

Accounting 101*

One of our chapter's lifetime member, Tena Martins, presented a workshop focusing on an overview of the journals and ledgers that make up financial reporting.

Whether you are new to accounting, or need a refresher course, this document should help you gain an understanding of typical accounting functions.

Note: This handout from the workshop is an accounting primer, and does not cover:

- Firm statistical information
- Profitability ratios
- Overhead analysis
- Converting accounts receivables into cash
- How to budget
- Project management and other related issues

* While Tena's handout was titled "A/E Accounting 101," (she presented it to staff working in architectural and engineering firms at the time) the information she shared isn't specific to just those types of firms.



A/E ACCOUNTING 101

The two objectives of any business are to earn a profit and to remain solvent (having the cash to pay debts on time). The accounting system is the means by which profitability and solvency are measured.

Accounting assembles and maintains historical data about the firm's financial transactions.

This workshop is designed to foster a better understanding of the accounting process of journalizing business transactions. This topic has been developed with the understanding that class participants have very little (if any) accounting experience. The data covered make up day to day typical accounting functions necessary to record and classify accounting information.

Glossary

Account	A tabular record of financial transactions related to a particular item or class of items used to classify and record financial details of business transactions of the firm.
Accounting	The collective methods for recording the financial details of business transactions and systematically assembling, presenting and interpreting these data to provide financial information about a business. This information is needed by owners to assist in making informed decisions.
Accounting Equation	$Assets = Liabilities + Owner's Equity$.
Accounts Payable	Current liabilities in accrual accounting, representing the amount owed by the firm to vendors and consultants for merchandise or services provided to the firm.
Accounts Receivable	Money owned by clients to the firm for services rendered or for reimbursement of expenses.
Assets	The listing of what things the business owns (i.e., building, cash, equipment)
Balance Sheet	A statement of the firm's financial condition as of a specific date. It is a statement of the balance between the asset accounts and the liability and owner's equity accounts.
Bookkeeping	Mechanical aspects of recording and classifying transactions, and is but a small part of the field of accounting.
Chart of Account	A list of accounts used by the firm in keeping its books. The detail of accounts must be appropriate to the needs of the firm for management and for tax return preparation.
Controller	Chief accounting officer.
Credit	The right-hand entry of a double entry bookkeeping system.
Debit	The left-hand entry of a double entry bookkeeping system.
Double Entry Accounting	A system of keeping books of accounts in which there are always two entries, of an equal dollar amount of debits and credits.
Expenses	The cost of goods and services used during the period used up in the process of obtaining revenue.
Income Statement	The basic operating financial statement showing the activity of the firm for the accounting period specified; it shows revenues, expenses and the resulting income (profit) or loss.
Journals	A chronological record of transactions.
Ledgers	A book of accounts used to summarize all transactions recorded

	in journals. The form of record used to record increases and decreases in a single balance sheet item is called an account. The entire group of accounts is called a ledger.
Liabilities	Debts or obligations of the firm owed to others. Borrowing money or buying on credit will create a liability. Examples of liabilities are accounts payable and notes payable. Liabilities represent the claims of creditors to the resources of the business.
Net Income	Profits remaining after expenses have been subtracted from revenue.
Owner's Equity	Value of the firm's assets in excess of its liabilities; represents the owner's investment in the business.
Posting	The process of transferring the debit and credit totals from journals to the ledger accounts.
Revenue	Financial inflows from the activities of the firm.

METHODS OF ACCOUNTING

There are two methods of maintaining accounting records: the cash basis and the accrual basis.

In accounting for transactions on the **cash basis**, revenue is recognized only when cash is received, and expenses are only recognized when they are paid in cash.

Financial statements using the cash basis do not give an accurate view of the financial status of the firm since the cash basis does not reflect revenues that the firm has earned. Expenses in cash accounting show only costs that have been paid in cash.

A business which recognizes revenue in the period in which it is earned and which deducts in the same period the expenses incurred in generating this revenue is using the **accrual basis** of accounting.

Accrual basis of accounting recognizes revenue when it is earned, whether or not payment has been received in cash, and recognizes expenses when they are incurred whether or not the firm has made cash payment.

