

Driver Education
Classroom and In-Car Curriculum

Appendix A

In-Car Lessons



Appendix A: In-Car Lessons

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Overview and Objectives

In-Car Lessons Introduction

Lesson Content



Overview

There are six, one hour, twenty minute in-car lessons, which make a total of eight hours behind-the-wheel. In-car lessons can be increased or decreased based on school policy and/or student performance.

All behind-the-wheel lessons are introduced and pre-requisite objectives are completed in the classroom sessions. During the in-car lessons, each student should be evaluated and the student progress record in Lesson 6 should be completed by the instructor at the end of each lesson. During the final in-car lesson, the student evaluation should be completed and marked pass or fail.



Objectives

The student will:

1. Demonstrate pre-entry safety checks, pre-start adjustments of communication, safety, visibility and comfort devices prior to driving, starting procedures, operation of driving controls, basic vehicle maneuvers, stopping and securing the vehicle.
2. Demonstrate the ability to determine minimum time/space gaps for performing selected movements, in moderate density traffic, when traveling 25 to 40 miles per hour on two and four lane roadways. Maintain a safe path of travel on straight, hilly and curving streets with open and moderately restricted visibility. Enter, exit and cross traffic at intersections and secure a motor vehicle when parking up or down hill.
3. Demonstrate correct visual steering, speed control and gap assessment techniques for each of the following: approaching an intersection, completing left and right turns at intersections, changing lanes, backing straight, and backing left and right.
4. Use space management principles to reduce the chance of conflict in moderate density traffic traveling at speeds up to 50 mph. Demonstrate lane changes, merging, and exiting in free flow traffic. Employ commentary driving while adjusting speed, adjusting position and communicating in response to changes in space around the vehicle. Demonstrate two-point turnabout and angle parking.
5. Demonstrate risk management through communication, speed and position adjustments in complex traffic situations on country highways, limited access highways, and city streets. Planned exercises will include: following and meeting other vehicles, merging onto, driving through and exiting freeway interchanges, assessing passing time/space gap needs and parallel parking.
6. Demonstrate pre-drive procedures, knowledge and operation of information, communication, safety devices and vehicle control, basic vehicle maneuvers, intersection approach and safe turning procedures, time and space management, driving through curves, and the application of rules and laws. Driving environments will include parking lots, country highways, freeways and business district streets.

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In-Car Lessons Introduction		Lesson Overview Time Frame – 8 hours
Teacher Information and Resources		
Lessons	<ol style="list-style-type: none">1. Developing Basic Driver Actions2. Driving in Light Traffic3. Driving in Moderate Traffic4. Developing Effective Visual Search Skills, Turning Around and Parking5. Driving in Different Environments6. Final Assessment	
Materials	In-Car Lessons In-Car Evaluation/Progress Record Clipboard and pen Driver education vehicle	
Instructor Notes		

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In-Car Lesson #1 Developing Basic Driver Actions (1 hour 20 minutes per student)

Performance Objectives: Students will demonstrate pre-entry safety checks, pre-start adjustments of communication, safety, visibility and comfort devices prior to driving, starting procedures, operation of driving controls, basic vehicle maneuvers, stopping and securing the vehicle.

This lesson should be conducted on a parking lot or straight, level residential streets with open lines of sight and low density traffic that is traveling no more than 15 miles per hour. The lesson may progress to other areas with a variety of turning situations, but should not include exposure to faster moving through traffic until the student has demonstrated good vehicle control.

Performance Objectives

1. Make checks prior to entering and adjustments of safety, communication, visibility and comfort devices as needed prior to driving a motor vehicle.
2. Locate and explain the purpose of and operate as appropriate, all protective, information, communication, control and visibility devices.
3. Start the engine and prepare to move from a stopped position.
4. Enter, move, stop and secure a motor vehicle.
5. Use accelerator and brakes to control speed and stop a motor vehicle.
6. Demonstrate visual search, time/gap assessments and use of signals when positioning a motor vehicle within a lane and when changing lanes.

Learning Activities

1. Practice making safety checks prior to entering the vehicle and adjustments of protective, information, comfort, communication, visibility devices and vehicle controls.
2. Practice operating protective, information, control, communication and visibility devices as appropriate.
3. Practice proper sequence of actions for starting a motor vehicle safely. Practice moving a motor vehicle, parked at a curb, into moving traffic.
4. Practice pre-start, starting, moving, stopping and securing procedures.
5. Practice accelerating to and maintaining a designated speed. Practice appropriate visual checks, controlling speed and steering while adjusting position between and within lanes.
6. Practice making visual checks, communicating intentions and adjusting speed and position between and within lanes.

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7. Control steering and speed when making left and right turns.

7. Practice coordinated use of turn signals, accelerator, brakes and steering while:

- making right and left turns
- maintaining proper control of speed and position while making right and left turns in low speed, low density traffic.

8. Stop and secure vehicle.

8. Practice moving a motor vehicle from a position in a travel lane, to a parked position, parallel to a curb. Practice proper sequence of actions for securing a vehicle parked at a curb.

