General Course Information and Notes

Version Description

Major Concepts/Content

The purpose of this classroom course is to introduce students to Florida driving laws/rules of the road and safe driving behavior. It will also provide an in-depth study of the contributing factors to vehicle crashes and their solutions. The content should include, but not be limited to, the following:

- Meaning and responsibilities of a Driver License
- Laws that govern the operation of a motor vehicle
- Knowledge of Florida's Graduated Driver Licensing (GDL) laws
- Physical and mental factors that affect driving ability
- Effects of alcohol and other drugs on driving performance
- Preparing to operate a vehicle
- Defensive driving strategies
- Vehicle control and traffic procedures
- Understanding Vision and Vehicle Controls
- Introducing Traffic Entry Skills
- Introducing Intersection Skills and Negotiating Curves and Hills
- Space Management and Vehicle Control Skills
- Developing Traffic Flow and Space Management Skills
- Factors Impacting Driver Performance
- Driver Mental and Perceptual Awareness
- Driver Fitness Tasks
- Managing Adverse Conditions
- Knowledge of sharing the road with other types of vehicles and vulnerable road users
- Other Roadway Users
- Responding to Emergencies, Vehicle Malfunctions and Crashes
- Avoiding Collision Threats
- Advanced Driver-Assistance Systems (ADAS) Safety Features
- Making Informed Consumer Choices

Version Requirements

After successfully completing a Driver Education course, the student will:

Demonstrate an understanding of the Highway Transportation System (HTS) its components and the concepts of right-of-way in the HTS by:

- Recognizing roadway users within the HTS by:
    - Identifying the types of each roadway user including but not limited to drivers, pedestrians, cyclists, and non-traditional users within the HTS and which roadway users are the most vulnerable.
    - Identifying the responsibilities of each roadway user within the HTS.
    - Describing temporary and permanent impairments and limitations of other roadway users.
    - Understanding appropriate driver responses, including space management and speed adjustments.
- Comprehending the characteristics and limitations of vehicles by:
    - Describing the attributes and limitations of vehicles including but not limited to passenger vehicles, motorcycles, commercial motor vehicles, transit vehicles, and micromobility vehicles.
    - Describing the impact of vehicle maintenance on safe operation.
    - Explaining specific aspects like visibility, sight lines, and wind blast.
    - Explaining safe vehicle operations regarding space considerations for different vehicles on the HTS with emphasis on commercial vehicles' turning, backing, and stopping needs, transit vehicles, and vulnerable vehicles.
- Understanding the variability and challenges of roadways by:
    - Identifying different types of roadways, including but not limited to intersections, limited access highways, alleyways, primary, and secondary roadways.
    - Comparing the different types of roadways and their attributes based on location.
    - Recognizing the effects of different conditions on roadways, such as weather conditions (rain, snow, fog, etc.), lighting conditions (day, night, dusk, dawn), and road maintenance issues (potholes, construction zones, etc.).
- Applying the concept of right-of-way within the HTS by:
    - Defining the concept of right-of-way.
    - Identifying situations where right-of-way rules apply to roadway users including but limited to drivers, pedestrians, and cyclists.
    - Explaining the importance of right-of-way in preventing crashes.

    - Contrasting the concepts of right-of-way that governs traffic flow to public Right of Way which includes the area on, below, adjacent, or above the roadway.

- Understanding the Move Over law by:
    - Identifying the situations where the Move Over law applies.
    - Identifying the actions required by drivers.
    - Identifying the consequences of violating the Move Over law.
- Understanding of reducing risk in work zones and construction areas by:
    - Recognizing work zone signs, flaggers, and temporary traffic control devices.
    - Describing speed adjustments and lane position to accommodate lane shifts, narrowed roadways, and construction barriers.
    - Identifying the dangers of distracted driving in work zones and understanding increased crash risks.
    - Explaining legal penalties for work zone violations, including increased fines and potential license penalties.
- Describing rail crossings and drawbridges as special intersections in the Highway Transportation System (HTS) by:
    - Identifying and explaining rail crossings by:
        - Defining controlled and uncontrolled railroad crossings.
        - Recognizing railroad crossing warning signs, signals, and pavement markings including the dynamic envelope.
        - Explaining the right-of-way rules at railroad crossings and the legal responsibilities of drivers.
        - Identifying the dangers associated with railroad crossings, including train stopping distances and the importance of never stopping on tracks.
        - Describing appropriate driver responses when approaching a controlled and uncontrolled railroad crossing, including slowing down, looking both ways, and obeying crossing signals.
        - Explaining emergency procedures if a vehicle stalls or gets stuck on railroad tracks.
    - Identifying and explaining drawbridge crossings by:
        - Recognizing the warning signs, flashing lights, gates, and other signals indicating an upcoming drawbridge opening.
        - Understanding right-of-way rules at drawbridges and driver responsibilities for stopping and waiting.
        - Explaining the dangers of attempting to cross a rising or closing drawbridge.
        - Identifying appropriate driver responses when approaching a drawbridge, including slowing down, maintaining a safe following distance, and preparing to stop when signals activate.

Describing emergency procedures in case of mechanical failures or being caught between drawbridge barriers.

Demonstrate an understanding of the roles of roadway safety agencies by:

- Identifying agency roles in road safety by:
    - Explaining the responsibilities of local, county, and state law enforcement in managing emergencies and enforcing traffic laws.
    - Explaining the support provided by emergency response agencies during crashes and vehicle malfunctions.
    - Identifying the various roadway management agencies and their role in road and traffic safety.
- Differentiating assistance by:
    - Describing how to summon help using roadside assistance services.
    - Identifying the types of assistance and response drivers can expect.