The most common example of such is the cost of a consultant. After a consultant bills the architect, the architect bills the owner but may not pay the consultant until the owner pays. On the architect's books the architect's invoice to the owner is a receivable, and the consultant's fee is a payable. In accrual accounting the revenue has been recognized, and the related expenses have been matched even though there has been no exchange of cash.

We will be working with the accrual basis of accounting throughout this class.

ACCOUNTING PERIODS

An accounting period is a period of time such as a week, month, quarter or year that is established as being meaningful for collecting, reporting and analyzing financial data. Financial statements present summary information for the financial position and activity during these accounting periods.

The most common period is twelve months. This annual period is called the fiscal year, and it may or may not coincide with the calendar year.

ACCOUNTING EQUATION

The “accounting equation” is **Assets = Liabilities + Owner’s Equity**. The listing of assets shows us what things the business owns; the listing of liabilities and owner’s equity tells us who supplied these resources to the business.

CHART OF ACCOUNTS

Each account has a number and is arranged in the ledger in the same sequence as they appear. This arrangement makes it easier to prepare the balance sheet and income statement and to locate any account in the ledger.

Sample Chart of Accounts

On the Balance Sheet: Asset accounts first, then liabilities, and finally owner’s equity.

Assets

100	Checking
100	Savings
101	Petty Cash
102	Accounts Receivable
103	Fixed Assets
104	Less Deprecation

Liabilities

200	Salaries Payable
201	Notes Payable
202	Accounts Payable – Consultants
203	Accounts Payable – Trade

Owner’s Equity

300	Owner’s Equity
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On the Income Statement: Revenue accounts first, then direct expenses, and indirect expenses.

Income

- 400 Fee Revenue
- 401 Reimbursable Revenue

Reimbursable Expenses

- 500 Consultants Expenses
- 501 Reprographic Services
- 502 Postage/Delivery
- 503 Long Distance Telephone

Direct Expenses

- 600 Direct Salaries – Principals
- 601 Direct Salaries – Employees

Indirect Expenses

- 701 Administrative Salaries – Principals
- 702 Administrative Salaries – Staff
- 703 Holiday, Sick Vacation
- 704 Payroll Taxes
- 705 Medical/Dental Insurance
- 706 Rent
- 707 Telephone
- 708 Office Supplies
- 709 Excise Taxes
- 710 Legal & Accounting
- 711 Business Development
- 712 Depreciation

ACCOUNTS

In its simplest form, an account is divided into two sections by a vertical line drawn down the center of the page. The left half of the page is called the **debit** side; the right half of the page is the **credit** side.

Title of Account	
Left (Debit)	Right (Credit)

An amount recorded on the left side of an account is called a **debit entry**; an amount recorded on the right side is called the **credit entry**, regardless of whether account represents an asset, a liability, or owner's equity. For every debit, there must be a corresponding credit or series of credits totaling the same amount,

LEDGERS

1. A ledger account is maintained for every account (item) on the balance sheet. The ledger is a permanent, important, and basic accounting record. Each ledger account occupies a separate page in a loose-leaf book called a ledger. For example, cash is typically the first page in a ledger. It would show increases and decrease in cash, resulting from the many transactions in which cash is received or paid.
2. In its simplest form, a ledger page is divided into two sections by a vertical line drawn down the center of the page. The left half of the page is called the **debit side**; the right half the page is the **credit side**.

Title of Account	
Left (Debit)	Right (Credit)

3. An amount recorded on the left side of a ledger page is called a debit entry; an amount recorded on the right side is called a credit entry, regardless of whether the account represents an asset, a liability, or owner's equity. For every debit, there must be a corresponding credit or series of credits totaling the same amount.
4. Asset accounts normally have debit balances; that is, the sum of amounts entered on the debit (left) side is larger than the sum of the amounts entered on the credit (right) side. For example, Cash is an asset account and has a debit balance.
5. For all asset accounts, increases are recorded by debits, and decreases are recorded by credits.

Any Asset Account	
Debit (Increase)	Credit (Decrease)

6. Liability accounts and owner's equity accounts normally have credit balances because the sum of the amounts entered on the credit (right) side is greater than the sum of the amounts entered on the debit (left)

side. For all liability accounts and owner's equity accounts, increases are recorded by credits, and decreases are recorded by debits.

