

### Miami Lakes Educational Center and Technical College

5780 NW 158<sup>th</sup> Street Miami Lakes, Florida 33014



### Commercial Vehicle Driving Course: 1490205

### **Syllabus**

The mission of the Commercial Vehicle Driving (CVD) program is to prepare postsecondary student for employment as a tractor trailer/truck driver. This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare commercial vehicle industry. The content includes but is not limited to the following: Loading and unloading cargo; reporting delays or accidents on the road; verifying load against shipping papers; and keeping records. The course content should also include instruction in human relations, leadership, communication, and employability skills, and safe, efficient work practices.

### I. General Information:

<u>Instructor</u> <u>Class Meets</u>

John Perez Mon – Fri: 12:00 pm to 5:00 pm

Office hours: 5:00 pm to 6:00 pm

Telephone #: (305) 557-1100, ext. 2326

Cell: (954) 790-3458

E-mail: johnperezcdl@dadeschools.net

<u>Attendance Policy</u>: Late arrivals and/or early departure will be noted on a daily basis, as will absences. If a lack of attendance or a lack of punctuality becomes excessive, a referral to a counselor will be written. Students are not permitted to be absent from the class for a total of 30 hours.

<u>**TABE Requirements:**</u> Reading-NA Math-NA Language-NA

**Program Length:** 320 clock hours

### **Course Requirements:**

- Must be at least 21 years of age
- Pass the Department of Transportation Physical
- Pass the Department of Transportation Drug Test
- Students must be able to read and speak English.
- Students must have the following requirements:
  - Air Brakes
  - General Knowledge test
  - Combinations Vehicle test
- Attended a CDL Orientation

### **Materials Needed:**

Work Uniforms (Dickie's / School Uniform Shirts)

Work Gloves

Safety Vests

Flashlight

Slip Resistant Shoes

Clip Board

### **How to Study for this Course**

Students will be expected to read and study all handouts and allocate a recommended two hours a day for study time.

### **Detailed Course Calendar**

Pre-Trip and Straight Backing evaluations are on the second week of class

Basic Skills evaluation for angle backing is on the third week of class

Road Test evaluation is on the fourth week of class

State Pre-Trip Testing begins on the third week of class

State Skill Test begins on the fifth week of class

State Road Test begins on the sixth week of class

### **Course Policies**

Students must sign the CDL Maximum Allowable Absent Policy

Student must sign the Student Rule Policy

Student must sign the Safety Certificate.

Student must sign the Code of Student Conduct

### **Evaluations Specified**

List of assignments, with due dates and point values

### **Grading**: MDCPS grading scale.

$$90-100 = A$$
  $60-69 = D$   $80-89 = B$   $68 \text{ or below} = F$   $70-79 = C$ 

Grading will be based on written test, preliminary test, state testing, class participation, class assignments and the final exam.

### **Written Test:**

Pre-Trip Inspections Compliance Safety Accountability Hours of Service

### Preliminary Test in the following areas:

### **Pre-Trip Evaluation**:

The pre-trip test will be randomly selected by the instructor. It will consist of two major systems. You will be required to pass it with an 80% efficiency or better.

#### **Back Skills Evaluation:**

You will be required to straight back 5 times in a roll in an alley; you will be graded on the number of time you backed into the alley.

#### **Road Test Evaluation:**

You will be evaluated on the driving range for you Road Test Evaluation. During that test, the instructor will have you make a series of turns. You will be graded on turns, Up-Shifting, down shifting, double clutching, turning on and off your turns signal switch before and after turns, riding the clutch, hands on the steering wheel and coasting.

