State of Kansas

Introduction to Accounting
Introduction

The Washburn University School of Business is honored to have the opportunity to work with the State of Kansas in providing accounting training and enrichment.
A brief word about the Washburn and The School of Business.

- US News and World Reports (Ranked #7 in America’s Best College Category).
- AACSB Accredited (Among top 10% of all business schools)
- Princeton Review (Top 301 business schools)
Instructor Credentials

- James Martin, MPA, CPA
  - Westar Energy (1983-2001)
    - Senior Vice President Finance. Responsibilities included: Finance, Accounting, Treasury, Investor Relations, Regulatory, Strategic Planning, Corporate Development, Budgeting and Forecasting.
  - Washburn University (2004- )
Clicker Set Up

- A) I am female.
- B) I am male.
Which most closely describes you expectations from this class?

A) I have a pretty good knowledge of Accounting. I am ready to build on it.

B) Accounting is not my strong suit. I am here to learn.

C) My knowledge of accounting is pretty light. My learning may be limited.

D) I am really skeptical that this guy can teach me something about accounting.
Why are you here?

A) Change is coming with the SMART system and it is best I get some training.
B) My boss thought it would be a good idea if I came.
C) You thought you could use a dose of “Ichabod Mania”
D) The training seemed like more fun than staying in the office.
Definition of Accounting

A) The language of business.

B) An information system that identifies, records, and communicates economic events of an organization to interested users.

C) Bean counting.

D) A great way to impress a date.
Accounting for “For Profit” entities and “Not for Profit” entities differ.

- For Profit: Involves measurement of revenues and expenses with a goal of maximizing value for shareholders.
- Not For Profit: Involves measurement of receipts and disbursements. Consideration is given to operating within a given budget or appropriation level.
Differences between Profit/Nonprofit

The pricing dilemma.

- “For profit” companies will set a price for an item that is as high as the company feels the customer will pay.
- However, the price a company charges must be at least high enough that it covers the cost to produce the product.
- Therefore it is very important that companies know what it costs to produce a product.
The Snow Cone Shack Problem

- Project #1
The Snow Cone Shack Solution
Does It Have to Be Snow Cones?

- What if it were flu shots?
Flu Shots?

The Department of Painful Inoculations in the newly chartered state of Euphoria wants to operate a portable clinic for the next five years in the state capital to give out H2N2 flu shots.
Flu Shot Costs

- Cost of the portable clinic: $10,000.
- Annual cost of medical supplies: $1,200.
- Annual cost of nurse: $6,800.
- Number of shots per year: 5,000
The Flu Shot Solution

Cost of Medical Supplies  $1,200
Cost of Nurse  $6,800
Cost of the Clinic  
  $10,000  5 years =  $2,000
Total Costs  $10,000

Solution: $10,000  5,000 shots =

$2.00 per shot
What Does That Demonstrate?

A) People like flu shots as much as snow cones?
B) State agencies are like companies that sell overpriced ice and flavored syrup?
C) The instructor today is drunk?
D) There are a lot of things that government agencies and businesses have in common when it comes to financial decision making.
What is the Basis for Accounting Decision Making?

Entities (business or government) have three key financial statements they rely upon.

Balance Sheet
Income Statement
Statement of Cash Flows
The Balance Sheet

A financial snapshot of a business entity at one point in time.

Assets = Liabilities + Equity (Fund Balance)
The Balance Sheet (cont.)

Assets: An entity’s resources (e.g. Cash, Computer Equipment, Buildings, Receivables).

Liabilities: An entity’s debts. (Vouchers Payable, Revenue Bonds Payable.)

Equity: Fund Balance
The Income Statement

A financial video covering a period of time.

Revenues – Expenses = Excess (Deficiency)
The Income Statement (cont.)

Revenues: Includes increases in assets from exchange transactions, realized gains, and support. (Taxes, Fees, Assessments)

Expenses: The cost of assets that have been exhausted in producing services. (Payroll, Rent, Supplies, Depreciation).

Excess/Deficiency: Revenues minus Expenses.
The Statement of Cash Flows

Summary of sources and uses of cash during a period of time.

Operating

Noncapital Financing

Capital and Related Financing

Investing
The Statement of Cash Flows (cont.)

**Operating:** Receipts from clients minus payments to suppliers and employees.

**Noncapital Financing:** Proceeds from debt unrelated to capital improvement. Grants, taxes etc. not for capital purposes minus repayment of such debt and interest.

**Capital and Related Financing:** Proceeds from debt related to capital improvement. Grants, taxes etc. for capital purposes minus repayment of such debt and interest.

