



Independent Study | in Idaho

Providing independent study opportunities for more than 40 years.

Acct 202
**Introduction to
Managerial
Accounting**



The University of Idaho in statewide cooperation with
Boise State University — Idaho State University — Lewis-Clark State College

Course Guide

Independent
Study | in Idaho

Self-paced study. Anytime. Anywhere!

Acct 202 Introduction to Managerial Accounting

University of Idaho
3 Semester-Hour Credits

Prepared by:

Karin (KD) Hatheway-Dial
Accounting instructor, University of Idaho
Certified Internal Auditor through the Institute of Internal Auditors.

RV: August 2017
4 – Acct 202
Copyright Independent Study in Idaho/Idaho State Board of Education

Table of Contents

Welcome! 1

Policies and Procedures 1

Course Description 1

Course Materials 1

Course Delivery #

Course Introduction #

Course Objectives #

Lessons #

Exams #

Grading #

About the Course Developer #

Contacting Your Instructor #

Assignment Submission Log #

Lesson 1: Job Classification #

Lesson 2: Job Costing #

Lesson 3: Process Costing #

Exam 1 Information: Covers Lessons 1–3 #

Lesson 4: Activity Based Costing (ABC) #

Lesson 5: Cost-Volume-Profit #

Lesson 6: Cost-Volume-Profit Additional Issues #

Exam 2 Information: Covers Lessons 4–6 #

Lesson 7: Variable and Absorption Costing #

Lesson 8: Budgetary Planning #

Lesson 9: Budgetary Control and Responsibility Accounting #

Exam 3 Information: Covers Lessons 7–9 #

Lesson 10: Standard Costs and Balanced Scorecard #

Lesson 11: Incremental Analysis #

Lesson 12: Planning for Capital Investments #

Exam 4 Information: Covers Lessons 10–12 #

Acct 202: Introduction to Managerial Accounting 3 Semester-Hour Credits: UI

Welcome!

Whether you are a new or returning student, welcome to the Independent Study in Idaho (ISI) program. Below, you will find information pertinent to your course including the course description, course materials, course objectives, as well as information about assignments, exams, and grading. If you have any questions or concerns, please contact the ISI office for clarification before beginning your course.

Policies and Procedures

Refer to the ISI website at www.uidaho.edu/isi and select *Students* for the most current policies and procedures, including information on setting up accounts, student confidentiality, exams, proctors, transcripts, course exchanges, refunds, academic integrity, library resources, and disability support and other services.

Course Description

Introduction to cost behavior and managerial use of accounting information for planning, control, and performance evaluation.

Prerequisite: Acct 201

Required: Internet access, scientific calculator, and access to a computer with Microsoft Office Excel (or equivalent program that can save a spreadsheet in an Excel format)

11 graded assignments, 12 Wiley Plus Auto-graded textbook homework self-study assignments, 4 proctored exams

Available online only.

Students may submit up to 5 assignments per week.

Students do not have to wait for grades and feedback on assignments prior to submitting subsequent assignments though it is ADVISED that they submit no more than two assignments a week and wait for feedback.

Before taking exams, it is ADVISED that students wait for grades and feedback on assignments, which may take up to three weeks after date of receipt by the instructor.

ALL assignments and exams must be submitted to receive a final grade for the course.

Course Materials

Required Course Materials

Smith, Gaylord N. *Excel Applications for Accounting Principles* 4th edition Cincinnati, OH, South- Western College Pub., February 2011. ISBN 9781111581565.

Course Delivery

All ISI courses are delivered through Canvas, an online management system that hosts the course lessons and assignments and other items that are essential to the course. Upon registration, the student will receive a *Registration Confirmation Email* with information on how to access ISI courses online.

Course Introduction

Businesses utilize **management accounting** for planning, directing, and controlling the day-to-day processes within an organization. It is where the rubber (accounting information) hits the road. The costs associated with the decisions made at the managerial level will ultimately find their way onto the financial statements where organizational performance is measured.