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In-Car Lesson #1 Developing Basic Driver Actions Procedure References

Pre-Entry Checks

1. Check around outside of vehicle for:
 - a. Broken glass (windows, lights, mirrors)
 - b. Body damage
 - c. Tires:
 1. Condition
 2. Inflation
 3. Direction front tires are turned
 - d. Fluid leaks
 - e. Objects that could damage vehicle when moved
 - f. Children and pets
 - g. Snow build up that can block windows and lights
2. If parked on street, approach driver's door, key in hand from front of vehicle
3. Unlock door and enter quickly

Preparing to Drive

1. Lock doors
2. Place key in ignition
3. Adjust seat for best control (Top of steering wheel should be no higher than the top of the driver's shoulders.) There should be at least 12" between the driver's body and the bottom of the steering wheel. (Use a wedge seat cushion, and/or pedal extensions for maximum field of view.)
4. Adjust inside and outside mirrors for maximum field of view
5. Fasten and adjust safety belt and make sure all passengers buckle up
6. Adjust head restraints

Starting the Engine

1. Check to be sure parking brake is set
2. Place foot on brake
3. Make sure the shift lever is in park
4. Turn key clockwise to start engine
5. Turn ignition on and check gauges
6. As soon as the engine starts, release the key
7. Allow engine to idle no more than 15 to 20 seconds (observe gauges and dash lights to make sure all indicate normal functioning while waiting)
8. Set needed accessories and adjust ventilation (HVAC)
9. Turn on low beam headlights (use headlights at all times)

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Moving the Vehicle Forward

1. With foot on brake, shift to drive “D”
2. Release parking brake
3. Check mirrors and over shoulder for traffic
4. Signal when clear
5. Position hands on steering wheel. Left between 7-9 and right hand between 3-5 o'clock
6. When safe, release brake pedal and press gently on the accelerator
7. Look well ahead along intended path of travel
8. Steer as needed to place vehicle in center of lane
9. Cancel signal

Approaching Intersections

1. Approaching intersection, search all corners for traffic controls, pavement markings, highway users and areas of limited visibility
2. Check mirrors for presence and actions of following traffic. Remember that over 30% of reported crashes are caused by rear-end collisions.
3. Make sure the driver is in the correct position and in the proper lane.
4. Be alert for traffic close to intended path.
5. Adjust speed to allow more time to search the area and to smoothly stop if necessary.
6. Remember, many people do not stop for signs and traffic signals.
7. If the driver has a restriction to the line of sight, the driver may need to change lane position and reduce your speed.

Turning at Intersections

1. Approaching intersection check for following, oncoming, cross traffic, other highway users, traffic control devices, condition of roadway and areas of limited visibility
2. Check mirrors for presence and actions of following traffic
3. Signal intent to turn at the intersection 3 to 4 seconds in advance or 100 feet
4. Position your vehicle for appropriate turn
5. Steer into proper lane
6. Tap brake pedal to alert following driver
7. Adjust speed as necessary, stopping if required
8. Recheck cross and oncoming traffic (90 percent of drivers do not stop for stop signs in residential areas)
9. Check mirrors
10. Identify a safe time/space gap in cross traffic
11. Look through turn to farthest possible point
12. Steer into proper lane using hand to hand (push/pull/slide steering)
13. Adjust speed as appropriate
14. Check mirrors for traffic to the rear

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Stopping at a Curb

1. Identify place to park
2. Check mirrors
3. Signal
4. Release accelerator
5. Tap brake pedal to alert following drivers
6. Press brake pedal to point of resistance
7. Steer gently toward curb
8. Use reference points to position vehicle legal distance from the curb
9. Apply firm, steady pressure for smooth stops. Do not pump brakes.
10. Check to assure vehicle is centered between front and rear lines

Securing the Vehicle for Parking

1. Come to a complete stop with the wheels turned toward or away from the roadway as appropriate. Check state law for hill parking.
2. Keep foot on the brake pedal and set the parking brake*
3. Shift selector lever to park position
4. Turn off all accessories and headlights if no daytime running lights (DRL's)
5. Turn ignition to lock and remove key
6. Unfasten safety belt
7. Check traffic to rear, exit vehicle carefully, and lock doors

* Setting the parking brake is required by law in some states. Setting of the parking brake is to hold the vehicle in place while parked and protect the transmission.

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In-Car Lesson #2 Driving in Light Traffic (1 hour 20 minutes per student)

Performance Objectives: The students will demonstrate the ability to determine minimum time/space gaps for performing selected movements, in moderate density traffic, when traveling 25 to 40 miles per hour on two and four lane roadways. Maintain a safe path of travel on straight, hilly and curving streets with open and moderately restricted visibility. Enter, exit and cross traffic at uncontrolled and controlled intersections. Secure a motor vehicle when parked heading up or down hill with and without a curb.

Learning Objectives

1. Make the sequence of checks prior to entering and adjustments of visibility, communication, protective and comfort devices in preparation to drive.
2. Demonstrate the proper procedure for starting the engine and preparing to move from a stopped position.
3. Use accelerator and/or brake pedal to control speed and stop a motor vehicle.
4. Use proper steering procedures when steering straight ahead, through curves and turns.
5. Employ aggressive visual habits and practice making time/gap assessments when preparing to cross or turn at an intersection.
6. Demonstrate visual search, time/gap assessment abilities when positioning a vehicle in a lane and when changing lanes.
7. Demonstrate the proper procedure for parking a motor vehicle when facing up and down hill, with and without a curb.

Learning Activities

1. Demonstrate 20 to 30 second visual search.
2. Demonstrate 12 to 15 second visual control zone.
3. Demonstrate 8 to 12 second alternate path of travel.
4. Demonstrate using a 4 to 8 second stopping zone.
5. Demonstrate ability to maintain a 3 to 4 second following distance.
6. Search for objects or conditions on and near the roadway that could influence the level of risk when driving.
7. Evaluate actions of motor vehicle operators and other highway users that could increase the chance of conflict.
8. Make adjustments of speed and/or position as needed to reduce the chance of conflict with motor vehicle operators and other highway users.

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Learning Activities (continued)

9. Search for adequate time/space gaps to safely make safe left and right turns to and from moving traffic.
10. Search for adequate time/space gaps to enter and make lane changes, left and right, in moving traffic.
11. Demonstrate procedure for parking and securing a motor vehicle when parking up and down hill with and without a curb.

