

**ACCOUNT 249**  
**Spring 2017**  
**Chapter 11: North Leaf Department Store Graded Homework Assignment**  
15 points

**Due Date**

Monday, April 24, 2017: Sections 01, 03, 06, 07, 09, 10, 11

Tuesday, April 25, 2017: Sections 02, 04, 05, 08, 12

**Assignment Learning Goals**

This assignment is designed to help you learn how to:

1. Construct and use a balanced scorecard.
2. Compute return on investment (ROI).
3. Understand how changes in sales, expenses, and assets affect ROI.
4. Compute residual income

**Required**

1. Read the information about North Leaf Department Store presented on pages 2 and 3.
2. Use the charts presented on pages 4, 5, 6, and 7 to organize the information you have been given.
3. Use concepts presented in Chapter 11 to address the issues facing North Leaf.

**Guidelines and Policies for Graded Assignments**

1. Your assignment can be hand-written or computerized using Word or Excel. However, you must present your answer using the charts presented on pages 4, 5, 6, and 7. **Five points will be deducted from your score if your answer is not presented using the charts presented on pages 4, 5, 6, and 7.**
2. All assignments will be collected at the beginning of the class period in which the assignment is due.
3. All assignments must be turned in during the class period in which they are due in order to receive full credit. As stated in the course syllabus, grades will be reduced by 25% for assignments turned in by midnight of the day they are due. No credit will be given for any assignment turned in after the day on which it is due unless the student discusses a specific situation with the instructor before the assignment is due.
4. Be sure your name and section number is on the assignment you turn in.

## Chapter 11: North Leaf Department Store Inc. Graded Homework Assignment

15 points

The North Leaf Department Store is located in a multi-story building in the recently re-vitalized downtown area of a medium-sized city. The corporation is wholly owned by the Koning family. Amanda Koning is the CEO while Shane and Hailey, are North Leaf's marketing manager and purchasing manager respectively. Amanda, Shane, and Hailey recently took over North Leaf when their father retired a few months ago. All three Koning siblings have MBA's and have worked in various management positions for other department store corporations. As a result of their education and work experience, they know modern business practices used in the department store industry and the shopping experience currently expected by many customers.

Unfortunately, their father had run North Leaf much as their grandfather had run it. Their father believed that people made a company and not machines so he invested in only the most basic technology and had refused to develop a social media presence. Because of his philosophy, North Leaf has not seen an increase in its revenues despite the significantly larger number of people shopping in the re-vitalized downtown area.

When Amanda, Shane, and Hailey took control of the company, they knew they had to institute a number of changes quickly if they were going to position the company for the year-end shopping season. Hailey immediately began reviewing North Leaf's purchasing policies and practices while Shane developed a social media presence. Shane also arranged for North Leaf to sponsor for the First Annual Ground Hog Day Trot, a 5K run designed to provide awareness and financial support to the county's volunteer-run wildlife sanctuary.

After reviewing the financial position of the company, Amanda has decided to focus on the following two issues:

1. Stop the growing amount of bad debt
2. Develop performance measures that will help evaluate the performance of department managers and decide on the investments needed to modernize the store's appearance and infrastructure.

### Issue 1: Growing Amount of Bad Debt

After reviewing the corporate records and talking to a few employers, Amanda realized that customers are taking longer and longer to pay the bills they incur using the department store's charge card and North Leaf has far more bad debt than what is normal for the industry.

Her investigation has revealed that many of the late payments and unpaid bills result from customers disputing incorrect charges on their bills. These incorrect charges usually occur because salesclerks incorrectly enter data on the charge account slip. Additionally, employees are uncertain as to how to handle these complaints because they had not been trained to handle these situations.

Amanda has decided to develop a balanced scorecard in order to communicate the actions that need to be taken so this issue can be resolved. At a recent meeting of the department managers, the following list of performance measures was developed.

- Accounts receivable written off as a percentage of sales.
- Average age of accounts receivable.
- Customer satisfaction with accuracy of charge account bills from monthly customer survey
- Customer satisfaction with efficiency of the dispute process
- Percentage of charge account bills containing errors.
- Percentage of employees trained in dispute process
- Percentage of employees trained to enter charge account data correctly
- Time from customer complaint to resolution
- Total profit

### Required for Issue 1:

- a. Use Chart 1a on page 4 to organize the performance measures suggested by the North Leaf managers into a balanced scorecard.
- b. Use Chart 2b on page 5 to indicate the desired direction each performance measure should move (increase or decrease) when progress is made on achieving the performance measure.

## Issue 2: Evaluating Manager Performance and Proposed Investments

In order to measure manager performance and decide on proposed investments, Amanda has decided to calculate the return on investment (ROI) and residual income for North Leaf's three largest departments. The data Amanda has developed for these calculations is presented in Table 1. After consulting North Leaf's external audit firm, Amanda has decided to use a 9% required rate of return for all departments.

	Apparel Department	Housewares Department	Appliances Department
Sales	\$460,000	\$385,000	\$335,800
Net operating income	\$27,600	\$26,950	\$10,070
Average operating assets	\$250,000	\$154,000	\$230,000

Casey Cavalli, the manager of the apparel department, has talked with Amanda a number of times about buying new mannequins because of the new line of clothes Hailey is bringing into North Leaf. Amanda told him to develop a proposal for buying the mannequins needed to display the new line of clothes. Table 2 presents a numerical summary of the proposal Casey has developed.

Estimated increase in sales	\$18,000
Estimated increase in net operating income	\$1,080
Estimated increase in average operating assets	\$6,250

### **Required for Issue 2:**

- Use Chart 2a on page 6 to calculate the ROI for each department.
- Use Chart 2b on page 6 to calculate the residual income for each department.
- Use Line 2c on page 6 to indicate which of the departments is being managed the best.
- Use Chart 2d to page 6 to indicate whether your calculations indicate Amanda should approve Casey's proposal.