Any Liability Account Or Owner's Equity Account	
Debit (Decrease)	Credit (Increase)

7. The double-entry system of accounting requires that **equal debits and credits** be recorded for every transaction.

Recording in transactions in ledger accounts: shown in T form is convenient for illustrative purposes. Details are avoided and we can concentrate on basic ideas.

Transaction 1: Tena Martins invested \$20,000 to start business

Cash	T. Martins Capital
20,000	20,000

Result: Debit (increase) cash; Credit (increase) equity.

Transaction 2: Purchased desk and chair on credit from Dania Furniture

Furniture	Accounts Payable
1,000	1,000

Result: Debit (increase) asset; Credit (increase) liability.

Transaction 3: Purchased computer paying cash.

Equipment	Cash
800	800

Result: Debit () asset; Credit () cash.

SPECIAL JOURNALS

1. An accounting system consists of the business documents, journals, ledgers, procedures and internal controls needed to produce reliable financial statements and other accounting reports. Accounting systems in common use range from simple systems in which accounting records are maintained by hand to sophisticated systems in which accounting records are maintained on computers. The accounting system to be used in any given company should be especially tailored to the size and to the information needs of the company.
2. To handle the large volume of transactions rapidly and efficiently, it is helpful to group the transactions into like classes and to use a specialized journal for each class. The great majority of transactions usually fall into three major categories.

Type of Transactions	Name of Special Journal
Sales on Credit	Sales Journal
Receipts of Cash	Cash Receipts Journal
Payments of Cash	Cash Disbursement Journal

3. In addition to these special journals, a general journal will be used for recording transactions which do not fit into any of the above three types. The general journal is added merely to distinguish it from the special journals.

Sales Journal

A sales journal is a chronological listing of all sales on account. When the services are rendered, a sales invoice is prepared. The information listed on the invoice usually includes the date of the services, the serial number of the invoice, the client's name and the amount of the sale.

Invoice Date	Account Debited	Invoice #	Invoice Amount
January 31, 2003	Starbucks Corporation	301	20,000
January 31, 2003	Tully's Corporation	302	15,000
January 31, 2003	Martin Selig Realty	303	25,300
January 31, 2003	City of Seattle	304	60,000
January 31, 2003	King County Library	305	12,000
January 31, 2003	Seattle Mariner	306	80,500
			212,800

Each entry represents a debit to the Accounts Receivable account. The offsetting credit to the Sales account.

Transaction in T form into corresponding ledger account:

Accounts Receivable	Fee Revenue	Reimb. Revenue
212,800	212,000	800

Cash Receipts Journal

Transactions involving the receipt of cash are recorded in the cash receipts journal. One common example is the collection of accounts receivable.

Receipt Date	Cash Receipt (Debit to Cash)	Collected From	Amount Collected (Credit to Accounts Receivable)
Feb 2, 2003	25,300	Martin Selig Realty	25,300
Feb 15, 2003	80,500	Seattle Mariners	80,500
Feb 22, 2003	15,000	Tully's Corporation	15,000
	120,800		120,800

Transaction in T form into corresponding ledger account:

Cash	Accounts Receivable
120,800	120,800

Cash Disbursements

The cash disbursements (or cash payments) journal, sometimes commonly referred to as **Cash Register** is used to record payments of cash. Among the more common of these transactions are payments of accounts payable to creditors, payment of operating expenses, and cash purchases of merchandise.

The cash payments journal illustrated below contains entries for January transactions of the Tena Martins Company which required the payment of cash.

Check Date	Check #	Payee	Check Amount	Description
January 1, 2003	1001	Windemere Realty	1,000	Jan. Rent
January 5, 2003	1002	Dania Furniture	500	Accounts Payable
January 15, 2003	1003	Qwest Dex	25	Advertising
January 22, 2003	1004	Puget Power	50	Utilities

Transaction in T form into corresponding ledger account:

Cash	Accts Payable	Rent	Advertising	Utilities
1,000 500 25 50	500	1,000	25	50

General Journal

A transaction that does not typically involve cash or sales is recorded in a General Journal.