Demonstrate an understanding of how Driver Education and driver licensing requirements reduce risk by:

- Explaining components of Florida's Graduated Driver Licensing laws (requirements, responsibilities, restrictions, and strategies).
    - Identifying the GDL process including but not limited to:
        - eligibility requirements for each stage, including age, state approved coursework, and hours of supervised driving.
        - restrictions associated with each licensing stage, such as curfew limits, passenger restrictions, and zero-tolerance policies for alcohol and drugs.
    - Listing the penalties for violating GDL restrictions and how violations may delay progression to the next licensing stage.
    - Identifying FLHSMV resources listing current documents required for obtaining a learner's license.
- Describing how Driver Education and licensing can reduce driver/occupant risks.
- Identifying the importance of student, parent and teacher roles and responsibilities in developing a lifelong member of the highway transportation system.
- Describing the maneuvers required for the driving skills exam.

Demonstrate an understanding of vehicle systems, components, and maintenance by:

- Describing vehicle anatomy and safety components, including the chassis, body, crumple zones, cabin features, seat belts, airbags, and how they contribute to crash mitigation.

- Differentiating between internal combustion engine (ICE) vehicles, hybrid vehicles, and electric vehicles (EVs), including their respective power sources, components (battery packs, power inverters, motors), and maintenance requirements.
- Identifying major vehicle systems and their functions.
- Explaining dashboard indicator lights and their relationship to vehicle system status and potential malfunctions.
- Describing vehicle maintenance and inspection procedures, including routine checks such as fluid levels, tire pressure, tread depth, and identifying corrective actions when issues arise.
- Recognizing the importance of the vehicle owner's manual for determining maintenance schedules and intervals for oil changes, battery replacement, and brake system evaluations.
- Explaining the consequences of neglecting vehicle maintenance and how it affects safety and performance.

Demonstrate an understanding of the effects of driver impairment: attitude, emotions, fatigue, distraction, and the influence of drugs on driving by:

- Understanding distractions, fatigue, emotions and their impact on driving by:
    - ▶ Recognizing distraction types and explaining how distractions impact the driving tasks.
    - ▶ Describing how fatigue impacts risk awareness, effective decision-making, and mental/physical tasks.
    - ▶ Describing the effects of attitudes and emotions on driving decisions by
        - Identifying emotions that may impact driving performance, the proper attitudinal approach to driving, and how to mitigate aggressive driving and confrontation (road rage) from others.
        - Recognizing how the driver’s emotions may play a role in impacting driving performance.
- Understanding the impact of drugs on the driving task by:
    - ▶ Describing legal, illegal, and prescribed drugs effects on judgment, on the driver’s physical and mental performance, and on teens.
    - ▶ Recognizing the laws concerning impaired driving, including zero tolerance rules and associated penalties.
- Understanding safe alternatives and strategies to avoid impaired driving by:
    - ▶ Developing strategies to abstain from impaired driving.
    - ▶ Developing refusal and peer intervention skills to avoid the risk of driving or riding with impaired individuals.
- Understanding road rage and aggressive driving prevention by:
    - ▶ Defining road rage, careless, aggressive careless, and reckless driving.

- Recognizing aggressive driving behaviors in oneself and other drivers, including but not limited to tailgating, excessive honking, erratic lane changes, and verbal confrontations.
- Understanding the legal consequences of road rage, careless, aggressive careless, and reckless driving, including fines, license suspension, and potential criminal charges.
- Identifying techniques to de-escalate and report road rage situations, such as avoiding eye contact, remaining calm, and not retaliating.

Demonstrate an understanding of the social aspect of driving by:

- Identifying instances of respectful driving practices according to law.
- Demonstrating effective communication techniques by:
    - Recognizing the proper use of turn signals before turning, lane changes, parking, and pulling into traffic from the curb.
    - Describing the use of headlights at all times to increase visibility to others.
    - Recognizing when and why to use hazard lights.
    - Identifying appropriate situations and techniques to use the horn to alert others of your presence.
    - Understanding how vehicle speed and position can communicate a driver's upcoming actions.
    - Recognizing and confirming when messages conveyed through signals or actions are acknowledged by other drivers.

Demonstrate an understanding of the impact of temporary and permanent conditions on drivers and other roadway users by:

- Describing how temporary and permanent conditions affect driving ability and legal responsibilities by:
    - Defining temporary, permanent and progressive conditions that impair driving ability.
    - Recognizing how temporary conditions, including but not limited to: concussions, prescription medication effects, and physical injuries impact reaction time, perception, and vehicle control.
    - Identifying medical and neurological conditions that may require restricted or conditional driver's licenses, including periodic medical evaluations including but not limited to seizures, narcolepsy, and blindness
    - Identifying situations for medical clearance before resuming driving after temporary impairments including but not limited to post-surgery clearance, vision improvement certification.

- Describing accommodations and adaptive technologies for drivers with disabilities by:
    - Identifying vehicle modifications that allow individuals with disabilities to drive safely including but not limited to hand controls, left-foot accelerators, wheelchair-accessible vehicles.
    - Explaining the function of specialized driving assessments for individuals with disabilities.
- Explaining how to interact with roadway users with disabilities by:
    - Identifying right-of-way rules when interacting with individuals using wheelchairs, guide dogs, or mobility aids.
    - Recognizing special pedestrian signals and accessibility features, such as audible crosswalk signals.
    - Explaining how drivers should approach and yield to visually impaired pedestrians using a white cane or service animal.

Demonstrate an understanding of signs, signals, and pavement markings/treatments by:

- Identifying the meaning of various signs, signals, and markings based on shape, color, symbol, wording, treatment, and pattern.
- Classifying various signs, signals, and markings based on shape, color, symbol, wording, treatment, and pattern.
- Assessing the appropriate driving actions based on these signs, signals, traffic calming devices, and pavement markings.
- Analyzing risk-reducing driving decisions relating signs, signals, and pavement markings to reducing risk and applying the concept of right-of-way by:
    - Identifying and understanding different intersection types, including uncontrolled, controlled, and rail-grade crossings.
    - Explaining the significance of regulatory controls.
    - Relating roadway conditions and signs to effective driving decisions.