### Florida Highway Safety and Motor Vehicles Test (FHSMV):

Florida Highway Safety and Motor Vehicles Test (FHSMV) is a pass or fail type of test. In the class, you will receive an "A" for each test that you pass on the FHSMV test or you will receive an "F" for each FHSMV state test that you fail. Below you will see the different of tests:

- Pre-Trip Test
- Backing Test
- Road Test

#### **Class Participation:**

Ex. Truck Washes, Tire Changes

#### **Class Assignments:**

Daily Pre-Trip Inspections
Mileage requirement for the CDL program is 1000 miles.
Write a resume
Identify Job Opportunities for 10 companies

#### **Standards and Benchmarks:**

### 01.0 Describe vehicle safety and accident prevention procedures--The student will be able to:

- 01.01 Understand, identify and explain the use of vehicle safety equipment.
- 01.02 Explain the use of fire extinguishers and firefighting procedures.
- 01.03 Utilize seat belts and personal protection gear appropriate to type of operation.
- 01.04 Demonstrate safe lifting procedures through use of hands-on labs or through viewing safety video.
- 01.05 Describe personal safety equipment and procedures.
- 01.06 Describe actions applicable for vehicle accidents.
- 01.07 Complete reports in a classroom activity (company, state, federal).
- 01.08 Identify all information needed for accident reports to the State, the employer and the insurance company.
- 01.09 Complete an accident report.
- 01.10 Describe procedures for protecting the scene of an accident.
- 01.11 Identify types of hazardous cargoes.
- 01.12 Describe personal liability requirements.
- 01.13 Identify hazardous road conditions that are a potential threat to the safety of the tractor-trailer driver.
- 01.14 Describe activities and characteristics of other road users that make them potentially dangerous.
- 01.15 Describe the potential consequences of excessive speed.
- 01.16 Describe the potential consequences of use of drugs or alcohol.

# 02.0 <u>Understand and comply with vehicle operating regulations--The student will be able to:</u>

- 02.01 Understand and comply with Hours of Service regulations.
- 02.02 Maintain a complete, neat and accurate driver's duty status log including discussion of electronic logs.
- 02.03 Keep accurate records required by hours of service regulations.
- 02.04 Perform mathematical calculations necessary to recap and apply totals to the hours of service regulations.
- 02.05 Determine driving hours remaining on a particular day or tour of duty.
- 02.06 Understand and comply with applicable United States Department of Transportation regulations.
- 02.07 Understand and comply with Florida Department of Transportation regulations.
- 02.08 Understand and comply with state and local traffic laws including restrictions on vehicle size and weight.
- 02.09 Identify permit requirements.
- 02.10 Fully understand and comply with Federal Motor Carrier Safety Administration rules and regulations Compliance, Safety, and Accountability (CSA) particularly the role of drivers and motor carriers.

## 03.0 Demonstrate proper cargo handling and documentation procedures--The student will be able to:

- 03.01 Load and unload cargo safely and efficiently.
- 03.02 Obtain gross weight and axle weight.
- 03.03 Describe cargo load to meet legal weight and safety requirements.
- 03.04 Secure cargo using blocking, bracing, packing, rope, cable, chains and strapping.
- 03.05 Describe the placement of placards when carrying hazardous materials.
- 03.06 Describe procedure for use of common cargo handling equipment, including pallets, jacks, dollies, hand trucks, nets, slings, poles and other equipment.
- 03.07 Identify categories of hazardous materials and the need for specialized training to handle hazardous materials.
- 03.08 Identify hazardous materials documentation requirements.
- 03.09 Verify nature, amount and condition of cargo on both pickup and delivery.
- 03.10 Verify information on bill of lading and properly record and report discrepancies and damage to the cargo.
- 03.11 Obtain appropriate signatures on delivery receipts and other required forms.
- 03.12 Prepare a manifest.
- 03.13 Describe the handling of C.O.D. shipments.
- 03.14 Verify door seal number against shipping document.
- 03.15 Comply with port of entry or exit and other inspection station procedures.

### 04.0 Demonstrate pre-trip preparation procedures--The student will be able to:

- 04.01 Check and secure tractor-trailer or vehicle permit.
- 04.02 Check accident report packets for proper contents.
- 04.03 Plan a route from one point to another that is optimal in terms of travel time, fuel costs, potential hazards and federal, state and local travel restrictions. Describe the use of manual and contemporary GPS navigation systems.
- 04.04 Arrange to secure permits required by the nature of the vehicle, its cargo and route to be traveled.
- 04.05 Arrange a secure place for vehicle on layovers, especially when transporting hazardous materials.
- 04.06 Demonstrate map-reading skills.
- 04.07 Estimate travel time and plan rest stops and layovers.
- 04.08 Estimate fuel consumption and plan fuel stops.
- 04.09 Estimate expense money and obtain funds and/or credit cards.

