# Comprehensive Projects— Paper-Based Versions



These comprehensive projects are designed to be completed through the use of templates available in the Student Exercise Files download for this course.

After examining the annual payroll process, it is important to practice using the skills you've learned. In this chapter, two payroll-related projects are provided. The first project focuses on Ellipses Corp. For this company you will complete all payroll-related tasks for the month of December and will then finalize all year-end reporting. The second project focuses on Ampersand, Inc. For this company you will complete all payroll-related tasks for the 4th quarter of the year, after which you will finalize all year-end payroll reporting. You will manually complete all necessary forms and schedules for these projects.

## **One-Month Project**

**NOTE!** Templates needed to complete these exercises, including one containing year-to-date payroll data, are included in the Student Exercise Files download for this course.

Ellipses Corp. is a small business that operates in Herndon, VA. The company is located at 10 Period Lane, Herndon, VA 20170. Its federal Employer Identification Number is 77-7777777, and its president, who signs all tax forms, is John Parker (telephone #571-555-0073). The company does not wish to name a third-party designee on forms.

During 2019 four individuals are employed by Ellipses Corp. These employees are as follows:

Name	Address	Social Security #	Federal W/H Allowances	State W/H Allowances	Marital Status
Hunter Cranston	85 Southern Road Herndon, VA 20170	111-11-1111	2	2	Married
Allison Harrison	203A Pine Court Herndon, VA 20170	777-77-7777	4	3	Married
John Parker	212 Tradition Lane Herndon, VA 20170	444-44-4444	1	1	Single
Pierre Sternberg	41 Seward Boulevard Herndon, VA 20170	333-33-3333	2	2	Married

Note that Pierre Sternberg was hired in November, and his first day of work was Monday, November 25. Additionally, due to an economic downturn, Allison Harrison was laid off in mid-December, with her last day of work on Friday, December 13.

All employees of Ellipses Corp. work a regular 40-hour workweek (thus all hours worked over 40 in a given week are overtime hours), receive overtime pay at a rate of 1.5 times the regular wage rate, and are paid weekly on Friday for the current week (which runs from Saturday through Friday, although employees never work on weekends). The SUTA tax rate applicable to Ellipses Corp. is 3.1%, while the SUTA wage base in Virginia is \$8,000.

Earnings and voluntary deduction information for each of the four employees is as follows:

Name	Regular Wage Rate	Annual Salary	Weekly 401(k) Deduction	Weekly Charitable Contribution
Hunter Cranston	\$15/hour	N/A	6% of gross pay	\$5
Allison Harrison	\$23/hour	N/A	5% of gross pay	\$5
John Parker	N/A	\$203,000.20	N/A	\$20
Pierre Sternberg	N/A	\$112,000.20	1% of gross pay	N/A

The first 11 months of the year have passed, and all payroll-related activity has been properly accounted for as of 11/30/2019. Payroll data for each of the four employees for the first three quarters of the year, as well as for the months of October and November, is as follows:

## **Hunter Cranston**

Period	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$7,800	\$221	\$366.60	\$483.60	\$113.10	\$468	\$65
2nd quarter	\$7,800	\$221	\$366.60	\$483.60	\$113.10	\$468	\$65
3rd quarter	\$7,800	\$221	\$366.60	\$483.60	\$113.10	\$468	\$65
October	\$2,400	\$68	\$112.80	\$148.80	\$34.80	\$144	\$20
November	\$3,000	\$85	\$141	\$186	\$43.50	\$180	\$25

## **Allison Harrison**

Period	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$11,960	\$416	\$568.10	\$741.52	\$173.42	\$598	\$65
2nd quarter	\$11,960	\$416	\$568.10	\$741.52	\$173.42	\$598	\$65
3rd quarter	\$11,960	\$416	\$568.10	\$741.52	\$173.42	\$598	\$65
October	\$3,680	\$128	\$174.80	\$228.16	\$53.36	\$184	\$20
November	\$4,600	\$160	\$218.50	\$285.20	\$66.70	\$230	\$25

