Curriculum Guide for Driver Education in Virginia

Senate Joint Resolution 378

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The Curriculum Guide for Driver Education in Virginia

§22.1-205 of the Code of Virginia authorizes the Virginia Board of Education to establish a standardized program of driver education for public, private, and commercial schools.

The Driver Education Standards of Learning and the Curriculum and Administrative Guide for Driver Education in Virginia prescribe the content and administrative requirements of a state-approved driver education program.
The Curriculum Guide for Driver Education in Virginia

- Is a Standards-Based Curriculum (The SOLs identify what students should know and be able to do)
- Is divided into 11 Modules
- Includes lesson plans and other resources that align instruction with the SOL
- Has 450 (+) PowerPoint slides
The Curriculum Guide for Driver Education in Virginia

- Provides the scope and sequence for the SOL content.
- Has suggested methods of Assessment and sample quiz and test questions
- Includes sample workbook questions
- Has suggested Videos, Web sites and other Teacher Resources
Virginia Licenses

- Learner’s Permit
- Driver’s License
- Motorcycle License
- Commercial Driver’s License (CDL)

Organ donation is denoted on the driver's license as a red heart followed by “Organ Donor” in black.

Virginia Driver’s License for persons 21 years of age and older

Virginia Driver’s License for persons under 21 years of age
**Topic 4 Lesson 1**

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**Warning Signs**
Give advance warning of hazards to allow drivers time to safely minimize risks.

**Guide Signs**
GUIDE drivers to their destination by identifying routes well in advance.

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**Information Signs**
INFORM drivers of motorist services and recreational facilities.

**Regulatory Signs**
REGULATE the speed and movement of traffic.
Virginia Driver Responsibilities:

Preparation to Operate a Vehicle

Topic 1 -- Driver Preparation Procedures

Topic 2 -- Identifying Vehicle Control Devices

Topic 3 -- Operating Vehicle Control Devices

Topic 4 -- Vehicle Balance Considerations

Topic 5 -- Standard Vehicle Reference Points
Vehicle Control

Vehicle Direction / Speed Requirements

Changing Vehicle Load from Front to Rear (Pitch)
- Light accelerator pressure
- Releasing the brake
- Progressive accelerator pressure
- Thrust accelerator pressure

Changing Vehicle Load from Rear to Front (Pitch)
- Releasing the accelerator
- Controlled braking (Squeeze on)
- Threshold braking
- Trail braking (Squeeze off)
When cornering, tires tend to flex.

If the tires are under inflated, the contact with the rim may be lost. **AIR LOSS WILL OCCUR.**

Excessive tire flexion increases tire heat and may result in a blowout.
Module Three

Basic Maneuvering Tasks:
Low Risk Environment

Topic 1 -- Basic Maneuvers
Topic 2 -- Vision and Perception
Topic 3 -- Controlling Risk Using a Space Management System
Topic 4 -- Developing Good Driving Habits

Provided in cooperation with the Virginia Department of Motor Vehicles
Vision and Perception Requirements

- **Targeting**, Line of Sight, Path of Travel
- **Referencing Vehicle to** Path of Travel
- Using Visual References
- Using Turning Points to Start the Turning Process
  - Forward visual turning points
  - Rear visual turning points
Approach to Intersection

Step 1 (Search)
- Identify Intersection
- Identify Controls
- Check Rear Areas
- Search for Intersection Risks

Step 2 (Evaluate)
- Scan Open Side Areas First
- Scan Closed Side Areas
- Look for Closed or Changing Frontal Areas

Step 3 (Execute)
- Adjust Speed
- Maintain Lane Position or Stop Behind Crosswalk
- Proceed Through Open Space Area or Stop Behind the Crosswalk
Basic Maneuvering Tasks:

Moderate Risk Driving Environment

Topic 1 -- Risk
Topic 2 -- Space Management System
Topic 3 -- Lane Changes
Topic 4 -- Turnabouts
Topic 5 -- Parking
Reduced Risk Driving

Three principles for reducing risks
- Never risk more than you can afford to lose
- Do not risk large consequences for a small reward
- Consider the odds and your situation
Space Management Basics

**Executing Decisions:**
- Change speed while maintaining vehicle balance
- Change position while maintaining vehicle balance

**Risk Reduction:**
- Control the Target Area, Line of Sight and Path of Travel by:
  - speed changes;
  - position changes; and
  - effective communication.

