

Course Outline for Homebuilders and Renovators

Divided into 10 modules, the course is designed for owner/managers of small and medium-sized businesses. No previous administrator knowledge or experience is required. In keeping with the approach of our other business management courses, this one emphasizes the practical application of management theory.

There are frequent examples, learn-by-doing activities, case studies and exercises.

The basic objective of the course is to improve the ability of the students as administrators. It tries to accomplish this by introducing them to some elementary technology and outlines a Philosophy of administration.

In a brief course of this type, it is impossible to delve too deeply into the finer points of administration in the construction industry or to examine the technical problems of the sub trades. It is designed to expose the student to some of the basic fundamentals and give him an opportunity to compare his ideas with other students.

In particular, there are four specific objectives. These are:

- 1. to identify the role of the administrator in the construction industry.
- 2. to improve the planning and control functions of the administrator
- 3. to improve problem solving skills for job improvements.
- 4. to improve communications between the job site and head office for project control.

The course is designed primarily for managers and administrators in the construction industry. Others, including office supervisors and owner-managers, will also benefit. It can also be beneficial for people who are management trainees in the industry.

#### **COURSE MATERIALS**

The course has 10 participant modules and cases and exercises.

Each module forms the basis of a three-hour class. It has an easy-to-read text (with many examples) and activities that promote the participatory approach. In addition, each module leads to a case study or exercise.

The approach is based upon the following learning sequence:

- Create interest by continually relating the text to participants' real life experiences.
- Facilitate understanding by supporting the basic theory with practical examples.
- Revise and complete the presentation by discussing questions raised by participants.
- Simulate a realistic situation through a case study, or an exercise (as suggested in each module).

Group participation is essential for this course. The more participants are involved in the learning process, the more successful you will be. The case studies and exercises have been developed with this approach in mind. At least half of each three-hour session will be devoted to discussion and participation, encouraging participants to develop their own ideas and relate their own experiences.

# COST CONTROL AND ADMINISTRATION COURSE CONTENT

Training sessions are to be presented in ten individual sessions including exams in session, each of three hours in duration or a 30 hour course with Exam at completion

Each session is divided into three parts.

- 1. Readings
- 2. Main Case
- 3. Case Study

There are essentially ten main sessions which form the major part of the training.

- 1. The Administration Function
- 2. Goals and Objectives
- 3. Planning & Scheduling I
- 4. Planning & Scheduling II
- 5. Monitoring Progress for Cost Control
- 6. Problem Solving
- 7. Making Job Improvements
- 8. Safety Administration
- 9. Communications
- 10. Time Management

THE ADMINISTRATION FUNCTION	4
1. Determine the nature of administration as it relates to cost control.	4
2. Define the functions of the management process.	4
3. Determine the general conditions necessary for sub trades contracts	4
GOALS AND OBJECTIVES	4
1. Identify what is meant by long - range, short-range, and individual objectives.	4
2. Determine how to set reasonable objectives.	4
3. Practice setting standards and objectives	4
PLANNING THE JOB I	5
1. Explain the concepts of Gantt Chart scheduling and the use of construction analysis	5
charts.	5
2. Develop Gantt charts for work and personnel scheduling.	5
3. Relate the use of Gantt Chart scheduling to cost control.	5
PLANNING THE JOB II	5
1. Demonstrate how the CPM methods can be used by administrators for controlling the	5
project.	5
2. Draw a few simple examples of CPM networks.	5
3. Relate other computer based methods of planning.	5
4. Illustrate the use of CPM and computer based tools to cost control.	5
MONITORING PROGRESS FOR COST CONTROL	6
1. Relate methods of monitoring to goals and objectives.	6
2. Determine what variables are to be measured to provide information that will be	6
required to monitor progress.	6
3. Develop a prototype system for monitoring progress	6
PROBLEM SOLVING	6
1. Explain the five step approach to problem solving.	6
2. Identify alternative methods to problem solving.	6
3. Analyze a situation and determine a course of action.	6
4. Relate the implications of potential problems and their solutions to cost control.	6

MAKING JOB IMPROVEMENTS	7
1. Analyze situations to recommend job improvements.	7
2. Apply problem solving techniques to address costs and benefits.	7
3. Identify areas for job improvements.	7
SAFETY ADMINISTRATION	7
1. Determine the role of the various agencies in safety problems.	7
2. Identify the forms and information required to report an accident.	7
3. Determine the relationship of safety administration to cost control.	7
4. Handle giving feedback on a safety infraction.	7
COMMUNICATIONS	8
1. Describe the steps in the communications process.	8
2. Identify barriers to communications and steps to overcome them.	8
3. Develop a strategy for improving interpersonal communications.	8
4. Relate the role of communications to cost control and administration	8
ORGANIZING AND PLANNING YOUR TIME	8
1. Determine personal time use problems and ways of improving their time	8
management.	8
2. Identify and apply the principles of time management.	8
3. Apply the principles of time management by analyzing time use and recommending	8
changes.	8

# COST CONTROL AND ADMINISTRATION SESSION ONE:

### THE ADMINISTRATION FUNCTION

- 1. Determine the nature of administration as it relates to cost control.
- 2. Define the functions of the management process.
- 3. Determine the general conditions necessary for sub trades contracts

#### Outline

Administration is a function requiring certain skills such as planning, monitoring, problem solving, and communication. In different forms, this responsibility may fall on different people with different job titles.

