Contributions from Employment	$ 1,944	5	transfer from income sheet		
12	Sub-Total Savings	$ 3,178	6	=SUM(B10:B11)		
13	Deductions from Saving (from table below)	$ 2,342	11	transfer =B19		
14	**Running Account Balance**	**$ 836**	12	=B12-B13		
15						
16	**Loan & Saving Calculations**	**Year 1**				
17	Estimated Loan Amount	$ 2,342	8	=0.4*(B7-B23)		
18	Sub-Total Savings (from table above)	$ 3,178	7	transfer =B12		
19	Deductions from Savings	$ 2,342	10	=IF(B20=0,B17,B17-B20)		
20	**Loans (if line 17 exceeds line 18)**	**$ -**	9	=IF(B18>B17,0,B17-B18)		
21						
22	**Resources**	**Year 1**				
23	Scholarships	$ 3,152	13	=0.35*B7		
24	Loans	$ -	14	transfer =B20		
25	Deductions from Savings	$ 2,342	15	transfer =B19		
26	Grants	$ 1,756	16	=0.5*(B7-SUM(B23:B25))		
27	Financial Aid Package	$ 1,756	17	transfer =B26		
28	**Total Resourceses**	**$ 9,007**	18	=SUM(B23:B27)		
29						