Unit 1: Before You Drive In Class Resources

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Session 1 Lesson Plan: The Highway Transportation System & The Graduated Driver Licensing Law

Session Goals:

- 1. Classify risk factors present in the Highway Transportation System (HTS) and why attitude is important to driving.
- 2. Understand the phases of the New York State Graduated Driver Licensing (GDL)Law, along with associated requirements and restrictions.

What will students know?

- The three parts of the HTS, how to manage risk, and how attitude can affect driving.
- The phases of the NYS GDL Law, applicable requirements and restrictions.

What will students be able to do?

- Determine whether various risks are driver-contributed, vehicle- contributed, or roadway-contributed; determine how attitude can affect driving.
- Determine what requirements and restrictions are associated with each phase of the NYS GDL Law.

Key Vocabulary and Topics:

 Highway Transportation System (HTS) Roadway Vehicles Road Users Risks of Driving Causes of Risk New York State Graduated Driver's 	 MV-285 MV-262 License Revocation License Suspension
Licensing Law	

Lesson Presentation:

Session Component	Notes	
Course Introduction	Specific to program, not covered in session plan	
Sample PPT (32 Slides)	 PPT includes the following activities and assessments: HTS Learning Activity (Slide 4) Characteristics of Safe Driver Class Discussion (Slides 13&14) Classifying Risk Factors Learning Activity (Slide 19) Session Review (Slides 28-31) 	
Additional Activities and Assessments	Managing Risk Self Reflection	

Supplemental Resources:

New York State Department of Health- A Brief Overview of New York State Graduated Driver Licensing Law

New York State Department of Motor Vehicles- Graduated License Law and Restrictions for Drivers Under 18

New York State Department of Motor Vehicles- Pre-Licensing Course Instructor's Manual

Name:

Managing Risk Self-Reflection

Describe in at least 2 sentences how you can manage risk, both as a driver and a passenger.

I can manage risk as a driver by...

I can manage risk as a passenger by...

Session 2 Lesson Plan: Know Your Vehicle

Session Goals:

- 1. Students will demonstrate familiarity with the location and navigation of owner's manuals regarding functions and operations of instruments in the vehicle.
- 2. Students will learn and demonstrate the importance of legal and safe starting, stopping and turning maneuvers.
- 3. Students will demonstrate and explain the importance of appropriate driving space and following distance to help ensure safe driving in all conditions.

What will students be able to do?

- Students will be able to employ and operate gauges, warning lights and control devices without interfering with driving tasks and demonstrate useful navigation of the driver's manual.
- Students will demonstrate safe and proper starting, stopping, and turning maneuvers when driving in various conditions

What will students know?

- Students will demonstrate proper navigation of the owner's manual along with knowledge of gauges and warning lights that are used.
- Students will demonstrate proper navigation of the owner's manual along with knowledge of gauges and warning lights that are used.
- Students will explain the importance of a proper space cushion while driving invarious conditions, speeds, and vehicles.
- Students will explain and show evidence of proper space cushions while driving in various driving settings and environments.

Key Vocabulary and Topics:

 Accelerator pedal Air bags Area around the vehicle Body position Brake pedal Cruise/speed control Cover brake Enhanced mirror settings Gear selector lever Hazard flasher Owner's manual Parking brake Pre-drive procedures Pre-entry checks Temperature controls Odometer

 Fuel gauge Speedometer Occupant restraints Passive/active restraints Head rest 	 Safety, communication, comfort and convenience devices Dashboard icons and symbols Air condition control Air vents
	Air ventsBack up lights
 Turn signals 	
 Trunk release 	Intermittent wipers
	 4 L's of Exiting: Look, Lever, Look, Leave

Lesson Presentation:

Session Component	Notes
Sample PPT (36 Slides, link to PPT with 14 additional slides)	 PPT includes the following activities and assessments: <u>Warning Lights Activity</u> (Slide 6) Good Driving Habits Discussion (Slide 7) Pre-Drive Checklist Activity (Slide 8)
Additional Activities and Assessments	Following Distance Activity Vehicle Feature Activity Readiness Quiz Know Your Vehicle Assessment

Supplemental Resources:

DERIC Chapter 7: Getting Familiar with Your Vehicle

Name:	

Warning Lights Activity

Instructions: Explain the importance of the following warning lights.