Demonstrate an understanding of how to safely interact with bicyclists and micromobility users by:

- Identifying the different types of bike lanes (protected, painted, shared, etc.), crosswalks, and multi-use trails and understanding how drivers should navigate them safely.
- Recognizing the rights and responsibilities of cyclists and e-scooter riders, including applicable laws and safe riding behavior.
- Explaining how to safely pass and make turns with cyclists and e-scooter users, including maintaining at least three feet of clearance, move right to turn right, and yielding when necessary.
- Identifying the dangers of “dooring” cyclists when exiting parked vehicles and explaining the Dutch Reach technique to prevent crashes.

- Recognizing how bike-sharing and scooter-sharing programs impact urban traffic conditions.
- Describing common collision scenarios between vehicles and cyclists/scooter users and how to reduce risks (e.g., right-hook and left-cross crashes).

Demonstrate an understanding of visual and mental skills for risk-reducing decisions by:

- Describing visual fields by:
  - Differentiating between central, fringe, and peripheral fields.
  - Applying these fields to the driving task.
- Dividing attention systematically by:
  - Switching focal vision between different target areas in an orderly manner.
  - Scanning target and path of travel, controls, left and right peripheral, and rear zones.
- Active scanning and evaluation by:
  - Implementing rhythmic scanning techniques to perceive vital driving information.
  - Systematically evaluating changes in target areas. (i.e. hazards, construction zones, school zones, pedestrian crossings, bike lanes, etc.)
  - Recognizing and adjusting to changes affecting the approach to target areas.
- Identifying specific zones of caution on roadways by:
  - Recognizing areas that require increased driver awareness, such as school zones, construction zones, pedestrian-heavy areas, and high-risk intersections.
  - Explaining the purpose and importance of signage, pavement markings, and traffic control devices used to designate caution zones.
  - Describing appropriate speed adjustments and defensive driving techniques when approaching and navigating through caution zones.
- Navigating intersections and complex terrains by:
  - Scanning and evaluating intersections prior to approach.
  - Assessing curves and hill crests to make necessary decisions.

Demonstrate an understanding of natural laws and physics in driving by:

- Explaining laws of motion relating to driving by:
  - Recognizing how speed and mass influence a vehicle's momentum.
  - Evaluating the role of kinetic energy during various driving scenarios.
- Evaluating total stopping time/distance by:

- Identifying and recognizing the significance of the three parts: (1) perception time/distance plus (2) reaction time/distance plus (3) braking time/distance.
- Describing the relationship between perception, reaction, and braking time/distance and total stopping time and distance.
- Describing how speed, traction, road surface, and roadway conditions impact total stopping time and distance.
- Describing other factors that contribute to perception, reaction, and braking time/distance.

- Evaluating force of impact, force-time, and vehicle safety mechanisms by:
    - Describing the force of impact in collisions and the relation to the critical importance of seatbelt use by increasing force time.
    - Describing the impact of seatbelts and airbags on force-time and surface area applied across the body; therefore, reducing the risk of injury.
- Describing vehicle balance and changes in motion by:
    - Recognizing how sudden inputs (braking, acceleration, steering) influence traction and subsequently alter weight distribution.
    - Explaining how vehicle size, weight, speed, and driving technique impact vehicle balance: roll, pitch, and yaw.
    - Demonstrating techniques that ensure smooth vehicle movement.

Demonstrate an understanding of safety belts and occupant protection by:

- Explaining occupant protection's role as a vital tool for crash and loss prevention by:
    - Describing how safety belts increase the possibility of the driver staying in control of the vehicle post-collision and avoiding secondary collisions.
    - Describing the difference between active and passive restraints for comprehensive protection.
    - Evaluating the importance of frontal crash protection, side impact protection, and rear impact protection.
    - Evaluating the importance of safety belts by all vehicle occupants.
- Identifying use and misuse of occupant protection by:
    - Debunking common myths surrounding safety belts and restraints.
    - Describing proper lap belt and shoulder restraint adjustments for optimal protection.
    - Describing specific considerations for child restraints.

Demonstrate an understanding of the appropriate starting and ending procedures by:

- Describing the importance of mental and physical well-being before driving.
- Conducting pre-entry safety checks by:
    - Demonstrating pre-entry checks for potential external and internal hazards, such as obstacles or safety issues around and inside the vehicle.
    - Demonstrating approaching the vehicle attentively with keys or key fob in hand, staying alert to pedestrians and other drivers.
    - Demonstrating securing the vehicle by locking all doors immediately after entry.
    - Visualizing initial path of travel and intended route to destination.
- Making necessary in vehicle adjustments by:
    - Adjusting head restraints, pedals, seat position, rear view and side mirrors, safety restraints, and steering wheel for proper ergonomics and safe operations.
    - Securing passengers, phones, and cargo.

Demonstrate an understanding of vehicle starting procedures by:

- Initiating safe starting sequence by:
    - Verifying that the parking brake is engaged before starting the vehicle.
    - Pressing the brake pedal and ensuring the vehicle is in correct gear (park/neutral) is selected before ignition.
    - Describing the starting sequence for a vehicle (see owner's manual) and common errors.
    - Recognizing and interpreting dashboard indicator light symbols while starting the vehicle (see owner's manual).
- Operating accessories by:
    - Selecting and managing vehicle accessories, such as lights and wipers, before moving the vehicle.
    - Recognizing the significance of indicator light symbols related to the engine or other systems.

Demonstrate an understanding of procedures for securing a vehicle by:

- Identifying lawful and safe locations to stop.
- Describe the conditions that the vehicle is stopped.
- Engaging the parking brake while maintaining pressure on the brake pedal.
- Shifting into the appropriate gear or parking mode before releasing the brake pedal.