### 05.0 Demonstrate vehicle inspection procedures--The student will be able to:

- 05.01 Check general appearance and condition of vehicle.
- 05.02 Check fuel, oil, water levels and automatic transmission fluid level.
- 05.03 Check signal lights, stop lights and running lights.
- 05.04 Check tires, rims and suspension.
- 05.05 Check horn, windshield wipers, mirrors and reflectors.
- 05.06 Check fifth wheel, trailer hook-up and brake lines.
- 05.07 Check emergency bi-directional reflective triangles and fire extinguishers.
- 05.08 Check instruments for normal readings.
- 05.09 Check steering system, brake action and tractor protection valve.
- 05.10 Check cargo-blocking, bracing and tie down.

- 05.11 Perform in route inspections of mirrors, instrument panel, engine and power train, suspension system and brakes.
- 05.12 Perform post-trip inspection of vehicle and all systems.

### 06.0 Perform vehicle maintenance and servicing procedures--The student will be able to:

- 06.01 Describe function and operation of principle vehicle systems including, engine, engine auxiliary brake, drive train, coupling, suspension and electrical system.
- 06.02 Check engine fuel, oil, coolant, battery and filters.
- 06.03 Check tire air pressure.
- 06.04 Check for proper tire and wheel mounting.
- 06.05 Drain moisture from air brake supply reservoirs.
- 06.06 Check brakes.
- 06.07 Clean and repair lights.
- 06.08 Change fuses and reset circuit breakers.
- 06.09 Clean interior and exterior of vehicle.
- 06.10 Check and replace mud/rain flaps.
- 06.11 Check and adjust tandem and fifth-wheel slides, if so equipped.

### 07.0 Demonstrate basic vehicle control procedures--The student will:

- 07.01 Place transmission in neutral before starting engine.
- 07.02 Start, warm up and shut down the engine according to the manufacturer's specifications.
- 07.03 Build full pressure (90-120 PSI) in air tanks before starting.
- 07.04 Test parking brake and service brake before starting.
- 07.05 Coordinate use of accelerator and clutch to achieve proper gear shifts, smooth acceleration and avoid clutch abuse.
- 07.06 Maintain proper engine RPM while driving.
- 07.07 Properly modulate air brakes to bring vehicle to a smooth stop.
- 07.08 Shift up and down through all gears of all major types of conventional transmissions.
- 07.09 Double clutch and time shift for smooth acceleration and fuel-efficient performance.
- 07.10 Select proper gear for speed and highway conditions.
- 07.11 Operate manual, automatic and semiautomatic transmissions as available training equipment allows.
- 07.12 Coordinate steering, braking and acceleration to take the vehicle through a desired path forward and backward in a straight line.
- 07.13 Adequately judge the path trailer will take (off tracking) as vehicle negotiates left or right curves and turns.
- 07.14 Use clutch and gears to maintain proper operating range/power/RPM of the motor while slowing the vehicle.
- 07.15 Park the vehicle, set brakes and shut off the engine.
- 07.16 Properly chock/block wheels where and when required.

### 08.0 Demonstrate backing, coupling and uncoupling skills--The student will:

- 08.01 Check area before backing.
- 08.02 Properly utilize guides and mirrors.
- 08.03 Properly back in straight line and curved paths.
- 08.04 Properly back into an alley dock.

- 08.05 Properly Parallel Park.
- 08.06 Judge side, rear and overhead clearances and path of the trailer.
- 08.07 Reverse-steer and articulate a vehicle.
- 08.08 Align the tractor properly to connect with trailer.
- 08.09 Back and secure the tractor properly into the trailer kingpin without damage.
- 08.10 Perform tug test against the locking mechanisms and visual checks to make sure coupling is secure.
- 08.11 Connect electrical and air lines properly.
- 08.12 Set in-cab air brake controls properly.
- 08.13 Retract and secure landing gear after coupling is secure.
- 08.14 Properly uncouple and secure the trailer.