Engine Temperature:

Oil Pressure:

Battery Charging Light

Brake Warning Light

Check Engine Light

Name: _____

Following Distance Activity

Instructions: Explain how safe and proper following distances are adjusted while driving during dry, rainy, snowy, and icy conditions.

Dry Conditions:

Rainy Conditions:

Snowy Conditions:

Icy Conditions:

Name:	

Vehicle Feature Activity

Instructions: Your instructor will assign you a vehicle feature. Answer the following questions based on your assigned feature.

Vehicle Feature:

- 1. What would happen if this feature stoppedworking?
- 2. How would you respond to this failure?
- 3. How would you change your driving behavior?
- 4. Would the vehicle still be able to be driven?

Readiness Quiz

Instructions: Answer the following questions about driver and vehicle readiness.

- 1. Driver readiness means
 - a. Being ready to obtain a driver license
 - b. Mental, emotional and physical preparation to operate a vehicle
 - c. Not being aware of your own mental, emotional and physical well being
 - d. Both a) and b)
- 2. Which of the following is NOT a necessary step prior to driving a vehicle?
 - a. Check tire tread depth with a penny
 - b. Check for obvious fluid leaks
 - c. Check for physical damage to the vehicle
 - d. Check for objects around the vehicle
- 3. Emotions that may affect your drivingare:
 - a. Happiness or joy
 - b. Depression or anxiety
 - c. Sadness or anger
 - d. All of the above
- 4. The horn should not be used to
 - a. Get the attention of other drivers
 - b. Show anger
 - c. Show position
 - d. None of the above

True or False?

- 5. When you approach your vehicle, you should look for children or animals playing around the vehicle.
- 6. The oil should be changed every 7,000-9,000 miles.
- 7. Drivers who have developed basic maneuvering skills without properdecision-making are usually considered good drivers.
- 8. Young people do not need to concern themselves with fatigue while driving because their energy level in higher than older people.

Readiness Quiz- Answer Key

- 1. Driver readiness means
 - a. Being ready to obtain a driver license
 - b. Mental, emotional and physical preparation to operate a vehicle
 - c. Not being aware of your own mental, emotional and physical well being
 - d. Both a) and b)
- 2. Which of the following is NOT a necessary step prior to driving a vehicle?
 - a. Check tire tread depth with a penny
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 - d. Check for objects around the vehicle
- 3. Emotions that may affect your drivingare:
 - a. Happiness or joy
 - b. Depression or anxiety
 - c. Sadness or anger
 - d. All of the above
- 4. The horn should not be used to
 - a. Get the attention of other drivers
 - b. Show anger
 - c. Show position
 - d. None of the above

True or False?

- **5.** When you approach your vehicle, you should look for children or animals playing around the vehicle. **True**
- 6. The oil should be changed every 7,000-9,000 miles. False
- 7. Drivers who have developed basic maneuvering skills without properdecision-making are usually considered good drivers. **False**
- **8.** Young people do not need to concern themselves with fatigue while driving because their energy level in higher than older people. **False**

