

# **Federal Motor Carrier Standard for Class B CDL – Training Curriculum**

## **Appendix B to Part 380—Class B—CDL Training Curriculum**

Class B CDL applicants must complete the Class B CDL curriculum outlined in this Appendix. The curriculum for Class B applicants pertains to heavy straight vehicles (Group B) as defined in 49 CFR 383.91(a)(2). There is no required minimum number of instruction hours for theory training, but the training instructor must cover all the topics in curriculum. There is no required minimum number of instruction hours required for BTW (range and public road) training, but the training instructor must cover all topics set forth in the BTW curriculum. BTW training must be conducted in a CMV for which a Class B CDL is required. The instructor must determine and document that each driver-trainee has demonstrated proficiency in all elements of the BTW curriculum unless otherwise noted. Consistent with the definitions of BTW range training and BTW public road training in §380.605, a simulation device cannot be used to conduct such training or to demonstrate proficiency. Training instructors must document the total number of clock hours each driver-trainee spends to complete the BTW curriculum. The Class B curriculum must, at a minimum, include the following:

### THEORY INSTRUCTION

#### *Section B1.1 Basic Operation*

This section must cover the interaction between driver-trainees and the CMV. Driver-trainees will receive instruction in the Federal Motor Carrier Safety Regulations (FMCSRs) and will be introduced to the basic CMV instruments and controls. This section must also teach driver-trainees how to perform vehicle inspections, control the CMVs under various road and traffic conditions, employ shifting and backing techniques, and couple and uncouple, as applicable. Driver-trainees must familiarize themselves with the basic operating characteristics of a CMV.

##### Unit B1.1.1 Orientation

This unit must introduce driver-trainees to the commercial motor vehicle driver training curriculum and the components of a commercial motor vehicle. The training providers must teach driver-trainees the safety fundamentals, essential regulatory requirements (*i.e.*, overview of FMCSRs/hazardous materials (HM) regulations), and driver-trainees' responsibilities not directly related to driving. This unit must also cover the ramifications and driver disqualification provisions and fines for non-compliance with parts 380, 382, 383, and 390 through 399 of the FMCSRs. This unit must also include an overview of the applicability of State and local laws relating to the safe operation of the CMV, stopping at weigh stations/scales, hazard awareness of vehicle size and weight limitations, low clearance areas (e.g., CMV height restrictions), and bridge formulas.

##### Unit B1.1.2 Control Systems/Dashboard

This unit must introduce driver-trainees to vehicle instruments, controls, and safety components. The training providers must teach driver-trainees to read gauges and instruments correctly and the proper use of vehicle safety components, including safety belts and mirrors. The training providers must teach driver-trainees to identify, locate, and explain the function of each of

the primary and secondary controls including those required for steering, accelerating, shifting, braking systems (e.g., ABS, hydraulic, air), as applicable, and parking.

#### Unit B1.1.3 Pre- and Post-Trip Inspections

The training provider must teach the driver-trainees to conduct pre-trip and post-trip inspections as specified in §§392.7 and 396.11, including appropriate inspection locations. Instruction must also be provided on enroute vehicle inspections.

#### Unit B1.1.4 Basic Control

This unit must introduce basic vehicular control and handling as it applies to commercial motor vehicles. This unit must include instruction addressing basic CMV controls in areas such as executing sharp left and right turns, centering the vehicle, maneuvering in restricted areas, and entering and exiting the interstate or controlled access highway.

#### Unit B1.1.5 Shifting/Operating Transmissions

This unit must introduce shifting patterns and procedures to driver-trainees to prepare them to safely and competently perform basic shifting maneuvers. This unit must teach driver-trainees to execute up and down shifting techniques on multi-speed dual range transmissions, if appropriate. The training providers must teach driver-trainees the importance of increased fuel economy achieved by utilizing proper shifting techniques.