**Investing:** Receipts from sales of other entity securities; receipt of interest and dividends; purchase of other entity securities.
# Financial Statement Interrelationships

<table>
<thead>
<tr>
<th>Statement of Cash Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
</tr>
<tr>
<td>NonCap Financing</td>
</tr>
<tr>
<td>Investing</td>
</tr>
<tr>
<td>Cap/Rel Financing</td>
</tr>
<tr>
<td>Cash Balance Change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Less Expenses</td>
</tr>
<tr>
<td>Excess Rev. over Exp.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance Sheet (Partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets:</td>
</tr>
<tr>
<td>Cash</td>
</tr>
<tr>
<td>Liabilities</td>
</tr>
<tr>
<td>Debt</td>
</tr>
<tr>
<td>Equity</td>
</tr>
<tr>
<td>Fund Balance</td>
</tr>
</tbody>
</table>
Where do Financial Statements Come From?

Transactions → Accounting System → Financial Statements
Terminology

Accounts: An accounting record that is used to track all increases in a specific asset, liability or fund account (including revenues/expenses).

Double Entry Accounting Definition (part 1): Every transaction will affect at least two accounts.
Sample Transaction #1

Agency received $10,000 in fee revenue. Agency paid $1,000 for rent.

\[
\begin{align*}
\text{Assets} & \quad = \quad \text{Liabilities} \quad + \quad \text{Fund Balance} \\
\text{Cash} & \quad \text{Fee Fund} \\
$10,000 & \quad $10,000 \\
<$1,000> & \quad <$1,000> \\
$9,000 & \quad $9,000
\end{align*}
\]
## Post Transaction Balance Sheet

### Assets:
- Cash: $9,000
- Total Assets: $9,000

### Liabilities:
- None: $0
- Total: $0

### Fund Balance:
- Fee Fund: $9,000
- Total Fund Balance: $9,000

### Total Liab. / Fund Bal.
- $9,000
Question

When analyzing a fund account, would it be helpful to separate the transactions which increase the fund balance (revenues) from the transactions which decrease the fund balance (expenses)?

Absolutely. Let’s set up temporary accounts called Fee Revenue and Rent Expense.
Sample Transaction #1 (Again!)

Agency received $10,000 in fee revenue.
Agency paid $1,000 for rent.

Assets = Liabilities + Fund Balance

<table>
<thead>
<tr>
<th>Cash</th>
<th>Fee Revenue</th>
<th>Rent Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000</td>
<td>$10,000</td>
<td>&lt;$1,000&gt;</td>
</tr>
<tr>
<td>&lt;$1,000&gt;</td>
<td>_____</td>
<td>&lt;$1,000&gt;</td>
</tr>
<tr>
<td>$ 9,000</td>
<td>$10,000</td>
<td>&lt;$1,000&gt;</td>
</tr>
</tbody>
</table>
## Post Transaction Balance Sheet

<table>
<thead>
<tr>
<th>Assets:</th>
<th>Liabilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>None</td>
</tr>
<tr>
<td>$9,000</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>$9,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Fund Balance:**
- Fee Fund       $9,000
- Total Fund Balance $9,000

**Total Liab. / Fund Bal.** $9,000
Post Transaction Income Statement

Revenues
- Fee Revenue $10,000
- Total Revenue $10,000

Expenses
- Rent Expense <$1,000>
- Total Expense <$1,000>

Excess Revenue Over Expense $9,000
Department of Armadillo Affairs Problem

- Project #2
Would it be helpful if we took each account and “split” it down the middle? We could use one side of the “split” for increases to the account. The other side of the “split” will show decreases to the account.

Cash

\[ \text{Debit} \quad \text{Credit} \]

Note: We have invented the “T” Account.
The Rules for Debits and Credits

1) Debit means “left side”, not “increase” or “decrease”.

2) Credit means “right side”, not “increase” or “decrease”.

3) Every transaction has at least one debit and one credit entry (Double entry accounting definition: part 2).

4) Debits = Credits.
Normal Balances

\[ \text{Assets} \quad = \quad \text{Liabilities} \quad + \quad \text{Fund Balance} \]

Assets are on the left side of the above equation and as such normally have debit balances (left side balances).

<table>
<thead>
<tr>
<th></th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td>10,000</td>
</tr>
</tbody>
</table>
Normal Balances

Assets = Liabilities + Fund Balance

Liabilities are on the right side of the above equation and as such normally have credit balances (right side balances).