- Turning off all non-essential accessories before switching off the ignition.
- Exiting the vehicle safely by:
    - Conducting a final exit check for children, passengers, and pets.
    - Utilizing the Dutch Reach method to open doors cautiously, preventing potential collisions with passing road users.
    - Locking all doors and activating the alarm system, if available, to secure the vehicle after exiting.
    - Evaluate parking alignment.

Demonstrate an understanding of pedal control techniques by:

- Demonstrating right foot pedal control by:
    - Performing the use of the right foot only for both the accelerator and brake pedals while keeping the heel floor board.
    - Explaining the importance of pedal control for braking and acceleration.
    - Describing covering (hovering) the brake technique and situations where this technique is used.
- Demonstrating left foot pedal control by:
    - Describing the role of the left foot on the clutch (manual transmission).
    - Parking brake (if on the floorboard)
- Describing the use of adaptive pedal controls.

Demonstrate an understanding of steering techniques by:

- Identifying the proper techniques
    - Pull push
    - Hand-over-hand
    - Straight backing
- Identifying improper steering techniques
    - Shuffle steering
    - One-hand forward / wrist with hang
    - Hand inside the wheel
    - Knees
- Identifying different hand position

- Demonstrating pull-push steering technique by:
    - Comparing and performing steering through curves, intersection turning, and lane changes.
- Demonstrating hand-over-hand steering by:
    - Comparing and performing tight turns such as in narrow alleyways, parking lots, turnabouts, etc.
    - Applying this method for low speed driving and parking.
- Demonstrating one-hand steering by:
    - Describing the 12 o'clock hand position for backing the vehicle.
- Describing the use of adaptive steering devices.
- Describing the relationship of steering to visual tracking.

Demonstrate an understanding of vehicle control techniques by:

- Describing vehicle motion and direction control through acceleration, braking, and steering techniques and when to use each technique.
- Describing the techniques used to communicate effectively with other road users.
- Describing rules of the road by:
    - Identifying right-of-way and yielding/accepting guidelines at intersections and other critical points on the roadway.
    - Applying rules related to signal use, lane positioning, and the proper execution of maneuvers such as backing and turning.
- Planning for executing safe vehicle maneuvers by:
    - Selecting appropriate gaps when turning, merging, and changing lanes considering vehicle speed, and road conditions.
    - Describing vehicle blind zones, blind spots, mirror usage, head turn, and making necessary adjustments to maintain safety.
    - Evaluating the gain versus risk prior to any vehicle maneuver.
- Identifying and practicing methods for stopping a vehicle by:
    - Searching effectively ahead of the vehicle to determine braking needs and checking the rear zone/space prior to braking.
    - Describing controlled braking techniques, including squeeze braking, coasting and trail braking, to bring the vehicle to a smooth stop.
    - Recognizing how braking action influences vehicle dynamics, such as body pitch.
    - Explaining how covering the brake reduces reaction time.

- Describing situations where coasting and covering the brake is necessary.

- Applying speed management techniques to ensure safety in various driving conditions by:
    - Controlling speed on entrance and exit ramps, effectively merging into traffic, and adjusting speed for lane changes.
    - Identifying and responding to tailgating by adjusting speed and lane position to maintain safe following distances.
- Utilizing vehicle reference points by:
    - Identifying and using vehicle reference points to determine position relative to the roadway, turning points, and intended travel path.
    - Determining when the front and rear bumpers are positioned correctly in relation to stop lines, curb edges, or other reference points.
- Navigating curves and roadway features to minimize risk by:
    - Responding to signs, signals, and pavement markings specific to curves and other roadway features including but not limited to intersections, roundabouts, traffic calming features, bridges and hills.
    - Explaining vehicle positioning, speed, and steering for curve entry, apexing, and exiting.
- Executing lane changes safely by:
    - Identifying the need for a lane change and applying effective communication techniques.
    - Performing traffic checks including but not limited to checking mirrors and blind spots.
    - Evaluating spaces/zones and mirror blind spots before initiating a lane change, and determining the best lane position for conditions.
- Applying procedural steps for tasks like intersection approach and turns by:
    - Describing approaching intersections, path of travel, and necessary adjustments to variable conditions.
    - Explaining various techniques for turning.
    - Evaluating driving decisions in intersection situations.
- Complying with planned passing situations by:
    - Identifying space management techniques to ensure safe passing.
    - Evaluating all zones for line of sight and path of travel, speed, and conditions before attempting a passing maneuver.
    - Communicating effectively with other drivers and applying passing procedures that prioritize safety and minimize risk.

- Identifying and complying with entering/merging, speed control, lane selection, and exiting situations on limited access roadways by:
    - ▶ Describing effective communication, space management, and gap selection when merging or exiting roadways.
    - ▶ Evaluating vehicle speed relative to traffic on entrance/exit ramps and acceleration/deceleration lanes to ensure smooth, safe merging and exiting.
    - ▶ Selecting appropriate lanes for conditions.
- Describing and applying sequential steps for decision making by:
    - ▶ Explaining conditions for searching, including changes to the path of travel, line of sight, and roadway conditions.
    - ▶ Evaluating paths of travel, line of sight restrictions, and roadway conditions.
    - ▶ Selecting appropriate speed changes, position adjustments, and communication techniques.
- Explaining backing maneuvers, when applicable, including straight-line, and turning while backing, while ensuring safe vehicle positioning.
- Understanding low-speed driving and parking lot safety by:
    - ▶ Identifying safe parking lot navigation techniques, including pedestrian awareness, parking patterns, traffic controls, scanning for hazards, and reducing speed in congested areas.
    - ▶ Recognizing common parking lot crash risks, such as blind spots, reversing vehicles, objects, and distracted pedestrians.
    - ▶ Describing parking maneuvers, including but not limited to:
        - Explaining parking techniques for angle, reverse angle, perpendicular, and parallel parking.
        - Correlating visual, speed, and steering control during parking maneuvers.
        - Comparing vehicle reference points to achieve proper positioning within parking spaces.
    - ▶ Learning best practices for backing into parking spaces to improve visibility and facilitate easier exits.
    - ▶ Describing strategies for navigating parking garages and tight spaces, including the use of mirrors, slow-speed control, and proper turn radius.