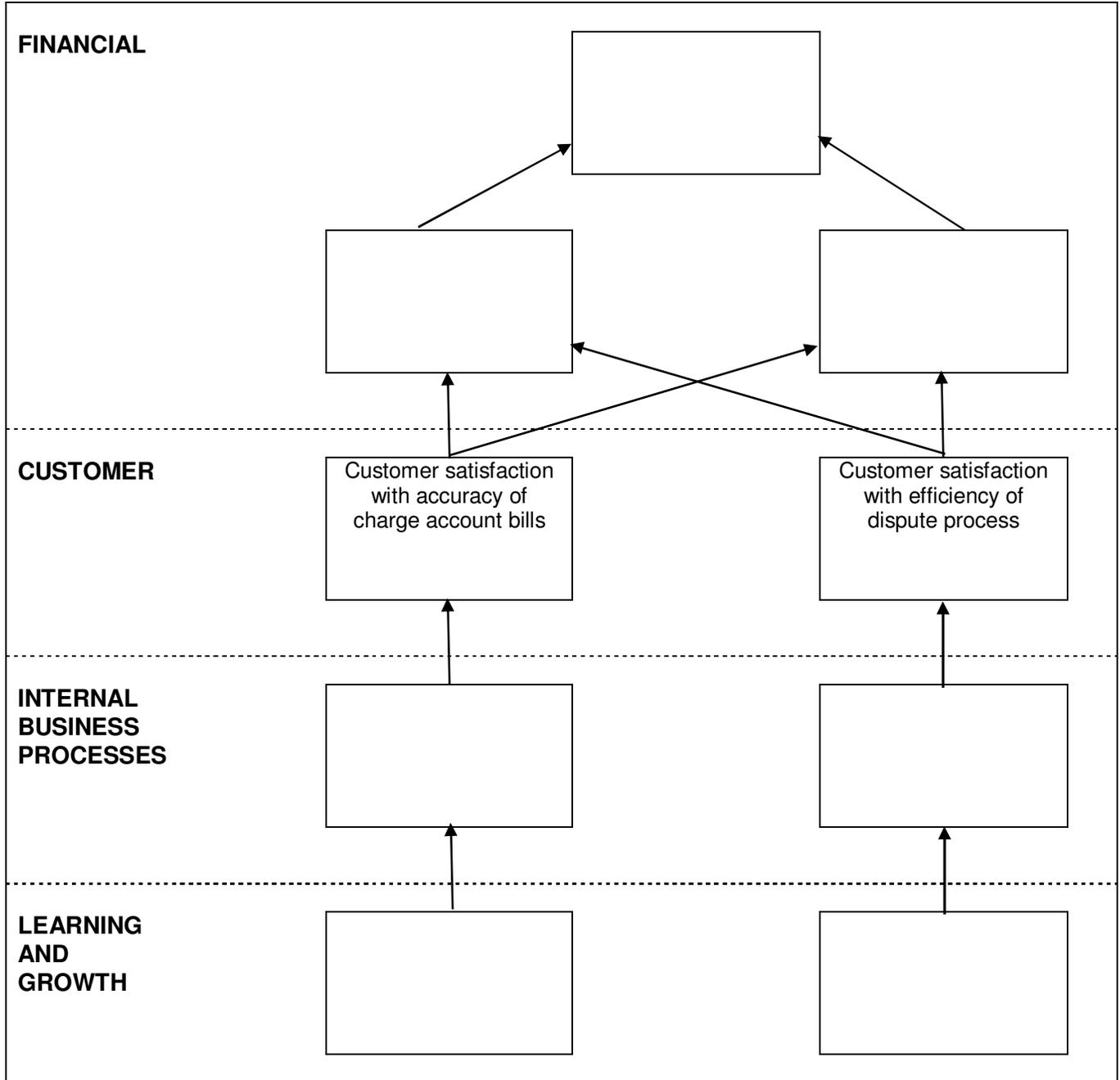
Chapter 11: North Leaf Department Store Graded Homework Assignment  
15 points

Student Name: \_\_\_\_\_

Section Number: \_\_\_\_\_

**Issue 1: Growing Amount of Bad Debt**

**Chart 1a: Balanced Scorecard**



**Issue 1: Growing Amount of Bad Debt**

Accounts receivable written off as a percentage of sales	
Average age of accounts receivable.	
Customer satisfaction efficiency of dispute process	
Customer satisfaction with accuracy of charge account bills	increase
Percentage of charge account bills containing errors.	
Percentage of employees trained in dispute process	
Percentage of employees trained to enter charge account data correctly	
Time from customer complaint to resolution	
Total profit	increase

**Issue 2: Evaluating Manager Performance and Proposed Investments**

<b>Table 2a: Calculation of Department ROI</b>						
	Apparel Department		Housewares Department		Appliances Department	
	Calculation	Amount	Calculation	Amount	Calculation	Amount
Margin						
Turnover						
ROI						4.38%

<b>Table 2b: Calculation of Department Residual Income</b>						
	Apparel Department		Housewares Department		Appliances Department	
	Calculation	Amount	Calculation	Amount	Calculation	Amount
Net Operating Income	n/a	\$27,600	n/a	\$26,950	n/a	\$10,070
Target Operating Income		\$22,500				
Residual Income						

2c. According to your calculations, which department is being managed best? \_\_\_\_\_

Table 2d: Summary of Proposal for Buying New Mannequins for Apparel Department		
	Calculation	Amount
Margin		
Turnover		
ROI		

2d. According to your calculations, should Amanda approve Casey's proposal? \_\_\_\_\_ Yes \_\_\_\_\_ No