#### Unit B1.1.6 Backing and Docking

This unit must teach driver-trainees to back and dock the combination vehicle safely. This unit must cover "Get Out and Look" (GOAL), evaluation of backing/loading facilities, knowledge of backing set ups, as well as instruction in how to back with use of spotters.

### *Section B1.2 Safe Operating Procedures*

This section must teach the practices required for safe operation of the CMV on the highway under various road, weather, and traffic conditions. The training providers must teach driver-trainees the Federal rules governing the proper use of seat belt assemblies (§392.16).

#### Unit B1.2.1 Visual Search

This unit must teach driver-trainees to visually search the road for potential hazards and critical objects, including instruction on recognizing distracted pedestrians or distracted drivers. This unit must include instruction in how to ensure a driver-trainee's personal security/general awareness in common surroundings such as truck stops and/or rest areas and at shipper/receiver locations.

#### Unit B1.2.2 Communication

This unit must teach driver-trainees how to communicate their intentions to other road users. Driver-trainees must be instructed in techniques for different types of communication on the road,

including proper use of headlights, turn signals, four-way flashers, and horns. This unit must cover instruction in proper utilization of eye contact techniques with other drivers, bicyclists, and pedestrians.

#### Unit B1.2.3 Distracted Driving

This unit must instruct driver-trainees in FMCSRs related to distracted driving and other key driver distraction driving issues, including improper cell phone use, texting, and use of in-cab technology (e.g., §§392.80 and 392.82). This instruction will include training in the following aspects: Visual attention (keeping eyes on the road); manual control (keeping hands on the wheel); and cognitive awareness (keeping mind on the task and safe operation of the CMV).

#### Unit B1.2.4 Speed Management

This unit must teach driver-trainees how to manage speed effectively in response to various road, weather, and traffic conditions. The instruction must include methods for calibrating safe following distances under an array of conditions including traffic, weather and CMV weight and length.

#### Unit B1.2.5 Space Management

This unit must teach driver-trainees about the importance of managing the space surrounding the vehicle under various traffic and road conditions.

#### Unit B1.2.6 Night Operation

This unit must instruct driver-trainees in the factors affecting the safe operation of CMVs at night and in darkness. Additionally, driver-trainees must be instructed in changes in vision, communications, speed, space management, and proper use of lights, as needed, to deal with the special problems night driving presents.

#### Unit B1.2.7 Extreme Driving Conditions

This unit must teach driver-trainees the specific problems presented by extreme driving conditions. The training will emphasize the factors affecting the operation of CMVs in cold, hot, and inclement weather and on steep grades and sharp curves. The training providers must teach driver-trainees the proper tire chaining procedures in this unit.

### *Section B1.3 Advanced Operating Practices*

This section must introduce higher-level skills that can be acquired only after the more fundamental skills and knowledge taught in the prior two sections have been mastered. The training providers must teach driver-trainees the advanced skills necessary to recognize potential hazards and must teach driver-trainees the procedures needed to handle a CMV when faced with a hazard.

#### Unit B1.3.1 Hazard Perception

The unit must provide instruction for recognizing potential hazards in the driving environment in order to reduce the severity of the hazard and neutralize possible emergency situations. The training providers must teach driver-trainees to identify road conditions and other road users that are a potential threat to the safety of the CMV and suggest appropriate adjustments. The instruction must emphasize hazard recognition, visual search, adequate surveillance, and response to possible emergency-producing situations encountered by CMV drivers in various traffic situations. The training providers must also teach driver-trainees to recognize potential dangers and the safety procedures that must be utilized while driving in construction/work zones.

#### Unit B1.3.2 Skid Control/Recovery, Jackknifing, and Other Emergencies

This unit must teach the causes of skidding and jackknifing and techniques for avoiding and recovering from them. The training providers must teach the importance of maintaining directional control and bringing the CMV to a stop in the shortest possible distance while operating over a slippery surface. This unit must provide instruction in appropriate responses when faced with CMV emergencies. This instruction must include evasive steering, emergency braking, and off-road recovery, as well as the proper response to brake failures, tire blowouts, hydroplaning, and rollovers. The instruction must include a review of unsafe acts and the role the acts play in producing or worsening hazardous situations.