Demonstrate an understanding of defensive driving strategies and space/speed management techniques to reduce risk by:

- Identifying hazards and predicting traffic patterns by:
    - ▶ Searching for potential hazards in traffic and the associated patterns.
    - ▶ Determining actions to minimize risk.

    - Executing defensive driving techniques.

- Recognizing and managing vehicle operating space by:
    - Identifying visual limitations around the vehicle, including front, rear, and sides.
    - Adjusting mirrors for optimal visibility, using enhanced mirror settings, and vehicle technology to reduce blind spots.
- Understanding roadway and traffic flow dynamics by:
    - Explaining different types of traffic flow including but not limited to multiple use lanes, reversible lanes, and diverging diamond.
    - Explaining how to navigate shared roadways with both motorized and non-motorized users as well as their restrictions.
    - Selecting appropriate traffic gaps that reduce the impact of traffic flow.
    - Identify the need to divide attention between various driving tasks.
    - Identify commercial motor vehicle no zones.
    - Determining lowest risk turn around options independent of GPS
        - Identifying when it is safer to go around the block.
        - Identifying safe behaviors for turning around in a parking lot
        - Identifying procedures for a turnabout with entry into a roadway, alley or driveway on the left or by backing around a corner to the right
        - Identifying procedures for a U-turn.
        - Identifying procedures for a three-point (on-street) turnabout in a low-risk roadway environment.
        - Identifying procedures for turning around in a cul-de-sac, round-about or circular drive turnabout.
    - Describing limited access highway conditions and their impact on driving by:
        - Defining limited access highway
        - Identifying characteristics of limited access highways, including but not limited to controlled entry and exit points, multiple lanes, and speed minimum/maximum regulations.
        - Identifying the function and characteristics of highway shoulders, including emergency stopping areas, breakdown lanes, and shoulder restrictions.
        - Identifying the differences in off-road areas adjacent to highways, such as grassy medians, guardrails, barriers, and emergency pull-off zones.
        - Explaining specific lane controls on limited access highways, including but not limited to express lanes, high-occupancy vehicle (HOV) lanes, reversible lanes, shoulder usage, merging lanes, and acceleration/deceleration lanes.

- Explaining the impact of highway conditions on speed, lane selection, and risk management, including variable speed limits, toll plazas, work zones, and construction barriers.
- Identifying appropriate driver responses to highway-specific conditions, such as merging into fast-moving traffic, handling lane closures, and navigating ramps safely.

- Effectively managing vehicle space on different roadways by:
  - Demonstrating techniques to control space around the vehicle.
  - Demonstrating communication techniques including but not limited to signaling intentions, lane position, and eye contact.
  - Identifying space concerns regarding navigating curves, merging, and exiting limited access highways.
  - Demonstrating commentary driving for enhanced spatial awareness.
  - Demonstrating speed adjustments and lane positioning to increase space around the vehicle in all zones.
  - Explain emergency vehicle protocols, including move over laws and techniques to ensure emergency vehicle traffic flow.
- Selecting, maintaining, and adjusting speed/space to reduce risk of collision in compliance with rules of the road by:
  - Applying a systematic search to evaluate space
  - Controlling front, sides, and rear space by
    - Describing minimum and extended following distances
    - Selecting a safe speed
    - Identifying actions to take when a space closes
      - Applying techniques to increase space and keep open side zones
      - Describing what to do when being tailgated
      - Separating hazards
      - Minimizing hazards
      - Compromising space

Demonstrate an understanding of adverse driving conditions by:

- Describing adverse driving conditions, including Florida tropical conditions and extreme heat.
- Describing how to act in various adverse lighting conditions including but not limited to low light, glare, smoke, fog, rising/setting sun, and rain.
- Describing challenges and best practices for night driving, including:
  - Comparing reduced visibility at night and how it impacts perception and reaction time.

    - Comparing the use of high beams, low beams, auto brightness, parking lights, and daytime running lights.
    - Identifying nighttime hazards such as impaired drivers, pedestrians, cyclists, work zone activity, and wildlife.
    - Listing speed adjustment, following distance, and scanning techniques to reduce risk in darkness.
    - Recognizing the effects of driver fatigue, vision changes, and reduced alertness during nighttime driving.
- Describing how to react to various loss of traction conditions including but not limited to rain, ice, debris and the effects of wind.
- Describing techniques to identify and avoid flooded roadways and the reasons why flooding is dangerous.
- Identifying nighttime driving challenges by:
    - Describing issues and preventive measures for driving at night including but not limited to the prevalence of impaired drivers, reduced visibility, and enhancement of additional adverse conditions.
    - Comparing the impact of night driving on space management, speed, and ADAS.
- Comparing driving in adverse conditions and normal conditions by:
    - Adjusting driving strategies to maintain vehicle control during adverse weather that affects visibility and traction.
        - Recognizing measures to minimize risk during adverse weather including but not limited to use of windshield wipers, headlights, fog lights, and tire tread/pressure.
        - Explaining the need for speed modulation, steering modulation, and space adjustments in correspondence with varying road and weather circumstances.
        - Elaborating on measures to minimize risk during adverse weather including but not limited to use of windshield wipers, headlights, fog lights, and tire tread/pressure.
        - Differentiating traffic flow situations.
    - Explaining the limitations of using ADAS like cruise control and lane-keeping assist in adverse conditions.
    - Making observations about the dangers associated with reduced traction, including but not limited to understeer and oversteer scenarios.
- Describing how road surface conditions, slopes, grades, and traction potentials affect vehicle control by:
    - Identifying different types of roadway surface conditions and their effects on vehicle handling, including dry pavement, wet roads, dirt, sand, ice, snow, gravel, and oil-slick surfaces.

