Table of Contents

Chapter 1  Orientation ................................................................. 1
  ■ Introduction
  ■ Welcome to the Trucking Industry
  ■ Interstate vs. Intrastate
  ■ A Regulated Industry
  ■ Getting Your Commercial Driver’s License (CDL)
  ■ Driver Qualifications
  ■ Driver Disqualification
  ■ Alcohol & Drug Testing
  ■ The Commercial Motor Vehicle (CMV)
  ■ Size & Weight Limitations
  ■ Orientation Quiz

Chapter 2  Control Systems/Dashboard ....................................... 25
  ■ Introduction
  ■ Engine Controls
  ■ Primary Vehicle Controls
  ■ Secondary Vehicle Controls
  ■ Vehicle Instruments
  ■ Warning Devices
  ■ Control Systems/Dashboard Quiz
Chapter 3  Pre- and Post-Trip Inspections  ................................................. 39
  ■ Introduction
  ■ The Importance of Inspections
  ■ Inspection Locations
  ■ Types of Required Inspections
  ■ Pre-Trip Inspection (§392.7, §392.8, §396.13)
  ■ On-the-Road Inspection (§392.9)
  ■ Post-Trip Inspection (§396.11)
  ■ Special Rigs
  ■ Pre- and Post-Trip Inspections Quiz

Chapter 4  Basic Control  ............................................................................. 63
  ■ Introduction
  ■ Starting, Warming Up, & Shutting Down
  ■ Putting the Vehicle in Motion & Stopping
  ■ Straight Line Backing
  ■ Turning
  ■ Basic Control Quiz

Chapter 5  Shifting/Operating Transmissions ............................................. 79
  ■ Introduction
  ■ Key Elements of Shifting
  ■ Shifting Gears
  ■ Shifting/Operating Transmissions Quiz

Chapter 6  Backing and Docking. ................................................................. 93
  ■ Introduction
  ■ Backing Dangers
  ■ General Backing Guidelines
  ■ Steering Principles
  ■ Sight Side & Blind Side Backing
  ■ Basic Backing Maneuvers
  ■ Backing Safely
  ■ Loading Docks & Parking Lots
  ■ Backing and Docking Quiz
Chapter 7  Coupling and Uncoupling ................................. 107
- Introduction
- Coupling Tractor-Trailers
- Uncoupling Tractor-Trailers
- Coupling Doubles/Twin Trailers
- Uncoupling Doubles/Twin Trailers
- Other Combinations
- Coupling and Uncoupling Quiz

Chapter 8  Visual Search .................................................. 125
- Introduction
- Scanning your Entire Sight Area
- Types of Mirrors
- Visual Search Quiz

Chapter 9  Communication ................................................. 135
- Introduction
- Communicating Your Intent While Driving
- Communicating Your Presence While Driving
- Communication from Others
- Communication Tools
- Communication Quiz

Chapter 10  Distracted Driving ........................................... 143
- Introduction
- Recognizing Driving Distractions
- In Cab Technology
- Managing Driving Distractions
- Distracted Driving Quiz
Chapter 11  Speed Management  .................................................. 151
- Introduction
- Stopping Distance
- Road Design
- Road Conditions
- Weather Conditions
- Heavy Traffic
- Maintain a Safe Speed
- Use of Cruise Control
- Speed Management Quiz

Chapter 12  Space Management  .................................................. 161
- Introduction
- Managing Space
- Turning Space
- Space When Crossing & Entering Traffic
- Distracted Drivers
- Space Management Quiz

Chapter 13  Night Operation  .................................................. 171
- Introduction
- Night Driving Factors
- Night Operation Quiz

Chapter 14  Extreme Driving Conditions  .................................. 179
- Introduction
- Vehicle Preparation
- Driver Preparation
- Tire Chain Installation
- Cold Weather Starting
- Operating in Hot Weather
- Extreme Weather
- All Slippery Surfaces
Freeing a Stuck Vehicle
Breakdowns
Mountain Driving
Sharp Curves
Extreme Driving Conditions Quiz

Chapter 15  Hazard Perception ................................................................. 201
  - Introduction
  - Hazard Recognition
  - Road Hazards
  - User Hazards
  - Visual Search
  - Responding to Emergency Situations
  - Hazard Perception Quiz

Chapter 16  Skid Control/Recovery, Jackknifing, and Other Emergencies  .  . 211
  - Introduction
  - Causes of Skids
  - Tractor-Trailer Skids
  - Skid Recovery
  - Slippery Surfaces
  - Evasive Steering
  - Emergency Braking
  - Off-Road Recovery
  - Brake Failure
  - Tire Blowouts
  - Hydroplaning
  - Rollovers
  - Skid Control/Recovery, Jackknifing, and Other Emergencies Quiz
Chapter 17  Railroad-Highway Grade Crossings  ........................................... 227
- Introduction
- The Regulations
- Signs & Signals
- Safety Tips
- Railroad-Highway Grade Crossings Quiz

