

Overview of Financial Accounting, Transaction Processing, and Accounting Systems

Financial accounting deals with the procedures we use to record business transactions and report the results of those transactions to shareholders, creditors, and other external entities. This is the focus of BUSA 202, and is closely related to finance.

Managerial accounting deals with reports and information for decision making within an organization, and is closely related to cost accounting, which is the determination of product costs for the valuation of inventory and cost of goods sold. This material is now covered in BUSA 203 and also in BUSA 323.

Accounting systems is the study of transaction processing and the controls needed to assure that the integrity of accounting records is maintained and that assets are safeguarded from fraud, embezzlement, or pilferage. Accounting systems requires a broad knowledge of all aspects of the business, including sales, purchasing and manufacturing,

The end product of both financial accounting and accounting systems is **financial reports**. The most important of these are the balance sheet, the income statement; and the statement of cash flows.

Balance sheet (a.k.a. the *statement of financial position*) represents the account balances on a particular date. It is kind of like a snapshot; it doesn't tell you much about either the past or the future, although you can certainly make some inferences about both. The balance sheet lists assets, liabilities, and owner's equity, and is the formal representation of the fundamental accounting equation:

$$A = L + OE$$

Income statement (a.k.a. P and L) summarizes the effects of revenues and expenses of an organization for a fiscal period.

$$\text{Revenues} - \text{Expenses} = \text{Profit (or Loss)}$$

Statement of cash flows summarizes all transactions involving **cash** during the fiscal period.

The **accounting cycle** is the series of steps we go through to record transactions during every fiscal period. Many of the terms used in describing the accounting cycle and the recording process itself referred originally to pencil-and-paper documents and manual transaction processing. The availability of sophisticated accounting computer software simplifies much of the recording process, but the names and terms we use have stayed the same. There is a diagram of the accounting cycle on page 4 of this document. A more detailed description of the steps in the accounting cycle follows below:

Analyze transactions: We need to know what type of transaction we are dealing with; we also need to verify that the information is correct and that transactions have taken place only with proper authorization. Most accounting transactions originate with what are called **source documents**, which are the invoices, invoices, orders, time cards, checks, and other "paperwork" (or now, commonly digital files) which provide the first indication that a transaction has taken place (or will be taking place in the future.)

Journalize transactions: The **journal** is the "book of original entry," the place where the transactions first become part of the official financial records of the organization. We make **journal**

entries which specify the date, the accounts which are affected by a transaction, and the amount of money involved. There are two types of journals. Specialized journals [e.g., payroll, sales, cash receipts, purchases, cash disbursements] simplify the recording of routine transactions and make it easier to post the aggregate impact of the transactions to the ledger[s]. A *general journal* is used to record miscellaneous transactions and adjustments.

The ledger is the entire group of accounts maintained by an organization. We also have specialized ledgers, such as vendor and customer ledgers. The ledger used to consist of a series of pages in a book (hence the terms "bookkeeper," "books of account," and so on). Now the journal[s] and the ledger[s] are typically a file or series of files on a computer hard disk.

Posting refers to the transfer of the journal entries to the ledger. In a manual system, posting was a separate process. In computerized systems, posting is typically accomplished contemporaneously with recording the transaction in the journal.

A trial balance is nothing more than a summation of the account balances to be sure that the books do, in fact, balance. Trial balances were especially important in manual systems because they provided checkpoints throughout the entire accounting cycle. They are less necessary with computerized systems because the software usually maintains balances continuously. Built-in controls prohibit finalizing an entry which is out of balance. However, as we will see in our use of the Peachtree software, trial balances are still useful as tools for review of individual account balances.

Adjusting entries are the end-of-period entries which are required to bring the books up to date. These often involve transactions which are "incomplete" in some way. For example, we may have employees who have earned wages, but who have not been paid because the payroll period spans the end of the fiscal period. We may have to accrue interest on a loan, or recognize that the rent we just paid is for the next fiscal period.

Closing entries are the entries that we make to close (i.e., bring to a zero balance) the *temporary accounts* [the expense and revenue accounts]. In manual systems, each closing entry had to be made individually. In computerized systems, a single command closes the books. Furthermore, manual systems required monthly closings in order to prepare financial statements. In computerized systems, monthly statements can usually be prepared without closing the books.

Debits and credits: The terms **debit and credit** are nothing more than accounting lingo for the entries which increase or decrease account balances.