Know Your Vehicle Assessment

- 1. When starting a vehicle with an automatic transmission, the selector lever should be in
 - a. Drive (D)
 - b. Park (P)
 - c. Low (L1, L2, OR 1, 2)
 - d. Reverse (R)
- 2. The temperature light or gauge indicates the temperature of the
 - a. Air inside the vehicle
 - b. Engine
 - c. Gas
 - d. Air outside
- 3. Before shifting from PARK to DRIVE you should
 - a. Apply parking brake
 - b. Shift to Neutral and wait 2 seconds
 - c. Press on the brake pedal
 - d. Release brake pedal
- 4. When backing up, you should
 - a. Only use back-up camera
 - b. Only use main mirror and side mirrors
 - c. Keep one hand on the steering wheel
 - d. Use mirrors and back-up camera ONLY to supplement looking out rear window
- 5. To safely brake and perform a smooth stop with a vehicle
 - a. Slowly and with control apply gradual brake pressure according to conditions
 - b. Jam on the brakes
 - c. Shift car into neutral 2 seconds before car stops
 - d. Initially brake hard then ease off at last second
- 6. When driving in wet conditions you should _______following distance a. Decrease
 - b Keep the same as long as all cars are going the same speed
 - c. Increase
 - d. None of the above
- 7. All of the below are true except
 - a. Airbags are designed to work with seat belts
 - b. Seat belt fit matters
 - c. Bucking your seat belts in the single most effective way to protect yourself in crash
 - d. The lap portion of your seat belt should rest across your stomach

Know Your Vehicle Assessment- Answer Key

- 1. When starting a vehicle with an automatic transmission, the vehicle should bein a. Drive (D)
 - b. Park (P)
 - c. Low (L1, L2, OR 1, 2)
 - d. Reverse (R)
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- 7. All of the below are true except
 - a. Airbags are designed to work with seat belts
 - b. Seat belt fit matters
 - c. Bucking your seat belt is the single most effective way to protect yourself incrash
 - d. The lap portion of your seat belt should rest across your stomach

Session 3 Lesson Plan: Signs, Signals, & Markings

Session Goals:

- 1. Understand what traffic control devices are and why they are important.
- 2. Understand the many factors that influence their ability to observe, recognize, understand and react to traffic control devices.
- 3. Understand why correct application of right of way rules is important.
- 4. Demonstrate the ability to observe, recognize, understand and react to the three types of traffic control devices: signs, signals, and markings behind the wheel.
- 5. Demonstrate the ability to implement proper right of way in different situations behind the wheel.

What will students know?

- The different types of traffic control devices and how they are used.
- Why traffic control devices are necessary for maintaining safe roadways.
- The potential consequences of not obeying traffic control devices.
- How to distinguish regulatory, warning, guide, and service signs.
- How to use color, shape and size to identify and understand signs.
- How to use color, light pattern and orientation to identify and understand signals.
- How to use color, pattern and width to identify and understand pavement markings.
- How to use the SEE/SIPDE process to appropriately observe and react to signs, signals and markings.
- How to distinguish specific right of way scenarios at intersections.
- How to use the SEE/SIPDE process to appropriately observe and react to right of way scenarios.

What will students be able to do?

- Explain the different types of traffic control devices and how each are used.
- Understand how traffic control devices are a necessary tool for maintaining safe roadways.
- Identify the potential consequences of not obeying traffic control devices.
- Recognize and understand regulatory, warning, guide and service signs.
- Use color, shape and size to recognize and understand signs.
- Use color, light pattern and orientation to recognize and understand signals.
- Use color, pattern and width to recognize and understand pavementmarkings.
- Use the SEE/SIPDE process to observe signs, signals and markings and appropriately respond to them.
- Apply right of way rules to differing situations.

Key Vocabulary & Topics:

Black Guide Guide	Colors for Traffic Signs: • Red • Yellow • White • Black	 <u>Shapes for Traffic Signs:</u> Octagon Triangle Diamond Circular 	Types Traffic Signs:• Regulatory• Warning• Construction• Guide
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 Green Brown Blue Orange Fluorescent Yellow Fluorescent Pink 	PentagonRectangle	IncidentChevron
 Traffic Signals: Steady red/yellow/green Flashing red /yellow Flashing yellow arrow Red "X" and arrow Yellow "X" and arrow Green arrow Green arrow Pedestrian signals, countdown timers Multiple left turn lanes Multiple right turn lanes 	 Pavement Markings: White lines (solid or broken Yellow lines Double solid yellow lines Solid yellow line with a broken yellow line (on your side of center line) Solid yellow line with a broken yellow line (on far side of center) Blue curb or red curb Lane marker arrows Bicycle paths 	 Special Vehicle Lights Side markers Vehicle back- up lights License plate light Vehicle turn signals High mounted brake lights Parking lights