### 09.0 Demonstrate basic vehicle maneuvers--The student will be able to:

- 09.01 Make a straight-in approach to an alley.
- 09.02 Drive forward through an alley for 100 feet.
- 09.03 Back 100 feet through an alley.
- 09.04 Make proper straight in approach to multiple curves (serpentine).
- 09.05 Drive forward through curves (serpentine) while keeping tires inside of line.
- 09.06 Properly position unit for backing into a loading dock.
- 09.07 Properly back to a dock actual or simulated.
- 09.08 Properly stop unit within three feet (36") from the end of the alley dock.
- 09.09 Properly enter a weighing platform.

### 10.0 Demonstrate road driving skills--The student will be able to:

- 10.01 Carefully enter traffic from parked position.
- 10.02 Use clutch and gears properly.
- 10.03 Proceed from a stopped position without rolling backward.
- 10.04 Use mirrors properly.
- 10.05 Signal intention to turn well in advance.
- 10.06 Get into proper lane well in advance of turn.
- 10.07 Check traffic conditions and turn only when intersection is clear.
- 10.08 Restrict traffic from passing on right when preparing to complete a right hand turn.
- Maintain 3 feet or less on right side of vehicle.
- 10.09 Complete a turn promptly and safely and not impede other traffic.
- 10.10 Select and shift to proper gear prior to beginning any turn.
- 10.11 Obey all traffic signals.
- 10.12 Plan stop in advance and adjust speed correctly.
- 10.13 Use brakes properly on grades.
- 10.14 Plan stops far enough in advance to avoid hard braking.
- 10.15 Stop clear of crosswalks.
- 10.16 Come to a complete stop at all stop signs.
- 10.17 Yield right of way at intersections having yield signs.
- 10.18 Check for cross traffic regardless of traffic signals.
- 10.19 Enter all intersections prepared to stop if necessary.
- 10.20 Stop a minimum of 15 feet but not more than 50 feet before railroad grade crossing if stop is necessary.

- 10.21 Select proper gear to avoid shifting gears on railroad grade crossing.
- 10.22 Determine sufficient space required for passing.
- 10.23 Pass only in safe locations.
- 10.24 Pass on two-lane highway.
- 10.25 Pass on four or more lane highway.
- 10.26 Signal lane changes before and after passing.
- 10.27 Warn driver ahead of intention to pass.
- 10.28 Pass only when appropriate to avoid impeding other traffic.
- 10.29 Return to right lane promptly, but only when safe to do so.
- 10.30 Observe speed limits.
- 10.31 Adjust speed properly to road, weather and traffic conditions.
- 10.32 Slow down in advance of curves, danger zones and intersections.
- 10.33 Maintain consistent speed where possible.
- 10.34 Yield right of way.
- 10.35 Allow faster traffic to pass.
- 10.36 Use horn only when necessary.
- 10.37 Park only in legally permissible parking areas.
- 10.38 Check instruments at regular intervals.
- 10.39 Maintain proper engine RPM while driving.
- 10.40 Determine minimum front-to-rear distances when following other vehicles.

### 11.0 Demonstrate hazardous driving skills--The student will be able to:

- 11.01 Describe preparation for operation in cold weather, including removing snow and ice from windows, mirrors, brakes, lights, hand and toeholds, etc.; and installing tire chains when necessary.
- 11.02 Demonstrate proper procedure for expelling moisture from the air tanks after each trip.
- 11.03 Describe proper procedure for checking ice accumulation on brakes, slack adjuster, air hoses, electrical wiring and radiator shutters during operation.
- 11.04 Describe operational adjustments necessary to maintain control in all weather conditions, including speed selection, braking and following distance.
- 11.05 Describe procedures to check safe operation of brakes after driving through deep water.
- 11.06 Perform proper use of windshield wipers, washers and defrosters to maintain visibility.
- 11.07 Observe and evaluate changing road surface conditions.
- 11.08 Demonstrate ability for recognizing conditions that produce low traction, including initial rainfall, ice, snow and mud.
- 11.09 Describe procedures to avoid skidding and jackknifing.
- 11.10 Describe procedures to avoid hydroplaning and describe the road and vehicle conditions that produce it.
- 11.11 Describe procedures for mounting and dismounting tire chains.
- 11.12 Describe procedures for extricating the vehicle from snow, sand and mud by maneuvering or towing.
- 11.13 Demonstrate ability to adjust rate of change in speed and direction to accommodate road conditions to avoid skidding.
- 11.14 Describe procedures required to coordinate acceleration and shifting to overcome the resistance of snow, sand and mud.
- 11.15 Demonstrate ability to perform checks on brake adjustment prior to mountain driving.