This course is designed to give students a rudimentary understanding of the various analytical tools applied in business to provide cost and performance information for decision-making purposes. Every person can benefit from understanding how to calculate and analyze cost information. This information can be applied by every organization. Whether you work for the large private company or the small micro-business or the local government agency understanding this information will give you an edge in doing business. The tools and techniques that will be learned in this course include activity-based costing (ABC), variable costing, and capital budgeting. In addition, students will gain basic Microsoft Excel™ skills useful in performing management accounting computations.

Course Objectives

In this course we will learn how to identify and analyze data; then use this computed information for decision making purposes from the following managerial accounting topics:

- cost classification,
 - job costing,
 - process costing,
- cost volume profit analysis,
 - activity based costing,
 - variable costing,
 - absorption costing,
- profit planning,
 - variance analysis, flexible budgeting,
 - capital budgeting.

In addition, during the course we will explore ethical dilemmas that arise during the decision-making process.

Lessons

Overview

Each lesson may include the following components:

- lesson objectives
- reading assignments
- important terms
- lecture

- written assignment, project, or activity

Study Hints:

- Keep a copy of every assignment submitted.
- Complete all reading assignments.
- Set a schedule allowing for course completion one month prior to your personal deadline. An *Assignment Submission Log* is provided for this purpose.
- Web pages and URL links in the World Wide Web are continuously changing. Contact your instructor if you find a broken Web page or URL.
- Add your own recommendations here.
- Introduce and explain any terms that are essential to understanding the course.

Refer to the **Course Rules** in Canvas for further details on assignment requirements and submission.

Exams

- You are ADVISED to wait for grades and comments on assignments prior to taking subsequent exams.
- For your instructor’s exam guidelines, refer to the **Course Rules** in Canvas.

Refer to *Grading* for specific information on assignment/exam points and percentages.

Proctor Selection/Scheduling Exams:

All exams require a proctor.

To submit your *Proctor Information Form* online, visit the ISI website and select *Forms, Proctor Information Form*. Submit this form at least two weeks before your first exam. Refer to *Students, Assignments and Exams* on the ISI website for information on acceptable and unacceptable proctors.

Grading

The course grade will be based upon the following considerations:

Lesson Points Percentage

8 Lessons Containing:

Wiley Plus Assignments

89 problems from 1 to 4 points each 122 15.0%

Excel™ Assignments

10 Spreadsheets; @ 20 points each	200	25%	Master Budget Project	78	10%	Total
400	50.0%					

<u>Exam</u>	<u>Points</u>	<u>Percentage</u>
Exam 1	100	12.5%
Exam 2	100	12.5%
Exam 3	100	12.5%
Exam 4	100	12.5%
Total	400	50.0%
Total for course:	800	100.0%

The grading percentages will be as follows:

A = 90%–100%	720–800	points
B = 80%–89%	640–719	points
C = 70%–79%	560–639	points
D = 55%–69%	440–559	points
F = 54% or below	439	points or below

The final course grade is issued after **all** lessons and exams have been graded.

Acts of academic dishonesty, including cheating or plagiarism are considered a very serious transgression and may result in a grade of F for the course.

About the Course Developer

Your course developer is Karin (K.D.) Hatheway-Dial. She is an accounting instructor at the University of Idaho, and a Certified Internal Auditor through the Institute of Internal Auditors. She is a graduate of the University of Idaho, where she received bachelor’s degrees in both Soil Science and Bacteriology in 1988, and a Master’s of Accountancy in 1999. Since 2003, she has been teaching courses at the University of Idaho in Introduction to Financial Accounting, Introduction to Managerial Accounting, Cost Accounting, Fraud Examination, Sustainability Accounting and Corporate Corruption.

Contacting Your Instructor

Instructor contact information is posted on your Canvas site under *Course Rules*.

Assignment Submission Log				
Send the completed <i>Proctor Information Form</i> to the ISI office at least two weeks before taking your first exam.				
Lesson	Projected Date for Completion	Date Submitted	Grade Received	Cumulative Point Totals
1				
2				
3				
It is time to make arrangements with your proctor to take Exam 1.				
Exam 1				
4				
5				
6				
It is time to make arrangements with your proctor to take Exam 2.				
Exam 2				
7				
8				
9				
It is time to make arrangements with your proctor to take Exam 3.				
Exam 3				
10				
11				
12				
It is time to make arrangements with your proctor to take Exam 4.				
Exam 4				

