Curriculum Scope and Sequence Modules for Driver Education in Virginia

Module Eleven

Behind-the-Wheel and In-Car Observation

Virginia Department of Education in cooperation with the Virginia Department of Motor Vehicles

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Standards of Learning Addressed In This Module

- DE.2 The student will demonstrate an understanding of basic vehicle operating procedures. Key concepts/skills include
 - a) pre-driving procedures;
 - b) starting procedures (automatic and manual transmissions);
 - c) vehicle information, warning, and control devices;
 - d) vehicle securing procedures.
- DE.3 The student will recognize the effects of momentum, gravity, and inertia on vehicle control and balance, and the relationship between kinetic energy and force of impact. Key concepts/skills include
 - a) seating and hand position;
 - b) steering, braking, and acceleration;
 - c) compensating for shifts in vehicle load (from side to side, front to rear, and rear to front) that affect vehicle performance;
 - d) types of collisions head-on, near-frontal, broadside, rear-end, rollover, sideswipe.
- DE.4 The student will demonstrate the ability to manage visibility, time, and space to avoid conflicts and reduce driving risks. Key concepts/skills include
 - a) synthesizing information visually from the driving environment, using a space-management process;
 - b) applying following-interval concepts;
 - c) selecting gap and judging distance;
 - d) estimating passing-time and space needs.
- DE.5 The student will demonstrate appropriate adjustments when approaching controlled and uncontrolled intersections, curves, railroad crossings, and hills with line-of-sight or path-of-travel limitations. Key concepts/skills include
 - a) roadway signs, signals, and markings;
 - b) right-of-way rules;
 - c) slope/grade of terrain;
 - d) vehicle position.
- DE.6 The student will identify the characteristics of an expressway and apply risk-reducing expressway driving strategies. Key concepts/skills include
 - a) entering, merging, integrating into, and exiting from traffic flow;
 - b) managing interchanges;
 - c) selecting vehicle position and changing lanes.
- DE.7 The student will demonstrate the ability to communicate presence and intentions with other highway transportation users. Key concepts/skills include
 - a) vehicle position and driver action;
 - b) vehicle communication devices.
- DE.9 The student will identify and analyze the legal, health, and economic consequences associated with alcohol and other drug use and driving. Key concepts/skills include
 - a) positive and negative peer pressure;
 - b) refusal skills:
 - c) Implied Consent, Zero Tolerance, and Use and Lose laws:
 - d) Administrative License Revocation, loss of license, ignition interlock, and other licensing restrictions;
 - e) court costs, insurance requirements, Virginia Alcohol Safety Action Program referral, and other costs.

- DE.13 The student will identify changes in the environment that affect visibility and traction and demonstrate an understanding of appropriate driver reaction to these risks. Key concepts/skills include
 - a) driving at night;
 - b) smoke- and weather-related conditions;
 - c) road conditions and construction;
 - d) vehicle stability and traction control systems.
- DE.14 The student will demonstrate an understanding of the proper use of vehicle occupant protection features and analyze how they reduce injury severity and increase collision survival. Key concepts/skills include
 - a) active restraint systems;
 - b) passive restraint systems;
 - c) child restraint systems;
 - d) highway safety design.
- DE.15 The student will identify and evaluate emergency response strategies to reduce the severity of or avoid a collision in high-risk driving situations. Key concepts/skills include
 - a) evasive maneuvers, using brake and steering combinations;
 - b) off-road recovery;
 - c) front and rear traction control.
- DE.16 The student will identify and describe the performance characteristics of other road users and apply problem-solving skills to minimize risks when sharing the roadway with
 - a) pedestrians and animals;
 - b) pedalcycles and motorcycles;
 - c) tractor-trailers, trucks, and construction vehicles;
 - d) sport utility vehicles, recreation vehicles, and trailers;
 - e) emergency vehicles;
 - f) funeral processions;
 - g) passenger and school buses;
 - h) farm machinery and horse drawn vehicles.
- DE.17 The student will compare vehicle-braking systems and explain proper braking techniques for various weather and roadway conditions. Key concepts/skills include
 - a) small and large vehicle conventional brake systems;
 - b) two- and four-wheel anti-lock brake systems (ABS).
- DE.18 The student will analyze how preventive maintenance reduces the possibility of vehicle failures and recognize the warning signs that indicate the need for maintenance, repair, or replacement. Key concepts/skills include
 - a) vehicle warning devices;
 - b) lights and signals;
 - c) steering and suspension systems:
 - d) tires and braking systems;
 - e) fuel and ignition electronics.

Module Eleven Introduction

Module 11 contains sample in-car lessons that compliment classroom instruction. Suggested in-car lessons have been developed for a standard seven period driving, seven period observing behind-the-wheel program. Sample record sheets and evaluation tools are included.

- Lesson 1 This lesson introduces the checks made by the driver when approaching the vehicle, adjustments made prior to starting the vehicle, starting procedures, and how to move the vehicle away from and to the curb. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Module Two)
- This vehicle control and basic procedures lesson reinforces procedures included in Lesson 1 and introduces targeting, sightlines, path of travel and reference points. The student performs basic vehicle control maneuvers in a controlled environment. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Module Two)
- Lesson 3 This lesson introduces basic maneuvers at low speed and in a low risk environment. The student is introduced to intersections, right-of-way concepts, turns, and parking. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Module Three)
- Lesson 4 This basic maneuvers in low risk environment lesson reinforces tasks learned in previous lessons and introduces 2-point turnabouts, 3-point turnabouts, U turns and parking procedures. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Modules One, Two, and Three)
- Lesson 5 This basic maneuvers in moderate risk environment lesson reinforces driving tasks learned in prior lessons and introduces the student to moderate risk driving environments. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Modules One, Three, and Four)
- Lesson 6 This lesson utilizes a space management system to identify risk using commentary driving. Driving tasks taught in prior lessons are reinforced and space management concepts are emphasized. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Modules One, Two, Three, Four, and Five)
- Lesson 7 Continued emphasis is placed on using space management techniques while introducing the student to more demanding driving experiences. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Modules One, Two, Three, Four, and Five)
- Lesson 8 This basic maneuvers in complex traffic situations lesson reinforces driving tasks learned in prior lessons and places the student in more complex traffic situations. A minimum of 50 minutes driving and 50 minutes observation is recommended. The driver/observer should switch positions every 25 minutes. (Modules One, Two, Three, and Eight)
- **Lesson 9** Brake failure, engine failure, accelerator failure, traction loss and collision avoidance techniques are simulated in this lesson using a driving range environment or parking lot. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Modules Two and Nine)
- Lesson 10 The backing maneuvers exercise demonstrates accuracy in both reverse and forward driving tasks in the range / parking lot environment. The recommended instructional time is 25 minutes driving and 25 minutes observing. (Modules Two and Three)
- Lesson 11 The final road skills assessment is conducted on a pre-determined driving route utilizing all driving tasks with no assistance from the instructor or observer. The recommended instructional time is 50 minutes driving and 50 minutes observing. (Module Nine)

Behind-the-Wheel and In-Car Observation Recommendations

Teachers should develop written lesson plans for behind-the-wheel instruction and in-car observation that reflect local driving environments. It is also important to have procedures, techniques, and route selections clearly written to avoid tort liability problems. Program administrators should have copies of the routes and lesson plans on file. Teachers should also maintain a daily driving record for each student which contains instructional time, mileage and skill assessments.

The following information will assist in developing route plans for behind-the-wheel instruction, in-car observation, and guiding parental practice sessions.

- Select a drive route appropriate to the individual lesson objectives and student-driver's ability. Be prepared with an alternate route in case of detours or other traffic problems.
- At the beginning of each session, make sure the student driver and observer understand the objectives of the lesson, and do a quick review of the preceding session.
- Check to make sure the students have their learner's permits.
- Be calm and patient, but be alert at all times. Do not become distracted from the instructional task. The teacher must maintain the highest level of care at all times to insure the safe operation of the vehicle.
- Headlights should be used at all times. Mirrors should be adjusted using the contemporary setting.
- Sit so the instructor's left hand can be quickly placed on the steering wheel if necessary.
- Never leave students unsupervised in a vehicle with the motor running.
- As with any instructional setting, food and beverages should not be consumed in the vehicle.
- Read the traffic environment ahead, to the sides and behind while observing the student driver's behavior and ask the student to verbalize the need to change direction or speed.
- When giving directions, first provide students with the path of travel and then state the action to take. (At the second intersection, prepare to turn left.)
- Give directions 4 to 6 seconds before the maneuver, and always check mirrors before giving directions. (The novice driver will take more time to process information than an experienced driver.)
- Avoid the use of terms with possible double meanings. (Instead of saying "right" to indicate a correct response to a question, say "that's correct".) It may be helpful to point in the direction you want the student to go.
- Demonstrate what and how to do something to save time. (Demonstrations may be as simple as assisting with steering, using the instructor brake, using a drawing or magnetic board, or as elaborate as changing seat positions and actually demonstrating the appropriate actions.)
- For each new maneuver, guide the novice driver through two or three practice trials, then allow practice
 without specific assistance or direction.
- If a mistake is made, have the student repeat the maneuver and verbally coach him/her, step by step, through the process.
- If a lengthy discussion or explanation is needed, move to a safe place to stop and park the vehicle. Use a legal parking area or parking lot. Do not park or stand on the roadway shoulder or impede traffic flow.
- Never allow a novice driver to drive "blindly" into a dangerous situation. Take control or give specific
 directions prior to entering the high risk driving area. Insuring student safety is the teacher's foremost
 concern.
- Involve the student driver in the evaluation of his/her performance. It is recommended that each instructor use a standardized recording document prepared by the local division, or the samples included in this guide. It is very important to maintain accurate records for each student.

