



Recycle-A-Bicycle Mechanic Training Curriculum Outline

I. INTRODUCTION

- a. Recycle-A-Bicycle and Bicycle Education: A History
- b. How to use this curriculum
 - i. Benefits of hands-on education
 - ii. Bicycle mechanic training

II. THE MECHANIC AS A STUDENT

- a. "Brains before brawn"
- b. Patience
- c. Attention to detail
- d. Problem-solving
- e. Accountability

III. THE SHOP

- a. Rules and Responsibility
- b. Tools
 - i. Proper use and care

IV. THE BIKE

- a. Bicycle Vocabulary
- b. How the bike works
- c. Why bikes?

V. BIKE REPAIR

- a. Bearings
 - i. Headset
 - 1. Explanation of different types
 - 2. Overhauling and adjustment
 - ii. Bottom Bracket
 - 1. Explanation of different types
 - 2. Overhauling and adjustment
 - iii. Front hub
 - 1. Explanation of different types
 - 2. Overhauling and adjustment

- iv. Rear hub
 - 1. Explanation of different types
 - 2. Overhauling and adjustment
- b. Wheel Truing
 - i. Purpose
 - ii. When is it a lost cause?
 - iii. Lateral truing
 - iv. Radial truing
- c. Braking System
 - i. Types of brakes and uses
 - ii. Cables and Housing
 - iii. Adjustment
- d. Drivetrain
 - i. Cranks, chains, and cogs
 - ii. Cables and housing
 - iii. Gear adjustment

VI. CUSTOMER SERVICE

- a. Communication
 - i. With coworkers and management
 - ii. On the phone
 - iii. In person with customers
- b. Accountability
 - i. Taking responsibility for your work
 - ii. Representing your organization/place of work

VII. COMPREHENSION

- a. Written/Multiple choice test
 - i. Bicycle part vocabulary
 - ii. Tool identification
 - iii. Technical standards
- b. "Shop Test"
 - i. Customer service scenario test
 - 1. Diagnosis: Checking in a repair
 - 2. Over-the-phone diagnosis
 - ii. Coworker/Manager scenario
 - 1. The schedule
 - 2. A mistake: who's at fault, and how to deal with it
 - iii. Specifications
 - 1. Technical standards/norms
- c. Resume and Cover Letter