Lesson 1

Job Costing

Lesson Objectives

- Objectives: Understand conceptually the basic tenets of managerial accounting
- Understand the planning and control cycle
- Compare and contrast financial and managerial accounting
- Understand organizational structures
- Understand managerial accounting codes of conduct
- Understand, explain and classify the three manufacturing costs
- Understand, explain and classify product and period costs
- Understand, explain and calculate Cost of Goods Manufactured and Sold
- Understand, explain, compare and prepare basic income statement and balance sheets under both manufacturing and merchandising
- Identify tomorrow's managerial accounting trends

Reading Assignments

Chapter 14 – ebook doesn't have page numbers



Students have access to text on Wiley Plus site at

[WileyPLUS Read, Study & Practice](#)

Important Terms

<i>balance scorecard</i>	<i>general and administrative costs</i>	<i>process re-engineering</i>
<i>centralized</i>	<i>indirect labor</i>	<i>product costs</i>
<i>controlling</i>	<i>indirect materials</i>	<i>raw materials</i>
<i>cost of goods manufactured</i>	<i>just-in-time</i>	<i>shake n bake</i>
<i>cost of goods sold</i>	<i>lean production</i>	<i>six sigma</i>
<i>decentralized</i>	<i>life test</i>	<i>theory of constraints</i>
<i>direct labor</i>	<i>managerial accounting</i>	<i>total quality management</i>
<i>direct materials</i>	<i>manufacturing overhead</i>	<i>value chain</i>
<i>directing and motivating</i>	<i>organizational chart</i>	<i>work-in-process</i>
<i>environmental management accounting</i>	<i>period costs</i>	
<i>finished goods</i>	<i>planning</i>	

Lecture

1.1 What is Management Accounting?

Management accounting is a forward-looking strategic process that measures both financial metrics such as cost and non-financial metrics such as percentage of reworked items. Every financial and non-financial decision made within an organization will eventually be reflected on the organizations financial statements. Those financial statements are then evaluated by various types of stakeholders (shareholders, creditors, customers, suppliers, etc.) for decision making purposes. In other words, it is accounting performed inside the organization aimed at creating or maintaining stakeholder value through improvement of current processes, identifying and evaluating new commercial opportunities and enhancing customer value.

1.2 Planning and Control Cycle Model

Management accounting is all about keeping everything and everyone moving in the same direction so that the organization (non-profit, governmental, for-profit enterprises) can achieve established goals and objectives. By using the planning and control cycle model, an organization can be sure to consider all aspects of a project or process from start to finish.

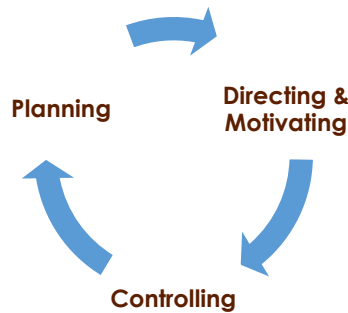


Exhibit 1.1 Planning and Control Cycle

Here we have a graphic of the Planning and Control cycle model. After an organization determines a course of action and prepares a plan, implements the plan and finally reviews the actual results to the planned outcome...the organization starts the cycle again.

In the **planning** portion of the cycle the organization first identifies alternatives or options which will best guide the organization towards its goals and objectives. Next an organization needs to balance those alternatives or opportunities against the available resources. Reviews of historical and projected information will assist in this process. Once all information has been gathered, organized and reviewed an alternative can be selected for the next stage. In the next stage, a detailed plan is built to ensure all steps in the implementation are completed efficiently.

The nuts and bolts of the cycle are in the **directing and motivating** section of the plan. Getting everyone involved to perform their assigned steps of the plan at the appropriate moment improves efficiency and ensures the complete success of the plan.

The **controlling** portion of the cycle is that portion which examines or reviews, tests, and seeks feedback from both internal and external sources about how well the plan is being executed. Feedback can come in many different forms. The most common form is comparing the actual results to the planned or budgeted results. This is the part of the cycle that determines if and how adjustments to the original design must be made.

Sometimes there are unforeseen circumstances which require an adjustment to the plan. Sometimes expectations of results are too low or, more likely, too high. When expectations are not on track changes must be made to the plan as well. It is in the controlling portion of the cycle this activity is conducted.