General Guidelines for Developing Lesson Plans

Lesson and route plans should be developed in a manner that is easily understood by anyone reviewing the document. To minimize tort liability and to provide a plan for consistent instruction and performance assessment, lesson plans should consist of the following information.

Title—The title should link the classroom and the in-car activities so any person would be able to look at the lesson and understand the information used to introduce the in-car objectives and procedures - This will also help to insure consistent terminology and descriptive phrases.

Development Date—The route plan should have a lesson plan development date to indicate revisions from 2001 on. This would document procedures and technique refinements and help with future changes and modifications.

Preparation—Make a list of any special vehicle requirements, route challenges, cones, tape measure, or other assessment tools needed for this lesson.

Student Activities—This should identify all the directions, maneuvers, and procedures required of the student to perform the lesson. The directives should be in enough detail to allow any parent, jurist, lawyer, instructor, or administrator to take a novice driver through the lesson.

Instructor Comments—This area is for the instructor to list procedures, diagrams, specialized techniques, and temporary adjustments to the route. This information should be written in a manner that is easily understood by any reader.

Conclusions—This should provide some ideas or lesson review comments, suggestions for improvement, and how this lesson links to the next lesson.

Comments and Drawing Area—Each lesson plan should have a designated area for instructor comments and an area that can be used to draw intersections or demonstrate techniques. The drawings may be directly related to the topic areas or may be left blank for instructor use during the lesson.

Instructional Strategies—This area should list the strategies used to facilitate student learning and involve the observer in the lesson.

Discussion Questions—These questions and answers may be used to initiate problem solving discussions with the observer and the driver.

Evaluation Procedures—This should explain how the oral and written assessments are accomplished based on local division protocols. Assessment information should be written in such a manner that is easily understood by parents and school administrators.

Route Map—This is especially helpful for new instructional staff, and allows program administrators to locate an instructional vehicle in emergencies.

AME:	Behind-the-Wheel Student Record Form	d Form CLASS
EARNER'S PERMIT NUMBER	ISSUE DATE	TOTAL MILAGE

Sessions 1 through 3, Developing Basic Driver Actions

Instructor Comments Initials			
Instructor Initials			
Driver Initials			
Weather Conditions			
Mileage			
End Time			
Start Time			
Lesson Start Number Time	1	2	3
Date			

Session 4 and 5, Driving in Low Risk Environment

4	5	

Session 6 and 7, Driving in Moderate Risk Environment Session 8 and 9, Driving in Complex Risk Environment

9	7	

Sessions 10 and 11, Driving Evaluations

8	6

10	11

In-Car Route Plan	
in-Car Route Plan	
Route Map may be adjusted for constructi	on or temporary traffic difficulties. Draw the planned route
here and indicate any possible changes the	at may be needed. One copy should be kept in the vehicle
and one copy should be give to an adminis	strator.

In-Car Skills

1. Basic Skills

1.1 Getting Ready to Drive

- Approaches the vehicle with awareness
- · Checks outside and inside of vehicle before opening the door
- Adjusts mirrors to reduce mirror blind spots
- Checks all occupants for safety belt use
- Locks doors
- Adjusts head restraints, seat position, safety restraints, steering wheel position
- Demonstrates an understanding of vehicle information and control devices

1.2 Starting the Vehicle

- Checks that the parking brake is in set position
- Selects proper gear for starting
- Places foot securely on brake pedal
- Demonstrates proficient use of ignition starting device
- Demonstrates ability to select and use appropriate accessories
- Makes appropriate gear selection for movement
- Puts headlights on day and night

1.3 Placing Vehicle in Motion

- · Visually identifies open space before moving foot from brake to gas
- Communicates with other users
- Places the vehicle into motion smoothly

1.4 Stopping Vehicle in Motion

- Searches effectively ahead of the vehicle to determine deceleration or braking needs
- · Uses controlled braking efficiently with heel of foot on floorboard
- Checks rear zone space prior to braking
- Applies a firm squeezing braking force at the beginning of the braking process
- Brings the vehicle to a smooth stop
- Eases pressure off brake during the last two seconds of braking to reduce vehicle pitch
- Checks the rear zone space before, during and after braking actions
- Demonstrates effective use of maximum ABS braking in a non-emergency braking situation

1.5 Steering

- Uses a balanced hand position on the wheel at or below the 9 and 3 position
- Uses the Hand-Over-Hand, Hand-To-Hand, or One Hand methods effectively
- Turns head and visually targets in the direction of intended path of travel prior to turning
- Visually checks the rear/side view mirrors and mirror blind areas

1.6 Securing the Vehicle

- Sets parking brake and shifts into appropriate gear before removing foot from brake
- Turns off appropriate accessories prior to turning off ignition and removing key
- · Visually checks traffic flow before opening door
- Locks doors and activates any alarm systems

2. Judging Vehicle to Roadway Position

2.1 Right Side of Vehicle

- Determines when the vehicle is positioned within 3-6 inches of the curb or lane line
- Determines when the vehicle is positioned within 3-4 feet of the curb or lane line

2.2 Left Side of Vehicle

Determines when the vehicle is positioned within 3-6 inches of the curb or lane line

2.3 Front of Vehicle

Determines when the front bumper is positioned even with the curbline

2.4 Rear of Vehicle

Determines when the rear bumper is positioned even with a line

2.5 Front Turning Point of Vehicle

- Determines where on the road the front is positioned for a left turn
- Determines where on the road the front is positioned for a right turn

3. Searching the Intended Path of Travel

3.1 Target

Identifies a stationary object or area in the center of the intended path of travel

3.2 Targeting Area

Locates target area, evaluates the line of sight or path of travel conditions, and determines best approach speed and lane position

3.3 Targeting Path

Identifies any factors that may change or modify the intended travel path

3.4 Judging Space in Seconds

- Searches the space the vehicle will occupy at least 12-15 seconds ahead
- Continually evaluates the immediate 4-6 second travel path
- Adjusts speed and/or lane position as needed when search areas cannot be maintained

3.5 Identifying Open, Closed or Changing Zones/Spaces

Identifies the intended travel path as open, closed or changing, and adjusts speed and position as needed

3.6 Searching Intersections

- Looks for open zones/space to the left, front and right when approaching and entering an
 intersection
- Identifies closed or changing zones/spaces and makes necessary speed and/or lane position adjustments

3.7 Searching Curves and Over Hills

Evaluates the line of sight and path of travel for appropriate speed and position adjustments when approaching/entering a curve or a hill

4. Speed Control

4.1 Adjusting For Conditions

Applies the basic speed rule—adjusts for driver, vehicle, roadway, and environmental limitations

4.2 Changes in Line of Sight or Path of Travel

- Recognizes a closed zone, (a red light or stopped traffic) and adjusts speed to arrive as the zone/space opens
- Recognizes a speed limit sign as a cue to check vehicle gauges, mirrors, and to evaluate line of sight and travel conditions

4.3 Selects the Appropriate Lane

Factors in space management, code requirements, and destination when selecting lane position

4.4 Lane Position while Driving Straight Ahead

- Selects lane position furthest from closed or changing space
- Places the vehicle in the appropriate lane position

4.5 Lane Position Usage while Approaching Curves and Hillcrests

Establishes the appropriate lane position on approach, at apex, and when exiting a curve or going downhill

5. Rear Space Searching and Control

5.1 Inside Mirror Usage

- Searches to the rear after seeing a change in line of sight or path of travel
- Searches to the rear before and after making a turn or a stop, a speed adjustment, or a lane position change

5.2 Using Outside Mirrors, Convex Mirrors, Mirror Blind Spot Checks

- Adjusts mirrors to reduce mirror blind spot areas
- Checks the side view or convex mirror before adjusting lane position
- Visually checks mirror blind space after checking the side view mirror and before turning the steering wheel

5.3 Evaluating Condition to the Rear

- Determines if the rear zone/space is open, closed, or changing
- Adjusts speed or lane position when a tailgater is closing or changing the rear zone/space

6. Following Time and Space

6.1 Closure Rate on Approach

Approaches the vehicle in front gradually, avoiding a fast closure rate

6.2 Moving at Same Speed – Maintaining Four Seconds of Time

Adjusts speed or lane position to maintain four seconds of time and space when following another vehicle

6.3 When Stopping Behind Vehicles

 Stops in a position to see the vehicle in front rear tires touching the pavement to ensure a minimum amount of space to maneuver

 Stops behind a vehicle that has limited visibility to the rear in a position to see the driver in the vehicle's side view mirror

6.4 Delay Start Before Moving

After the vehicle in front begins to move, delays movement and monitor brake lights to ensure open the front zone/space

7. Communication and Courtesy

7.1 Technique

- Activates turn signal light before turning right or left or moving to another lateral position
- Uses headlights at all times to increase visibility
- Uses horn to make others aware of presence
- Taps brake lights to warn rear traffic of a slowdown or stopped traffic flow
- Adjusts vehicle speed and/or position to communicate intentions
- Uses proper hand signals to communicate change to other roadway users

7.2 Timing

Activates signal light at least five seconds prior to path change to provide others time to receive message and adjust

7.3 Effectiveness

Monitors other drivers' actions to make sure communications have been received

8. Three Steps to Problem-Solving

8.1 Identifies Changes to Line of Sight and/or Path of Travel

Searches for changes that may make the intended path-of-travel no longer available or safe

8.2 After Seeing a Line of Sight or Path of Travel Change, Checks for Other Spaces

- Looks for alternate path-of-travel
- Gets all information before acting

8.3 Uses the Best Speed Control, Lane Position, and Communication Method for the Conditions

Evaluates all information before acting

9. Commentary Driving

9.1 Uses Commentary Driving to Reinforce the Process into Habit

- Identifies and verbalizes the need to change speed or position
- Explains and demonstrates the ability to control space changes

10. Responses to Emergency Situations (hopefully in a simulated experience)

10.1 Identifies and Responds to Vehicle Failures

Demonstrates the ability to recognize engine, steering, brake, or tire pressure failure and to respond appropriately

10.2 Identifies and Responds to Environmental Conditions (also simulated)

- Demonstrates the ability to recognize traction loss and the appropriate response
- Demonstrates the ability to control the vehicle when the vehicle's tires drop off of the pavement
- Recognizes sudden path of travel or line of sight restrictions and responds with appropriate actions

Driving Procedures

In addition to the skills described above, students should demonstrate proficiency in the following driving maneuvers.