## **John Parker**

Period	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$50,750.05	\$10,929.36	\$2,537.47	\$3,146.52	\$735.93	\$0	\$260
2nd quarter	\$50,750.05	\$10,929.36	\$2,537.47	\$3,146.52	\$735.93	\$0	\$260
3rd quarter	\$50,750.05	\$10,929.36	\$2,537.47	\$1,946.76	\$735.93	\$0	\$260
October	\$15,615.40	\$3,362.88	\$780.76	\$0	\$226.44	\$0	\$80
November	\$19,519.25	\$4,203.60	\$975.95	\$0	\$283.05	\$0	\$100

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## **Pierre Sternberg**

Period	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2nd quarter	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3rd quarter	\$0	\$0	\$0	\$0	\$0	\$0	\$0
October	\$0	\$0	\$0	\$0	\$0	\$0	\$0
November	\$2,153.85	\$224.36	\$106.62	\$133.54	\$31.23	\$21.54	\$0

Note that all tax payments and filings are made on the due date. Based on the data provided here, you will complete the following:

- 1. Establish an employee earnings record for each of the company's four employees. Complete the top portion of each record.
- 2. Establish and complete the payroll register for each weekly pay period during December. When calculating federal income tax withholding, use the withholding tables where possible, and refer to the percentage method only when necessary. Note that as of December 7, Hunter Cranston requests that his federal withholding allowances increase from two to three (Ellipses Corp. makes this change). Additionally, for simplicity, calculate the state income tax withholding as 5% of each employee's taxable pay (which is the same as taxable pay for FWT). Recall that state income tax withholding would ordinarily be calculated using the applicable state's withholding tables. Payroll checks are remitted to the employees in the same order (Cranston, Harrison, Parker, Sternberg) each pay period and are written from a bank account that is used solely for these payments. The first payroll check written in December is check #762.

Note that all charitable contributions are deemed to be made on the final day of each pay period. The following information will be required for the completion of these records for the two employees who are compensated via an hourly wage:

## **Weekly Hours Worked**

Weekly Start Date	Hunter Cranston	Allison Harrison
November 30	40	37
December 7	38	41
December 14	43.5	0
December 21	40	0

#### **WARNING!**

The above dates are weekly start dates. Refer to a calendar to determine the weekly end dates and associated pay dates. Keep in mind that tax liability and payment amounts are determined based on the weekly pay dates.

3. Complete the employee earnings records for December for each of the four employees. Divide the voluntary deductions from the payroll register appropriately across the associated columns within the employee earnings records. If directed to do so by your instructor, record the necessary journal entries for each pay period.

4. Complete Form 941 for the 4th quarter. Note that based on the lookback period, the company is a monthly depositor. Assume that all necessary deposits were made on a timely basis and that the employer made deposits equal to the total amount owed for the quarter. Although Virginia quarterly state payroll forms are also filed by Ellipses Corp., you will not complete these. If directed to do so by your instructor, record the necessary journal entries associated with Form 941 (including those required for any tax payments made).

**NOTE!** Recall from the *Form 941 Rounding Considerations* section that quarter- and year-end tax figures should not be calculated based on the total taxable earnings for the respective quarter or year. Instead, to avoid rounding discrepancies, tax figures within Part 2 of Form 941 should be determined for each employee by adding the individual taxes across each pay period.

- 5. Complete Form 940 for Ellipses Corp. Note that FUTA payments are made only when required (i.e., if the employer is permitted to postpone the payment of these taxes, it will do so until a point in time when payment must be remitted). If directed to do so by your instructor, record the necessary journal entry associated with Form 940.
- 6. Calculate total SUTA tax owed by the employer. Although Ellipses Corp. will file state forms in which this figure is reported, you are required to calculate only the total amount owed for the year.
- 7. Complete Copy A of Form W-2 for each of the four employees. State wages were the same as federal wages subject to federal withholding tax for each of the four employees, and the state identification number for Ellipses Corp. is the same as its federal Employer Identification Number.
- 8. Complete Form W-3 for Ellipses Corp. Note that the company files the paper version of the form and selects "None apply" in the *Kind of Employer* section.