1.3 Comparison of financial and management accounting

It is important to understand the differences between Managerial and Financial Accounting.

First, **financial accounting** information is historical information. The information is gathered and reported after the fact. It is essentially the report card of the organization, whereas **managerial accounting** is critical to good future management of the organization. Remember, the decisions made with managerial accounting will ultimately end up on the financial statements.

Second, Financial accounting information is primarily used by external users, whereas managerial accounting information is used by the internal stakeholders of a company. Managerial accounting helps managers and staff direct internal operations.

Third, there are no rules governing managerial accounting. This is an area in accounting where innovation in cost allocation is welcomed.

Fourth, in order for managerial information to be useful it needs to be assimilated and distributed quickly. For example, Managers need to know quickly when customers complain of malfunctioning products so that an investigation can occur immediately and the problem can be cured swiftly, or managers need to know when a department starts having an increase in rework. In other words, managerial accounting information does not need to be precise to be useful. What is critical is that good information is available in a timely manner for decisions to be made. In contrast, financial accounting information must be very accurate and thus speed is often given up to achieve precision.

Fifth, an important qualitative characteristic of managerial accounting is relevance, whereas objectivity is central to financial accounting information.

Sixth, managerial accounting information is not required by any governmental body. With that said, not having good reports based on managerial accounting information can sink your ship. Financial accounting is required. Even if you are privately a held company you need good financial accounting information just to file your taxes.

Finally, managerial accounting information tends to be centered within parts of an organization. Financial accounting information emphasizes the whole organization.

Accounting information is accounting information no matter where the emphasis lays. The benefits of any information must always outweigh the costs. It must be useful or why spend the resources to gather it? It needs to be comparable from time period to time period, or, in the case of financial accounting

information, it needs to be comparable to other entities. And finally, to be comparable there needs to be a strong element of consistency used to gather and derive the information from period to period.

1.4 Organizational structures

Communication is central to the achievement of an organization's objectives and goals. Key to communication is clear organizational structure. Organizational structure can either be centralized or decentralized. **Centralized** is just like what the word itself suggests...all decisions are made centrally.

Decentralized is when decision making authority has been delegated to the department or a lower level. The idea behind decentralization of decision making is that the people closest to the job can make the better decision. This theory has credibility if the individuals making the decisions have both the education and experience to make those decisions. Organizations can decentralize to a level where individuals are inexperienced, undereducated or otherwise incompetent to make the appropriate decisions for their department and the organization as a whole. In addition, there are times that departmental managers are too far removed from the top and the overall strategic vision of the organization to make the right decision. On the flip side, organizations can be so centralized they smother operational efficiency. It is a balancing act.. Could this be rephrased? I had a bit of trouble understanding what you meant. How is that?

The best structure is a combination of centralized authority and decentralized authority. For instance, some companies may find that purchasing decisions below \$2,500 can be made by the department, but decisions over that amount must go through central purchasing.

One important piece of communication to individuals with any organizations is the **organizational chart**. The organizational chart is a crucial document that must be kept updated at all times. The "org" chart communicates the lines of authority to everyone within the establishment.

1.5 The changing business environment

The business environment is ever changing. Ignoring this basic tenet is foolhardy whether you are the employee or employer. The exponential changes within the business environment have intensified competition. This has created a retail bonanza for customers with lower prices, higher quality, and more choices. To meet these wide-sweeping changes, companies have had to re-invent themselves to survive and focused more on the value chain. The **value chain** is a set of business process or activities that are necessary in delivery a product or providing a service to the customer. The primary activities of a value chain for a manufacturing company would be research and development, acquisition of raw materials, production, sales and marketing, delivery and customer relations.

In addition to focusing on the value chain, improvement programs have been born out of the need for solutions to meet changing times. **Just-in-time** is one of those improvement programs. Just-in-time was developed by the Toyota company because it didn't have the available land to warehouse cars and parts after production. This lack of warehouse space was an economic barrier to the Toyota Motor Company.