A. Precision Turns

- Demonstrates and explains the proper side position
- Demonstrates and explains the proper forward position
- Searches left, front, and right of intersections to ascertain open spaces
- Looks through the turn before turning the steering wheel

B. Approach to Intersections

- Sees and responds to open/closed space areas
- Checks and responds to rear space conditions
- Establishes and maintains proper lane usage and speed control
- Searches left, front, and right zones for line of sight or path of travel changes, and identifies open spaces before entering
- Safely stops when necessary

C. Timing Arrival for Open Space

- Adjusts speed to reduce closure rate and to arrive in an open zone
- Adjusts speed to have at least one open side zone

D. Precision Lane Change

- Evaluates zones and checks mirrors
- Moves to the left side of lane for left lane change
- Moves to right side of lane for right lane change
- Makes final mirror blind spot check
- · Decides on best lane position for conditions

E. Approach to Curves

- Establishes effective speed control
- Executes left curve approach in Lane Position 3, if right zone is open; enters apex area in Lane Position 1, and exits in Lane Position 1
- Executes right curve approach in Lane Position 2, if left zone is open, enters apex in Lane Position 3, and exits in Lane Position 1

F. Passing/Being Passed

- Identifies tailgater problems and adjusts speed and lane position
- Evaluates gain versus risk prior to attempting a passing maneuver
- Checks all zones for line of sight or path of travel conditions
- Controls speed and lane position

G. Getting On/Off Highways

- Maintains slowest safe speed on entrance ramp to maximize search time and options
- Evaluates gap prior to entering
- Establishes effective speed on acceleration lane
- When exiting, plans ahead, tests brakes, and adjusts speed on the exit ramp

H. Backing Techniques

- Searches all space zones prior to and while backing
- Uses brake and accelerator effectively for speed control
- Demonstrates effective steering technique

I. Perpendicular Parking, Backing into a 90 Degree Space

- Demonstrates proper side and forward position
- Evaluates vehicle alignment to space
- Backs to pivot point, turns wheel effectively
- Visually targets center of vehicle or space to the rear

J. Responding to Emergency Situations

Uses vision, motion, and steering control sequences effectively

Non-Moving Vehicle Skills

Inside Pre-Drive

- Place keys on dashboard.
- Lock door.
- · Adjust seat for leg/heel position.
- Adjust/secure restraints.
- · Adjust steering wheel.
- Adjust side and rear mirrors.
- · Check to see if parking brake is set.

Starting

- Place key in ignition.
- · Place right ball of foot on brake.
- Unlock ignition.
- Check gauges.
- Put gear selector in park.
- · Start engine.
- Select any accessories.
- Select proper gear.
- Check traffic.
- Release parking brake.

Securing

- Place selector in park.
- Set the parking brake.
- Turn off any accessories.
- Turn off and lock ignition switch.
- Remove restraints.
- Check traffic.
- Exit vehicle.
- Lock door when leaving, activate alarms.
- Remove items from the trunk.
- Give keys to the next driver.

Steering Techniques

Hand to Hand Steering

- Drive with hands at 9-3 or lower.
- "Pull" steering wheel in direction of turn.
- Use outside of steering wheel rim.
- Move wheel continuously and smoothly into turn.
- When hand reaches bottom of wheel, bring the hand up to 10 o'clock.
- Return wheel using the same smooth continuous motion until positioned in lane.

Hand Over Hand Steering

- Start with hands in 10-2 position.
- Move steering wheel in direction of turn.
- Use the top third of the steering wheel.
- When hand reaches bottom third bring the hand to the top of the wheel.
- Move wheel continuously and quickly into turn.
- Return wheel using the opposite top third in a slow continuous manner until positioned in lane.

Vehicle Control Skills

Lane Change

- Check mirrors.
- Return eyes to monitor line of sight (LOS).
- Hook thumb on steering wheel and use lane changer device to communicate intentions.
- Check blind spot for traffic flow.
- Make any necessary speed adjustments throughout lane change.
- Release lane changer device as you move gradually into selected gap in lane.

Moving to Curb on Right

- Check mirror (half second glance).
- Return eyes to monitor path of travel (POT).
- Return eyes to vehicle reference.
- Use signal device.
- Check mirror blind spot.
- Make necessary speed adjustments.
- Slow gradually using vehicle reference for 0-6 inches (line up curb line with center of the vehicle).

Moving Away from Curb

- Check rear side mirror.
- Check entry lane position.
- Return eyes to path of travel.
- Use signal device (lane changer).
- Check mirror blind spot.
- Adjust speed for smooth entry to traffic flow.

Railroad Crossings

- Identify advance warning and warning signs and signals at highway-railroad grade crossings.
- Check intersection controls.
- Check rear view mirror.
- Position vehicle in proper lane.
- Control speed.
- Stop (when necessary, but never on tracks)
 - before stop line...or
 - before gate crossing ...or
 - before 50 feet of nearest rail.
- Remain until crossing is clear.

Approach to Intersections

- Monitor Intersection Controls.
- Check mirrors.
- Give Proper Signal Indication.
- Position Vehicle in Proper Lane.
- Control Speed.
- Stop (when necessary)
 - in correct position
 - before stop line
 - before crosswalk line
 - before near edge of sidewalk
 - before near edge of curb
 - before near edge of intersection
- Position to view traffic flow.
 - View from left first.
 - Check traffic to right.
- Move into lane and accelerate to speed.
- Student Driver Goals
 - 3 to 5 seconds to cross traffic
 - 12 to 15 seconds to complete right turn
 - 15 to 18 seconds to complete left turn

Turning Skills

Turning

- Monitor intersection control devices.
- Check mirror.
- Give proper signal indication.
- Move into lane position. (Check blind spots.)
- Visually check receiving lane position (projected path of travel).
- Adjust Speed. (Cover brake on entry.)
- Steer into Center of Lane Position.
- Visually lift eyes to 8-12 seconds into the projected path of travel.
- Return steering wheel.
- Accelerate to speed.

Two-Point Turnabout—Backing

- Check traffic flow.
- Signal, and position yourself to 2-3 feet from curb.
- Drive beyond the driveway and stop.
- Reverse, monitor intended path.
- Back slowly, turning steering wheel rapidly to the right as you enter driveway.
- Turn wheels left, centering car in driveway.
- Signal left and exit driveway.

(Reverse procedure for two-point turnabout, heading forward into a driveway on the left.)

Backing While Turning

- Check for traffic.
- Turn head and body toward the direction you are turning.
- View your path through rear and side windows.
- Look and steer to the direction you want the vehicle to move.
- Move the vehicle slowly and control speed with brake pedal.
- Monitor all four corners of the vehicle.

U-Turn

- Evaluate risk and select best location.
- Move vehicle to 3"-6" from right curb.
- Apply left signal; check traffic.
- · Creep and turn wheel rapidly to the left.
- Complete turn and align vehicle in traffic lane.

3-Point Turnabout (used when area is too narrow for U-turn)

- Evaluate risk and select safest location.
- Signal and move right to 3" to 6" from the right curb.
- Apply left signal.
- Check blind spots.
- Creep and turn wheel fast to the left.
- Stop before left curb.
- Foot on brake and shift to reverse.
- Recheck traffic.
- Look over right shoulder.
- Creep and turn wheel rapidly to right.
- Stop before curb.
- Foot on brake and shift to drive.
- Check traffic and complete turn.

Parking Skills

Angle Park

- Align front wheel 2-3' from space.
- Visually locate center of space.
- Control speed on entry to as slow as possible.
- Steer to middle of space.
- Lift eyes to find new target in center.
- Steer on target.
- Control speed.
- Identify front limitation.

Parallel Parking into Space

- Give the proper signal.
- Stop alongside vehicle in front (align yourself with the driver position of the vehicle next to you, approximately 2-3 feet from vehicle. Standard visual reference may be used to get 2-3 feet from vehicle).
- Shift vehicle to reverse and turn head to see out of rear window.
- Move slowly backward until your steering wheel aligns with the rear corner of the vehicle next to you.
- Move as slowly as possible and turn the wheel quickly to align with the vehicle ahead (visually check the turn point of vehicle as it gets past the vehicle beside.).
- Position the vehicle in the middle of the space.

Perpendicular Park—Backing into the Space

- Select parking space and apply appropriate signal.
- Get 2-3 feet from the parked cars.
- Move vehicle forward until your body appears aligned with the center of the space.
- Creep forward and turn wheel rapidly to left.
- Line up car with space, look over right shoulder.
- Foot on brake, shift to reverse and back vehicle into the space.

Parallel Parking—Out of Space

- Check position in space. (If you can see the tires of the vehicle ahead, there is no need to back up.)
- If needed, back to the rear of the space.
- Give proper signal.
- Check traffic flow.
- Look at the middle of your lane to exit.
- Move vehicle slowly and steer to lane.
- Accelerate to speed of traffic flow.