#### Unit B1.3.3 Railroad-Highway Grade Crossings

This unit must teach driver-trainees to recognize potential dangers and appropriate safety procedures to utilize at railroad (RR)-highway grade crossings. This instruction must include an overview of various Federal/State RR grade crossing regulations, RR grade crossing environments, obstructed view conditions, clearance around the tracks, and rail signs and signals. The training providers must instruct driver-trainees that railroads have personnel available ("Emergency Notification Systems") to receive notification of any information relating to an unsafe condition at the RR-highway grade crossing or a disabled vehicle or other obstruction blocking a railroad track at the RR-highway grade crossing.

### *Section B1.4 Vehicle Systems and Reporting Malfunctions*

This unit must provide entry-level driver-trainees with sufficient knowledge of the CMV and its systems and subsystems to ensure that they understand and respect their role in vehicle inspection, operation, and maintenance and the impact of those factors upon highway safety and operational efficiency.

#### Unit B1.4.1 Identification and Diagnosis of Malfunctions

This unit must teach driver-trainees to identify major vehicle systems. The goal is to explain their function and how to check all key vehicle systems, as appropriate (e.g., engine, engine exhaust auxiliary systems, brakes, drive train, coupling systems, and suspension) to ensure their safe operation. Driver-trainees must be provided with a detailed description of each system, its importance to safe and efficient operation, and what is needed to keep the system in good operating condition.

## Unit B1.4.2 Roadside Inspections

This unit must instruct driver-trainees on what to expect during a standard roadside inspection conducted by authorized personnel. The training providers must teach driver-trainees on what vehicle and driver violations are classified as out-of-service (OOS), including the ramifications and penalties for operating a CMV when subject to an OOS order as defined in section 390.5.

## Unit B1.4.3 Maintenance

This unit must introduce driver-trainees to the basic servicing and checking procedures for various engine and vehicle components and to help develop their ability to perform preventive maintenance and simple emergency repairs.

### *Section B1.5 Non-Driving Activities*

This section must teach driver-trainees activities that do not involve actually operating the CMV, e.g., proper cargo securement.

#### Unit B1.5.1 Handling and Documenting Cargo

This unit must teach driver-trainees the basic theory of cargo weight distribution, cargo securement on the vehicle, cargo covering, and techniques for safe and efficient loading/unloading. The training providers must also teach driver-trainees the basic cargo security/cargo theft prevention procedures. The training providers must teach driver-trainees the basic information regarding the proper handling and documentation of HM cargo.

#### Unit B1.5.2 Environmental Compliance Issues

This unit must teach driver-trainees to recognize environmental hazards and issues related to the CMV and load, and also make aware that city, county, State, and Federal requirements may apply to such circumstances.

#### Unit B1.5.3 Hours of Service Requirements

This unit must teach driver-trainees to understand that there are different hours-of-service (HOS) requirements applicable to different industries. The training providers must teach driver-trainees all applicable HOS regulatory requirements. The training providers must teach driver-trainees to complete a Driver's Daily Log (electronic and paper), timesheet, and logbook recap, as appropriate. The training providers must teach driver-trainees the consequences (safety, legal, and personal) of violating the HOS regulations, including the fines and penalties imposed for these types of violations.

#### Unit B1.5.4 Fatigue and Wellness Awareness

The issues and consequences of chronic and acute driver fatigue and the importance of staying alert will be covered in this unit. The training providers must teach driver-trainees about wellness and basic health maintenance information that affect a driver's ability to safely operate a CMV.

#### Unit B1.5.5 Post-Crash Procedures

This unit must teach driver-trainees the appropriate post-crash procedures, including the requirement that the driver, if possible, assess his or her physical condition immediately after the crash and notify authorities, or assign the task to other individuals at the crash scene. The training providers must teach driver-trainees how to protect the area; obtain emergency medical assistance; move on-road vehicles off the road in minor crashes so as to avoid subsequent crashes or injuries; engage flashers; place reflective triangles and other warning devices for stopped vehicles; and properly use a fire extinguisher, if necessary. The training providers must instruct driver-trainees in post-crash testing requirements related to controlled substances and alcohol.