The just-in-time inventory management system reared from the Toyota Motor Companies warehouse space problem. In the 1950s the shortage of land for warehousing finished goods was an economical hardship for the company. One engineer looked at accounting assumptions and determined that there was a better option that didn't require warehouse space. Over the next several years the engineers of

Toyota re-engineered the cars for commonality of tooling. Wherever possible they standardized assembly steps and parts across models. In some cases whole subassemblies were identical to several models. They set up a system called Kalban where you would have two shelves in the manufacturing line...one for incoming parts and one for outgoing parts. A single part was placed on the incoming shelf. Once the assembly worker pulled the part from the incoming shelf that signaled for another part to be placed on the shelf, thus parts arrived at assembly areas “just-in-time” for the assembling process. The assembly areas were also located for the greatest efficiency of assembly. No longer were parts and sub-assemblies pulled from every corner of the plant...wasting time and risking lost and damaged parts.

Ultimately, the goal was to reduce all levels of inventory (raw materials, work-in-process, and finished goods) thus reducing the need for warehouse space. One unexpected surprise was the increase in cash. Cash was no longer tied up in inventory, making it available for use in other areas of the company. Another repercussion was that overall quality of the product manufactured improved. This could be attributed to the ability of the assembly process to recognize and communicate problems immediately whereas with the old system it could take months. For instance, if raw materials fell below specs or flaws in work-in-process occurred it could take days, weeks or months under the old system to discover. With just-in-time if a subassembly does not fit because of sub par parts, it is immediately revealed to managers and quickly fixed. Toyota was the first to institute the pull rope to stop the production line if a quality problem was detected. To this day, Toyota Motor Company is synonymous with quality and durability. Another example of the power of JIT is the “Harley Davidson” story.

In the 1980s an American icon, Harley Davidson, was having tremendous trouble with the quality of its bikes. Harley Davidson showrooms had mats under the brand new bikes to catch oil leaks. It looked like Harley Davidson would soon go the way of the dinosaur...extinction. Harley Davidson implemented JIT and regained their market share and distinction amongst bike enthusiasts as a quality bike.

The next management improvement strategy on the list is TQM. TQM or **total quality management** was first commissioned by the U.S. Navy in 1985. The Navy was looking for a management strategy to cement “quality” awareness in all its processes. Total quality management is essentially a continuous improvement process where product and process quality are tested over and over. Information gleaned from these tests are utilized to re-engineer the product or process to reduce failures and errors. For example, the **life test** is a test where a product is tested until there is a failure. The failure is analyzed and used to improve the product. The new product is tested until it fails and that new information is incorporated into the next model. Another test is the “**shake n bake**” test. This test incorporates vibration and heat to determine part strength. Once a product fails, the failure is understood and engineered out of the product.

The **Theory of Constraints** (TOC) is another management philosophy where management directs its attention to managing process constraints or bottlenecks. The idea behind TOC is that the throughput of the system is constrained by the slowest part of the process. Thus by optimizing the output of the process constraint or bottleneck product output is maximized.

Process re-engineering is a radical redesign where every process within an organization goes under the microscope. The theory behind process re-engineering is that every step from material acquisition through production to marketing and distribution must be analyzed for process improvements. Changes made from process re-engineering have unfortunately trimmed redundancies which have led to employee layoffs. Thus labor has a negative opinion of this improvement tool. It is a double edged sword; do we

make the organization more competitive and productive and lay off employees, or continue down the same path without change and keep employees?

Lean Production is a fairly new program. It is a business initiative to reduce the seven wastes:

- Overproduction
- Waiting time (Time it takes from customer order to customer delivery)
- Transportation
- Over-processing
- Inventory
- Motion
- Scrap

The idea is that most costs are assigned when a product is originally designed. The objective is to reduce the costs systematically.

Another quality management programs is “**Six Sigma**” which was developed by the Motorola Company. The goal of Six Sigma is to achieve six sigma levels of quality. Statistically sigma refers to the standard deviation of a set of data. Six Sigma corresponds to “TWO” quality failures per billion parts. Now in practice “Six Sigma” requires only 3.4 failures per million. This is in contrast to the common standard of three sigma which corresponds to 67,000 quality failures per million. Quite a difference: 3.4 versus 67,000...Wow!!!