Special Situations

Engine Failure

- Maintain control of travel path.
- Maintain control of steering.
- Place selector carefully in neutral.
- Try to restart the engine.
- If restart fails, signal and move out of traffic flow.
- Try to restart again.
- If restart fails, scan for a safe place to stop.
- If restart is successful, place selector in drive and resume.

Accelerator Failure

- Maintain vision control.
- Maintain steering control.
- Applying brakes to reduce speed.
- Put gear selector in Neutral (you will have 30 seconds to find a place to pull over and stop with engine racing).
- Scan for an escape path.
- When stopped (clear of traffic if possible) turn off ignition. (When you turn off ignition, you lose power steering and braking.)
- Stop and secure the vehicle.

Brake Failure

- Maintain visual control.
- Maintain steering control.
- Pump brake pedal quickly for pressure.
- Shift to lower gear for slow down.
- Use parking brake to slow.
- Scan for a safe place to stop.
- Stop vehicle and secure.

Loss of Forward Vision

- Maintain steering control.
- Look through crack below open hood.
- If unavailable, roll down window and look outside.
- Put on four-way flashers.
- Scan area for safe location to stop.

Vehicle Familiarization and Basic Operational Procedures

Prerequisite—Possesses a valid Virginia learner's permit and has completed Module Two.

Instructional Objectives—To successfully complete this session, the student will:

- perform routine vehicle checks and adjustments prior to entering the vehicle;
- perform routine vehicle checks and adjustments after entering the vehicle;
- locate and identify vehicle alert symbols, warning symbols, control and safety devices;
- perform starting and securing procedures;
- steer the vehicle within given space utilizing proper steering and hand positioning techniques;
- pull to and from the curb line using lane change procedures; and
- explore mirror use.

Assessment—Student record and observation sheets

Time—25 minutes driving and 25 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Review vehicle and facility for changes or obstructions. Check each driver for valid learner's permit. Review lesson objectives with drivers. After vehicle entry Review routine vehicle checks and adjustments prior to entering the vehicle. Review routine vehicle checks and adjustments after entering the vehicle. Review and assess the ability to locate, identify, and respond to vehicle alert symbols, warning symbols, control devices, and safety devices. Review and assess starting and securing procedures. Guide and supervise 2-3 feet front limitation techniques. Guide and supervise 2-3 feet curb alignment techniques. Guide, and supervise steering wheel usage. Review and evaluate student progress in activities for record. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Performs routine vehicle checks and adjustments prior to entering the vehicle. Performs routine vehicle checks and adjustments after entering the vehicle. Locates, identifies, and responds to vehicle alert symbols, warning symbols, control devices, and safety devices. Performs starting and securing procedures. Performs 2-3 feet front limitations techniques. Performs 2-3 feet rear limitation techniques. Performs steering and hand position techniques. Discuss progress. 	Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures. Session activity Completes observation form noting vehicle speed and position changes. Watches and asks questions regarding procedures. Verbally reviews procedures while driver is performing techniques in each activity and completes student observation sheet. Watches demonstration of each activity by student or instructor.

Diagram—Vehicle Familiarization and Basic Procedures

Fill In Procedures Pre-Entry Procedure Driver Preparation Procedure Starting Procedure Securing Procedure To Curb Procedure From Curb Procedure **Front Limitation Side Limitations Rear Limitation** LANE POSITION DIAGRAM AREA

Vehicle Control and Basic Procedures

Prerequisite—Completed Module Two and In-Car Lesson One, Session 1.

Instructional Objectives—To successfully complete this session, the student will:

- steer the vehicle within given space utilizing proper steering and hand positioning techniques;
- recognize and manage hidden spaces to the front, rear, and sides by establishing targeting, sightlines, and a path of travel;
- establish placement while moving, stopping, turning, or parking by using visual sightlines and reference points;
- determine appropriate lane position, gap selection, and speed;
- explore mirror use and space management areas; and
- describe and utilize balancing techniques when braking, accelerating, and steering.

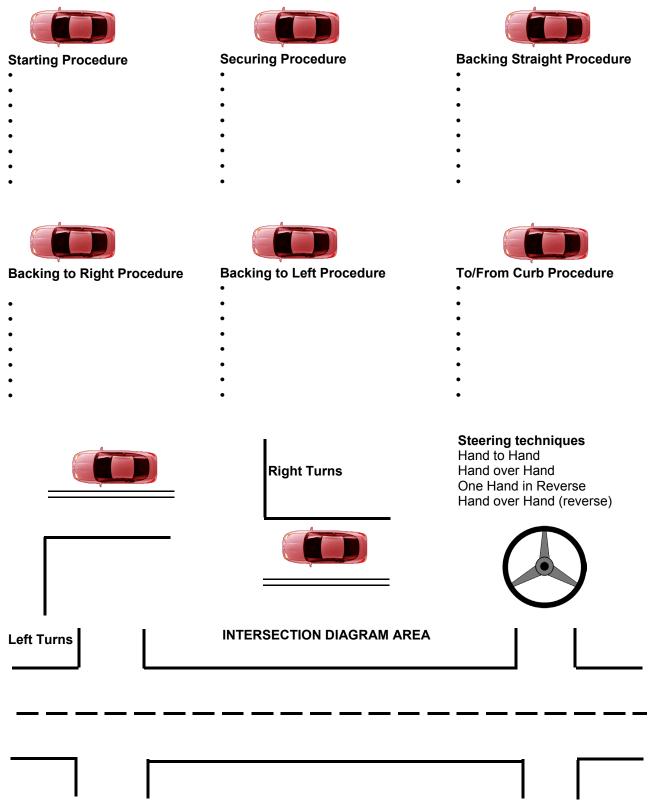
Assessment—Student record and observation sheets

Time—25 minutes driving and 25 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Review vehicle and facility for changes or obstructions. Check each driver for valid learner's permit. Review lesson objectives with drivers. After vehicle entry Evaluate pre-start, start, and moving from curb. Review, guide, and evaluate steering wheel usage. Review, guide, and supervise backing straight techniques. Review, guide, and supervise backing to the right techniques. Review, guide, and supervise backing to the left techniques. Review, guide, and supervise movement to and away from curbs technique. Introduce targeting, sightline, travelpath, speed and space control techniques. Review, guide, and supervise mirror usage techniques. Review, guide, and evaluate parking and securing techniques. Review and evaluate student progress in activities for record. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth movements from the curb. Performs backing straight along a curb maneuver 2-3 times. Performs backing to right into a parking space maneuver 2-3 times. Performs 2-3 backing to the left into a parking space maneuvers. Performs 4 intersection approaches using proper vision, motion, and steering skills with minimal assistance. Performs 3 right turns using proper vision, motion, and steering skills with minimal assistance. Performs 3 left turns with minimal assistance. Performs speed and lane adjustments with minimal assistance. Performs stopping, securing procedures. Reviews and assesses tasks performed in lesson. 	Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures. Session activity Completes observation form. Watches and asks questions regarding procedures. Watches demonstration of each activity by student driver or instructor. Watches and verbally comments on signs and signals on approach to intersections. Verbally reviews procedures while driver is performing procedures in each area. Comments on effectiveness of vision sightline and travel path concerns.

Diagram—Vehicle Control and Basic Procedures

Fill In Procedures



Basic Maneuvers in Low Speed and Low Risk Environments

Prerequisite—Completed Module Three and In-Car Lesson One, Session 2.

Instructional Objectives—To successfully complete this session, in a low risk driving environment, the student will:

- utilize critical thinking, decision-making, and problem-solving skills to operate vehicle and perform basic maneuvers;
- pull to and from curb without affecting flow of traffic;
- complete left and right turns utilizing procedures, lane position, and speed;
- accept or yield right of way based on law, potential consequences, and present conditions.

Assessment—Student record sheet / student observation sheet, should indicate the instructional objectives were introduced and were practiced and/or evaluated.

Time—25 minutes driving and 25 minutes observation time

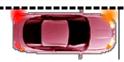
Instructor Activities	Student Driver Activities	Observer Activities
Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Prepare vehicle for lesson. Review route for changes or obstructions. Check each driver for valid learner's permit. Review lesson objectives with drivers. After vehicle entry Evaluate pre-start, start, and moving from curb procedures. Review, guide, and supervise intersection approach techniques. Review, guide, and supervise intersection yield rules and potential consequences in specific conditions. Review, guide, and evaluate turning techniques. Review, guide, and evaluate lane change techniques in low risk driving environments. Review, guide, and supervise a series of right or left turns as a turnabout technique. Review, guide, and supervise 2-3 3 pt. turnabout techniques. Review, guide, and supervise 2-3 angle parking techniques. Review, guide, and supervise 2-3 hill parking techniques. Review and evaluate student progress in activities for record. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth and precise movements from stop in moderate risk traffic flow. Performs intersection approach with minimal assist in low risk traffic flow. Performs left and right turns with minimal assist in low risk traffic flow. Performs lane changes with minimal assistance in low risk traffic flow. Performs 3 pt. turnabouts with minimal assistance. Angle parks with minimal assistance. Parks on hills with minimal assistance. Performs stopping, securing procedures. Reviews and assesses tasks performed in lesson. 	 Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures. Session activity Completes observation form. Watches and asks questions regarding procedures. Verbally reviews procedures while driver is performing simulation in each area. Watches demonstration of each activity by student or instructor. Comments on problem areas or concerns. Practices verbal commentary on approach to intersections. Identifies closed or changing paths of travel or changes to line of sight.