(Example: Tena Martins sells a company car with payment to be collected in 30 days.)

Car	Note Receivable
10,000	10,000

Additionally, you would record a general journal transaction when you record depreciation expense for the month.

(Example: Dania furniture purchased for \$1,000 has a depreciable life of five years – or 60 months – monthly depreciable “expense” of \$17 per month.)

Transaction in T form into corresponding ledger account:

Accum. Depreciation (Furniture)	Depreciation Expense
17	17

Exercise #1

Can you give us another example of an entry you would record to General Journal. Give us the corresponding T form ledger account.

Exercise #2

What special journal would you use to record Interest earned from a Money Market Account. Give us the corresponding T form ledger account.

Exercise #3

You have just written a \$1,200 check to pay your business insurance for the year. Give us examples of the T form ledger account: 1) to record the payment; and 2) show how you would expense it over twelve months.

Exercise #4

Following this list of account titles is a series of transactions. For each transaction you are to indicate the proper accounts to be debited and credited by placing the appropriate account title in the space provided.

Cash
 Accounts Receivable
 Office Equipment
 Notes Payable
 Accounts Payable
 Accumulated Depreciation
 Owner's Equity

Office Supplies
 Salaries Expense
 Depreciation Expense
 Rent Expense

Transaction	Account Debited	Account Credited
1. Owner invested cash in the business		
2. Obtained a loan from the bank, signed a note to be paid in full in 3 years		
3. Received cash from a client for services rendered		
4. Purchased office supplies on credit		
5. Paid bill from #4.		
6. Paid salaries of employees.		
7. Record Depreciation for Feb.		
8. Paid March rent		

Transaction in T form corresponding to ledger account

FINANCIAL STATEMENTS

Financial Statements are the primary source of accounting information to persons outside the business enterprise. These statements show the financial position of the business at a given date and also the operating results which caused it to arrive at this position.

The two most widely used financial statements are the **Balance Sheet** and the **Income Statement**.

Balance Sheet: A balance sheet shows the financial position at a specific date. It consists of a list of the company's assets (what the firm owns), liabilities (what the firm owes to creditors), and owner's equity (what the owners have invested in the firm).

Sample Balance Sheet

Tena Martins Company
Balance Sheet
January 31, 2003

ASSETS:		LIABILITIES & OWNER'S EQUITY	
Cash	140,000	Liabilities;	
Accounts Receivable	92,000	Consultant Payable	2,000
Furniture & Equipment	1,800	Accounts Payable (Dania)	<u>500</u>
Note Receivable	10,000	Total Liabilities	2,500
Accum Depreciation	(17)	Owner's Equity:	
Total Assets:	<u>243,783</u>	Tena Martins, Capital	2,375
		Prev. Yr Retained Earnings	185,300
		Current Year Earnings	<u>53,608</u>
		Total Equity:	238,283
		Total Liability & O/E	<u>243,783</u>

Income Statement

The Income Statement is a formal financial statement which lists the revenue, deducts the expenses, and shows the net income of a business of the same time period. The income statement relates to the balance sheet because the net income figure is one of the causes of changes in owner's equity.

Sample Income Statement

Tena Martins Company
Income & Expenses
Period January 1 – 31, 2003

Fee Revenue	212,000
Reimbursable Revenue	<u>800</u>
	212,800
Direct Salaries Expense	120,000
Direct Consultants Expense	2,000
Misc. Direct Expenses	<u>1,000</u>
	123,000
Gross Profit on Sales:	89,800
Indirect (Administrative) Expenses:	
Indirect Salaries	20,000
Payroll Taxes	15,000
Rent	1,000
Advertising	25
Utilities	50
Misc. Office Supplies	100
Depreciation Expense	<u>17</u>
	36,192
Net Income on Sales:	53,608

Profits from profitable operations cause the owner's equity to increase. Losses from unprofitable operations cause the owner's equity to decrease.

Exercise #5

Net Income on Sales is a _____ (debit or credit) to owner's equity?

Exercise #6

Which of the following is not considered an expense on the Income Statement.

- a. Depreciation
- b. Direct Labor
- c. Dividends
- d. Indirect Expenses

Exercise #7

What are the two main objectives of any business.