Another major change in the business environment is the ever increasing emphasis on the environment. Management accounting is a heavy player in the role of environmental accounting. **Environmental management accounting** is the process of identifying, collecting and analyzing environmental information for internal decision making. Decisions regarding purchasing, capital investment, product cost, risk management, product and process design and regulatory compliance take into consideration environmental impact.

Finally, the balanced scorecard is a management tool that continues to gain favor around the world. The **balance scorecard (BSC)** is a management tool designed to connect the strategic plan of an organization (profit, non-profit, government) with the day to day operations. Its objective is to create a common language to focus employee attention and reduce uncertainty.

1.6 Managerial Codes of Conduct

The frauds that rocked the business community at the beginning of this century equivocally demonstrated the power of unethical behavior on our economy. Entire pensions went down with some of those corporate ships; forcing retirees back into the job market. Those can attest to the fundamental need of trust in maintaining a robust economy.

Management accountants have a responsibility to follow their professional code of conduct. In part one it describes four broad areas of conduct:

- Maintain professional competence

- Treat sensitive matters with confidentiality
- Maintain personal integrity
- Be objective in all disclosures

These areas are really common sense. We all know when something isn't quite right...it is merely a matter of speaking up. Part two of the codes of conduct for management accountants discuss how to resolve specific ethical situations. You can review the codes of conduct on the Web at the Institute of Management Accountants (www.imanet.org).

Ethics is one of those areas that can be tricky to discuss. At a recent ethics seminar there was discussion about how our country in the 1950s began moving away from principle based ethics to utilitarian based ethics. Principle based ethics thinks in terms of "is this the right thing to do?" whereas the utilitarian based ethics thinks in terms of "what are the barriers to getting this done." It does not mean we are bad people, just perhaps we need to return to an approach that is more sustainable. Giving priority utilitarian-based ethics rather than principle-based ethics sometimes leaves us with unintended consequences that mushroom into a series of unfortunate events.

1.7 General Cost and Classification terms

Costs are unavoidable business truths. How costs are classified and understood depends upon the type of the organization. There are three main types of organizations:

- Manufacturing
- Merchandising
- Service

To make things more complicated, the same cost term can be used to communicate several different ideas. How cost terms should be applied often depends upon the context in which the term is being utilized.

The organization with the most complicated cost structure is manufacturing. Once you understand manufacturing costs, it is easy to transfer that knowledge to a merchandising or service organization. Thus, this lecture and the textbook discuss cost terms in a manufacturing framework.

Manufacturing converts **raw materials** to finished products using labor. Thus manufacturing costs are broken into three categories. **Direct materials** or raw materials, **direct labor** or touch labor and **manufacturing overhead**, also known as factory overhead or factory burden.

Direct materials depicted with the acronym DM or raw materials depicted as RM are the basic materials that are used in the production of a product. Some raw material examples are steel used in car manufacturing or leather in leather coat manufacturing.

Direct labor or DL is the labor required to transform the raw materials into a final or **finished good**, or goods that are ready for market. This is the labor that directly handles the assembly of the product into the finished product. This direct contact is often referred to as touch labor. Assembly line workers are examples of touch or direct labor.

The final cost component is **manufacturing overhead**. This is the remaining manufacturing costs outside of direct material and direct labor costs. Manufacturing overhead includes **indirect labor** such as the factory janitor and **indirect material** such as lubricant oil for equipment. It also includes energy costs for the factory such as electricity or heating oil. Factory property tax is another manufacturing overhead cost.

All the costs outside of the factory complex are non-manufacturing costs or period costs. Non-manufacturing or period costs are classified into two categories:

- Marketing and selling costs
- General and administrative costs

Marketing and selling costs are those costs related to the advertising and selling of a product. Examples are sales commissions, shipping costs, advertising costs, and the warehouse foreman's wages.

General and administrative costs are those costs associated with the day-to-day management of the organization. Examples are executive salaries, clerical salaries, accountant salaries, headquarters property tax, and property insurance on the headquarters building.

1.8 Product versus Period Costs

Non-manufacturing costs are often called period costs. Manufacturing costs are also commonly referred to as product costs. Basically, product costs are all those costs associated with the production or acquisition of a product to sell. Period costs are all those costs not included in product costs.