Diagram—Vehicle Maneuvers/Space Management

(Lane Change Sequence)



1 Search Rear Mirror Search Side Mirror Search Side Area Visual Search Entry Area Visual Search



2 Communicate Lane change Device Stable steering Check A. 4 or 5



3 Movement Travelpath/ Sightline Target Area 1 Speed Control



Vehicle Pos. 1

'4 Vehicle Control
Speed Adjust
Open/Closed
Position Adjust
Areas

Precision Task Concerns

steering control

- hand position
- · stability
- balance

being followed

- space control
- mirrors
- speed

speed and position changes

- accuracy
- timing
- communication

lane position

- consistency
- · selection
- balance

traffic flow adjustments

- speed control
- space management
- communication

starting/stopping/securing

- procedures
- accuractiming
- communication

lane changes

- procedure
- communication
- smoothness

oncoming traffic

- lane positionspace management
- communication

vision

- sightline/travelpath
- head checksmirror checks
- scanning

lane selection

- timing
- · response to zone
- accuracy

intersecting

- approach
- communication
- speed

following

- space
- speed adjustments

passing

timingcommunicationspeed control

5 Lane

Control

Lane Positions 1

Open/Closed/Changing Area

Area		Area
Area		Area
Area		Area

Speed Changes to Faster/Slower

Vehicle Lane Position Changes to 1,2,3,4,5

	Situation #									
Space Areas	Area 3					A	rea 5			
C/Closed/Change	Area 1					A	rea 6			
O/Open	Area 2	L			L	A	rea 4]	L	
Situation #										1
Speed Changes										1
Position Changes										

Basic Maneuvers in Low Risk Environments

Prerequisite—Completed Module Three and In-Car Lesson Two, Session 3.

Instructional Objectives—To successfully complete this session, the student will:

- pull to and from curb without affecting flow of traffic;
- enter a roadway in both forward and reverse from a private or public driveway;
- perform appropriate mirror blind spot and mirror checks prior to lane changes;
- complete left and right turns utilizing procedures, lane position, and speed; and
- accept or yield right of way based on law, potential consequences, and present conditions.

Assessment—Student record sheet/student observation sheet, should indicate which instructional objectives that were introduced, practiced, and/or evaluated.

Time—25 minutes driving and 25 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Prepare vehicle for lesson. Review route for changes or obstructions. Check each driver's learner's permit. Review lesson objectives with drivers. After vehicle entry Evaluate pre-start, start, and moving from curb procedures. Review, guide, and supervise intersection approach techniques. Review, guide, and supervise intersection yield rules and potential consequences in specific conditions. Review, guide, and evaluate turning techniques. Review, guide, and evaluate lane change techniques in low risk driving environment. Review, guide, and supervise 2-3 2-point turnabout techniques. Guide and evaluate 3-point turnabouts. Review, guide, and supervise 2-3 U turnabout techniques. Guide, and evaluate an angle park. Review, guide, and supervise 2-3 perpendicular parking techniques. Guide and evaluate parking on a grade. Review and evaluate student progress in activities for record. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth and precise movements from stop in moderate risk traffic flow. Performs intersection approaches with minimal assist in low risk traffic flow. Performs left and right turns with minimal assist in low risk traffic flow. Performs lane changes with minimal assistance in low risk driving environment. Performs 2-point turnabouts with minimal assistance. Performs U turnabouts with minimal assistance. Performs U turnabouts with minimal assistance. Perpendicular parks with minimal assistance. Parks on hills with minimal assistance. Performs stopping, securing procedures correctly. Reviews and assesses tasks performed in lesson. 	Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures. Session activity Completes observation form. Watches and asks questions regarding procedures. Watches demonstration of each activity by student or instructor. Verbally reviews procedures while driver is performing simulation in each area. Comments on problem areas or concerns. Practices verbal commentary on approach to intersections. Identifies closed or changing paths of travel or changes to line of sight.

Diagram—Vehicle Maneuvers/Space Management



Intersection Approach Procedure

Intersection Type
Intersection Controls
Check to clear Front
Check to clear Rear
Open Area (Lt or Rt)
Closed Area (Lt or Rt)
Clear Front Space
Speed Adjustment
Position Adjustment



Turning Procedure

Intersection Approach
Communication
Speed Adjustment
Travelpath/Sightline
Establish Target Area
Reference Pivot Pt.
Position Adjustment
Speed Adjustment
Vehicle in Center Position



Lane Change Procedure

Closed Area to Front Speed Adjustment Check Open Area (Side) Check Area to Rear Communication Travelpath/Sightline Establish new Target Position Adjustment Speed Adjustment Vehicle in Center Position



Perpendicular Park Procedure



3 pt. Turnabout Procedure

Move to Curb
Proceed.
Clear Space Areas
Proper Signal
Target Curb to Left
Recheck Traffic Areas
Move/Steer to Curb
Front Alignment Ref.
Reverse Procedure
Target Rear Curb
Move/Steer to Curb
Rear Alignment Ref.
Gear Selection
Move to L. Pos. 1



Angle Parking Procedure

Identify Parking Space Proper Signal Setup L. Pos. 1 Target Center of Angle Parking Space Use Angle Pivot Pt for Turn In Align with Target Center Use Front Alignment Reference Pt. Secure Vehicle

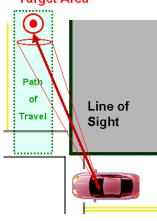


2 Pt. Turnabout Procedure

Move to Curb Proceed.
Clear Space Areas
Proper Signal
Target Curb to Left
Recheck Traffic Areas
Look for Lane Position to
Right Rear
Reverse Procedure
Move/Steer to Lane 1
Front Alignment Ref.
Gear Selection

Path of Travel Line of sight

Target Area





Hill Park Procedure Downhill/No curb

Identify Parking Space Check Area to Rear Communication Travelpath/Sightline Establish new Target Position Adjustment Speed Adjustment Vehicle in Center Position Turn Wheels to Curb on Downhill or No curb Secure Vehicle



Hill Park Procedure Uphill

Identify Parking Space Check Area to Rear Communication Travelpath/Sightline Establish new Target Position Adjustment Speed Adjustment Vehicle in Center Position Turn Wheels Away from Curb on Uphill Secure Vehicle

Basic Maneuvers in Moderate Risk Environments

Prerequisite—Completed Module Three and In-Car Lesson Two, Session 4.

Instructional Objectives—During this session the student demonstrates correct visual, steering, and speed control techniques for each of the following situations: approaching intersections, completing right and left turns, changing lanes, turning about, and parking in a moderate risk driving environment.

Assessment—Instructor assesses visual, speed, and steering control skills. Student record sheet and student observation sheet should indicate the instructional objectives that were introduced and were practiced and/or evaluated.

Time—50 minutes driving and 50 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Prepare vehicle for lesson. Review route for changes or obstructions. Check each driver for valid learner's permit. Review lesson objectives with drivers. Have students check engine fluid levels. After vehicle entry Evaluate pre-start, start, and moving from curb procedures. Review, guide, and supervise intersection approach techniques in moderate risk traffic flow. Review, guide, and supervise turning techniques. Review, guide, and supervise lane change techniques in moderate risk driving environment. Review, guide, and supervise 2-point turnabout techniques. Review, guide, and supervise 3-point turnabout techniques. Review, guide, and supervise U turnabout techniques. Review, guide, and supervise unabout techniques. Review, guide, and supervise unabout techniques. Review, guide, and supervise perpendicular parking techniques. Review and evaluate student progress in activities for record. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Checks fluid levels. Performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth and precise movements from stop in moderate risk driving environment. Performs intersection approach with minimal assist in moderate driving environment. Performs left and right turns with minimal assist in moderate risk driving environment. Performs lane changes with minimal assistance in low risk driving environment. Performs 2-point turnabouts with minimal assistance. Performs U turnabouts with minimal assistance. Performs U turnabouts with minimal assistance. Perpendicular parks with minimal assistance. Perpendicular parks with minimal assistance. Performs stopping, securing procedures. Review and assess tasks performed in lesson. 	Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures. Session activity Assists with fluid checks. Completes observation form. Watches and asks questions regarding procedures. Watches demonstration of each activity by student or instructor. Verbally reviews procedures while driver is performing simulation in each area. Comments on problem areas or concerns. Practices verbal commentary on approach to intersections. Identifies closed or changing paths of travel or changes to line of sight.

Diagram—Vehicle Maneuvers/Space Management



Intersection Approach Procedure

Intersection Type
Intersection Controls
Check to clear Front
Check to clear Rear
Open Area (Lt or Rt)
Closed Area (Lt or Rt)
Clear Front Space
Speed Adjustment
Position Adjustment



Turning Procedure

Intersection Approach
Communication
Speed Adjustment
Travelpath/Sightline
Establish Target Area
Reference Pivot Pt.
Position Adjustment
Speed Adjustment
Vehicle in Center Position



Lane Change Procedure

Closed area 1,2,3 Speed Adjustment Check Open Area 4,5 Check Area 6 Communication Travelpath/Sightline Target New Area 1 Position Adjustment Speed Adjustment Vehicle Position 1



2 pt. Turnabout Procedure

Move to Curb Proceed.
Clear Space Areas
Proper Signal
Target Curb to Left
Recheck Traffic Areas
Look for Lane Position to
Right Rear
Reverse Procedure
Move/Steer to Lane 1
Front Alignment Ref.
Gear Selection
Complete Left Turn



3 pt. Turnabout Procedure

Move to Curb Proceed.
Clear Space Areas
Proper Signal
Target Curb to Left
Recheck Traffic Areas
Move/Steer to Curb
Front Alignment Ref.
Reverse Procedure
Target Rear Curb
Move/Steer to Curb
Rear Alignment Ref.
Gear Selection
Move to L. Pos. 1



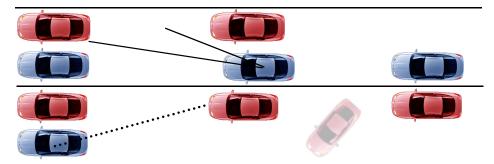
U Turnabout Procedure

Move to Curb Proceed.
Clear Space Areas
Proper Signal
Target L. Position 1
Recheck Traffic Areas
Move/Steer to Lane
Enter L. Pos. 1
Adjust Speed



Angle Parking Procedure

Identify Parking Space Proper Signal Setup L. Pos. 1 Target Center of Angle Parking Space Use Right Pivot Pt for Turn In Align with Target Center Use Front Alignment Reference Pt. Secure Vehicle



Parallel Park Procedure 1. Locate Open Space Check Rear Area Proper Signal Align 2-3 Rt Ref. Pt.