Chapter 18  Identification and Diagnosis of Malfunctions.  ......................... 237
- Introduction
- Frame
- Suspension System
- Axles
- Engine
- Fuel System
- Air Intake & Exhaust System
- Lubrication System
- Cooling System
- Electrical System
- Drive Train
- Brake System
- Wheels & Tires
- Steering System
- Coupling System
- Diagnosing Malfunctions
- Identification and Diagnosis of Malfunctions Quiz

Chapter 19  Roadside Inspections  ............................................................... 267
- Introduction
- Roadside Inspection Basics
- The Roadside Inspection Process
- Roadside Inspection Report & Results
- Roadside Inspections Quiz
Chapter 20  Maintenance .................................................. 281
- Introduction
- Types of Maintenance
- Your Responsibility
- Regulatory Requirements
- Pitfalls of Poor Vehicle Maintenance
- Maintenance Quiz

Chapter 21  Handling and Documenting Cargo .......................... 289
- Introduction
- The Importance of Proper Cargo Handling
- Principles & Methods of Cargo Securement
- Cargo Securement Plan
- Principles of Weight Distribution
- Safe Loading Responsibilities
- Loading/Unloading Tools
- Bill of Lading
- Shipping Paper Accessibility
- Pickup & Delivery Procedures
- Cargo Theft
- In-Transit Security Tips
- Handling and Documenting Cargo Quiz

Chapter 22  Environmental Compliance Issues ............................ 315
- Introduction
- Air Pollution
- Fuel Efficiency
- Hazardous Materials
- Environmental Compliance Issues Quiz
Chapter 23  Hours of Service Requirements .......................... 325
- Introduction
- Who is Regulated?
- On-Duty & Off-Duty Time
- The Limits
- Record of Duty Status
- Exceptions
- Consequences for Non-Compliance
- Impact on CSA BASIC Scores
- Out-of-Service Criteria
- Travel Time
- Hours of Service Requirements Quiz

Chapter 24  Fatigue and Wellness Awareness .......................... 347
- Introduction
- Personal Health & Driving
- Stress
- Fatigue
- Alcohol Use & Drug Abuse
- Safe Work Practices
- Back Safety
- Personal Security
- Fatigue and Wellness Awareness Quiz

Chapter 25  Post-Crash Procedures ................................. 363
- Introduction
- Definitions
- Accident Register
- Securing the Scene
- At the Scene
- Hazardous Materials
- Vehicle Fires
- Post-Crash Procedures Quiz
<table>
<thead>
<tr>
<th>Chapter 26</th>
<th>External Communications</th>
<th>381</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Roadside Inspection Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Roadside Inspection Outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Interpersonal Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- External Communications Quiz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 27</th>
<th>Whistleblower/Coercion</th>
<th>389</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Whistleblower Protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Coercion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Whistleblower/Coercion Quiz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 28</th>
<th>Trip Planning</th>
<th>397</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Paperwork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Route Selection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Vehicle &amp; Cargo Restrictions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Estimating Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Estimating Fuel Usage &amp; Selecting Fuel-Efficient Routes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Estimating Trip Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Trip Planning Quiz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 29</th>
<th>Drugs/Alcohol</th>
<th>411</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Safety-Sensitive Function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Alcohol Misuse &amp; Drug Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Types of Tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Alcohol Testing Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Drug Testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Refusing to Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Failing an Alcohol Test or Testing Positive for Drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The Effects of Alcohol Abuse &amp; Drug Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Drugs/Alcohol Quiz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter 34  Crossing the Canadian Border ............................. 471
  ● Introduction
  ● General Requirements
  ● Crossing the Canadian Border Procedures
  ● Border Crossing Programs
  ● Returning to the United States from Canada
  ● Motor Carrier Safety & Licensing
  ● Vehicle Sizes & Weights
  ● Metric Measurements & Conversions
  ● Crossing the Canadian Border Quiz

Chapter 35  Basic Business Practices ................................. 489
  ● Introduction
  ● Cost Determination & Control
  ● Fuel Management
  ● Growing Revenue
  ● Trucking Industry Image
  ● Contact with the Public
  ● Customer Relations
  ● What Do Employers Look For?
  ● Company Policy
  ● Opportunities for Advancement
  ● Applying for a Job
  ● Basic Business Practices Quiz

General Knowledge CDL Pre-Test ...................................... 503
Glossary ............................................................................. 513
Vehicle Troubleshooting Guide ........................................ 525