- **Assets:** debits increase the balance; credits decrease the balance
- **Liabilities and owner's equity:** debits decrease the balance; credits increase the balance
- **Expenses:** debits increase the balance; credits decrease the balance
- **Revenues:** debits decrease the balance; credits increase the balance

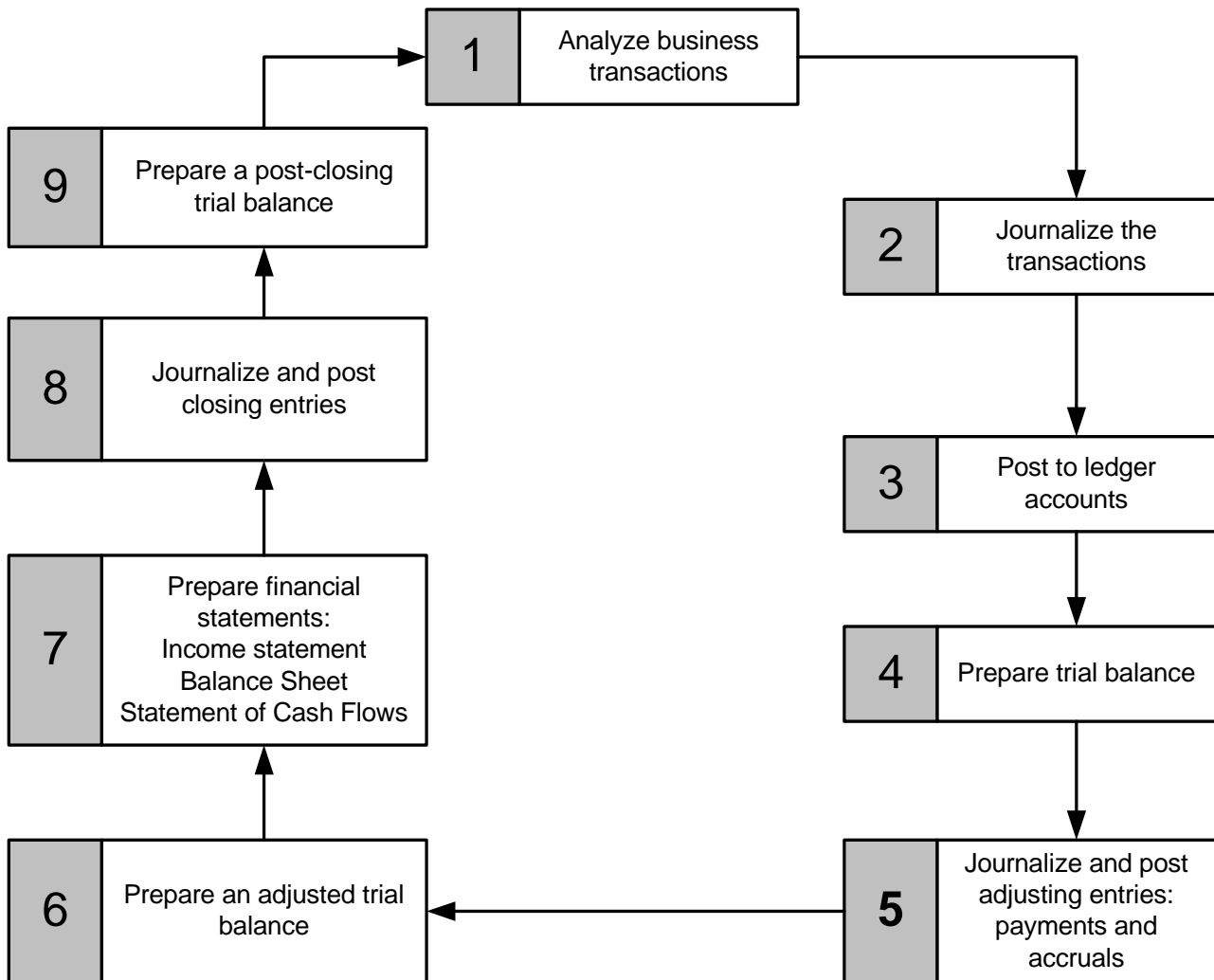
Or, if you prefer a diagram:

Increase	DR	CR
Decrease	(CR)	(DR)
	Assets	Liabilities
	(Contra-assets)	Owners equity
		Revenues

Note that the parties to an accounting transaction view the entries from opposite perspectives. Because just about all of us have bank accounts, our relationship with the bank may be the easiest way to visualize this. Suppose you deposit your paycheck in your checking account. If you kept records the way an organization does, you would debit cash (your checking **account**) and credit a revenue account (e.g., salaries earned). But what is the bank going to do? They are going to debit cash too (after all, they do have more than they did before you gave them your paycheck). They are going to credit something called depositors' accounts, with a subsidiary account in your name (there will be a subsidiary account for every other depositor as well). Note that a CREDIT balance in the depositor's account means that the depositor has a bank balance greater than zero; this is effectively a liability to the bank—it's the depositor's money. When the bank sends you an "insufficient funds" notice [i.e., your check for the rent bounced], this means that you have a **debit balance**, you are overdrawn, and you had better deposit more money quickly. *Purchases on account* work somewhat the same way. When you buy a book from Amazon.com, VISA shows the value of the purchase as a receivable—an asset to them. If Amazon sent the wrong title and you send the book back, VISA will eventually **credit your account** for the purchase price.