Check Side Alignment

2. Backing Procedure Target Center of Vehicle to Rear Control Speed when Backing Use Rear Alignment Reference as Turn Point Target Center of Vehicle to

Rear

3. Control Speed Turn Wheel Quickly on Entry Maintain Target Area Return Steering Slowly to Align to Rear Stop Vehicle Target Vehicle to Front

4. Move Slowly Forward Realign Steering Check Outside Right Convex Mirror for Curb Alignment/Distance Secure Vehicle

Utilizing a Space Management System to Identify Risk

Prerequisite—Completed Module Four and In-Car Lesson Three, Session 5.

Learning Goal—The student should communicate with other users and responsibly execute lane changes in higher volume traffic settings; and integrate experience and knowledge to avoid crisis situations while performing speed and position changes.

Instructional Objectives—During this session the student will:

- Use the SEEiT space management system;
- Position the vehicle in a proper lane and lane position to avoid conflict;
- Demonstrate lane change procedures and merging and exiting maneuvers in traffic flow;
- Demonstrate speed and vehicle position adjustments in response to changes in space around vehicle...

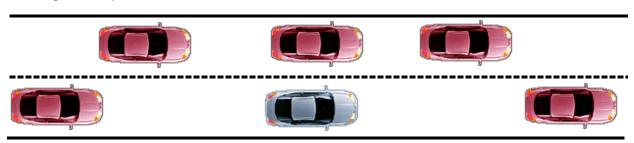
Assessment—Instructor assessment of space/area management skills is recorded on the student record sheet; student performs self-assessment of skills; student observation chart should indicate the instructional objectives introduced and practiced.

Time—25 minutes driving and 25 minutes observation time

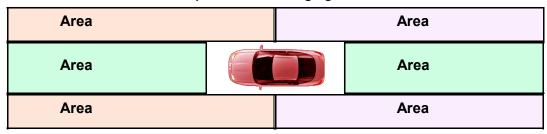
Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Prepare vehicle for lesson. Review route for changes or obstructions. Check each driver's learner's permit. Review lesson objectives with drivers. After vehicle entry Evaluate pre-start, start, and moving from curb procedures. Review SEEiT procedures with driver. Review lane change procedures and need for precision in performing task in high volume traffic flow. Involve rear seat observer in area control and lane changes procedures. Mark position changes and speed adjustments. Involve driver in a minimum of 3 lane changes in each of the following areas: traffic flow, merging, exiting roadway. Evaluate speed and space changes in response to changes in space around vehicle at speeds up to 55 mph. Evaluate stopping, securing procedures. Review and evaluate student progress. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth and precise movements from curb. Reviews space control process. Hears example from rear seat observer and instructor. Verbally comments on high risk situations and all speed and position changes. Performs 3 lane change procedures in moderate traffic flow. Performs 3 lane change procedures while exiting traffic flow. Performs speed and position changes in response to changes in space around vehicle at speeds up to 55 mph. Performs stopping, securing procedures. Review and assess tasks performed in lesson. 	Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures and zone control concepts. Session activity Charts changes in areas/space and marks changes in speed/position. Watches and asks questions regarding procedures. Verbally performs SEEiT procedures for driver and instructor. Verbally reviews lane change procedures while driver is making 1st lane change in each area.

Diagram—Space Management in Complex Environments

Passing Techniques



Open/Closed/Changing Area



Precision Task Concerns

steering control

- hand position
- stability
- balance

being followed

- space control
- mirrors
- speed

speed and position changes

- accuracy
- timing
- communication

lane position

- consistency
- selection
- balance

traffic flow adjustments

- speed control
- space managementcommunication

starting/stopping/securing

- procedures accuracy
- timing
- communication

lane changes

- procedure
- communication smoothness

- oncoming traffic
 lane position
- space management
- communication

vision

- sightline/travelpath
- head checks mirror checks
- scanning

lane selection

- timing
- response to zone
- accuracy

passing

• timing

communication speed control

intersecting

- approach communication
- speed

following

- space
- speed adjustments

Rear Seat Tally Sheet

Speed Changes to Up/Down **Vehicle Lane Position Changes to 1,2,3,4,5** Situation

	Situatio	11π								
Space Areas	Fro	nt				F	Rear			
	Fro	nt				R	Rear			
	Fro	nt				R	Rear			
Speed Changes Position Changes									 	
1 osition Changes]
										Ī

Utilizing a Space Management System

Prerequisite—Completed Module Four and In-Car Lesson Four, Session 6.

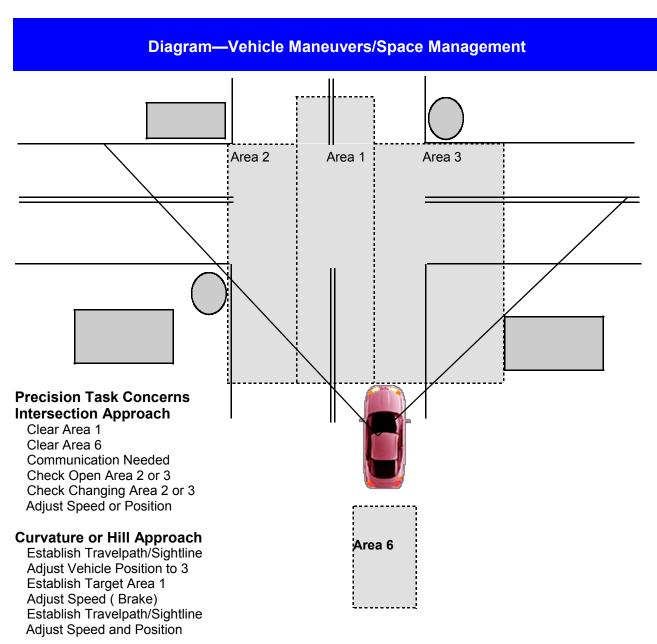
Learning Goal—The student should communicate with other users and responsibly execute lane changes in higher volume traffic settings at speeds below 55 mph; and integrate experience and knowledge to avoid crisis situations while performing speed and position changes.

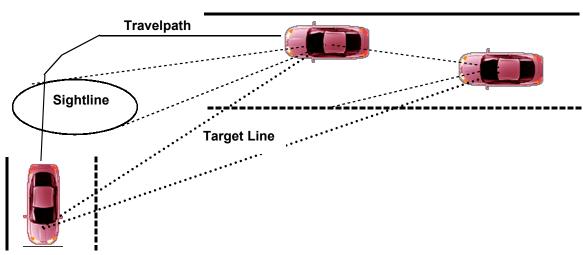
Instructional Objectives—During this session the student will use SEEiT space management system to negotiate hills, curvatures, intersections, narrow paved and unpaved roadways, bridges, railroad crossings, and tunnels.

Assessment—Instructor assessment of space/area management skills recorded on the student record sheet, student observation chart and self-assessment of skills.

Time—25 minutes driving and 25 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Prepare vehicle for lesson. Review on street route for changes or obstructions. Check each driver's learner's permit. Review lesson objectives with drivers. After vehicle entry Evaluate pre-start, start, and moving from curb procedures. Review SEEiT procedures with drivers. Review intersection, hill, and curvature approach when performing tasks in higher volume traffic. Involve rear seat observer in area control approaching intersections and have student mark position changes and speed adjustments on observation form. Involve rear seat observer in area control approaching curves and hills and have student mark position changes and speed adjustments on chart. Evaluate speed and space changes in response to changes in space around vehicle. Evaluate stopping, and securing procedures. Review and evaluate student progress. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity 1st driver performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth and precise movements from curb. Reviews area control process. Hears example from rear seat observer and instructor. Responds vocally to open and closed areas and changes to speed and position. Negotiates intersections in traffic flow. Negotiates 3 curvature approaches. Performs speed and position changes in response to approach to RR crossing. Performs speed and position changes in regard to changing pavement surface. Performs speed and position changes in regard to bridge or tunnel. Performs stopping, securing procedures. Review and assess tasks performed in lesson. Completes self assessment sheet. 	Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures and zone control concepts. Session activity Charts changes in areas/space and marks changes in speed/position on observer sheet. Asks questions regarding procedures. Verbally performs SEEIT procedures for driver and instructor. Verbally reviews intersection curvature procedures while driver is making adjustments in each area.





Basic Maneuvers in Complex Traffic Situations

Prerequisite—Completed Module Eight and In-Car Lesson Four, Session 7.

Instructional Objectives—During this session the student demonstrates reduced-risk speed and position adjustments in complex traffic situations during planned exercises involving speed control, steering control, lane position, lane changing, lane selection, intersection control, following, being followed, traffic flow adjustments, oncoming traffic, merging, and entering and exiting from parking spaces. Commentary driving is used for determining proper speed and position adjustment.

Assessment—Self-assessment through commentary driving; analyzing reasons for changing speed or lane position. Instructor assesses precision in completion of each task and driver decisions regarding speed and lane position changes. Teacher evaluations are recorded on the student record sheet and are placed in portfolio along with the student observation sheet and self-assessment sheet.