<table>
<thead>
<tr>
<th>Vouchers Payable</th>
<th>Bonds Payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debit</td>
<td>Debit</td>
</tr>
<tr>
<td>Credit</td>
<td>Credit</td>
</tr>
<tr>
<td>9,000</td>
<td>20,000</td>
</tr>
</tbody>
</table>
Normal Balances

Assets = Liabilities + Fund Balance

Fund Balances are on the right side of the above equation and as such normally have credit balances (right side balances).

<table>
<thead>
<tr>
<th>Fund BALance</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Fund</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>Capital Improvement Fund</td>
<td>15,000</td>
<td></td>
</tr>
</tbody>
</table>
## How to Increase/Decrease an Account

<table>
<thead>
<tr>
<th>Type Of Account</th>
<th>Normal Balance</th>
<th>Increase With A...</th>
<th>Decrease With A...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset</td>
<td>Debit</td>
<td>Debit</td>
<td>Credit</td>
</tr>
<tr>
<td>Liability</td>
<td>Credit</td>
<td>Credit</td>
<td>Debit</td>
</tr>
<tr>
<td>Fund Bal.</td>
<td>Credit</td>
<td>Credit</td>
<td>Debit</td>
</tr>
<tr>
<td>Revenue</td>
<td>Credit</td>
<td>Credit</td>
<td>Debit</td>
</tr>
<tr>
<td>Expense</td>
<td>Debit</td>
<td>Debit</td>
<td>Credit</td>
</tr>
</tbody>
</table>
Transaction Example #1

An agency has $100,000 in the bank and $25,000 in land at beginning of the month.

<table>
<thead>
<tr>
<th>Cash</th>
<th>Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000</td>
<td>25,000</td>
</tr>
</tbody>
</table>

The agency pays $10,000 cash for some new land. (A debit to Land Account increases it while a credit to the Cash Account decreases it.)
An agency has $90,000 in the bank and $13,000 vouchers payable at beginning of the month.

The agency pays $5,000 on an outstanding voucher. (A credit to Cash Account decreases it while a debit to the Vouchers Payable Account decreases it.)
Transaction Example #3

An agency has $85,000 in the bank and $50,000 in its fee fund at the beginning of the month.

\[
\begin{align*}
\text{Cash} & \quad \text{Fee Fund} & \quad \text{Fee Revenue} \\
85,000 & \quad 50,000 & \quad \ \ \\
\end{align*}
\]

The agency receives $7,000 in fee revenue. (A debit to Cash Account increases it while a credit to the Fee Revenue Account increases it.)
Transaction Example #4

An agency has $92,000 in the bank and $57,000 in its fee fund at the beginning of the month.

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Fee Fund</th>
<th>Utility Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>92,000</td>
<td></td>
<td>57,000</td>
<td></td>
</tr>
</tbody>
</table>

The agency pays $1,000 for its electric bill. (A credit to Cash Account decreases it while a debit to the Utility Expense Account increases it.)
Depreciation Defined

- Fixed (or capital) assets are assets which will be held or used for a longer term (usually more than one year).
- Examples are equipment, structures, land.
- These assets (excluding land) are recorded at original cost and then transferred to expense over time using a rational and systematic method.
- This process, called depreciation, results in a debit to depreciation expense and a credit to a contra-asset called accumulated depreciation.
Depreciation Calculated

\[
\frac{\text{Original Cost of Asset} - \text{Estimated Salvage Value}}{\text{Estimated Life (in Years)}} = \text{Annual Depreciation Expense}
\]

Example: A building cost $250,000 to build. It has an estimated salvage value of $10,000 and is expected to be used for 20 years.

\[
\frac{($250,000 - 10,000)}{20} = $12,000 \text{ depreciation expense per year.}
\]

* Monthly depreciation expense = $12,000 \times 12 = $1,000 per month.
Depreciation: Example #5

An agency has $91,000 in the bank, $56,000 in its fee fund. It purchases a trailer for $10,000.

The trailer has a five year expected life (no salvage). Record annual depreciation expense.

\[
\begin{align*}
\text{Cash} & \quad \text{Equipment} & \quad \text{Accum. Depreciation} \\
91,000 & \quad & \\
\text{Depreciation Expense} & \quad \text{Fee Fund} & \\
& \quad 56,000 & 
\end{align*}
\]
Department of Armadillo Affairs Problem

- Project #3
The Director of DAR notices that the invoice for the armadillo locater (charged to computer expense) was really for lease of a manual armadillo locater and should have been charged to rent expense.

<table>
<thead>
<tr>
<th>Computer Expense</th>
<th>Rent Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

The correcting journal entry is born!
Thank You!