    - Explaining how weather conditions interact with surface types to impact vehicle stability and stopping distance.
    - Identifying how slopes and grades affect vehicle speed and control, including the impact of gravity when driving uphill or downhill, potential loss of control situations, and reduced traction on steep grades or uneven surfaces.
    - Identifying appropriate driving strategies for maintaining traction and control, including speed modulation, braking techniques, and the use of low gears on slopes.
    - Interpreting the effects of road debris and uneven pavement on vehicle handling and the need for hazard awareness.
- Describing cold weather driving considerations and their impact on vehicle performance and driver safety by:
    - Identifying the effects of cold weather on vehicle performance, including engine warming, battery efficiency, and fuel system considerations.
    - Identifying proper tire maintenance and selection for winter driving, including tire pressure adjustments, tread depth requirements, and the use of winter tires or tire chains.
    - Explaining visibility challenges in winter conditions, including managing glare from snow, defogging windows, and using headlights appropriately in low-visibility situations.
    - Identifying safe driving techniques for icy or snowy roads, including maintaining a safe following distance, gentle braking and acceleration, and the use of low gears on slippery surfaces.
    - Listing appropriate responses to ice-related driving emergencies, such as how to safely regain control if the vehicle skids on an ice patch, proper steering techniques, and when to avoid sudden braking or acceleration.
    - Recognizing essential emergency preparedness items for cold weather driving, such as blankets, extra clothing, flashlights, food, water, ice scrapers, and traction aids (e.g., sand, kitty litter).

Demonstrate an understanding of proper response to driving emergencies by:

- Recognizing and addressing vehicle malfunctions by:
    - Interpreting dashboard lights to identify alerts, warnings, and vehicle malfunctions.
    - Diagnosing vehicle system malfunctions before, when, and after they occur.
- Responding to steering emergencies by:
    - Describing understeer and oversteer scenarios and solutions.
    - Describing off-road recovery techniques.
- Optimizing braking techniques and understanding braking systems by:

- Identifying appropriate response to braking system malfunctions.
- Describing how to use Anti-lock Braking Systems (ABS) to maintain control during emergencies.
- Adjusting braking techniques based on vehicle load, weight distribution, and impact forces.

- Managing traction and tire-related emergencies by:
  - Describing responses to tire blowouts and traction loss situations.
  - Evaluating tire condition and air pressure to prevent malfunctions.
- Contrasting normal driving conditions with weather challenges by:
  - Describing appropriate actions for hydroplaning and flooded roadway incidents.
  - Listing methods for escaping a submerged vehicle during emergencies.
  - Preparing for severe weather conditions, such as hurricanes, to ensure safe vehicle operation.
- Explain the appropriate driving techniques to respond to a hazard by:
  - Describing navigating non-operational, malfunctioning, or missing traffic control devices when:
    - Officers are present
    - Officers are not present
- Describing the swerving steering technique by
  - Describing how timely identification of a hazard reduces the need or severity of the swerve.
  - Listing situations where swerving is an appropriate response to a hazard.
  - Ordering the steps to perform a swerve.
  - Explain the proper use of braking while swerving.
- Describing how to respond in emergency situations including but not limited to these situations:
  - Vehicle fire
  - Tire Blowout
  - Vehicle stalled on a railroad track
  - Downed electrical line
  - Stuck accelerator/brake
  - Loss of brake pressure
  - Loss of visibility

        - Hood flies up
        - Overheating engine/motor
        - Facing an oncoming vehicle driving the wrong way
        - Animal crossing
        - Medical emergency
        - Road debris
        - Hydroplaning
        - Approaching a flooded road
        - Escaping a submerged vehicle
- Demonstrating knowledge of emergency roadside procedures and how to handle vehicle breakdowns by:
    - Describing how to safely pull over and exit a disabled vehicle, including best practices for different roadway types (highways, city streets, rural roads).
    - Describing how to call for help, interact with roadside assistance, including what information to provide and safety precautions while waiting for help.
    - Describing how to safely change a flat tire or jump-start a battery, including necessary tools and step-by-step safety precautions.
    - Describing what to do in the event of running out of fuel, including best practices for safely obtaining fuel or seeking assistance.
    - Describing proper use of hazard lights, flares, or reflective triangles to signal distress and ensure visibility to other road users.

Demonstrate an understanding of vehicle crashes and crash avoidance by:

- Identifying driver actions to reduce the likelihood of crashes by:
    - Describing speed adjustments to minimize potential impacts.
    - Describing space management practices to minimize risk and allow time for decision-making.
    - Describing evasive steering techniques to avoid collisions and minimize impact.
    - Describing environmental conditions in which speed, space, and steering adjustments are required.
- Determining the physical forces acting on vehicles during crashes by:
    - Identifying vehicle design, safety features, and crashworthiness.
    - Describing the principles of momentum, kinetic energy, and inertia as they pertain to crash forces.

Demonstrate an understanding of Florida traffic laws by:

- Describing the laws regarding vehicle occupant restraints including safety belts and child restraints.
- Describing the points system for traffic violations.
- Describing how drivers may lose their driving privilege
    - Suspension
    - Revocation
    - Cancellation
- Identifying the consequences of being at fault
- Identifying vehicle bumper height requirements
- Describing appropriate use of disabled parking permits
- Explaining the consequences of littering
- Describing Florida vehicle insurance laws and requirements

Demonstrate an understanding of speeding, aggressive driving, and anti-racing laws:

- Describing Florida's speeding laws.
- Describing Florida's aggressive driving laws.
- Describing the legal definition of racing on highways in Florida and distinguishing it from legal motorsports activities.

