### Expanded Automotive Maintenance Course Templates

#### 1. \*\*Introduction to Basic Car Maintenance\*\*

\*\*Course Overview:\*\*

This course is designed for car owners who want to learn the fundamentals of car maintenance. Participants will gain practical knowledge and hands-on experience in performing essential car care tasks that every car owner should know.

\*\*Course Objectives:\*\*

- Understand the importance of regular car maintenance.

- Learn to perform basic maintenance tasks.

- Gain confidence in handling routine car care.

\*\*Course Outline:\*\*

\*\*Module 1: Introduction to Car Maintenance (30 minutes)\*\*

- \*\*Topics Covered:\*\*

- Importance of regular maintenance for vehicle longevity and safety.

- Overview of the main car systems (engine, transmission, brakes, suspension, electrical).

- \*\*Outcomes:\*\* Participants will understand why regular maintenance is crucial and be familiar with basic car components.

\*\*Module 2: Checking and Changing Engine Oil (1 hour)\*\*

- \*\*Topics Covered:\*\*

- How to check engine oil levels.

- Steps to change engine oil and oil filter.

- Proper disposal of used oil and environmental considerations.

- \*\*Outcomes:\*\* Participants will be able to check and change their engine oil, potentially saving $25-$75 per oil change.

\*\*Module 3: Checking and Topping Up Fluids (1 hour)\*\*

- \*\*Topics Covered:\*\*

- How to check and refill coolant, brake fluid, and windshield washer fluid.

- Importance of maintaining proper fluid levels.

- \*\*Outcomes:\*\* Participants will know how to maintain fluid levels, preventing potential damage that could cost $100-$500 in repairs.

\*\*Module 4: Basic Tire Maintenance (1 hour)\*\*

- \*\*Topics Covered:\*\*

- Checking tire pressure and tread depth.

- How to inflate tires to the correct pressure.

- Steps to change a flat tire.

- \*\*Outcomes:\*\* Participants will be able to maintain tire pressure and change a flat tire, saving $15-$30 per tire pressure check and $50-$100 per tire change.

\*\*Practical Sessions: (30 minutes)\*\*

- \*\*Activities:\*\*

- Hands-on practice of oil changes, fluid top-ups, and tire maintenance.

- \*\*Outcomes:\*\* Participants will gain practical experience and confidence in performing these tasks.

\*\*Estimated Savings Over 3 Years:\*\*

- By performing these basic maintenance tasks themselves, participants can save an estimated $300-$600 in oil changes, $100-$200 in fluid top-ups, and $150-$300 in tire maintenance.

\*\*Requirements from Business Partners:\*\*

- Provide a safe and equipped space for practical sessions.

- Supply necessary tools and materials (e.g., oil, filters, fluids, tire pressure gauges, jacks).

- Ensure qualified instructors to guide the participants.

#### 2. \*\*Basic Car Safety and Inspection\*\*

\*\*Course Overview:\*\*

This course is designed to teach car owners how to perform basic safety inspections and routine checks to ensure their vehicle is safe to drive. Participants will learn how to identify potential issues and take preventative measures.

\*\*Course Objectives:\*\*

- Learn to perform basic safety checks.

- Understand the importance of regular vehicle inspections.

- Gain skills to identify and address minor issues.

\*\*Course Outline:\*\*

\*\*Module 1: Introduction to Car Safety (30 minutes)\*\*

- \*\*Topics Covered:\*\*

- Importance of vehicle safety for driver and passenger protection.

- Overview of key safety systems (brakes, lights, tires).

- \*\*Outcomes:\*\* Participants will appreciate the importance of regular safety checks and know which systems are crucial.

\*\*Module 2: Inspecting Lights and Signals (1 hour)\*\*

- \*\*Topics Covered:\*\*

- How to check headlights, taillights, and indicators.

- Steps to replace bulbs and ensure all lights function properly.

- \*\*Outcomes:\*\* Participants will be able to inspect and replace light bulbs, preventing potential fines and ensuring safety.

\*\*Module 3: Brake Inspection and Maintenance (1 hour)\*\*

- \*\*Topics Covered:\*\*

- Checking brake pads and discs for wear.

