Driver Education Standards of Learning for Virginia Public Schools

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Preface

The Driver Education Standards of Learning for Virginia Public Schools provides the framework for the Curriculum Guide for Driver Education in Virginia, which defines the skills and competencies necessary to become a proficient user of the highway transportation system. As prescribed by §22.1-205 of the Code of Virginia, the curriculum guide serves as the Board of Education’s approved program of study for public, private, and commercial driver training school programs. Public and private school driver education programs are approved by the Board of Education, and commercial driver training schools are approved and licensed by the Virginia Department of Motor Vehicles.

The Driver Education Standards of Learning focus on core concepts and procedures and set clear, concise, and measurable expectations for novice drivers. The standards, which have been refined through public hearings and numerous rounds of feedback from parents, teachers, administrators, and representatives from higher education, are informed by teachers’ experience, content experts, research and national standards. Parents are encouraged to work with their children to help them achieve these standards, and teachers are encouraged to use simulation and other technologies to enhance student learning.

A major goal of Virginia’s educational agenda is to create an excellent statewide system of public education that meets the needs of all young people in Virginia. These Standards of Learning chart the course for achieving that objective.
Introduction

Driver literacy is an important life skill. Cars do not crash; people crash them. The classroom and in-car driver education standards are intended to help students develop conceptual understanding of safe driving practices and skill-based performance. The standards also stress the abilities to reason and connect safe driving skills with safe driving attitudes. Emphasis is placed on linking the skills of visual search, managing time and space, and maintaining vehicle balance. Significant attention is given to awareness of risks, maintenance of alertness, driver distractions, and protection of occupants.

Students begin driving by applying basic driving skills in low-to-moderate traffic environments and progress to demonstrating skills in more complex traffic situations. The ability to move a car skillfully is not the same as the ability to drive safely. A well-educated driver helps to increase traffic safety.

Successful completion of a state-approved driver education program does not make a teenager a responsible, experienced driver. Traffic safety education involves family, community, industry, government, and personal factors such as motivation and maturity. Evidence shows that often it is not poor driving skills that lead to crashes among this age group, but inexperience, inappropriate attitude, and/or lack of decision-making skills. The family, not the school, is in the best position to have a sustained effect on minimizing the risks faced by inexperienced drivers and encouraging responsible behaviors. Throughout the course, emphasis is placed on extensive supervised driving practice with a licensed parent, guardian or other mentor.

Safety

Safety must be given the highest priority in implementing the driver education instructional program. Teachers must be vigilant, focused, and able to control the vehicle at all times. Students must practice basic evasive braking and efficient, controlled steering maneuvers in low-risk driving environments. For every instructional activity, careful consideration should be given to ensure use of appropriate training techniques, driving environments, speed, and driving experiences. Selection of safe facilities for instruction and performance requires thorough route and lesson planning, careful management, and constant monitoring. Providing a safe learning environment is an essential part of any performance-based, hands-on driving lesson, whether on a closed driving range, parking lot or public roadway. Students must follow safety guidelines, demonstrate appropriate safety techniques that lead to safe driving habits, and use safety equipment appropriately.

Goals

The purpose of driver education is to provide students with a detailed understanding of the fundamentals of driving and to foster responsible driving attitudes and behaviors. As a result of quality traffic-safety instruction, students will be able to

- demonstrate a working knowledge of the laws governing the operation of a motor vehicle;
- identify and analyze responsible habits and behaviors and understand how physical and psychological conditions affect driver performance;
- apply knowledge, processes, and skills to become safe, competent users of the highway transportation system;
- use visual search skills and a systematic decision-making process to make risk-reducing decisions by adjusting speed and/or position;
• demonstrate balanced vehicle movement through precise and timely steering, braking, and accelerating under a variety of conditions;
• display responsible driving behaviors when alone and with peers;
• interact safely with other roadway users by predicting vehicle performance, avoiding conflicts, and minimizing and managing risks;
• identify how advancements in intelligent handling and stability technology systems affect driving practices;
• engage in meaningful, extensive supervised practice to progress from simple to more complex driving skills in low, moderate, and higher risk driving environments; and
• master precision movements for maintaining optimal vehicle balance and control in expected as well as unexpected circumstances.
Standards of Learning

DE.1 The student will demonstrate an understanding of Virginia traffic laws, licensing procedures, and other responsibilities associated with the driving privilege. Key concepts include
   a) graduated driver licensing requirements and types of licenses;
   b) traffic safety information in the Virginia Driver’s Manual;
   c) the motor vehicle section of the Code of Virginia;
   d) the organ- and tissue-donation designation process;
   e) interaction with law enforcement; and
   f) responsibilities at a crash scene.

DE.2 The student will demonstrate an understanding of basic vehicle operating procedures. Key concepts/skills include
   a) pre-driving procedures;
   b) starting procedures for automatic and manual transmissions;
   c) vehicle information, warning, and control devices;
   d) efficient accelerating, braking, and steering techniques; and
   e) vehicle securing procedures.

DE.3 The student will use vehicle reference points to establish vehicle position and execute basic driving maneuvers. Key concepts/skills include
   a) parking;
   b) turning;
   c) establishing lane position; and
   d) backing.

DE.4 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) sitting and hand position;
   b) steering, braking, and accelerating;
   c) compensating for shifts in vehicle load (from side to side, front to rear, and rear to front) that affect vehicle performance;
   d) managing front tire traction loss (understeer) and rear tire traction loss (oversteer); and
   e) analyzing the cause and severity of types of collisions — head-on, near-frontal, broadside, rear-end, rollover, sideswipe.