#### Unit B1.5.6 External Communications

This unit must instruct driver-trainees in the value of effective interpersonal communication techniques/skills to interact with enforcement officials. The training providers must teach driver-trainees the specifics of the roadside vehicle inspection process, and what to expect during this activity. Driver-trainees who are not native English speakers must be instructed in FMCSA English language proficiency requirements and the consequences for violations. The training providers must teach driver-trainees the implications of violating Federal and state regulations will have on their driving records and their employing motor carrier's records.

#### Unit B1.5.7 Whistleblower/Coercion

This unit must teach the driver-trainees about the right of an employee to question the safety practices of an employer without incurring the risk of losing a job or being subject to reprisals simply for stating a safety concern. The training providers must instruct driver-trainees in the whistleblower protection regulations in 29 CFR part 1978. The training providers must teach driver-trainees the procedures for reporting to FMCSA incidents of coercion from motor carriers, shippers, receivers, or transportation intermediaries.

#### Unit B1.5.8 Trip Planning

This unit must address the importance of and requirements for planning routes and trips. This instruction must address planning the safest route, planning for rest stops, heavy traffic areas, railroad-highway grade crossing safe clearance and ground clearance (*i.e.*, "high center"), the importance of Federal and State requirements on the need for permits, and vehicle size and weight limitations. The training providers must teach driver-trainees the correct identification of restricted routes, the pros and cons of Global Positioning System (GPS)/trip routing software, and the importance of selecting fuel-efficient routes.

#### Unit B1.5.9 Drugs/Alcohol

This unit must teach driver-trainees the rules applicable to controlled substances (including prescription drugs) and alcohol use and testing related to the operation of a CMV.

#### Unit B1.5.10 Medical Requirements

This unit must teach driver-trainees the Federal rules on medical certification, medical examination procedures, general qualifications, responsibilities, and disqualifications based on various offenses, orders, and loss of driving privileges (49 CFR part 391, subparts B and E).

#### BEHIND-THE-WHEEL RANGE

This unit must teach driving exercises related to basic vehicle control skills and mastery of basic maneuvers, as covered in §§383.111 and 383.113 of this chapter necessary to operate the vehicle safely. The training providers must teach driver-trainees activities in this unit on a driving range as defined in §380.605. The training provider must teach "Get Out and Look" (GOAL) to the driver-trainee as it applies to units B2.2-2.6.

#### *Unit B2.1 Vehicle Inspection Pre-Trip/Enroute/Post-Trip*

Driver-trainees must demonstrate proficiency in conducting pre-trip and post-trip inspections as specified in §§392.7 and 396.11, including appropriate inspection locations. Instruction must also be provided on enroute vehicle inspections.

#### *Unit B2.2 Straight Line Backing*

Driver-trainees must demonstrate proficiency in proper techniques for performing various straight line backing maneuvers to appropriate criteria/acceptable tolerances.

#### *Unit B2.3 Alley Dock Backing (45/90 Degree)*

Driver-trainees must demonstrate proficiency in proper techniques for performing 45/90 degree alley dock maneuvers to appropriate criteria/acceptable tolerances.

#### *Unit B2.4 Off-Set Backing*

Driver-trainees must demonstrate proficiency in proper techniques for performing off-set backing maneuvers to appropriate criteria/acceptable tolerances.

#### *Unit B2.5 Parallel Parking Blind Side*

Driver-trainees must demonstrate proficiency in proper techniques for performing parallel parking blind side positions/maneuvers to appropriate criteria/acceptable tolerances.

#### *Unit B2.6 Parallel Parking Sight Side*

Driver-trainees must demonstrate proficiency in proper techniques for performing sight side parallel parking maneuvers to appropriate criteria/acceptable tolerances.