## **Three-Month Project**

**NOTE!** Templates needed to complete these exercises, including one containing year-to-date payroll data, are included in the Student Exercise Files download for this course.

Ampersand, Inc., is a small business that operates in Somerset, VT. The company is located at 732 Appalachian Way, Somerset, VT 05363. Its federal Employer Identification Number is 44-444444, and its president, who signs all tax forms, is Stacey Jones (telephone #802-555-3917). The company does not wish to name a third-party designee on forms.

During 2019 four individuals are employed by Ampersand, Inc. These employees are as follows:

Name	Address	Social Security #	Federal W/H Allowances	State W/H Allowances	Marital Status
Maggie Hough	13 Spruce Street Somerset, VT 05363	222-22-2222	1	1	Single
William Finnegan	7 Smith Boulevard Somerset, VT 05363	999-99-9999	2	2	Married
Stacey Jones	8110 Browning Place Somerset, VT 05363	555-55-5555	2	1	Single
Francine Stewart	101 Park Court Somerset, VT 05363	888-88-8888	3	3	Married

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Note that Francine Stewart was hired in September, and her first day of work was Monday, September 23. Additionally, due to an economic downturn, Maggie Hough was laid off in late November, with her last day of work on Friday, November 22.

All employees of Ampersand, Inc., work a regular 40-hour workweek (thus all hours worked over 40 in a given week are overtime hours), receive overtime pay at a rate of 1.5 times the regular wage rate, and are paid weekly on Sunday for the most recent week (which runs from Monday through Sunday, although employees never work on weekends). The SUTA tax rate applicable to Ampersand, Inc., is 2.5%, while the SUTA wage base in Vermont is \$15,600.

Earnings and voluntary deduction information for each of the four employees is as follows:

Name	Regular Wage Rate	Annual Salary	Weekly 401(k) Deduction	Weekly Charitable Contribution
Maggie Hough	\$14/hour	N/A	5% of gross pay	\$10
William Finnegan	\$18/hour	N/A	4% of gross pay	\$5
Stacey Jones	N/A	\$262,000.44	N/A	\$15
Francine Stewart	N/A	\$94,000.40	2% of gross pay	N/A

The first three quarters of the year have passed, and all payroll-related activity has been properly accounted for as of 9/30/2019. Quarterly payroll data for each of the four employees is as follows:

## **Maggie Hough**

Quarter	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$7,280	\$533	\$345.80	\$451.36	\$105.56	\$364	\$130
2nd quarter	\$7,280	\$533	\$345.80	\$451.36	\$105.56	\$364	\$130
3rd quarter	\$7,280	\$533	\$345.80	\$451.36	\$105.56	\$364	\$130

## William Finnegan

Quarter	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$9,360	\$403	\$449.28	\$580.32	\$135.72	\$374.40	\$65
2nd quarter	\$9,360	\$403	\$449.28	\$580.32	\$135.72	\$374.40	\$65
3rd quarter	\$9,360	\$403	\$449.28	\$580.32	\$135.72	\$374.40	\$65

## **Stacey Jones**

Quarter	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$65,500.11	\$15,655.90	\$3,274.96	\$4,061.07	\$949.78	\$0	\$195
2nd quarter	\$65,500.11	\$15,655.90	\$3,274.96	\$4,061.07	\$949.78	\$0	\$195
3rd quarter	\$65,500.11	\$15,655.90	\$3,274.96	\$117.66	\$949.78	\$0	\$195