Lesson Presentation:

Session Component	Notes
Sample PPT (59 Slides)	 PPT includes the following activities and assessments: Pavement Markings Activity (Slides 32- 50) Session Review (Slides 55-58)
Additional Activities and Assessments	Passenger Driving Log ActivityDriving Journal ActivitySelf-Reflection ActivitySigns, Signals, and Markings Assessment

Supplemental Resources:

DERIC Chapter 6: Signs, Signals, and Markings

Passenger Driving Log Activity

Instructions: While riding as a passenger while your parent or sibling (or classmate if doing the activity during BTW instruction) drives, record all of the signs, signals and markings that you see. Indicate how you would respond to each. Be prepared to present a few to the class.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

Driving Journal Activity

Instructions: While riding with your parents, siblings, or classmates, keep a record of any intersection where a traffic control device was blocked or otherwise difficult to see. Describe how the driver handled the situation. Also, describe how you would have handled the situation.

- 1.

 2.

 3.

 4.

 5.

 6.

 7.

 8.

 9.
- 10.

| Name: | |
|-------|--|
| | |

Self-Reflection Activity

Instructions: Reflect on a time when you disregarded or did not completely follow a traffic control device. Why did you disregard the traffic control device? What consequences could have occurred?

Describe the incident:

Explain why you disregarded the traffic control device:

Possible Consequences:

Signs Signals and Roadway Markings Assessment

- 1. The weather can affect your ability to observe and react to a traffic control device. True or False?
- 2. Failing to obey a traffic signal, stop sign or yield sign can result in three driver violation points. True or False?
- 3. Match the type of sign with its description:
 - a) Regulation Blue sign with white lettering and symbols
 - b) Warning Orange sign with black lettering and symbols
 - c) Destination Yellow sign with black lettering and symbols
 - d) Service White sign with black lettering and symbols
 - e) Work Area Green sign with white lettering and symbols
- 4. A regulation sign is normally what shape?
- 5. What is the normal shape of a warning sign?
- 6. What must you do at a STOP sign?
- 7. What must you do when facing each of the following: a flashing red light, flashing yellow light, steady yellow light, a red light with a green arrow?
- 8. What does it indicate if an edge line angles in toward the center of the road?
- 9. What do each of these lines indicate: one broken, one solid, double solid, solid and broken together?
- 10. If an intersection has crosswalk lines but no STOP line, where must you stop for a red light at that intersection?
- 11. What type of pavement marking is used to show you which lane you must use for a turn?
- 12. A red and white triangular sign at an intersection means....

- a. Slow down if an emergency vehicle is approaching
- b. Look both ways as you cross theintersection
- c. Always come to a full stop at the intersection
- d. Slow down and be prepared to stop if necessary

13. A rectangular-shaped sign is....

- a. School crossing sign
- b. Railroad crossing sign
- c. Stop sign
- d. Speed limit sign
- 14. A diamond-shaped sign is a....
 - a. Road hazard sign
 - b. Interstate route sign
 - c. School crossing sign
 - d. Speed limit sign
- 15. What are the colors of the warning signs that indicate hazards ahead, such as curves in the road or narrow bridges?
 - a. Black letters or symbols on a white background
 - b. Black letters or symbols on a yellow background
 - c. White letters or symbols on a blue background
 - d. White letters or symbols on a green background
- 16. What are the colors of a sign which tells you the distance to the next exit of a highway?
 - a. Yellow with black letters
 - b. Black with white letters
 - c. Red with white letters
 - d. Green with white letters
- 17. Which of the following must you obey over the other three?
 - a. A steady red light
 - b. A policeman
 - c. A stop sign
 - d. A flashing red light