What is the best decision and action for the driver of the RED car?
Module Five

Information Processing:
Moderate Risk Driving Environment

Topic 1 -- Processing Information
Topic 2 -- Intersections, Curves, and Hills
Topic 3 -- Passing
Processing Highway Conditions

**Roadway Structure**
- Width
- Curbing
- Curves
- Slopes

**Roadway Surface**
- Roughness
- Slick
- Wet Leaves
- Mud
- Sand

**Atmosphere**
- Illumination
- Glare
- Precipitation
- Wind/Noise

**Intersections**

**Roadway Features**
- Shoulders
- Affixed Objects
- Adjacent Buildings
Limited Line of Sight Through Curves
Module Six

Information Processing:
Complex Risk Environments

Topic 1 -- Characteristics of Expressways
Topic 2 -- Entering, Changing Lanes, and Exiting
Topic 3 -- High Speed Considerations
A cloverleaf interchange has a series of entrance and exit ramps that resemble the outline of a four leaf clover.

This design:
- allows for the interchange of two expressways or major roadways.
- has shared entrance and exit weave lanes.

Traffic is permitted to move ONLY in the direction indicated by the arrows.
Common Expressway Signals

Lane Signals

A **GREEN arrow** over a lane — the lane is open for travel.

A **RED “X”** over a lane — travel in that lane is closed or prohibited.

A **YELLOW “X”** over a lane — travel in that lane is about to change or close.
Module Seven

Driver Performance: Personal Factors

Topic 1 -- Introduction to Alcohol – Saying No
Topic 2 -- Nature of Alcohol-Related Crash Problems
Topic 3 -- Physiological and Psychological Effects of Alcohol
Topic 4 -- Effects of Alcohol and Other Drugs on the Driving Task
Topic 5 -- Dealing with Driver Fatigue
Topic 6 -- Preventing Road Rage
### BAC Factors

<table>
<thead>
<tr>
<th>Weight</th>
<th>Heavier people have more blood and other body fluids to dilute alcohol consumed.</th>
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</thead>
<tbody>
<tr>
<td>220 lbs</td>
<td>Their BAC level will be lower than the BAC of a smaller person who drank the same volume of alcohol.</td>
</tr>
<tr>
<td>110 lbs</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Time Spent Drinking</th>
<th>On average, a person’s BAC is oxidized at a rate of 0.015 per hour</th>
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<tbody>
<tr>
<td></td>
<td>✓ 90% of the alcohol detoxified is oxidized (burned up) by the liver</td>
</tr>
<tr>
<td></td>
<td>✓ 10% is eliminated in breath, urine, and sweat</td>
</tr>
</tbody>
</table>

**NOTE:** Alcohol is toxic to the liver and brain. Hence, the term intoxication denotes the toxic effect alcohol has on these organs.
Factors Leading to Aggressive Driving & Road Rage

- More Cars
- More Traffic Congestion
- More Frustration
- More Stress
- More Hostility
- More Violence
Module Eight

Driver Performance: Vehicle Function

Topic 1 – Visibility in Adverse Conditions
Topic 2 – Extreme Weather Conditions
Topic 3 – Protecting Occupants
Topic 4 – Roadway and Vehicle Technology
Topic 5 – Traction Loss Conditions
Automotive Technology

- Anti-Lock Brakes
- Crush Zones
- Traction Control Devices
- Electronic Stability Program (ESP)
- Suspension Control Devices
- Door Latches
- Glass
- Headlights
Highway Safety Design Features

Occupant Protection Highway Design Features Include

- Breakaway sign support posts
- New design guard rails with ends angled away from roadway and buried
- Crash attenuators such as vinyl liquid or sand filled drums
Driver Responsibilities: Vehicle Functions

Topic 1 -- Vehicle Functions/Malfunctions

Topic 2 -- Anti-Lock Braking Systems

Topic 3 -- Vehicle Performance

Topic 4 -- Highway Transportation System Agencies
Vehicle Systems

Steering and Suspension

Fuel

Brake

Electrical
Vehicle Performance

- Bicycles, Mopeds, Scooters
- Construction Vehicles
- Oversize Vehicles
- Farm Machinery
- Horse-drawn Vehicles
Driver Responsibilities:

Making Informed Choices

Topic 1 -- Insuring Vehicle
Topic 2 -- Purchasing Vehicle
Topic 3 -- Trip Planning
Topic 4 – Virginia’s Conservation Concerns
Insuring a Car

- VA Law requires you to provide proof of financial responsibility
- Your parents’ policy covers you while you have a learner’s permit
- If you still owe money on your car, your lender may require collision insurance
When operating your vehicle

- Accelerate smoothly.
- Drive at moderate speeds.
- Avoid unnecessary braking and try to anticipate the traffic ahead.
- Avoid excessive idling.
- Join a car pool for commuting to and from school or work.
- Keep your vehicle in good working order.
- Recycle old oil and fluids.
- Recycle old vehicle parts.
Module Eleven

Behind-the-Wheel and In-Car Observation

✓ List of in-car skills
✓ Sample in-car lessons
✓ Route plan
✓ Final road skills test
Any Questions?