

Middlesex County Schools Curriculum Pacing Guide

Grade/Course _____

Drivers Education _____

School Year _____

2014-2015 _____

Time Frame	Unit/SOLs	SOL #	Strand	Essential Knowledge/ Understandings	Date of Common Formative Assessment (i.e. Unit Tests/Benchmark Tests)
Week 1	<input type="checkbox"/> Program Administration		Intro	Drivers ED. 45 hour log	<ul style="list-style-type: none"> • DOE web site • www.dmv.com
Week 2	<input type="checkbox"/> Module One – Virginia Driver Responsibilities: Licensing Responsibilities 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) licensing requirements and types of licenses; b) the motor vehicle section of the Code of Virginia; c) the organ- and tissue-donation designation process. DE.5 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) roadway signs, signals, and markings; b) right-of-way rules; c) slope/grade of terrain; d) vehicle position and speed control. DE.19 The student will identify and describe the legal aspects of and calculate the financial responsibilities associated with purchasing, operating, maintaining, and insuring a motor vehicle. Key concepts include a) 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; f) collision involvement.	DE. 1 DE. 5 DE. 19	M.1 T.1-4	Virginia Driver Responsibilities: Licensing Responsibilities	M.1 Work Sheet M1. Quiz M1. Test
Week 3	<input type="checkbox"/> Module Two – Virginia Driver Responsibilities: Preparing to Operate a Vehicle 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	DE. 2 DE. 3 DE.	M.2 T.1-5	Virginia Driver Responsibilities: Preparing to Operate a Vehicle	M.2 worksheet M. 2 Quiz M.2 Test

	<p>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) front tire traction loss (understeer) and rear tire traction loss (oversteer); e) 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-distance, time, and space concepts; c) selecting gap and judging distance; d) estimating passing-time and space needs; e) identifying and responding to open or closed space and changes to line-of-sight or path-of-travel. DE.7 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; c) hand signals (i.e., slow/stop, right and left turns). 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 braking and steering combinations; b) off-road recovery; c) front and rear traction control. 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) cooling system and belts; f) fuel and ignition electronics.</p>	<p>4 DE. 7 DE. 15 DE. 18</p>			
<p>Week 4</p>	<p><input type="checkbox"/> Module Three – Basic Maneuvering Tasks: Low Risk Environment 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) front tire traction loss (understeer) and rear tire traction loss (oversteer); e) 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</p>	<p>DE. 3 DE. 4 DE. 5 DE.</p>	<p>M.3 T.1-4</p>	<p>Basic Maneuvering Tasks: Low Risk Environment</p>	<p>M.3 worksheet M.3 Quiz M.3 Test</p>

	<p>a) synthesizing information visually from the driving environment, using a space-management process;</p> <p>b) applying following-distance, time, and space concepts;</p> <p>c) selecting gap and judging distance;</p> <p>d) estimating passing-time and space needs;</p> <p>e) identifying and responding to open or closed space and changes to line-of-sight or path-of-travel.</p> <p>DE.5 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</p> <p>a) roadway signs, signals, and markings;</p> <p>b) right-of-way rules;</p> <p>c) slope/grade of terrain;</p> <p>d) vehicle position and speed control.</p> <p>DE.6 The student will identify the characteristics of an expressway and apply risk-reducing expressway driving strategies. Key concepts/skills include</p> <p>a) entering, merging, integrating into, and exiting from traffic flow;</p> <p>b) managing interchanges;</p> <p>c) selecting vehicle position and changing lanes;</p> <p>d) managing toll facilities.</p> <p>DE.7 The student will demonstrate the ability to communicate presence and intentions to other highway transportation users. Key concepts/skills include</p> <p>a) vehicle position and driver action;</p> <p>b) vehicle communication devices;</p> <p>c) hand signals (i.e., slow/stop, right and left turns).</p>	<p>6</p> <p>DE.</p> <p>7</p>			
<p>Week 5</p>	<p><input type="checkbox"/> Module Four – Basic Maneuvering Tasks:</p> <p>Moderate Risk Driving Environment</p> <p>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</p> <p>a) synthesizing information visually from the driving environment, using a space-management process;</p> <p>b) applying following-distance, time, and space concepts;</p> <p>c) selecting gap and judging distance;</p> <p>d) estimating passing-time and space needs;</p> <p>e) identifying and responding to open or closed space and changes to line-of-sight or path-of-travel.</p> <p>DE.5 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</p> <p>a) roadway signs, signals, and markings;</p> <p>b) right-of-way rules;</p> <p>c) slope/grade of terrain;</p> <p>d) vehicle position and speed control.</p> <p>DE.6 The student will identify the characteristics of an expressway and apply risk-reducing expressway driving strategies. Key concepts/skills include</p> <p>a) entering, merging, integrating into, and exiting from traffic flow;</p> <p>b) managing interchanges;</p> <p>c) selecting vehicle position and changing lanes;</p> <p>d) managing toll facilities.</p> <p>DE.7 The student will demonstrate the ability to communicate</p>	<p>DE.</p> <p>4</p> <p>DE.</p> <p>5</p> <p>DE.</p> <p>6</p> <p>DE.</p> <p>7</p> <p>DE.</p> <p>12</p>	<p>M.4</p> <p>T.1-5</p>	<p>Basic Maneuvering Tasks:</p> <p>Moderate Risk Driving Environment</p>	<p>M.4 Worksheet</p> <p>M.4 Quiz</p> <p>M.4 Test</p>