- Identifying signs of brake issues (e.g., squealing, grinding).

- Basic brake maintenance tips.

- \*\*Outcomes:\*\* Participants will know how to inspect their brakes and understand when to seek professional help, potentially saving $150-$300 by preventing severe brake damage.

\*\*Module 4: Pre-Trip Inspection (1 hour)\*\*

- \*\*Topics Covered:\*\*

- Comprehensive pre-trip safety check (belts, hoses, fluids, tires, lights).

- How to inspect belts and hoses for wear and tear.

- Checking battery health and terminals.

- \*\*Outcomes:\*\* Participants will be able to conduct thorough pre-trip inspections, reducing the risk of breakdowns and costly repairs.

\*\*Practical Sessions: (30 minutes)\*\*

- \*\*Activities:\*\*

- Hands-on safety inspections and checks.

- \*\*Outcomes:\*\* Participants will gain practical experience and confidence in performing safety checks.

\*\*Estimated Savings Over 3 Years:\*\*

- By performing regular safety inspections, participants can save an estimated $200-$400 on professional inspection fees and prevent breakdowns that could cost $500-$1,000 in repairs.

\*\*Requirements from Business Partners:\*\*

- Provide a safe and equipped space for practical sessions.

- Supply necessary tools and materials (e.g., bulbs, brake inspection tools, battery testers).

- Ensure qualified instructors to guide the participants.

#### 3. \*\*Basic Troubleshooting and Emergency Repairs\*\*

\*\*Course Overview:\*\*

This course is designed for car owners who want to be prepared for common roadside emergencies and basic troubleshooting. Participants will learn how to handle minor issues and perform emergency repairs.

\*\*Course Objectives:\*\*

- Learn basic troubleshooting techniques.

- Gain skills to perform emergency repairs.

- Build confidence in handling roadside issues.

\*\*Course Outline:\*\*

\*\*Module 1: Introduction to Troubleshooting (30 minutes)\*\*

- \*\*Topics Covered:\*\*

- Understanding common car problems and their symptoms.

- Basic troubleshooting steps.

- \*\*Outcomes:\*\* Participants will understand the fundamentals of troubleshooting and be able to identify common issues.

\*\*Module 2: Battery Issues and Solutions (1 hour)\*\*

- \*\*Topics Covered:\*\*

- How to check battery health and terminals.

- Steps to jump-start a car safely.

- How to replace a dead battery.

- \*\*Outcomes:\*\* Participants will be able to handle battery issues, potentially saving $50-$150 in emergency service fees.

\*\*Module 3: Dealing with Flat Tires (1 hour)\*\*

- \*\*Topics Covered:\*\*

- Steps to safely change a tire.

- How to use a tire repair kit for temporary fixes.

- Understanding when a tire needs professional repair or replacement.

- \*\*Outcomes:\*\* Participants will be able to manage flat tires, saving $50-$100 per incident.

\*\*Module 4: Overheating and Coolant Issues (1 hour)\*\*

- \*\*Topics Covered:\*\*

- Recognizing signs of overheating.

- Steps to take when a car overheats.

- How to check and top up coolant.

- \*\*Outcomes:\*\* Participants will be able to address overheating issues and prevent engine damage, potentially saving $200-$500.

\*\*Practical Sessions: (30 minutes)\*\*

- \*\*Activities:\*\*

- Hands-on practice with emergency repairs (battery jump-starts, tire changes).

- \*\*Outcomes:\*\* Participants will gain practical experience and confidence in handling roadside emergencies.

\*\*Estimated Savings Over 3 Years:\*\*

- By being prepared for common roadside issues, participants can save an estimated $300-$600 on emergency service fees and minor repairs.

\*\*Requirements from Business Partners:\*\*

- Provide a safe and equipped space for practical sessions.

- Supply necessary tools and materials (e.g., battery testers, jump-start cables, tire repair kits).

- Ensure qualified instructors to guide the participants.

These expanded courses provide a detailed outline of what participants will learn and be able to do themselves. They also highlight the potential savings on repairs over three years and specify what is required from business partners to facilitate the courses.