- 1. What is meant by administration?
- 2. What is meant by the Management Process?
- 3. Who is responsible for the administration function?

## **SESSION TWO:**

## **GOALS AND OBJECTIVES**

- 1. Identify what is meant by long range, short-range, and individual objectives.
- 2. Determine how to set reasonable objectives.
- 3. Practice setting standards and objectives

#### Outline

The setting of goals and objectives is very important for the home building industry. While all companies have objectives, these may not always be clear to those who may be responsible for achieving them, or how what they do relates to the objectives. This is especially true for those charged with some role in administration and cost control since these functions are critical ingredients in being able to achieve results as planned.

- 1. Define what is to be achieved in measurable time.
- 2. Be reasonable and attainable
- 3. Be consistent.

# COST CONTROL AND ADMINISTRATION SESSION THREE:

## PLANNING THE JOB I

- 1. Explain the concepts of Gantt Chart scheduling and the use of construction analysis charts.
- 2. Develop Gantt charts for work and personnel scheduling.
- 3. Relate the use of Gantt Chart scheduling to cost control.

#### Outline

Essentially, Gantt Charts are bar charts that depict the occurrence of various activities across time. Activities represented by overlapping bars can be performed concurrently. Activities represented by non-overlapping bars must be performed in the sequence indicated. The following simplified Gantt Charts

could be used to illustrate the concept. It shows a Gantt Chart for building a house within 12 weeks. As indicated, the project is entering its ninth week. The dark bars are the plan and the light bars denote progress against that scheduled. All activities except installation of millwork are on or ahead of schedule. The delay in millwork is no cause for alarm, since there are four weeks remaining on the project, and the chart shows only two weeks of millwork remaining.

## **SESSION FOUR:**

## PLANNING THE JOB II

- 1. Demonstrate how the CPM methods can be used by administrators for controlling the project.
- 2. Draw a few simple examples of CPM networks.
- 3. Relate other computer based methods of planning.
- 4. Illustrate the use of CPM and computer based tools to cost control.

#### Outline

It is unlikely that more than a few will have had any significant experience with Critical Path Method

(CPM) techniques. There is different terminology or methods of layout used in this lesson than are in normally use. This is not surprising because so many different methods are used in the field that it is difficult to cover them all.

## **SESSION FIVE:**

### MONITORING PROGRESS FOR COST CONTROL

- 1. Relate methods of monitoring to goals and objectives.
- 2. Determine what variables are to be measured to provide information that will be required to monitor progress.
- 3. Develop a prototype system for monitoring progress

#### Outline

A review of the key points from session two on Goals and Objectives, as these are the basis

for the subsequent monitoring function to ensure that results match plans or that corrective action can be taken if necessary.

## **SESSION SIX:**

## PROBLEM SOLVING

- 1. Explain the five step approach to problem solving.
- 2. Identify alternative methods to problem solving.
- 3. Analyze a situation and determine a course of action.
- 4. Relate the implications of potential problems and their solutions to cost control.

#### Outline

The topic of problem solving is often what goes wrong. Causes not correctly identified create symptoms not causes, no objective way of evaluating solutions, no follow-up, etc. These will serves as a transition to a technique for effective problem solving. It is important to emphasize the role of problem solving to effective cost control for a home builder. Without it, the best plans may produce less than desired results.

## **SESSION SEVEN:**

### MAKING JOB IMPROVEMENTS

- 1. Analyze situations to recommend job improvements.
- 2. Apply problem solving techniques to address costs and benefits.
- 3. Identify areas for job improvements.

#### Outline

Benefits to cost control and administration from being able to make job improvements. These benefits can be categorized as to whether they will affect:

- the builder
- the project administrator
- the site supervisor
- the workers

A review of six steps in the methods for making job improvements.

## **SESSION EIGHT:**

## SAFETY ADMINISTRATION

- 1. Determine the role of the various agencies in safety problems.
- 2. Identify the forms and information required to report an accident.
- 3. Determine the relationship of safety administration to cost control.
- 4. Handle giving feedback on a safety infraction.

#### Outline

Safety is often viewed like insurance, not very important until it's too late. In the area of safety administration the home builder has a lot of opportunity to control costs. These in turn can escalate if a lack of safety consciousness or enforcement is in evidence. It is useful to be introduced to information on the "costs" of safety solely in terms of Workers' Compensation rates. Related personal examples are used to support the need for greater awareness and reinforcement

### **SESSION NINE:**

## COMMUNICATIONS

- 1. Describe the steps in the communications process.
- 2. Identify barriers to communications and steps to overcome them.
- 3. Develop a strategy for improving interpersonal communications.
- 4. Relate the role of communications to cost control and administration

#### Outline

Communications shields are of paramount importance to the function of administration as it relates to the construction industry. As seen, in the case analysis in previous sessions, the administration function involves being able to communicate effectively to anticipate and solve problems. Keeping the lines of communications open between the job site and the office is a major problem and potential benefit to controlling costs and ensuring results.

## **SESSION TEN:**

## ORGANIZING AND PLANNING YOUR TIME

- 1. Determine personal time use problems and ways of improving their time management.
- 2. Identify and apply the principles of time management.
- 3. Apply the principles of time management by analyzing time use and recommending changes.

#### Outline

Explaining the need to improve personal time management, to improve their ability to use and apply the skills of administration to improve cost control. A lot of potential expense comes from improper or ineffective time use, their own and others they interrelate with.