	<p>presence and intentions to other highway transportation users. Key concepts/skills include</p> <ul style="list-style-type: none"> a) vehicle position and driver action; b) vehicle communication devices; c) hand signals (i.e., slow/stop, right and left turns). <p>DE.12 The student will identify distractions that contribute to driver error. Key concepts include</p> <ul style="list-style-type: none"> a) passengers and pets; b) vehicle accessories; c) cell phones and other portable technology devices; d) insects and animals; e) driver behaviors (e.g., eating, smoking, personal grooming) 				
Week 6	<p><input type="checkbox"/> Module Five – Information Processing: Moderate Risk Driving Environment</p> <p>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</p> <ul style="list-style-type: none"> a) synthesizing information visually from the driving environment, using a space-management process; b) applying following-distance, time, and space concepts; c) selecting gap and judging distance; d) estimating passing-time and space needs; e) identifying and responding to open or closed space and changes to line-of-sight or path-of-travel. <p>DE.5 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</p> <ul style="list-style-type: none"> a) roadway signs, signals, and markings; b) right-of-way rules; c) slope/grade of terrain; d) vehicle position and speed control. <p>DE.6 The student will identify the characteristics of an expressway and apply risk-reducing expressway driving strategies. Key concepts/skills include</p> <ul style="list-style-type: none"> a) entering, merging, integrating into, and exiting from traffic flow; b) managing interchanges; c) selecting vehicle position and changing lanes; d) managing toll facilities. <p>DE.7 The student will demonstrate the ability to communicate presence and intentions to other highway transportation users. Key concepts/skills include</p> <ul style="list-style-type: none"> a) vehicle position and driver action; b) vehicle communication devices; c) hand signals (i.e., slow/stop, right and left turns) 	<p>DE. 4</p> <p>DE. 5</p> <p>DE. 6</p> <p>DE. 7</p>	<p>M.5 T.1-3</p>	<p>Information Processing: Moderate Risk Driving Environment</p>	<p>M.5 Worksheet M.5 Quiz M.5 Test</p>
Week 7	<p><input type="checkbox"/> Module Six – Information Processing: Complex Risk Environments</p> <p>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</p> <ul style="list-style-type: none"> a) seating and hand position; b) steering, braking, and acceleration; c) compensating for shifts in vehicle load (from side to side, 	<p>DE. 3</p> <p>DE. 4</p> <p>DE. 5</p>	<p>M.6 T.1-3</p>	<p>Information Processing: Complex Risk Environments</p>	<p>M.6 Worksheet M.6 Quiz M.6 Test</p>

	<p>front to rear, and rear to front) that affect vehicle performance;</p> <p>d) front tire traction loss (understeer) and rear tire traction loss (oversteer);</p> <p>e) types of collisions—head-on, near-frontal, broadside, rear-end, rollover, sideswipe.</p> <p>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</p> <p>a) synthesizing information visually from the driving environment, using a space-management process;</p> <p>b) applying following-distance, time, and space concepts;</p> <p>c) selecting gap and judging distance;</p> <p>d) estimating passing-time and space needs;</p> <p>e) identifying and responding to open or closed space and changes to line-of-sight or path-of-travel.</p> <p>DE.5 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</p> <p>a) roadway signs, signals, and markings;</p> <p>b) right-of-way rules;</p> <p>c) slope/grade of terrain;</p> <p>d) vehicle position and speed control.</p> <p>DE.6 The student will identify the characteristics of an expressway and apply risk-reducing expressway driving strategies. Key concepts/skills include</p> <p>a) entering, merging, integrating into, and exiting from traffic flow;</p> <p>b) managing interchanges;</p> <p>c) selecting vehicle position and changing lanes;</p> <p>d) managing toll facilities.</p> <p>DE.7 The student will demonstrate the ability to communicate presence and intentions to other highway transportation users. Key concepts/skills include</p> <p>a) vehicle position and driver action;</p> <p>b) vehicle communication devices;</p> <p>c) hand signals (i.e., slow/stop, right and left turns).</p> <p>DE.20 The student will demonstrate competency in map-reading and trip-planning skills. Key concepts/skills include</p> <p>a) route planning;</p> <p>b) map-reading and trip-planning technologies.</p>	<p>DE. 6</p> <p>DE. 7</p> <p>DE. 20</p>			
<p>Week 8</p>	<p><input type="checkbox"/> Module Seven – Driver Performance: Personal Factors</p> <p>DE.8 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</p> <p>a) prescribed and over-the-counter medications;</p> <p>b) illegal or illicit drugs;</p> <p>c) effects of alcohol and other drugs on vision and space management;</p> <p>d) synergistic effects of drugs;</p> <p>e) ways alcohol is eliminated from the body.</p> <p>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</p> <p>a) positive and negative peer pressure;</p>	<p>DE. 8</p> <p>DE. 9</p> <p>DE. 10</p> <p>DE. 11</p>	<p>M.7 T.1-6</p>	<p>Driver Performance: Personal Factors</p>	<p>M.7 Worksheet M.7 Quiz M.7 Test</p>