### **Francine Stewart**

Quarter	Gross Earnings	Federal Income Tax	State Income Tax	Social Security Tax	Medicare Tax	401(k) Deduction	Charitable Cont.
1st quarter	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2nd quarter	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3rd quarter	\$1,807.70	\$148.80	\$88.58	\$112.08	\$26.21	\$36.15	\$0

Note that all tax payments and filings are made on the due date. Based on the data provided here, you will complete the following:

- 1. Establish an employee earnings record for each of the company's four employees. Complete the top portion of each record.
- 2. Establish and complete the payroll register for each weekly pay period in the fourth quarter. When calculating federal income tax withholding, use the withholding tables where possible, and refer to the percentage method only when necessary. Note that as of November 25, Stacey Jones requests that her federal withholding allowances decrease from two to one (Ampersand, Inc., makes this change). Additionally, for simplicity, calculate the state income tax withholding as 5% of each employee's taxable pay (which is the same as taxable pay for FWT). Recall that state income tax withholding would ordinarily be calculated using the applicable state's withholding tables. Payroll checks are remitted to the employees in the same order (Hough, Finnegan, Jones, Stewart) each pay period and are written from a bank account that is used solely for these payments. The first payroll check written in October is check #4711.

Note that all charitable contributions are deemed to be made on the final day of each pay period. The following information will be required for the completion of these records for the two employees who are compensated via an hourly wage:

## **Weekly Hours Worked**

Weekly Start Date	Maggie Hough	William Finnegan
September 30	40	44
October 7	42	37
October 14	38	40
October 21	40	46.5
October 28	43.5	42
November 4	40	45
November 11	39	40

Weekly Start Date	Maggie Hough	William Finnegan
November 18	41	34.5
November 25	0	40
December 2	0	41
December 9	0	43.5
December 16	0	42.5
December 23	0	40

WARNING! The above dates are weekly start dates. Refer to a calendar to determine the weekly end dates and associated pay dates. Keep in mind that tax liability and payment amounts are determined based on the weekly pay dates.

- 3. Complete an employee earnings record for the 4th quarter for each of the four employees. Divide the voluntary deductions from the payroll register appropriately across the associated columns within the employee earnings records. If directed to do so by your instructor, record the necessary journal entries for each pay period.
- 4. Complete Form 941 for both the 3rd and 4th quarters. Assume that the employees earned the same amount during each pay period of the 3rd quarter and that there were four, four, and five pay periods during the months of July, August, and September, respectively. Note that based on the lookback period, the company is a monthly depositor. Assume that all necessary deposits were made on a timely basis and that the employer made deposits equal to the total amount owed for each quarter. Although Vermont quarterly state payroll forms are also filed by Ampersand, Inc., you will not complete these. If directed to do so by your instructor, record the necessary journal entries associated with each Form 941 (including those required for any tax payments made).

**NOTE!** Recall from the *Form 941 Rounding Considerations* section that quarter- and year-end tax figures should not be calculated based on the total taxable earnings for the respective quarter or year. Instead, to avoid rounding discrepancies, tax figures within Part 2 of Form 941 should be determined for each employee by adding the individual taxes across each pay period.

- 5. Complete Form 940 for Ampersand, Inc. Note that FUTA payments are made only when required (i.e., if the employer is permitted to postpone the payment of these taxes, it will do so until a point in time when payment must be remitted). If directed to do so by your instructor, record the necessary journal entry associated with Form 940.
- 6. Calculate total SUTA tax owed by the employer. Although Ampersand, Inc., will file state forms in which this figure is reported, you are required to calculate only the total amount owed for the year.
- 7. Complete Copy A of Form W-2 for each of the four employees. State wages were the same as federal wages subject to federal withholding tax for each of the four employees, and the state identification number for Ampersand, Inc., is the same as its federal Employer Identification Number.
- 8. Complete Form W-3 for Ampersand, Inc. Note that the company files the paper version of the form and selects "None apply" in the *Kind of Employer* section.