- 11.16 Describe procedures required to use right lane or special truck lane going up grades.
- 11.17 Describe procedures required to place transmission in appropriate gear for engine braking before starting downgrade.
- 11.18 Describe procedures required to use proper braking techniques and maintain proper engine braking before starting downgrades.
- 11.19 Describe proper use of truck escape ramp when brakes fail on a downgrade.
- 11.20 Describe procedure required for observing temperature gauge frequently when pulling heavy loads up long grades.
- 11.21 Describe the effect of vehicle weight and speed upon braking and shifting ability on long downgrades.
- 11.22 Identify the meaning and use of percent of grade signs.
- 11.23 Demonstrate bringing the truck to a stop in the shortest possible distance while maintaining directional control on a dry surface.
- 11.24 Describe procedures to make an evasive turn off the roadway and return to the roadway while maintaining directional control.
- 11.25 Describe procedures to bring the vehicle to a stop in the event of a brake failure.
- 11.26 Describe procedures to maintain control of the vehicle in the event of a blowout.
- 11.27 Describe procedures to bring tractor-trailer to a stop in the shortest possible distance while maintaining directional control when operating on a slippery surface.
- 11.28 Describe procedures to recover from vehicle skids induced by snow, ice, water, oil, sand, wet leaves or other slippery surfaces.
- 11.29 Describe procedures to counter steer out of a skid in a way that will regain directional control and not produce another skid.
- 11.30 Describe procedure to operate brakes properly to provide maximum braking without loss of control.

### 12.0 Demonstrate mathematics knowledge and skills--The students will be able to:

- 12.01 Demonstrate knowledge of arithmetic operations.
- 12.02 Analyze and apply data and measurements to solve problems and interpret documents.

# 13.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

- 13.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace.
- 13.02 Locate, organize and reference written information from various sources.
- 13.03 Interpret verbal and nonverbal cues/behaviors that enhance communication.
- 13.04 Apply active listening skills to obtain and clarify information.
- 13.05 Exhibit public relations skills that aid in achieving customer satisfaction.

## 14.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

- 14.01 Identify and demonstrate positive work behaviors needed to be employable.
- 14.02 Develop personal career plan that includes goals, objectives, and strategies.
- 14.03 Examine licensing, certification, and industry credentialing requirements.
- 14.04 Evaluate and compare employment opportunities that match career goals.
- 14.05 Identify and exhibit traits for retaining employment.

- 14.06 Identify opportunities and research requirements for career advancement.
- 14.07 Research the benefits of ongoing professional development.
- 14.08 Examine and describe entrepreneurship opportunities as a career planning option.

# 15.0 Obtain a Florida Commercial Vehicle Driver's License by passing written and performance test--The student will be able to:

- 15.01 Demonstrate competence in performing basic commercial vehicle driving skills utilizing the CDL testing criteria.
- 15.02 Demonstrate understanding and knowledge of Florida Commercial Vehicle Driving Laws as required, to safely and legally operate a commercial vehicle.

### Miami Lakes Educational Center and Technical College

5780 NW 158<sup>th</sup> Street Miami Lakes, Florida 305-557-1100

### **Acknowledgement of Course Syllabus**

I received the course syllabus for the Commercial Vehicle Driving (CDI	L A) program
Student Name Print	-
Student Signature	
Student Signature	
Date	