

# Introduction to Accounting

# Goals

- ▶ Enough background so non-accountants have some idea of what accountants do.
- ▶ A shared language of terms for when we work together.
- ▶ Appreciation that we all have our parts
  - ▶ Engineers tend to stick with cost estimation
  - ▶ Economists tend to stick with revenue estimation
  - ▶ Accounting types often do the rest with a focus on tax
- ▶ Set you up for cash flow forecasts later in the course.
  - ▶ Frequent job activity
  - ▶ Also needed for business loans and business plans

Enough knowledge to read the basic documents but not enough to create them.

# Warnings

- ▶ Will feel like drinking from fire hose if you have no background but same pace as intro accounting.
- ▶ Shortcuts/simplifications to get set up for cash flow forecasts.
  - ▶ Barrier between income statement and balance sheet. Revenue and expenses not immediately reflected.
  - ▶ Forget about contra accounts.
  - ▶ Simplification of the connection between balance sheet and cash flow statement.
    - ▶ All asset purchases, even inventory, are cash from investments.
    - ▶ All borrowing and lending, even accounts receivable/payable, are cash from finance.

# Focus on Financial Accounting

- ▶ Financial accounting focuses on the preparation of documents for public consumption.
  - ▶ Balance sheet (Assets, Liabilities and Owner Equity)
  - ▶ Income statement (Revenue and Expenses)
  - ▶ Cash Flow statement (Inflows and Outflows of Cash)
- ▶ There are other accounting areas
  - ▶ Audit (Makes sure people follow the rules and are not misstating things.)
  - ▶ Cost or Managerial (Cost benefit, volume studies, accounting approach to much of this class.)
  - ▶ Forensic (Get an attorney)
  - ▶ Fund and Governmental (Where money is separated and has strings)
  - ▶ Tax (Often Different Rules)

# What is in the three documents?

This is mostly a discussion of nouns. We will add verbs and get *transactions* later.

<https://prezi.com/agobxmlocjgj/accountingnoquiz/>

# In summary

- ▶ Balance Sheet
  - ▶ Assets, things that can be owned.
    - ▶ Current, things that turn into cash over the normal course of doing business.
    - ▶ Fixed, things that require an act of volition to turn into cash.
    - ▶ Other
  - ▶ Liabilities, things that are owed
    - ▶ Current, requires cash in the near future
    - ▶ Other
  - ▶ Owner equity, what is left over  $OE \equiv \text{Assets} - \text{Liabilities}$
- ▶ Income statement, revenue and expenses
  - ▶ More expenses increase a positive number

## Summary (Con't)

- ▶ Cash Flow Statement, More cash = increase
  - ▶ Operations
    - ▶ Same direction as net income
  - ▶ Investments
    - ▶ Increase if you sell an asset.
  - ▶ Finance
    - ▶ Increase if you borrow
    - ▶ Increase with new owners *investing*

## For Next Class

Bring an income statement, cash flow statement, and balance sheet for any firm you like.

- ▶ Not Nike or Intel (Or half the class will bring these)
- ▶ Avoid banks (Balance sheets look funny)
- ▶ Avoid non-us firms (Different sign conventions)
  - ▶ US is different than IFS
  - ▶ We focus on the US

Bring means, paper or provide a link in slack when asked.



# Where to Get The Statments

- ▶ <https://finance.yahoo.com/>
  - ▶ Probably the best of the aggregators.
  - ▶ May have parser problems
- ▶ <http://www.google.com/finance>
  - ▶ Recently gimped.
  - ▶ Very nice API if you work like that.
- ▶ <https://www.sec.gov/edgar/searchedgar/companysearch.html>

Or go to the company webpages and look for “investor relations”.

# Quiz!

<https://prezi.com/rukunfcbnemy/intro-accounting/>

## Connections between the documents

- ▶ Think about the cash flow statement as the consequences of balance sheet and net income changes.
- ▶ Things that change net income changes cash from operations
- ▶ Asset purchases and sales change cash from investments.
- ▶ Borrowing, lending and owner equity changes are reflected in cash from finance.

Beware of the sign conventions + Positive is inflow of cash. + Cash flow is about *cash*, so buying an asset results in decrease in cash from investing activities.

# How to Drill and Kill the transactions

## ► Resources

- Wiki page <http://ec314-pdx-edu.wikidot.com/q1:accounting>
  - There are a small number of transactions I ask about. Thirteen are listed but there are really only eight.
  - Bottom of the page has a link to past examples (<https://drive.google.com/drive/u/0/folders/0B3ilawp4z7olelZTWE5INHJIV0E>)
  - And videos of my explaining things (<https://www.youtube.com/playlist?p=PL9B50CBC168EDAF7>)
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- Learn the transactions first. Flash cards work well.
  - Then practice on categorizing actual transactions into the 8 that you know. Use the videos and past examples for this

## Flashcards

One side has a transaction like “Buy an asset”

The reverse has something like this.

Rev	Assets ↑↓	Operations
Expense	Liabilities	Investments ↓
	OE	Finance

## Example Take Out a Loan

Rev	Assets ↑	Operations
Expense	Liabilities ↑	Investments
	OE	Finance ↑

## Example Revenue increase

Rev ↑	Assets	Operations ↑
Expense	Liabilities	Investments
	OE	Finance

## Lets Try an Example

This is before Biketown came into existence.

[https://drive.google.com/file/d/  
0B3ilawp4z7olcVI5TXQ5dVI0WFU/view](https://drive.google.com/file/d/0B3ilawp4z7olcVI5TXQ5dVI0WFU/view)



## Back to the Pre-test

- ▶ Which of the following is *not* an asset?
  - ▶ Employees
  - ▶ Land
  - ▶ Machinery
  - ▶ Cash
  - ▶ Owner Equity
  - ▶ Accounts Receivable
- ▶ Which of the following is a liability?
  - ▶ Cash
  - ▶ Accounts Receivable
  - ▶ Owner Equity
  - ▶ Tax Owed
  - ▶ None of the above
- ▶ Which of the following is an expense?
  - ▶ Owner Equity
  - ▶ A Loan
  - ▶ Taxes
  - ▶ None of the above