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In-Car Lesson #2 Driving in Light Traffic Procedure References

Preparing to Drive:

1. Perform pre-entry safety checks
2. Lock doors
3. Place key in ignition
4. Adjust seat for best control (Top of steering wheel should be no higher than the top of the driver's shoulders.) There should be at least 10" between the driver's body and the bottom of the steering wheel. (Use a wedge seat cushion, and/or pedal extensions for a proper fit)
5. Adjust inside and outside mirrors for maximum field of view
6. Fasten and adjust safety belt
7. Adjust head restraints

Starting the Engine:

1. Check to be sure parking brake is set
2. Place foot on brake
3. Make sure the shift lever is in park
4. Turn key clockwise to start engine
5. Turn ignition on and check gauges
6. As soon as the engine starts, release the key
7. Allow engine to idle no more than 15 to 20 seconds (observe gauges and dash lights to make sure all indicate normal functioning while waiting)
8. Set needed accessories and adjust ventilation (HVAC)
9. Turn on low beam headlights (use headlights at all times)

Entering Traffic from the Side of the Roadway:

1. Signal and check traffic to front, side and rear
2. Identify a safe gap in traffic
3. Look well ahead along intended path of travel
4. Release brake and accelerate gently
5. Steer into intended path of travel
6. Cancel signal
7. Check for motor vehicles and other highway users to the sides of your path of travel
8. Check mirrors for traffic to the rear
9. Project visual search 20 to 30 seconds ahead

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Concentrate on Path of Travel:

1. Identify target area 20 to 30 seconds ahead along path of travel
2. Imagine a line down middle of intended pathway
3. Search area to sides and oncoming traffic 4 to 8 seconds ahead along path of travel
4. Where space is limited on sides, stay closer to center line

Changing Lanes:

1. Maintain safe following interval
2. Check highway and traffic conditions ahead, to the sides and behind
3. Select a safe gap in traffic
4. If clear, signal
5. Check mirror blind area in direction of lane change
6. Adjust speed and steer into lane
7. Cancel signal
8. Adjust speed to flow of traffic
9. Check mirrors for following traffic

Turning at Intersections:

1. Approaching intersection check for following, oncoming, cross traffic, other highway users, traffic control devices, condition of roadway and areas of limited visibility
2. Check mirrors for presence and actions of following traffic
3. Signal intent to turn at the intersection 3 to 4 seconds in advance or 100 feet
4. Position your vehicle for appropriate turn
5. Steer into proper lane
6. Tap brake pedal to alert following driver
7. Adjust speed as necessary, stopping if required
8. Recheck cross and oncoming traffic (90 percent of drivers do not stop for stop signs in residential areas)
9. Check mirrors
10. Identify a safe time/space gap in cross traffic
11. Look through turn to farthest possible point
12. Steer into proper lane using hand to hand (push/pull/slide steering)
13. Adjust speed as appropriate
14. Check mirrors for traffic to the rear

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Leaving Traffic and Parking Up and Down Hill, With and Without a Curb:

1. Search ahead for place to park
2. Check following traffic
3. Signal
4. Release accelerator
5. Tap brake pedal to alert following drivers
6. Press brake pedal to point of resistance
7. Steer gently toward curb
8. Apply firm, steady pressure for smooth stops
9. **Parking up or downhill without a curb and downhill with a curb:**
 - a. Before securing vehicle, turn wheels sharply toward the edge of the road
 - b. Let leading edge of front tire touch road edge or curb
10. **Parking uphill with a curb:**
 - a. Before securing vehicle, turn steering wheel sharply away from the curb
 - b. Let vehicle roll back slowly until rear edge of tire gently touches curb

Securing the Vehicle for Parking:

1. Come to a complete stop with the wheels turned toward or away from the roadway as appropriate. Check state law for hill parking.
2. Keep foot on the brake pedal and set the parking brake*
3. Shift selector lever to park position
4. Turn off all accessories and headlights if no daytime running lights (DRL's)
5. Turn ignition to lock and remove key
6. Unfasten safety belt
7. Check traffic to rear, exit vehicle carefully, and lock doors

* Setting the parking brake is required by law in some states. Setting of the parking brake is to hold the vehicle in place while parked and protect the transmission.

Exiting a Parking Space:

1. Start engine with foot on brake and shift to reverse, signal intention
2. Back slowly and straighten wheels
3. Stop before striking any vehicle parked to rear
4. Check to front, rear and sides for safe path
5. Signal intentions and select safe gap
6. Search ahead and select target area
7. Accelerate smoothly, and steer into proper lane
8. Cancel signal, search ahead along path of travel
9. Accelerate to appropriate speed
10. Check traffic to rear

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Observer Learning Activities In-Vehicle Lesson 2 Driving in Light Traffic

In moderate density traffic traveling 25 to 40 mph, conduct a systematic search of the roadway for objects and conditions in or adjacent to the path of travel that could increase risk.

Search for roadway conditions, other motor vehicle operators, signs-signals-markings, and non-motorized highway users that increase the level of risk. Evaluate the actions of motor vehicle operators and other highway users that could increase the possibility of conflict.

Practice determining a:

1. 20-30 second visual lead
2. 12-15 second visual control zone
3. 8-12 second alternate path of travel
4. 4-8 second stopping zone
5. 3-4 second following distance

Over each segment of roadway identified by the instructor, the student observers will award a value of 0 - 5 in the appropriate column to indicate the driver's response to conditions of increased risk: limited visibility, space and whether the appropriate speed or position adjustment was completed and communicated.

- 5 = Communicated; appropriate adjustment of speed and position
- 4 = Communicated and adjusted speed; no position adjustment
- 3 = Communicated and adjusted position; no speed adjustment
- 2 = Late; but acceptable adjustment of speed/position; no communication
- 1 = Slight adjustment; barely adequate
- 0 = No observable response

SUBURBAN

Roadway Segment	Location	Visibility	Space	Communication	Score
1					
2					
3					
4					
5					

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In-Car Lesson #3 Driving in Moderate Traffic (1 hour 20 minutes per student)

Performance Objectives: Students will demonstrate correct visual steering, speed control and gap assessment techniques for each of the following: approaching an intersection, completing left and right turns at intersections, changing lanes, backing straight, and backing left and right.