Signs, Signals, and Markings Assessment- Answer Key

- 1. The weather can affect your ability to observe and react to a traffic control device. True or False?
- 2. Failing to obey a traffic signal, stop sign or yield sign can result in three driver violation points. True or False?
- 3. Match the type of sign with its description:
 - Blue sign with white lettering and symbols f) Regulation
 - Orange sign with black lettering and symbols g) Warning-
 - -Yellow sign with black lettering and symbols h) Destination
 - White sign with black lettering and symbols i) Service i) Work Area -
 - Green sign with white lettering and symbols
- 4. A regulation sign is normally what shape? Rectangular
- 5. What is the normal shape of a warning sign? Diamond shaped
- 6. What must you do at a STOP sign? Come to a full stop, yield the right of way to vehicles and pedestrians in or heading toward intersection. Go when it is safe.
- 7. What must you do when facing each of the following: a flashing red light, flashing yellow light, steady yellow light, a red light with a green arrow?
 - Flashing red light- Means the same as a STOP sign; Stop, yield the right-ofway, and go when it is safe.
 - Flashing yellow light- Drive with caution.
 - <u>Steady vellow light</u>- The light will change from green to red. Be prepared to stop for the red light.
 - Red light with green arrow- You can go in the direction of the arrow, but • you must yield the right-of-way to other traffic at the intersection as required by law.
- 8. What does it indicate if an edge line angles in toward the center of the road? An edge line that angles toward the center of the road shows that the road is narrower ahead.
- 9. What do each of these lines indicate: one broken, one solid, double solid, solid and broken together?
 - <u>One broken-</u> You can pass other vehicles or change lanes if you can do so safely without interfering withtraffic.
 - One solid- You can pass other vehicles or change lanes, but you can only do so when obstructions in the road or traffic conditions make it necessary.

- <u>Double solid</u>- You cannot pass or change lanes. You cannot go across the lines except to turn left to enter or leave the highway (e.g., to or from a driveway or to do a U-turn
- <u>Solid and broken together</u>- If you are on the side with the solid line, you cannot pass other vehicles or go across the line except to make a left turn into a driveway. If you are on the side with the broken line, you can pass if it is safe to and you will not interfere withtraffic.
- 10. If an intersection has crosswalk lines but no STOP line, where must you stop for a red light at that intersection? **Behind the crosswalk**
- 11. What type of pavement marking is used to show you which lane you must use for a turn? **Arrows**
- 12. A red and white triangular sign at an intersection means....
 - a. Slow down if an emergency vehicle is approaching
 - b. Look both ways as you cross the intersection
 - c. Always come to a full stop at the intersection
 - d. Slow down and be prepared to stop if necessary
- 13. A rectangular-shaped sign is....
 - a. School crossing sign
 - b. Railroad crossing sign
 - c. Stop sign
 - d. Speed limit sign
- 14. A diamond-shaped sign is a....
 - a. Road hazard sign
 - **b.** Interstate route sign
 - **c.** School crossing sign
 - d. Speed limit sign
- 15. What are the colors of the warning signs that indicate hazards ahead, such as curves in the road or narrow bridges?
 - a. Black letters or symbols on a white background
 - b. Black letters or symbols on a yellow background
 - c. White letters or symbols on a blue background
 - d. White letters or symbols on a green background
- 16. What are the colors of a sign which tells you the distance to the next exit of a highway?
 - a. Yellow with black letters
 - b. Black with white letters
 - c. Red with white letters
 - d. Green with white letters
- 17. Which of the following must you obey over the other three?
 - a. A steady red light
 - b. A policeman
 - c. A stop sign
 - d. A flashing red light

Session 4 Lesson Plan: Vision and Space

Session Goals:

- 1. Explain the elements of the Smith System/SIPDE and apply to various driving situations.
- 2. Determine which lane position is appropriate for driving circumstances.

What will students know?

- Identify steps in the SIPDE process and the Smith System.
- Identify how to implement the SIPDE and Smith System steps given a driving situation.
- Determine lane position to help communicate with other drivers and avoid conflicts/collusions.

What will students be able to do?