The diagram on the next page shows the various steps in the accounting cycle. As you will see when using the Peachtree software, computerization greatly simplifies and speeds up the entire process. However, software also makes it possible to create a horrendous mess if there is inadequate documentation and/or weak controls. Errors happen more slowly when you do things by hand, and software may make it easier to steal larger amounts of money faster.

The Accounting Cycle



The majority of the transactions for a given business fall into a relatively finite number of categories: buy and sell inventory, collect or pay out cash, pay employees, borrow money, repay debt, and so on. I have put together a table on the following page which summarizes these routine transactions and their respective impacts on the journals and ledgers.

Summary of basic business processes and the effects of various transactions on the books

	Receive payment for the sale											
	Where the initial entries show up in the books	Purchase inventory	Pay for inventory	Make a sale	Receive payment for the sale	Buy a fixed asset	Pay for a fixed asset	Borrow money	Pay back debt	Accrue payroll	Pay payroll	Pay expenses
Journals	Purchases journal	X				X						
	Cash disbursements journal		X				X		X		X	
	Sales journal			X								
	Cash receipts journal				X							
	Payroll journal									X		
	General journal											
	Where the entries get posted**				Receive payment for the sale							
	Accounts payable subsidiary ledger	X				X						
	Accounts receivable subsidiary ledger			X								
	Inventory ledger											
	Fixed asset ledger											
	Payroll ledger									X		
	General ledger	X			X			X		X		X
Ledgers												

** Posting is the process of making entries to the ledgers from the respective journals. Entries to the ledgers are usually in summary form. For example, we would typically make a single entry from the cash receipts journal at the end of the month. That entry would reflect the aggregate impact of all cash receipts for the month. Note also that there is always a supporting journal entry of some kind for every transaction. Entries are NEVER made directly to a ledger without a supporting journal entry. Most journal entries will have some sort of supporting documentation, such as an invoice, deposit slip, time sheet, etc.

The diagram on the next page illustrates the relationship between the journal, ledger, and subsidiary ledgers.

Chart of accounts

A chart of accounts is nothing more than a listing of the account titles (and subdivisions) that we are likely to need, along with a coding system which specifies each individual account.

		Possible coding systems		
		Numeric	Alphanumeric	Decimal
Assets				
Control Account	Cash	1000	A1000	10.00
subsidiary accounts	Petty cash	1010	A1010	10.10
	General checking accounts	1020	A1020	10.20
	Last National Bank	1021	A1021	10.21
	Fells Wargo	1022	A1022	10.22
	Payroll checking account	1023	A1023	10.23
	Money market fund	1050	A1050	10.50
Control Account	Accounts receivable	1100	A1100	11.00
subsidiary accounts	Accounts receivable: Customer A	1110	A1110	11.10
	Accounts receivable: Customer B	1120	A1120	11.20
	Accounts receivable: Customer C	1130	A1130	11.30
Control Account	Inventory	1200	A1200	12.00
subsidiary accounts	Raw materials	1210	A1210	12.10
	Work in process	1220	A1220	12.20
	Finished goods	1230	A1230	12.30
Control Account	Equipment	1300	A1300	13.00
subsidiary accounts	Vehicles	1310	A1310	13.10
	Factory machinery	1320	A1320	13.20
	Office equipment	1330	A1330	13.30
Liabilities				
Control Account	Accounts payable	2000	L1000	20.00
subsidiary accounts	Accounts payable: supplier A	2010	L1010	20.10
	Accounts payable: supplier B	2020	L1020	20.20
	Accounts payable: supplier C	2030	L1030	20.30
	Notes payable	2100	L1100	21.00
	Interest payable	2200	L1200	22.00
	Rent payable	2300	L1300	23.00
Capital				
	Owner's equity	3000	C1000	30.00
	Retained earnings	3100	C1100	31.00
Revenues				
	Sales revenue	4000	R1000	40.00
	Interest income	4100	R1100	41.00
Expenses				
	Cost of goods sold	5000	E1000	50.00
Control Account	Wages & salaries	5100	E1100	51.00
subsidiary accounts	Office staff	5110	E1110	51.10
	Sales office	5111	E1111	51.11
	Finance	5112	E1112	51.12
	Engineering	5113	E1113	51.13
	Facilities management	5114	E1114	51.14
	Factory	5120	E1120	51.20
	Executive	5130	E1130	51.30
	Rent	5200	E1200	52.00
	Interest	5300	E1300	53.00
	Miscellaneous	5400	E1400	54.00

Washington Company bookkeeping exercise

Objectives: *The main objective of this assignment is to increase your comfort level with some basic accounting terminology [such as debits, credits, journals, ledgers] and to give you practice doing elementary bookkeeping—making journal entries and posting to the ledger. For some of you, parts of this assignment may be “old news;” bear with us—the practice is good for you. For others, this may be new and uncharted territory; if so, all the more reason to pay close attention.*

While we rarely do bookkeeping by hand any more, accounting software makes use of the same terminology and procedures that accountants have used for centuries. This assignment will give you at least minimal exposure to these so that when you use Peachtree [or other accounting software] to print a “purchases journal” or a “customer ledger,” you will have some context in which to understand what the software is doing and why.