DE.5 The student will demonstrate the ability to manage visibility, time, and space to avoid collisions and reduce driving risks. Key concepts/skills include
   a) demonstrating targeting and tracking skills;
   b) synthesizing information visually from the driving environment using the SEEiT (Search, Evaluate and Execute in Time) space-management systematic decision-making process;
   c) applying following-distance time and space concepts;
   d) selecting appropriate speed, maintaining adequate gap, and judging distance;
   e) estimating time and space needs for passing; and
   f) identifying and responding to open and closed spaces and changes to line-of-sight or path-of-travel.
DE.6 The student will demonstrate appropriate adjustments when approaching controlled and uncontrolled intersections, curves, work zones, railroad crossings, and hills with line-of-sight or path-of-travel limitations. Key concepts/skills include
   a) right-of-way rules;
   b) roadway signs, signals, and markings;
   c) slope/grade of terrain; and
   d) vehicle position and speed control.

DE.7 The student will identify the characteristics of an expressway and apply risk-reducing expressway driving strategies. Key concepts/skills include
   a) managing interchanges;
   b) entering, merging, and exiting from traffic flow;
   c) selecting vehicle position and changing lanes; and
   d) managing toll facilities.

DE.8 The student will demonstrate the ability to communicate presence and intentions to other highway transportation users. Key concepts/skills include
   a) vehicle position and driver action;
   b) vehicle communication devices; and
   c) hand signals for slow/stop, right turn and left turn.

DE.9 The student will analyze and describe the physiological, psychological, and cognitive effects of alcohol and other drugs and their impact on a driver’s awareness of risks and involvement in collisions. Key concepts include
   a) prescription and nonprescription medications;
   b) illegal drugs;
   c) effects of alcohol and other drugs on vision and space management;
   d) synergistic effects of drugs; and
   e) ways alcohol and other drugs are eliminated from the body.

DE.10 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 and peer-intervention skills;
   c) Implied Consent, Zero Tolerance, and Use and Lose laws;
   d) Administrative License Revocation, loss of license, ignition interlock, and other licensing restrictions; and
   e) court costs, insurance requirements, Virginia Alcohol Safety Action Program referral, and other costs.

DE.11 The student will recognize the consequences of aggressive driving and the influence of emotions on driving behaviors. Key concepts include
   a) stress and anxiety;
   b) anger management; and
   c) the relationship between aggressive driving and road rage.

DE.12 The student will analyze the effects of fatigue and other physical conditions on driver performance. Key concepts include
   a) circadian rhythms;
b) sleep deprivation;
c) short- and long-term physical and mental disabilities; and
d) chronic health conditions.

DE.13 The student will identify distractions that contribute to driver error. Key concepts include
a) driver behaviors (e.g., eating, smoking, personal grooming);
b) cell phones and other portable technology devices;
c) passengers;
d) vehicle accessories; and
e) insects and pets.

DE.14 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 construction and other adverse road conditions; and
d) vehicle stability and traction control systems.

DE.15 The student will demonstrate an understanding of the proper use of vehicle occupant-protection
features and analyze how they can reduce injury severity and increase collision survival. Key
concepts/skills include
a) active restraint systems;
b) passive restraint systems;
c) child restraint systems; and
d) other vehicle safety design features.

DE.16 The student will analyze how technological advancements in intelligent handling and stability
control systems affect driving practices. Key concepts/skills include
a) electronic stability control systems;
b) occupant protection systems to include thorax, curtain, knee and other airbags;
c) seatbelt technologies and intelligent head restraints systems;
d) adaptive cruise control and automatic emergency braking systems;
e) lane-keeping assist and blind spot warning systems;
f) reversing and other cameras; and
g) adaptive front lighting.

DE.17 The student will identify and evaluate emergency-response strategies to avoid or reduce the
severity of a collision in high-risk driving situations. Key concepts/skills include
a) understanding and managing front and rear traction control;
b) identifying open space;
c) recognizing how decisions are influenced and limited by the environment, the vehicle, driver
error, and driver capabilities;
d) demonstrating evasive maneuvers, using braking and steering combinations; and
e) managing off-road recovery.
DE.18 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) bicycles, scooters, mopeds, 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; and
   h) farm machinery and horse-drawn vehicles.

DE.19 The student will compare vehicle braking systems and explain and demonstrate proper braking techniques for various weather and roadway conditions. Key concepts/skills include:
   a) demonstrating proper use of conventional brake systems;
   b) demonstrating and evaluating controlled braking, trail braking, and threshold braking;
   c) engaging antilock brake systems (ABS) and steering toward a target; and
   d) analyzing how preventive maintenance reduces the possibility of brake failure and enhances safety.

DE.20 The student will analyze how regular 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) cooling system and belts; and
   f) fuel system and ignition electronics.

DE.21 The student will identify and describe the legal aspects of and identify the financial responsibilities associated with purchasing, operating, maintaining, and insuring a motor vehicle. Key concepts include:
   a) the Financial Responsibility Law;
   b) required and optional insurance coverage;
   c) title and vehicle registration;
   d) vehicle inspection;
   e) fuel, fluids, tires, and other maintenance costs; and
   f) collision involvement.

DE.22 The student will demonstrate competency in map-reading and trip-planning skills. Key concepts/skills include:
   a) route planning;
   b) map-reading and trip-planning technologies; and
   c) calculating the cost of a trip.
DE.23 The student will research and evaluate personal transportation needs and their impact on the environment and demonstrate skills necessary to be an informed consumer. Key concepts/skills include
a) printed and Internet resources;
b) community resources;
c) vehicle pollution, including carbon monoxide, carbon dioxide, ozone-causing gases, and acids;
d) appropriate disposal of batteries, fluids, tires, and other environmentally hazardous materials; and
e) energy conservation, alternative or renewable sources of energy, and conservation of natural resources.