Demonstrate an understanding of Florida Driving Under the Influence (DUI) Laws by:

- Evaluating DUI Awareness and Consequences by:
    - Explaining that DUI is not just alcohol, including but not limited to over-the-counter-medication, prescription drugs, and any substance that impairs driving.
    - Defining and describing the legal Blood Alcohol Content (BAC) limits for drivers in Florida.
    - Explaining the immediate and long-term consequences of DUI, including legal penalties, fines, and driver license suspension.
    - Explaining the Zero Tolerance Law for drivers under 21 years old, emphasizing the stricter BAC limits and the implications of violating this law.
    - Describing the concept of implied consent and its significance in Florida, detailing the requirement for drivers to submit to BAC testing when requested by law enforcement.

Demonstrate an understanding of traffic stop procedures and law enforcement interaction by:

- Identifying vehicle occupant procedures by:
    - Explaining the appropriate steps for pulling over safely, including selecting a secure location and proper vehicle positioning.
    - Describing the responsibilities of drivers and passengers to ensure a lawful and safe interaction with law enforcement.
    - Explaining the importance of remaining calm and cooperative during traffic stops while maintaining clear communication with officers.
    - Describing how to present documentation (license, registration, insurance).
    - Recognizing that accepting a traffic citation is not an admission of guilt, proper follow-up procedures, and how to dispute.
- Identifying law enforcement procedures by:
    - Describing the necessity of traffic stops as part of routine law enforcement.
    - Recognizing the concerns of the officer.
    - Listing the expected duties and procedures during a traffic stop.

Demonstrate an understanding of legal responsibilities at a crash scene by:

- Describing crash scene responsibilities by:
    - Identifying steps to ensure safety and summon assistance.
    - Explaining the importance of protecting injured parties and preventing further hazards.
- Describing post-crash obligations by:
    - Explaining the legal requirements for remaining at the scene, exchanging information and reporting crashes to authorities.
    - Identifying the penalties for failure to meet post-crash responsibilities.

Demonstrate an understanding of Advanced Driver Assistance Systems (ADAS) and vehicle technology by:

- Defining ADAS by:
    - Identifying the acronym ADAS
    - Identify common components of ADAS
    - Differentiating between different levels of vehicle autonomy

    - Identifying and describing the safety features in categories such as warnings, interventions, assistance, and parking aids.
    - Explaining how these features contribute to overall vehicle safety and driver assistance.

- Recognizing driver accountability with ADAS by:
    - Emphasizing the driver's full responsibility for vehicle operation.
    - Describing the legal implications for drivers regarding the use or misuse of ADAS.
    - Explaining the importance of reading the vehicle owner's manual, locating online resources and knowing the safety features before driving a vehicle.
    - Describing how regular maintenance to keep sensors clean and software technology updated and operational is essential to safe operation.
    - Explaining how drivers might change their behavior based on technologies, leading to potential risks.
- Understanding broader vehicle technology impacts on driving behavior by:
    - Recognizing the benefits, limitations, and risks of GPS navigation, including over-reliance, distraction risks, and improper use while driving.
    - Identifying how smartphones influence driving beyond texting, including hands-free calls, music selection, notifications, and app usage.
    - Understanding infotainment systems and their impact on driver distraction, including touchscreens, voice commands, and connected apps.
    - Comparing how technology can both enhance and hinder driver attention, addressing cognitive overload from multiple in-vehicle systems.
    - Explaining how technology assists with fuel economy, navigation, and vehicle diagnostics, including adaptive cruise control, eco-driving settings, and real-time vehicle health monitoring.
- Explaining ADAS limitations by:
    - Identifying situations where ADAS may be less effective due to placement, maintenance, and age of sensors.
    - Explaining how roadway and weather conditions, such as heavy rain, can impact the functionality of ADAS systems
    - Compare ADAS effectiveness when in use with various roadway users.
- Comparing potential benefits and concerns of ADAS by:
    - Identifying the reduction of human error and improved warning/reaction/response times.
    - Listing misconceptions and performance expectations, such as driving faster, following more closely, braking later, or cornering more aggressively.

- Explaining how unfamiliarity with vehicle safety technologies or turning them off can eliminate potential benefits.
- Recognizing the potential for driver overwhelm due to warnings, alerts, and information, and the risk of becoming complacent.
- Listing how ADAS may contribute to smoother traffic flow, more efficient transportation.

Demonstrate an understanding of vehicle ownership by:

- Evaluating the pros and cons of car ownership and alternative methods of transportation.
- Comparing the advantages and financial implications of buying new versus used vehicles including but not limited to safety features, depreciation, fuel efficiency, personal needs and financial capabilities.
- Comparing factors for buying and leasing a vehicle including but not limited to price, depreciation, maintenance, financing, trade-in, warranty, personal needs and financial capabilities.
- Describing insurance in Florida by:
    - Identifying the legal requirements for minimum motor vehicle insurance coverage.
    - Comparing different insurance plans and coverage types to meet personal needs including but not limited to age, experience, location, and vehicle type.
    - Explaining cost differences associated with insurance covering drivers with a learner's license compared to a driver license.
    - Identifying insurance cost factors and strategies to lower insurance rates.
    - Describing the implications of safety and financial responsibility laws on insurance choices.
    - Comparing different types of coverage: Liability, Collision, Comprehensive, Personal Injury Protection (PIP), Uninsured Motorist.
    - Defining deductible and premium and comparing how they impact each other.
    - Practicing how to file an insurance claim after a crash.
- Identifying the importance of maintenance by:
    - Describing different elements of vehicle maintenance as a pivotal practice for safety, cost savings, and efficiency.
    - Listing resources to determine if a vehicle is subject to recalls.
    - Referring to the vehicle owner's manual to determine guidelines for routine checks and maintenance.
- Describing the impact that vehicle modification has by:
    - Investigating the legal implications of making modifications to a vehicle.