Learning Objectives

1. Make required safety checks prior to entering the vehicle and adjustment of visibility, communication, protective and comfort devices in preparation to drive.
2. Demonstrate the proper procedure for starting the engine and moving a parked vehicle into traffic.
3. Demonstrate proper visual search and time/space gap assessments when:
 - a. Crossing or turning at an uncontrolled intersection
 - b. Crossing or turning at an intersection controlled by stop signs or traffic signals.
 - c. Turning at signalized intersections with more than one turn lane, or protected turn lanes.
 - d. Positioning a vehicle in a lane, when changing lanes, or entering or exiting traffic using a shared left turn lane.
4. Demonstrate visual search, targeting, steering and speed control while:
 - a. Backing in a straight line.
 - b. Backing while turning to the left and right.

Learning Activities

1. Identify traffic controls, motor vehicles, other roadway users, areas of limited visibility and condition of the roadway that could influence the path of travel.
2. Identify adequate time/space gaps to make left or right lane changes and adjust position within a lane in moving traffic.
3. Communicate intended move to other highway users.
4. Comply with laws regulating intended move.
 - a. Right turn on red
 - b. Advanced/delayed movement arrows
 - c. Multiple left and right turn lanes
 - d. Shared left turn lanes
5. Identify adequate time/space gap to safely make left and right turns to and from moving traffic.
6. Adjust speed/position for actions of motor vehicle operators and other highway users that could increase the level of risk.
7. Adjust body position to improve visual search, targeting, steering and speed control while backing straight, to the left and right

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In-Car Lesson #3 Driving in Moderate Traffic

Procedure References

Concentrate on Path of Travel:

1. Identify area 20 to 30 seconds ahead along path of travel
2. Imagine a line down middle of intended pathway
3. Search area to sides, and oncoming traffic 4 to 15 seconds ahead along path of travel
4. Where space is limited on sides, stay closer to center line

Changing Lanes:

1. Maintain safe following interval
2. Check highway and traffic conditions ahead, to the sides and behind
3. Select a safe gap in traffic
4. Signal
5. Check mirror blind spot in direction of lane change
6. Adjust speed and steer into lane
7. Cancel signal
8. Adjust speed to flow of traffic
9. Check mirrors for following traffic

Turning at Intersections:

1. Approaching intersection check for following, oncoming, cross traffic, other highway users, traffic control devices, condition of roadway and areas of limited visibility
2. Check mirrors for presence and actions of following traffic
3. Signal intent to turn at the intersection 3 to 4 seconds in advance or 100 feet
4. Position your vehicle for appropriate turn
5. Steer into proper lane
6. Tap brake pedal to alert following driver
7. Adjust speed as necessary, stopping if required
8. Recheck cross and oncoming traffic (90 percent of drivers do not stop for stop signs in residential areas)
9. Check mirrors
10. Identify a safe time/space gap in cross traffic
11. Look through turn to farthest possible point
12. Steer into proper lane using hand to hand (push/pull/slide steering)
13. Adjust speed as appropriate
14. Check mirrors for traffic to the rear

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Using Multiple Turn Lanes:

1. At least one block ahead of turn, identify and prepare to enter lane from which turn will be made
2. Check mirrors for following traffic and make head check in direction of lane change
3. Identify safe gap and signal intentions
4. When safe, enter appropriate lane
5. Check intersection for traffic controls, oncoming and cross traffic areas of limited visibility and other highway users
6. Check mirrors for following traffic and head check for vehicles in adjacent lanes
7. Signal intention to turn
8. Adjust speed as appropriate, stopping if needed
9. When traffic signal or arrow is green and it is safe to go, steer into lane corresponding to the one from which you started
10. Be alert for oncoming vehicles turning in the same direction
11. Be alert for other roadway users crossing the street
12. Be alert for vehicles in adjacent turn lane crossing into your lane

Using a Shared Left Turn Lane to Enter a Driveway:

1. Check oncoming traffic
2. Check oncoming traffic signaling a left turn (Possibly intending to use shared left turn lane)
3. Check traffic to the rear
4. Check for traffic, entering shared left turn lane from left or right sides of the roadway
5. Signal intention 3 to 4 seconds in advance of turn and check mirror blind spots
6. Adjust speed, move into two-way left turn lane no more than 2 to 3 seconds ahead of turn
7. Stop if necessary; complete turn when there is a safe gap in oncoming traffic

Using a Shared Left Turn Lane to Enter Traffic:

1. Signal a left turn and stop at edge of roadway
2. Check for drivers on opposite side of roadway signaling a left turn
3. Check traffic to the rear
4. Check for safe gap in traffic to the left and right
5. If traffic is clear in both directions, enter first through lane to left
6. If there is a gap to the left but not to the right, move out into the two-way left turn lane and stop
7. Turn on right turn signal
8. Recheck oncoming vehicles and vehicles on right, signaling left turns
9. When traffic lane to right is clear, accelerate and steer into nearest traffic lane
10. Cancel signal if necessary
11. Check mirrors for following traffic

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Backing Straight:

1. Prior to moving vehicle, check for objects to the rear
2. Place foot on brake pedal and shift to reverse
3. Grasp steering wheel at 12 o'clock with left hand
4. Turn body to right with right arm over back of passenger seat
5. Search through rear window and then glance forward
6. Move backward at idle speed, or use light accelerator pedal pressure if needed
7. Make minor steering corrections as needed
8. Release accelerator and apply pressure on brake pedal to stop
9. Look to rear until vehicle is stopped

Backing and Turning:

1. Prior to moving vehicle, check for objects to the rear
2. Place foot on brake pedal and shift to reverse
3. Signal left or right as appropriate
4. Grasp steering wheel with both hands at 9 and 3 o'clock position
5. Turn body in direction of turn
6. Search through rear side window in direction of turn
7. Move backward at idle speed, or light accelerator pedal pressure if needed
8. Steer smoothly in direction vehicle is to move
9. Make quick checks to front corner, opposite of turn (front swing)
10. Continue backing and straighten/rewind steering wheel to straight
11. Release accelerator and apply pressure on brake pedal to stop
12. Look to rear until vehicle is stopped

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In-Car Lesson #4 Developing Effective Visual Search Skills, Turning Around and Parking (1 hour 20 minutes per student)

Performance Objectives: Students will use space management principles (Search - Evaluate - Execute) to reduce the chance of conflict in moderate density traffic traveling at speeds up to 50 mph. Demonstrate lane changes, merging, and exiting in free flow traffic. Employ commentary driving while adjusting speed, adjusting position and communicating in response to changes in space around the vehicle. Demonstrate two-point turnabout and angle parking in an off-street area or low density residential traffic.

Learning Objectives

1. Demonstrate proper time/space gap assessments while responding to:
 - a. Highway conditions
 - b. Traffic control devices
 - c. Motorized vehicles
 - d. Non-motorized highway users
2. Demonstrate visual search, targeting, steering and speed control while:
 - a. Backing into a driveway/alley on the right
 - b. Turn left into driveway and back out to the right
3. Demonstrate visual search, targeting, steering and speed control while:
 - a. Entering and exiting angle parking spaces
 - b. Entering and exiting perpendicular parking spaces

Learning Activities

1. Identify and communicate, adjust speed and/or position to reduce risk in response to highway conditions that adversely affect space, traction and/or visibility.
2. Identify and adjust speed and/or position in response to traffic information, direction, warning and control devices.
3. Identify and communicate, adjust speed and/or position to reduce risk in response to vehicle condition or driver actions.
4. Identify and communicate, adjust speed and/or position to reduce risk in response to the presence and/or actions of non-motorized highway users.
5. Adjust body position to improve visual search, targeting, steering and speed control while backing.
6. Establish sight lines, target area, communicate and control steering and speed while entering and exiting angle parking spaces.

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In-Car Lesson #4 Developing Effective Visual Search Skills, Turning Around and Parking

Procedure References

Concentrate on Path of Travel:

1. Identify area 20 to 30 seconds ahead along path of travel
2. Imagine a line down middle of intended pathway
3. Identify an alternate path of travel 12 to 15 seconds ahead into which you can steer if necessary
4. Search area to sides and oncoming traffic 4 to 15 seconds ahead along path of travel
5. Maintain 3 to 4 seconds following distance

Assessing Highway Conditions:

1. Identify and respond as appropriate to areas of reduced visibility
2. Identify and respond as appropriate to areas of reduced space
3. Identify and respond as appropriate to areas of reduced traction

Identifying and Responding to Traffic Control Devices:

1. Identify and respond as appropriate to traffic signs
2. Identify and respond as appropriate to traffic signal lights
3. Identify and respond as appropriate to pavement markings

Searching for Clues to Motorized User Actions:

1. Identify and respond as appropriate to other roadway users
2. Identify and respond as appropriate to large vehicles
3. Identify and respond as appropriate to delivery vehicles
4. Identify and respond as appropriate to condition of vehicles
5. Identify and respond as appropriate to farm and recreational vehicles
6. Identify and respond as appropriate to driver actions

Searching for Clues to Non-Motorized User Actions:

1. Identify and respond as appropriate to presence and actions of pedestrians
2. Identify and respond as appropriate to presence and actions of bicyclists
3. Identify and respond as appropriate to presence and actions of wild and domestic animals

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Turning Around by Backing into an Alley or Driveway on the Right:

1. Check traffic to rear and tap brake pedal to alert following drivers
2. Signal intention to turn right and check to make sure the driveway/alley is clear
3. Stop with rear bumper of vehicle in line with the far edge of the driveway/alley
4. Check traffic to sides and rear
5. When safe, back slowly, turning steering wheel rapidly all the way to the right
6. As vehicle centers in driveway/alley, straighten wheels
7. Continue backing straight until front of vehicle clears the curb
8. Stop, turn on left signal and shift to drive
9. Check traffic and pedestrians in both directions
10. When safe, turn left into proper lane and accelerate as appropriate
11. Check traffic to the rear

Turning Around by Heading into an Alley or Driveway on the Left:

1. Select a driveway/alley on the left that is clear of obstacles and where visibility will not be blocked when backing into street
2. Check to rear and tap brake pedal to alert following drivers
3. Signal intention to turn left
4. When safe, turn into driveway/alley as close as possible to the right side
5. Stop as rear bumper clears curb or edge of roadway
6. Signal a right turn and shift to reverse
7. Check in all directions for vehicles and other highway users
8. When safe, move slowly back, turning steering wheel rapidly all the way to the right
9. Check left front while backing to make sure there is a clear space as you turn
10. As vehicle centers in nearest lane, straighten wheels, stop and shift to drive
11. Cancel right turn signal and accelerate smoothly
12. Check traffic to rear

Entering an Angle Parking Space:

1. Identify space to be entered
2. Signal intention to turn left or right
3. Position vehicle 5 to 6 feet from rear of parked vehicles
4. Move forward slowly until the driver can look straight down the painted line that marks the near side of the space the driver plans to enter. This line of sight is the reference point to begin turning.
5. Turn steering wheel sharply left or right as appropriate. The danger points are the front corner on the right side and the rear corner on the left side of the parking vehicle.
6. As vehicle is centered in the parking space, straighten wheels; determine the forward reference point to place the front of the bumper even with the curb or parking line.
7. Move forward to the front of the parking space, stop and secure vehicle