The chart of accounts of the Washington Company includes the following selected accounts:

11	Cash	31	Adams Trucking	61	Purchases discounts
17	Inventory	31	Pierce Supply, Inc.	62	Freight in
18	Supplies	31	Lewis Hardware	63	Purchases discounts
26	Equipment	32	Franklin Machine Works, Inc.	73	Advertising expense
31	Accounts payable	32	Spokane Advertising		
31.1	King Manufacturing Co.	40	Capital		

In August the following transactions were completed. All purchases were on account. Assume that the July 31 balance sheet showed only two accounts with balances: cash and capital, each with a balance of \$40,000.

Date	Transaction	<i>In what journal will you make the entry for this transaction?</i>
2	Purchased merchandise from King Manufacturing Company, \$6,000; terms are 2/10, net 30 days	
3	Received freight bill from Adams Trucking on King purchase, \$300.	
7	Purchased <i>office supplies</i> from Pierce Supply, Inc., \$7,000 and <i>merchandise</i> from Lewis Hardware, \$8,500.	
8	Received credit on merchandise returned to Lewis Hardware, \$400.	
9	Paid King Manufacturing Company invoice (August 2 nd purchase) in full.	
16	Purchased office supplies from Pierce Supply, Inc., \$6,000; purchased merchandise worth \$4,500 from King Mfg.	
17	Returned supplies to Pierce, receiving credit, \$100	
18	Received freight bills on August 16 purchases from Adams Trucking, \$500.	
20	Returned merchandise to King Manufacturing Company receiving credit, \$300.	
25	Received bill for advertising from Spokane Advertising, \$800.	
26	Paid August 3 rd Adams Trucking bill in full	
28	Purchased a cash register from Franklin Machine Works, \$250	
29	Paid Spokane Advertising and Franklin Machine Works for August 25 th and August 28 th purchases	

Instructions

- (a) Identify the relevant journals in the right hand column; then journalize the transactions
- (b) Post to both the general and subsidiary ledger accounts. Prove the agreement of the control and subsidiary accounts. Copies of the appropriate forms are attached.
- (c) Run a trial balance to be sure everything is in balance.

GENERAL LEDGER

GENERAL LEDGER

<u>11 - Cash</u>		<u>31.4 - Lewis Hardware</u>									
Date	Transaction	Journal	Debit	Credit	Balance	Date	Transaction	Journal	Debit	Credit	Balance
8/1	Beginning Balance					8/1	Beginning Balance				-0-
<u>17 - Inventory</u>		<u>31.5 Franklin Machine Works</u>									
Date	Transaction	Journal	Debit	Credit	Balance	Date	Transaction	Journal	Debit	Credit	Balance
8/1	Beginning Balance				-0-	8/1	Beginning Balance				-0-
<u>18 - Supplies</u>		<u>31.6 Spokane Advertising</u>									
Date	Transaction	Journal	Debit	Credit	Balance	Date	Transaction	Journal	Debit	Credit	Balance
8/1	Beginning Balance				-0-	8/1	Beginning Balance				-0-

26 - Equipment				40 - Capital							
Date	Transaction	Journal	Debit	Credit	Balance	Date	Transaction	Journal	Debit	Credit	Balance
8/1	Beginning Balance				-0-	8/1	Beginning Balance				
31 Accts payable control											
Date	Transaction	Journal	Debit	Credit	Balance						
8/1	Beginning Balance				-0-						
31.1 - King Mfg Co											
Date	Transaction	Journal	Debit	Credit	Balance	Date	Transaction	Journal	Debit	Credit	Balance
8/1	Beginning Balance				-0-	8/1	Beginning Balance				-0-
31.2 Adams Trucking											
Date	Transaction	Journal	Debit	Credit	Balance	Date	Transaction	Journal	Debit	Credit	Balance
8/1	Beginning Balance				-0-	8/1	Beginning Balance				-0-
31.3 Pierce Supply											
Date	Transaction	Journal	Debit	Credit	Balance	Date	Transaction	Journal	Debit	Credit	Balance
8/1	Beginning Balance				-0-	8/1	Beginning Balance				-0-