## BEHIND-THE-WHEEL PUBLIC ROAD

The instructor must engage in active two-way communication with the driver-trainees during all active BTW public road training sessions. Skills described in paragraphs B3.8 through 3.12 of this section must be discussed during public road training, but not necessarily performed. Driver-trainees are not required to demonstrate proficiency in the skills described in paragraphs B3.8 through 3.12.

### *Unit B3.1 Vehicle Controls Including: Left Turns, Right Turns, Lane Changes, Curves at Highway Speeds, and Entry and Exit on the Interstate or Controlled Access Highway*

Driver-trainees must demonstrate proficiency in proper techniques for initiating vehicle movement, executing left and right turns, changing lanes, navigating curves at speed, exiting and entering the interstate, and stopping the vehicle in a controlled manner.

### *Unit B3.2 Shifting/Transmission*

Driver-trainees must demonstrate proficiency in proper techniques for performing safe and fuel-efficient shifting.

### *Unit B3.3 Communications/Signaling*

Driver-trainees must demonstrate proficiency in proper techniques for signaling intentions and effectively communicating with other drivers.

### *Unit B3.4 Visual Search*

Driver-trainees must demonstrate proficiency in proper techniques for visually searching the road for potential hazards and critical objects.

### *Unit B3.5 Speed and Space Management*

Driver-trainees must demonstrate proficiency in proper habits and techniques for adjusting and maintaining vehicle speed, taking into consideration various factors such as traffic and road conditions. Driver-trainees must demonstrate proficiency in maintaining proper speed to keep appropriate spacing between the driver-trainee's CMV and other vehicles. Instruction must include methods for calibrating safe following distances under an array of conditions including traffic, weather, and CMV weight and length.

### *Unit B3.6 Safe Driver Behavior*

Driver-trainees must demonstrate proficiency in safe driver behavior during their operation of the CMV.

### *Unit B3.7 Hours of Service (HOS) Requirements*



Driver-trainees must demonstrate proficiency in the basic activities required by the HOS regulations, such as completing a Driver's Daily Log (electronic and paper), timesheet, and logbook recap, as appropriate.

#### *Unit B3.8 Hazard Perception*

Driver-trainees must demonstrate their ability to recognize potential hazards in the driving environment in time to reduce the severity of the hazard and neutralize possible emergency situations. Driver-trainees must demonstrate the ability to identify road conditions and other road users that are a potential threat to vehicle safety and suggest appropriate adjustments.

#### *Unit B3.9 Railroad (RR)-Highway Grade Crossing*

Driver-trainees must demonstrate the ability to recognize potential dangers and to demonstrate appropriate safety procedures when RR-highway grade crossings are reasonably available.

#### *Unit B3.10 Night Operation*

Driver-trainees must be familiar with how to operate a CMV safely at night. Training providers must teach driver-trainees that night driving presents specific circumstances that require heightened attention on the part of the driver. Driver-trainees must be taught special requirements for night vision, communications, speed, space management, and proper use of lights.

#### *Unit B3.11 Extreme Driving Conditions*

Driver-trainees must be familiar with the special risks created by, and the heightened precautions required by, driving CMVs under extreme driving conditions, such as heavy rain, high wind, high heat, fog, snow, ice, steep grades, and curves. Training providers must teach driver-trainees the basic driving habits needed to deal with the specific challenges presented by these extreme driving conditions.

#### *Unit B3.12 Skid Control/Recovery, Jackknifing, and Other Emergencies*

Driver-trainees must know the causes of skidding and jackknifing and techniques for avoiding and recovering from them. Driver-trainees must know how to maintain directional control and bring the CMV to a stop in the shortest possible distance while operating over a slippery surface. Driver-trainees must be familiar with proper techniques for responding to CMV emergencies, such as evasive steering, emergency braking, and off-road recovery. They must also know how to prevent or respond to brake failures, tire blowouts, hydroplaning, and rollovers.

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