Appendix A: In-Car Lessons

Exiting an Angle Parking Space:

1. With engine started, foot on brake, signal direction of turn
2. Check in all directions for vehicle and pedestrian traffic
3. When safe, shift to reverse
4. Move straight back until back of front seat/door post is in line with rear of vehicle on side of turn
5. Turn steering wheel in direction of turning movement. Check front bumper clearance on side opposite direction of turn
6. Continue backing into travel lane. When vehicle centers in lane, straighten wheel
7. Stop, shift to drive, adjust speed as appropriate

Entering a Perpendicular Parking Space:

1. Identify space to be entered
2. Signal intention to turn left or right
3. Position vehicle 8 to 9 feet from rear of space driver wishes to enter
4. Move forward slowly until driver can see straight down the line marking the near side of parking space ahead of the one to be entered
5. Look to the center of the parking space
6. Move forward slowly, turning the steering wheel sharply left or right as appropriate. When parking between vehicles, the danger points are the front bumper on the far side, and the rear bumper of the vehicle on the near side of the space
7. As vehicle centers in space, straighten wheels
8. Move forward to the front of the parking space until the driver sees the front line or curb edge just under the left or right side mirror. Seeing the line under the mirror is the reference point. Stop and secure vehicle

Exiting a Perpendicular Parking Space:

1. With engine started, foot on brake, signal direction of turn
2. Check in all directions for vehicle and pedestrian traffic
3. When safe, shift to reverse
4. Move slowly back until windshield (window post) is in line with rear of vehicles parked on either side
5. Turn steering wheel slowly in direction of turning movement. Check front bumper clearance on side opposite direction of turn (danger point)
6. As front bumper of vehicle clears vehicle on side opposite of turn, turn steering wheel sharply in direction to avoid striking vehicle parked in opposite row
7. Continue backing into travel lane. When vehicle centers in lane, rewind to straight
8. Stop, shift to drive, adjust speed as appropriate

Appendix A: In-Car Lessons

Observer Learning Activities

In-Vehicle Lesson 4

Developing Effective Visual Search Skills, Turning Around and Parking

In moderate density traffic traveling up to 50 mph, conduct a systematic search of the roadway for objects and conditions in or adjacent to the path of travel that could increase risk.

Search for roadway conditions, other motor vehicle operators, signs-signals-markings, and non-motorized highway users that influence the level of risk. Evaluate the actions of motor vehicle operators and other highway users that could increase the possibility of conflict.

Identify the similarities and differences in visual search patterns and vehicle control requirements when turning at an intersection, changing lanes and steering through a curve.

Practice determining a:

1. 20-30 second visual lead
2. 12-15 second visual control zone
3. 8-12 second alternate path of travel
4. 4-8 second stopping zone
5. 3-4 second following distance

Over each segment of roadway identified by the instructor, the student observers will award a value of 0 – 5 in the appropriate column to indicate the driver's response to conditions of increased risk: limited visibility, space and whether the appropriate speed or position adjustment was completed and communicated.

- 5 – Communicated; appropriate adjustment of speed and position
- 4 – Communicated and adjusted speed; no position adjustment
- 3 – Communicated and adjusted position; no speed adjustment
- 2 – Late; but acceptable adjustment of speed/position; no communication
- 1 – Slight adjustment; barely adequate
- 0 – No observable response

Open Highway

Roadway Segment	Location	Visibility	Space	Communication	Score
1					
2					
3					
4					
5					

Appendix A: In-Car Lessons

In-Car Lesson #5 Driving in Different Environments (1 hour 20 minutes per student)

Performance Objectives: Students will demonstrate risk management through communication, speed and position adjustments in complex traffic situations on country highways, limited access highways, and city streets. Planned exercises will include: following and meeting other vehicles, merging onto, driving through and exiting freeway interchanges, assessing passing time/space gap needs and parallel parking.

Learning Objectives

1. Demonstrate the ability to communicate and make changes of speed and position as appropriate in traffic when:
 - a. Intersecting with other highway users
 - b. Following and being followed
 - c. Merging with and exiting a freeway
 - d. Meeting oncoming vehicles on a two-lane highway
 - e. Passing and/or being passed
 - f. Parallel parking
 - g. Meeting or passing oversized, slow-moving farm vehicles

Learning Activities

1. Identify adequate time/space gaps to make safe left and right turns from and into moving traffic.
2. Identify and maintain a minimum following distance of 3 to 4 seconds, adjust speed and position as needed to manage risk to the rear.
3. Communicate presence and adjust speed and position as needed to manage risk when entering, driving on and exiting an expressway.
4. Communicate presence and adjust speed and/or position as needed when meeting oncoming traffic on a two-lane highway.
5. Identify adequate time/space gaps, adjust speed and/or position, and communicate as needed when passing or being passed.
6. Identify adequate time/space gaps, adjust speed and position, and communicate as needed when changing lanes.
7. Establish sight lines, communicate and control steering and speed while entering and exiting a parallel parking space.