Product costs consist of direct or raw materials, direct or touch labor, and manufacturing or factory overhead. Product costs are sometimes referred to as inventoriable costs. Examples of product costs are:

- Silk for parachute construction which is a raw material cost
- A welder on an aluminum jet boat which is a direct labor cost
- Factory janitor wages which is a manufacturing overhead cost

Period costs consist of non-manufacturing costs. **Selling and marketing** costs and general and administrative costs are period costs. Examples of period costs are:

- Sales commissions which are selling costs
- The cost to advertise in the local newspaper which are marketing costs
- Executive salaries which is an administrative cost

1.8 Costs, Schedules and Classifications

Why do we classify costs? We do it so that we can prepare reports. Reports are useful for planning and controlling the organizations operations. While reports of non-financial metrics are useful in the control of day-to-day operations, financial reports are heavily utilized. Cost control is critical for the survival of any organization. Financial reports are invaluable in providing this important cost information to decision makers. Incorrect decisions can easily be made with inaccurate or incomplete information, thus

jeopardizing an organizations ability to continue into the future to continue as a “going concern.” The schedules we will look at in this section are:

- **Schedule of costs of goods manufactured**
- **Schedule of costs of goods sold**

Some Company USA

Schedule of Costs of Goods Manufactured and Sold

For the year ended December 31, 20XX

Direct Materials

Raw materials inventory, January 1	\$100,000	
Add: Purchases of raw materials	675,000	
Raw Materials available for use	775,000	
Less: Raw materials inventory, December 31 st	75,000	
Raw materials Used in production	700,000	700,000

Direct Labor

150,000

Manufacturing Overhead:

Utilities, factory	30,000	
Depreciation, factory	36,000	
Indirect materials	14,000	
Indirect labor	136,000	
Maintenance, factory	34,000	
Total manufacturing overhead costs	250,000	250,000

Total manufacturing costs	1,100,000	
---------------------------	-----------	--

Add: Work in process inventory, January 1	400,000	
---	---------	--

Total work in process available	1,500,000	
---------------------------------	-----------	--

Less: Work in process inventory, December 31	250,000	
--	---------	--

Costs of goods manufactured	1,250,000	
------------------------------------	------------------	--

Add: Finished goods inventory, January 1	550,000	
--	---------	--

Total finished goods available	1,800,000
Less: Finished goods inventory, December 31	300,000
Costs of Goods Sold	\$1,500,000

Example 1.2: Schedule of cost of goods manufactured and sold

The schedule of costs of goods manufactured is broken up into three parts:

- Raw materials
- Direct labor
- Manufacturing overhead

Raw material has been broken into beginning inventory, purchases, and ending inventory. Direct labor is a single number. Manufacturing overhead includes indirect labor, indirect materials, and other factory costs.

Added materials, labor, and manufacturing overhead are added to beginning work-in-process. **Work-in-process** (WIP) are those products still in the manufacturing process at various stages of completion. The sum of the beginning WIP plus all added manufacturing cost is total WIP available. Ending WIP is subtracted to get **cost of goods manufactured**.

Notice that the costs of goods manufactured is added to beginning finished goods inventory. Ending finished goods inventory is subtracted from costs of goods available to calculate **cost of goods sold**. Cost of goods sold is reported on the income statement.

Cost of Goods Manufactured or Cost of Goods Sold can either be reported as stand alone schedules or they can be combined into a schedule of Costs of Goods Manufactured and Sold as provided in the example above.

The values calculated in the schedules above eventually find themselves reported on both the income statement and the balance sheet. These are external reports used by many external stakeholders to make investment or credit decisions.

Written Assignment

Before beginning the first written assignment, refer to the *Course Rules* in Canvas for your instructor's assignment requirements. If emailing assignments to your instructor, please copy the ISI office at indepst@uidaho.edu.

Assignment:

- Wiley Plus Textbook homework - Brief Exercise 14-3, 5, 6, 8, 10, 11 (auto graded)
 - Wiley Plus Textbook homework - Exercise 14-3, 4, 6, 8, 9, 11, 12 (auto graded)
 - Gaylord Smith's Excel Assignment Workbook - COST Excel Assignment (graded)
 - Gaylord Smith's Excel Assignment Workbook - MFG Excel Assignment (graded)
-