Time—50 minutes driving and 50 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Prepare vehicle for lesson. Review route for changes or obstructions. Check each driver's learner's permit. Review lesson objectives and commentary driving with drivers. After vehicle entry Evaluate pre-start, start, and moving from curb procedure. Review speed and position adjustment procedures with driver. Review procedures and need for precision in performing task in complex traffic flow. Involve driver in a minimum of 3 speed control, steering control, lane position, lane changing, lane selection, intersecting, following, being followed, traffic flow adjustments, oncoming traffic, merging, and parking entry/exit situations for evaluation. Evaluate speed and space changes in response to passing another vehicle. Evaluate stopping, securing procedures. Review and evaluate student progress for record. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth and precise movements from curb. Reviews zone control process. Responds vocally to open and closed zones and changes to speed and position. Completes driving tasks for: steering control adjustments lane position changes lane changes most appropriate lane choice traversing intersections following other roadway users being followed traffic flow adjustments adjustment for oncoming traffic merges and exits traffic flow correctly parking exiting parking space Performs speed and position changes while passing another vehicle. Performs stopping, securing procedures. Reviews and assesses tasks performed. Completes self assessment sheet. 	Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures and commentary concepts. Session activity Completes student observer evaluation of changes in zones/space and marks changes in speed/position on sheet. Watches and asks questions regarding procedures. Verbally performs zone control procedures for driver and instructor. Comments on problem areas or concerns.

Basic Maneuvers in Complex Traffic Situations

Prerequisite—Completed Module Eight and In-Car Lesson Five, Session 8.

Instructional Objectives—During this session the student demonstrates recognition of loss of control and recovery techniques in a simulated traffic setting. The student should perform visual, speed, and steering control adjustments for each of the following complex problem situations: brake failure, engine failure, accelerator failure, emergency braking, evasive steering, front traction loss, and rear traction loss.

Assessment—Instructor assesses precision of evasive maneuvers and recovery techniques and records on the Driver Assessment form.

Time—10-15 minutes driving and 10-15 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Determine off-road recovery area for practice area. Prepare vehicle and surfaces for lesson. Set up serpentine cones. Set up blocked roadway setting. Check each driver's learner's permit. Review objectives for lesson with drivers. After vehicle entry Evaluate pre-start, start, and moving from curb procedures. Review, guide, and supervise brake failure techniques. Review, guide, and supervise engine failure techniques. Review, guide, and supervise accelerator failure techniques. Review, guide, and supervise collision avoidance techniques. Review, guide, and supervise traction loss techniques. Evaluate stopping, securing procedures. Review and evaluate student progress in simulated complex problem activities for record and portfolio. 	 Group activity segment Review objectives, show learner's permit, ask questions regarding lesson activities. Session activity Performs pre-start, starting, and moving from curb procedures. Enters practice area with smooth and precise movements. Performs a brake failure simulation with minimal assist. Performs an engine failure simulation with minimal assist. Performs an accelerator failure simulation with minimal assistance. Performs a threshold brake simulation with minimal assistance. Performs an evasive action with minimal assistance. Performs a front traction loss simulation with minimal assistance. Performs a rear traction loss simulation with minimal assistance. Performs stopping, securing procedures. Reviews and assesses tasks performed in lesson. 	Rear Seat Observer Shows learner's permit at the start of lesson. Listens to review of procedures. Session activity Watches and asks questions regarding procedures. Watches demonstration of each activity by student or instructor. Verbally reviews procedures while driver is performing simulation in each area. Comments on effectiveness of seatbelt during evasive actions and braking maneuvers.

Diagram—Brake and Acceleration Techniques



Precision Task Concerns





Brake Failure

Recognition

- unusual pedal action
- brake light

Response

- · pump brake
- · lower gear
- · park brake
- surface

Engine Failure

Recognition

- engine light
- · no response
- speed reduction

Response

- shift to neutral
- · maintain steering balance
- restart
- · shift to gear

Accelerator Failure

Recognition

- speed increase
- limited brake response
- engine sound

Response

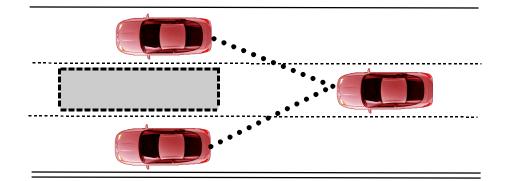
- maintain steering balance
- shift to neutral and brake
- locate safe stopping zone
- turn ignition to off

Braking Actions





Evasive Actions



Front Wheel Traction Loss







Vision/Steering/ Braking Adjustments















Backing Maneuvers

Prerequisite—Possess a valid Virginia Learner's Permit.

Instructional Objectives—During this session the student demonstrates program entry skill levels by:

- performing forward and reverse movements in the offset alley exercise;
- performing forward and reverse movements in the tracking exercise; and
- performing forward maneuvers in the constant curvature exercise.

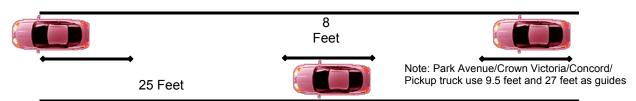
Assessment—Teacher assesses tracking, steering, braking, acceleration, lane position, and visual tracking in three exercises recorded in student record.

Time—10-15 minutes driving and 10-15 minutes observation time

Instructor Activities	Student Driver Activities	Materials Needed
 Prior to vehicle entry Prepare assessment site for demonstration of skills as listed in guide. Allow a 50 foot space cushion around the exercises for error control. Constant curvature exercise may be combined with the tracking exercise to conserve space on surface used. Prepare vehicle for lesson. Check each driver for valid learner's permit. Vehicle entry Demonstrate activities to be assessed with limited instruction on task performance. Include the assessment in the student portfolio. 	 Group activity segment Observe instructor demonstration of activity. Ask questions pertaining to understanding of tasks. Show learner's permit. Session activity Selects preferred position for driving vehicle regarding seating, steering, mirrors and restraints adjustment. Performs off-set alley maneuvers. Performs tracking exercise. Performs constant curvature exercise. At the completion of this activity, the students should assess their abilities to perform maneuvers. Completes self assessment and places in portfolio. 	Materials needed Vehicle prepared for on-street use Space large enough to accommodate the exercises Cones/markers for exercises; plastic trash cans of different sizes may be substituted for cone markers Chalked or painted exercise area is recommended for assessment consistency

Diagram—Laboratory In-Car Optional Skills Assessment

Assessment Skill Exercise One **Off-Set Alley**



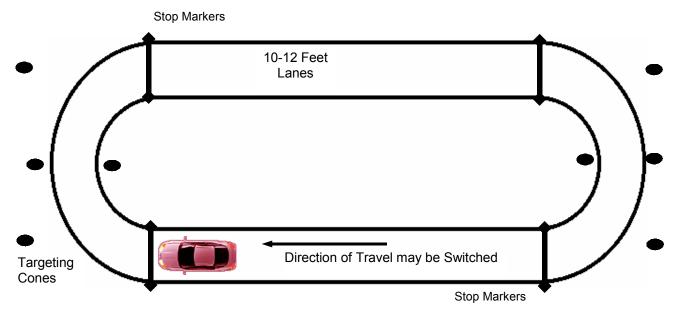
Drive forward at each of the following speeds: 10 mph, 20 mph, and 30 mph.

Drive in reverse at each of the following speeds: 5 mph, 10 mph, and 20 mph.

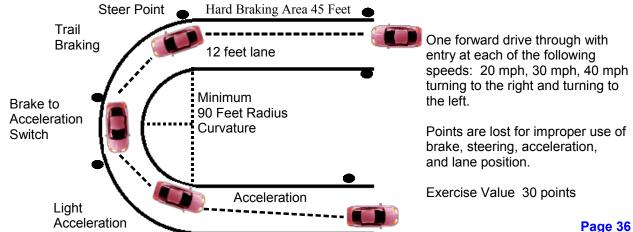
Points are lost when cones are struck or vehicle is slowed or stopped.

Exercise value 40 points

Assessment Skill Exercise Two Tracking



Assessment Skill Exercise Three CONSTANT CURVATURE



Skills Assessment

Points lost	Assessment Score:	/100 Assessment Stopped				
Off-Set Alley Assessment Forward 10 mph	Cone displacement	Speed /40				
Points Lost:	Large: 5 10 15 Small: 2 4 6	Slowed 1 1 1 1 1 Stopped 2 2 2				
Reverse 5 mph	Cone displacement Large: 5 10 15	Speed Slowed 1 1 1 1 1				
Points Lost:	Small: 2 4 6	Stopped 2 2 2				
Forward 20 mph	Cone displacement	Speed				
Points Lost:	Large: 5 10 15 Small: 2 4 6	Slowed 1 1 1 1 1 Stopped 2 2 2				
Reverse 10 mph	Cone displacement	Speed				
Points Lost:	Large: 5 10 15 Small: 2 4 6	Slowed 1 1 1 1 1 Stopped 2 2 2				
Forward 30 mph	Cone displacement	Speed				
Points Lost:	Large: 5 10 15 Small: 2 4 6	Slowed 1 1 1 1 1 Stopped 2 2 2				
Reverse 15 mph	Cone displacement	Speed				
Points Lost:	Large: 5 10 15 Small: 2 4 6	Slowed 1 1 1 1 1 Stopped 2 2 2				
Tracking/Targeting Asse	ssment	/30				
Forward 10 mph		2 2 2 2 2 2 Stopping Front 1 1 1 1 1 1 Alignment 2 2				
Points Lost:		1 1 1 1 1 1				
Reverse 5 mph	Cone displacement Lane Position	2 2 2 2 2 2 Stopping Front 1 1 1 1 1 1 Alignment 2 2				
Points Lost:	Vehicle Not Aligned	1 1 1 1 1 1 1				
Forward 20 mph	Cone displacement Lane Position	2 2 2 2 2 2 Stopping Front				
Points Lost:	Vehicle Not Aligned	1 1 1 1 1 1 Alignment 2 2 1 1 1 1 1 1				
Reverse 10 mph	Cone displacement Lane Position	2 2 2 2 2 2 Stopping Front 1 1 1 1 1 1 Alignment 2 2				
Points Lost:	Vehicle Not Aligned	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Constant Curvature Asset	essment	/30				
Forward 20 mph Braking 2 2 2	Steering Acceleration 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Forward 30 mph 2 2 2 2	111 111	1 1 1				
Forward 40 mph 2 2 2 2	111 111	1 1 1				

Final Skills Evaluation for Behind-the-Wheel

Prerequisite—Possess a valid Virginia Learner's Permit; completed Module Nine.