Appendix A: In-Car Lessons

In-Car Lesson #5 Driving in Different Environments

Procedure References

Concentrate on Path of Travel:

1. Identify area 20 to 30 seconds ahead along path of travel
2. Identify an alternate path of travel 12 to 15 seconds ahead into which you can steer if necessary
3. Search area to sides and oncoming traffic 4 to 15 seconds ahead along path of travel
4. Identify a stopping zone 8 to 12 seconds ahead
5. Where space is limited on sides, stay closer to center line
6. Maintain a 3 to 4 second following distance, adjust speed and position as needed for following traffic

Assessing Highway Conditions:

1. Identify and respond as appropriate to areas of reduced visibility
2. Identify and respond as appropriate to areas of reduced space
3. Identify and respond as appropriate to areas of reduced traction

Turning at Intersections

1. Approaching intersection check for following, oncoming, cross traffic, other highway users, traffic control devices, condition of roadway and areas of limited visibility
2. Check mirrors for presence and actions of following traffic
3. Signal intent to turn at the intersection 3 to 4 seconds in advance or 100 feet
4. Position your vehicle for appropriate turn
5. Steer into proper lane
6. Tap brake pedal to alert following driver
7. Adjust speed as necessary, stopping if required
8. Recheck cross and oncoming traffic (90 percent of drivers do not stop for stop signs in residential areas)
9. Check mirrors
10. Identify a safe time/space gap in cross traffic
11. Look through turn to farthest possible point
12. Steer into proper lane using hand to hand (push/pull/slide steering)
13. Adjust speed as appropriate
14. Check mirrors for traffic to the rear

Appendix A: In-Car Lessons

Expressway Driving:

1. Entering an expressway

- a. Identify entrance at least 1/2 mile in advance
- b. Check traffic in all directions
- c. Signal, position in proper lane and adjust speed as necessary
- d. Enter ramp and adjust speed
- e. Identify weave or collector distributor lane
- f. Identify adequate space gap for merging
- g. Signal presence and intent to enter
- h. Adjust speed and merge into travel lane (Remember exiting vehicles are to be given right of way at weave lane interchanges)
- i. Adjust to travel speed
- j. Check mirrors for following traffic

2. Driving on an expressway

- a. Select lane for through traffic and safe speed
- b. Identify and respond as appropriate to large vehicles
- c. Identify and respond as appropriate to condition of vehicles
- d. Identify and respond as appropriate to driver actions
- e. Identify and adjust speed and/or position for entering and exiting traffic

3. Exiting an Expressway

- a. Identify exit at least one mile in advance
- b. Check traffic in all directions
- c. Signal, position in proper lane and adjust speed as necessary
- d. Identify weave or collector distributor lane
- e. Signal presence and intent to exit
- f. Identify adequate space gap for merging
- g. Enter exit ramp and adjust speed
- h. Check for traffic ahead and behind, traffic controls and highway users
- i. Adjust to travel speed of new freeway or surface road as appropriate
- j. Check mirrors for following traffic

Appendix A: In-Car Lessons

Meeting, Following and Being Followed on Two-Lane Roads:

1. Avoid meeting:
 - a. Large vehicles at areas of reduced space
 - b. Other vehicles when approaching pedestrians, bicyclists or vehicles stopped on road shoulder
 - c. Other vehicles where road may be slippery
 - d. Other vehicles where strong crosswinds may cause steering difficulty
2. Increase following distance when:
 - a. Following any vehicle that blocks the visual field
 - b. Approaching a railroad crossing or intersection
 - c. Traction is reduced
 - d. Tired or upset
 - e. Being tailgated
 - f. Driving in or near a pack of vehicles
3. Speed selection
 - a. Adjust speed if line of sight is restricted
 - b. Adjust speed for changes in roadway surface
 - c. Adjust speed for curves
 - d. Maintain speed on hills

Passing and Being Passed on Two-Lane Highway:

1. Being Passed
 - a. Keep to right side of lane
 - b. Maintain speed, slow if appropriate to let other driver complete pass safely
2. Passing
 - a. Check oncoming and following vehicles, vehicles slowing ahead, vehicles or other highway users about to enter roadway from driveways, intersections or the shoulder
 - b. Check mirrors and head check for passing vehicles
 - c. When safe, signal intention to pass
 - d. Initiate pass at least two seconds behind vehicle to be passed
 - e. Steer smoothly into passing lane
 - f. Maintain or adjust speed as necessary
 - g. Search highway ahead and check mirrors
 - h. Make sure vehicle does not drift toward vehicle being passed
 - i. Continue in passing lane until complete front of passed vehicle is visible in rear view mirror
 - j. Signal intention to return to lane
 - k. Steer smoothly into lane, maintain or adjust speed as appropriate
 - l. Cancel turn indicator

Appendix A: In-Car Lessons

Entering a Parallel Parking Space:

1. Identify legal parking space
2. Check following traffic
3. Tap brake pedal and signal intentions
4. Stop with back of front seats/center door post aligned
5. Shift to reverse, check traffic and look in direction of intended move
6. Back slowly, turning steering wheel rapidly left or right as appropriate
7. Back until back of front seat/center door post is in line with rear bumper of vehicle parked in space ahead
8. Back slowly while turning steering wheel back to straight
9. Check front to make sure wheels are straight
10. Back slowly until front bumper is in line with rear bumper of vehicle parked in space ahead
11. Move slowly back, turning steering wheel rapidly left or right as appropriate
12. Stop before touching vehicle parked in space to the rear
13. Shift to drive, move slowly forward turning wheels sharply toward curb/edge of road
14. Stop centered in space, within 12" of curb/edge of road. Secure vehicle.

Exiting a Parallel Parking Space:

1. Foot on brake, start engine and shift to reverse and release parking brake
2. Check vehicle behind, move slowly back, straighten wheels if turned for hill parking
3. Stop and shift to drive
4. Signal intentions
5. Check mirrors and blind spot for vehicles and other highway users
6. Select safe gap, move slowly forward steering tight left or right as appropriate
7. Check front bumper for clearance of rear bumper of vehicle parked in space ahead
8. When back of front seat/center door post is in line with rear bumper of vehicle parked in space ahead
9. Steer to center of lane and accelerate to appropriate speed
10. Cancel turn indicator
11. Check traffic to rear

Appendix A: In-Car Lessons

Observer Learning Activities In-Vehicle Lesson 5 Driving in Different Environments

In high density traffic traveling on two and four lane city streets with open and restricted visibility conduct a systematic search of the urban environment for objects and conditions in or adjacent to the path of travel that could increase the chance of conflict.