- Use the SIPDE/Smith System to determine an appropriate visual lead time and following distances based on speed, environmental factors, and weather conditions.
- Adjust driving behaviors and habits as needed to adapt to the driving conditions present in rural, urban, suburban, and multi-lane settings.

Key Vocabulary and Topics:

| • | SIPDE | |
|---|------------------|--|
| | • • • • • | |

- Smith System
- Path of travel
- Field of vision
- Fringe vision
- Central vision
- Peripheral vision
- Zone control system/lane positions
- Target
- Target area
- Targeting path
- Line of sight

- Closed areas of space
- Open areas of space
- Blind spots
- Driving limitations
- Visual lead
- Selective search
- Separate
- Compromise
- Space cushion
- 3-4 second rule

Lesson Presentation:

| Session Component | Notes | | |
|--|---|--|--|
| Sample PPT | PPT includes the following activities and assessments: | | |
| (40 Slides) | Definitions Matching Activity (Slides 2&3) | | |
| | Brainstorm Activity (Slide 7) | | |
| | Using Targets and Path of Travel Activity (Slides 12-15, 20-25) | | |
| | Defensive Drivers Thought Activity (Slide 25) | | |
| | Lane Position Activity (Slide 37) | | |
| | Session Review (Slides 38-39) | | |
| Additional Activities and
Assessments | Visibility Group Activity
Unit 1 Classroom Checklist | | |

Supplemental Resources:

DERIC Chapter 11: Vision, Space, and Risk Management

| Name: | |
|-------|--|
| | |
| | |

Visibility Group Activity

Instructions: Divide class into small groups and assign each group on of the below conditions that could affect visibility when driving.

Develop a list of strategies to minimize risk your assign situation. The list should include strategies to incorporate before and during a drive.

1. Glare from Sun

2. Night Driving

3. Rain

4. Snow

5. Fog

6. Dust

Unit 1

(Sessions 1-4) Classroom Checklist

By the end of Session 4, the student should be able to demonstrate competency in the following areas. Use the checklist below to keep track of demonstrated competencies.

| Competency | Fully
Demonstrates
Knowledge | Needs
Improvement | Not
Knowledgeable |
|--|------------------------------------|----------------------|----------------------|
| Explain the purpose of the
Highway Transportation System
(HTS) | | | |
| Identify the three parts that make up the HTS | | | |
| Identify sources of risk found while
driving | | | |
| Explain purpose of the Graduated
Driver Licensing Law (GDL) | | | |
| Identify phases of GDL and
associated restrictions | | | |
| Describe common warnings/alerts
and why they may be activated | | | |
| Explain pre-driving considerations | | | |
| Describe what to look for when
approaching a vehicle that will be
driven | | | |
| Describe what to do in a pre- driving
check | | | |
| Demonstrate how to adjust the vehicle seat, seatbelt, head restraint, steering wheel, and mirrors | | | |
| Demonstrate how to operate the vehicle controls | | | |
| Demonstrate how to start the engine
Identify and demonstrate the three
(3) steering techniques | | | |
| Describe common errors drivers
make in steering | | | |
| Identify items under the hood
Identify signs by their color, shape,
and type | | | |
| Describe the different types of traffic
signals and what to do when
encountered | | | |

| Competency | Fully
Demonstrates
Knowledge | Needs
Improvement | Not
Knowledgeable |
|---|------------------------------------|----------------------|----------------------|
| Describe pavement markings and
their purpose, including yellow lines,
white lines, and guide markings | | | |
| Discuss right-of-way principles | | | |
| Explain the purpose of a round-
about(s) | | | |
| Describe the concept of field of vision | | | |
| Discuss space cushion | | | |
| Explain the 3-4 second rule | | | |
| Illustrate and explain blind spots on a vehicle and on a large vehicle (tractor trailer) | | | |
| Determine a target and path of travel | | | |
| Explain the Smith System | | | |
| Explain what SIPDE stands for | | | |
| Explain what the zone control
system is | | | |
| Determine which driving limitations
exist | | | |
| Illustrate lane position selection -
give an example | | | |