Instructional Objectives—During this session the student demonstrates proficiency in test conditions. The student will demonstrate pre-drive procedures, knowledge of control and information devices, vehicle operational control, basic vehicle maneuvers, intersection approach, curvature approach, traffic flow, time and space management, speed and lane positions, and application of rules and laws.

Assessment—Teacher concludes assessment of knowledge, precision, procedures, and techniques on the on-street records form.

Time—50 minutes driving and 50 minutes observation time

Instructor Activities	Student Driver Activities	Observer Activities
 Prior to vehicle entry Review route for changes or obstructions. Prepare vehicle and surfaces for lesson. Reviews lesson objectives and route with drivers. Check each driver's learner's permit. Review predetermined route with the driver. Limit instructions to location and activities to be evaluated. 	 Group activity segment Show learner's permit. Review objectives, ask questions regarding lesson activities. Session activity Performs pre-start, demonstrates hand signals, answers questions on control devices and then starting and moving from curb procedures. Demonstrates smooth and precise movements from curb and enters traffic flow with vehicle in 	 Rear seat observer Shows learner's permit at the start of lesson. Listens to review of procedures Observes test, asks questions regarding procedures. May assist with route directions if requested by the driver.
 After vehicle entry Start in parking lot, scoring each area of evaluation form while student drives predetermined route. Stop test sequence if emergency exists or if student is not able to perform tasks in safe manner. Evaluate student progress in driving environment or in simulated complex problem activities for record and portfolio. Involve rear seat observer in review of on-street tasks. 	 control. Performs all driving tasks to an acceptable performance level. Verbally comments on space, area, speed, and lane position changes. Parks, stops, and secures vehicle. 	

Road Skills Evaluation Support Information

General Guidelines

There are two types of evaluation that need to occur. The first is an ongoing evaluation developed by the local school division that describes the daily routes and documents student progress. The second is a summative evaluation. All students are required to take the end-of-course road skills evaluation. Successful completion of the route, skills, and process evaluation requires students to receive no marks on the automatic failure section, and no more than 5 deficiency marks in the general skills section.

Evaluation Time

The road skills evaluation should be a minimum of 20 minutes.

Route Selection

Option 1: The teacher selects a destination and provides the route specifics to the student during the test.

Option 2: The teacher selects a destination, and the student with the parent/guardian determine the route. Prior to the test, the student should provide the teacher with a written description of the route that includes street names and directions.

Teacher Assessment

Teachers have a tendency to teach even during assessment situations. Therefore, a concerted effort should be made not to coach the student through the process but to focus on student performance.

Communication with Students

The assessment criteria should be clearly communicated to the student prior to the testing process. Automatic failure items and individual skills should be reviewed. Test results should be discussed with the student, and when possible with the parents/guardians, upon completion of the road skill evaluation.

Essential Skills

All four driving environments may not be readily available to all schools. Therefore, the assessment may be performed in any combination of driving environments. However, all skills must be assessed.

Pre-driving Checks, Securing the Vehicle, and Parking

Multiple deficiency marks may occur on any of these tasks (e.g., doesn't lock door or fails to adjust mirrors during pre-driving phase).

Skills

Multiple deficiency marks may occur on any of the tasks, and in any of the driving environments.

	Mid-Poi	int Evaluation		Stu Eva
Pre-Drive Procedures	5 4 3 2 1 0	Ratings:		dent' aluat
Starting Procedures	5 4 3 2 1 0	5=excellent skills de 4=very good skills de 3=adequate skills de	Student's Name _ Evaluator's Name	
Securing Procedures	5 4 3 2 1 0	2=skill area needs p 1=not able to perfor	ractice	ame_
Backing	5 4 3 2 1 0	0=will not perform		
Left	5 4 3 2 1 0	1		
Right	5 4 3 2 1 0			Last
Straight	5 4 3 2 1 0	Right Lane Change Mirror checks	5 4 3 2 1 0 5 4 3 2 1 0	st
Paul over to curb	5 4 3 2 1 0	Mirror Blind Spots	5 4 3 2 1 0	
Pull away from curb	5 4 3 2 1 0	Lane Changer Gap Selection	5 4 3 2 1 0 5 4 3 2 1 0	
Rear Limitation	5 4 3 2 1 0	Speed Control Steering Control	5 4 3 2 1 0 5 4 3 2 1 0	
Front Limitation	5 4 3 2 1 0	Left Lanc Oberes	5 4 2 2 4 2	
Maintains lane Position	5 4 3 2 1 0	Left Lane Change Mirror checks Mirror Blind Spots	5 4 3 2 1 0 5 4 3 2 1 0 5 4 3 2 1 0	
Controlled braking stop	5 4 3 2 1 0	Lane Changer Gap Selection	5 4 3 2 1 0 5 4 3 2 1 0 5 4 3 2 1 0	First
Right Turns	5 4 3 2 1 0	Speed Control	5 4 3 2 1 0	
Vision Skills	5 4 3 2 1 0	Steering Control	5 4 3 2 1 0	
Motion Skills	5 4 3 2 1 0	3		
Steering Skills	5 4 3 2 1 0	Commentary Driving	5 4 3 2 1 0	
Mirror Checks	5 4 3 2 1 0	12 second lead	5 4 3 2 1 0	
		Speed responses	5 4 3 2 1 0	
Left turn		Position response	5 4 3 2 1 0	
Vision Skills	5 4 3 2 1 0	4 sec following	5 4 3 2 1 0	
Motion Skills	5 4 3 2 1 0	O a manage of the man Date that are	5 4 0 0 4 0	
Steering Skills Mirror Checks	5 4 3 2 1 0 5 4 3 2 1 0	Commentary Driving 12 second lead	5 4 3 2 1 0 5 4 3 2 1 0	
MITO CHECKS	343210	Speed responses	5 4 3 2 1 0	
3-pt turnaround		Position response	5 4 3 2 1 0	
Vision Skills	5 4 3 2 1 0	4 sec following	5 4 3 2 1 0	'
Motion Skills	5 4 3 2 1 0	. see reneming	0 . 0 2 . 0	
Steering Skills	5 4 3 2 1 0	Perpendicular Park Left	5 4 3 2 1 0 5 4 3 2 1 0	
2-pt. Turnaround		Right	5 4 3 2 1 0	
Vision Skills	5 4 3 2 1 0	-		
Motion Skills	5 4 3 2 1 0	Parallel Park	5 4 3 2 1 0	_ =
Steering Skills	5 4 3 2 1 0	Into Space Out of Space	5 4 3 2 1 0 5 4 3 2 1 0	Period Date
U-Turnaround	5 4 3 2 1 0	Park on an upgrade	5 4 3 2 1 0	
RR crossing approach	5 4 3 2 1 0	Position Wheels away	5 4 3 2 1 0 5 4 3 2 1 0	
Expressway Entry	5 4 3 2 1 0	•		
Gap selection	5 4 3 2 1 0	Park on a Downgrade	5 4 3 2 1 0	'
Speed Control	5 4 3 2 1 0	Position	5 4 3 2 1 0	
Mirror Checks	5 4 3 2 1 0	Wheels away	5 4 3 2 1 0	
		Angle Park	5 4 3 2 1 0	
		Position	5 4 3 2 1 0	
		Front Limitation	5 4 3 2 1 0	I

Commonwealth of Virginia Road Skills Evaluation

NAME					PASS	FAIL	
last	first						
DATEINSTRUCTOR	ICTOR				Number of Errors	rors	
Pre-driving Checks							
Securing the Vehicle		D	DRIVING ENVIRONMENTS	ONMENTS			
	SKILLS	Town/City	Residential	Rural	Multi-lane	Comments	
PARKING (Select one)	Hand Position						
Perpendicular	Steering Technique						
Angle	Proper Speed						
Parallel	Traffic Check						
	Mirror Check						
AUTOMATIC FAILURE	Head Check						
Seat Belt	Eye Check						
Speed	Lane Position						
Strikes an object	Lane Selection						
Drives in oncoming lane	Space Margins						
	Signals						
Disobeys regulatory sign or Signal	Obeys Signs						
Dangerous maneuver	Observes Right of Way						
Failure to vield: school bus	Proper Acceleration						
or emergency vehicle	Appropriate Braking						
Turning from improper lane	Smooth Stopping						
Instructor intervention		bA ohs	ditional skill asses	sments may b	be added at the tead	Additional skill assessments may be added at the teacher's discretion. The teacher should mark only those tasks the student was unable to nerform at an accentable level	
Other violation of the law	Student Signature		To pass, students may receive no more than 5 deficiency is evaluation, and no marks in the automatic failure section.	y receive no arks in the a	more than 5 defi utomatic failure	To pass, students may receive no more than 5 deficiency marks on the road skills evaluation, and no marks in the automatic failure section.	