Identify objects and conditions such as roadway conditions, motor vehicles, signs-signals-markings, non-motorized highway users and off-road activities that could influence the level of risk. Predict the actions of motor vehicle operators and other roadway users that could increase the possibility of conflict.

Identify the similarities and differences in visual search patterns and vehicle control demands when turning at an intersection, changing lanes and interacting with traffic.

Practice determining a:

1. 20-30 second visual lead
2. 12-15 second visual control zone
3. 8-12 second alternate path of travel
4. 4-8 second stopping zone
5. 3-4 second following distance

Over each segment of roadway identified by the instructor, the student observers will award a value of 0 - 5 in the appropriate column to indicate the driver's response to conditions of increased risk: limited visibility, space and whether the appropriate speed or position adjustment was completed and communicated.

- 5 = Communicated; good adjustment of speed and position
- 4 = Communicated and adjusted speed; no position adjustment
- 3 = Communicated and adjusted position; no speed adjustment
- 2 = Late; but acceptable adjustment of speed/position; no communication
- 1 = Slight adjustment; barely adequate
- 0 = No observable response

City

Roadway Segment	Location	Visibility	Space	Communication	Score
1					
2					
3					
4					
5					

Appendix A: In-Car Lessons

In-Car Lesson #6 Final Assessment (1 hour 20 minutes per student)

Performance Objectives: Students will demonstrate pre-drive procedures, knowledge and operation of information, communication, safety devices and vehicle control, basic vehicle maneuvers, intersection approach and safe turning procedures, time and space management through the selection of speed and position when traveling in a flow of traffic, driving through a curve, and the application of rules and laws. Driving environments will include parking lots, country highways, freeways and business district streets.

Learning Objectives

1. Demonstrate pre-entry check procedures
2. Demonstrate pre-drive and starting procedures
3. Demonstrate movement of the vehicle forward and to the rear
4. Demonstrate smooth, precise movement of vehicle from curb into traffic flow
5. Demonstrate approaching and turning at two and multi-lane intersections with one and two-way traffic, with and without traffic control devices, with one and multiple turn lanes
6. Demonstrate controlled braking stop
7. Demonstrate how to park on a hill
8. Demonstrate turnabouts
9. Demonstrate angle and parallel parking
10. Demonstrate commentary driving regarding, "Highway Elements," "Signs, Signals and Markings," "Motorized Vehicles" and Non-Motorized Highway Users as appropriate
11. Demonstrate management of speed and position on a rural highway, preferably with hills, curves, areas of limited visibility and slow moving vehicles
12. Demonstrate how to Search, Evaluate and Execute when entering, driving on and exiting a freeway
13. Demonstrate how to Search, Evaluate and Execute in moderately heavy business district traffic

Learning Activities

1. Final assessment of all objectives using an assessment form.
2. Driver assessment should be completed each driving session. Using the form on the back of this page, score the driver on each activity performed during the lesson.
3. The first lesson would cover the first six items on the score sheet. The instructor would mark these six items using the scoring guide provided.
4. Lesson 2 through Lesson 5 will score the first six items and all additional items that are performed.

Assessment:

1. Review and assess tasks performed in this lesson
2. Lesson 6 should have all items marked and the Pass or Fail should be circled.
3. Both the driver and the instructor should sign the progress record.

Appendix A: In-Car Lessons

Driver Education Student In-Car Evaluation/Progress Record							
Student							
Instructor							
Dates of Lesson (may be more than one date):							
1.		4.					
2.		5.					
3.		6.					
<p>In evaluating a driver's performance, use the following rating scale as a guide:</p> <ul style="list-style-type: none"> • 4 = Performs without any coaching • 3 = Performs adequately but needs occasional coaching • 2 = Performs but only with significant coaching • 1 = Does not perform adequately with teaching 							
		L-1	L-2	L-3	L-4	L-5	L-6
Pre-entry checks							
Pre-start and starting							
Moving forward							
Moving backward							
Entering traffic							
Right Turns							
Left turns							
Negotiating intersections							
Changing lanes							
Slowing and stopping							
Parking and securing							
Parking on grades							
Angle parking							
Parallel parking							
Turnabouts							
Assessing highway conditions							
Space management							
Response to traffic controls							
Response to other users							
Passing							
Commentary driving							
Speed							
Driving conditions when appropriate:							
Adverse weather							
Night driving							



Appendix A: In-Car Lessons

Sample Completion Letter To Parent/Guardian/Mentor

School Letterhead

Date:

Address:

Dear **(Name Of Parent/Guardian/Mentor)**:

(Novice driver's name) has successfully completed a basic driver education course consisting of 45 hours of classroom instruction and 8 hours of behind-the-wheel instruction. Also you and your novice driver should have been making extensive progress in the required 50 hours of supervised practice by using the Skills Log.

Even though your novice driver has successfully completed driver education through our school, it is my recommendation that he/she needs additional practice time in one or more of the following areas:

- Driver preparation and procedures
- Correctly responding to traffic control devices
- Driving in adverse conditions
- Residential driving
- Driving on the open highway (2 or 4 lane with speeds up to 50 mph.)
- Moderate, in-town traffic (suburban areas)
- In a business district with heavy traffic
- On the expressway with speeds up to 65 mph (entering, driving on and exiting)
- Changing lanes in traffic
- Passing other vehicles
- Stopping and accelerating smoothly
- Negotiating intersections
- Turning left at intersections (gap selection)
- Turning right at intersections
- Space Management - S.E.E. (Search, Evaluate, Execute)
- Parking: Indicate type: _____
- Backing in a straight lane
- Backing while turning
- Other: _____

Completion of this course does not mean that your novice driver is a good driver. Evidence indicates that it takes five years of driving experience to become as “good” as the average driver. Your novice driver needs much more practice and experience. Please take additional time out of your schedule to work with him/her to get this practice.

If you have any questions, contact me here at the school.

Sincerely,
Instructor's Signature