    - Listing the impact of vehicle modifications on warranties
    - Comparing safety and crashworthiness of Original Equipment Manufacturer (OEM) and non-OEM modifications including but not limited to tint, speakers, lift/lower kits, accessory lights, phone holders, and dash cams.
    - Identifying types of adaptive driving equipment.
- Describing fees associated with owning and operating a vehicle by:
    - Identifying ownership fees including but not limited to tax, tag, title
    - Identifying road use fees including but not limited to tolls and parking
    - Identifying punitive fees including but not limited to traffic citations, late fees, and fines
    - Identifying license fees including but not limited to initial licensing, renewals, classes, and licensing reinstatement.
    - Identifying additional expenses in other states including but not limited to emission testing and vehicle inspections.

Demonstrate an understanding of Florida vehicle registration laws and procedures by:

- Explaining the process for registering a new or used vehicle, including the required documentation such as the title, proof of insurance, and vehicle identification.
- Explaining the importance of vehicle registration, out-of-state vehicle registration transfers, and the consequences of driving with an expired registration.
- Describing the role of insurance verification in the registration process and the implications of non-compliance.
- Describing the steps for transferring vehicle ownership, including the requirements for a notarized bill of sale and odometer disclosure.

Demonstrate an understanding of navigation skills and trip planning by:

- Developing navigational proficiency by:
    - Explaining different types of spatial awareness
        - Cardinal directionals
        - Road names and landmarks
        - Addresses and street numbering
    - Identifying types of navigational tools including but not limited to digital maps, street views, Global Positioning System (GPS), and traditional maps.
    - Identifying safe and correct usage of navigational tools.
        - Map reading skills
        - When and where to use navigational tools

        - Detour management
    - Comparing and contrast the benefits and drawbacks of each type of navigational tool
- Developing trip planning proficiency by:
    - Identifying places to obtain trip planning resources including but not limited to traditional maps, places of interest, and routes to take.
    - Comparing short, medium, and long term trips by
        - Identifying vehicle checks for each type of trip
        - Identifying vehicle handling and cargo storage issues for each type of trip
    - Explaining how to plan for fuel, rest, food/drink, and costs considerations influence planning a trip
    - Explaining what to do when a trip plan fails
    - Planning a long trip that incorporates both traditional and digital navigational resources

Demonstrate an understanding of Eco-Driving practices by:

- Identifying economical choices and vehicle settings.
- Adopting fuel-saving techniques by:
    - Monitoring gas mileage to assess and improve fuel efficiency.
    - Regulating speed to optimize fuel consumption.
    - Minimizing vehicle load to reduce fuel usage.
    - Limiting idling time to conserve energy and reduce emissions.
    - Maintaining vehicle systems.
- Understanding fuel-efficient route planning by:
    - Comparing routes with constant steady speeds versus stop & go scenarios.
    - Describing how peak congestion reduces fuel economy.
    - Describing how to use navigation apps and traffic alerts to optimize travel efficiency and costs.
- Recognizing the impact of driving habits on fuel economy by:
    - Identifying how rapid acceleration, hard braking, and excessive speeding increase fuel consumption.
    - Using cruise control to maintain consistent speeds for improved efficiency.
- Identifying alternative transportation solutions by:

    - Comparing the use of different fuels.
    - Explaining driving alternatives including but not limited to public transportation, ridesharing, and micromobility.
- Comparing electric, hybrid, and ICE vehicle energy consumption by:
    - Understanding battery range limitations and charging infrastructure in electric vehicles.
    - Identifying how regenerative braking improves efficiency in EVs and hybrids.
    - Comparing lifetime operating costs of electric, hybrid, and ICE vehicles.
- Explaining the importance of recycling and disposal of automotive components by:
    - Describing the necessary disposal and recycling of vehicle fluids.
    - Describing how to safely reuse and repurposing used cars and parts.
    - Describing how to legally dispose or recycle automotive batteries and tires.

Demonstrate an understanding of towing and load safety laws by:

- Identifying towing and load equipment requirements by:
    - Explaining the required equipment for trailers under 3,000 pounds, such as rear reflectors and brake lights, and over 3,000 pounds, including clearance lamps, side marker lamps, and braking systems.
    - Describing the drawbar or towing connection standards, including strength, length restrictions, and safety requirements like white flags for chains, ropes, or cables.
- Explaining the necessity of securing loads to prevent dropping, shifting, or leaking onto the roadway.
- Identify marking requirements for projecting loads, including red flags for daytime use and red lamps or reflectors for nighttime or low visibility conditions.

Demonstrate an understanding of safe towing and projecting load transport techniques by:

- Identify techniques for safely towing a trailer by:
    - Describing skills required for safely towing and backing a trailer.
    - Recognizing basic towing equipment needed and correct use by:
        - Describing how to connect and disconnect a trailer to a vehicle including but not limited to hitching, coupling, safety pin insertion, and electrical connections.
        - Identifying the basic equipment and safety checks required before towing, such as hitch types, towing capacity, electrical connections, and safety chains.
        - Identify where to find regulations and laws that apply to towing equipment.

    - Describing how to correctly load a trailer including but not limited to balanced weight distribution and securing of cargo.
    - Describe how to determine the towing and load capacity of a vehicle.
- Identify safe techniques for marking and securing a projecting load.

Resources

As with any education program, the inclusion of parental involvement enhances instruction. These resources are for Driver Education instructors as well as the parents of Driver Education students.

- Florida Driver License Handbook: https://www.flhsmv.gov/handbooks/englishdriverhandbook.pdf
- Florida Teen Safe Driving Coalition: https://flteensafedriver.org/

Qualifications

As well as any certification requirements listed on the course description, the following qualifications may also be acceptable for the course:

Any field when certification reflects a bachelor or higher degree plus Driver Education Endorsement.