	<p>b) refusal and peer-intervention skills;</p> <p>c) Implied Consent, Zero Tolerance, and Use and Lose laws;</p> <p>d) Administrative License Revocation, loss of license, ignition interlock, and other licensing restrictions;</p> <p>e) court costs, insurance requirements, Virginia Alcohol Safety Action Program referral, and other costs.</p> <p>DE.10 The student will recognize the consequences of aggressive driving and other emotions that influence driving behaviors. Key concepts include</p> <p>a) stress and anxiety;</p> <p>b) anger management;</p> <p>c) the relationship between aggressive driving and road rage.</p> <p>DE.11 The student will analyze the effects of fatigue and other physical conditions on driver performance. Key concepts include</p> <p>a) short- and long-term physical and mental disabilities;</p> <p>b) chronic health conditions;</p> <p>c) circadian rhythms;</p> <p>d) sleep deprivation.</p>				
Week 9	<p><input type="checkbox"/> Module Eight – Driver Responsibilities: Adverse Conditions</p> <p>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</p> <p>a) driving at night;</p> <p>b) smoke- and weather-related conditions;</p> <p>c) road conditions and construction;</p> <p>d) vehicle stability and traction control systems.</p> <p>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</p> <p>a) active restraint systems;</p> <p>b) passive restraint systems;</p> <p>c) child restraint systems;</p> <p>d) highway safety design.</p> <p>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</p> <p>a) evasive maneuvers, using braking and steering combinations;</p> <p>b) off-road recovery;</p> <p>c) front and rear traction control.</p>	<p>DE. 13</p> <p>DE. 14</p> <p>DE. 15</p>	<p>M.8 T.1-5</p>	<p>Driver Responsibilities: Adverse Conditions</p>	<p>M.8 Worksheet M.8 Quiz M.8 Test</p>
Week 10	<p><input type="checkbox"/> Module Nine – Driver Responsibilities: Vehicle Functions</p> <p>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</p> <p>a) pedestrians and animals;</p> <p>b) bicycles, scooters, mopeds, and motorcycles;</p> <p>c) tractor-trailers, trucks, and construction vehicles;</p> <p>d) sport utility vehicles, recreation vehicles, and trailers;</p> <p>e) emergency vehicles;</p> <p>f) funeral processions;</p> <p>g) passenger and school buses;</p> <p>h) farm machinery and horse-drawn vehicles.</p> <p>DE.17 The student will compare vehicle-braking systems and explain proper braking techniques for various weather and roadway conditions. Key concepts/skills include</p>	<p>DE. 16</p> <p>DE. 17</p> <p>DE. 18</p>	<p>M.9 T.1-4</p>	<p>Driver Responsibilities: Vehicle Functions</p>	<p>M.9 Worksheet M.9 Quiz M.9 Test</p>

	<p>a) conventional brake systems of small and large vehicles; b) two- and four-wheel anti-lock brake systems (ABS); c) controlled braking, trail braking, threshold braking, and antilock braking.</p> <p>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</p> <p>a) vehicle warning devices; b) lights and signals; c) steering and suspension systems; d) tires and braking systems; e) cooling system and belts; f) fuel and ignition electronics.</p>				
Week 11	<p><input type="checkbox"/> Module Ten – Driver Responsibilities: Making Informed Choices</p> <p>DE.19 The student will identify and describe the legal aspects of and calculate the financial responsibilities associated with purchasing, operating, maintaining, and insuring a motor vehicle. Key concepts include</p> <p>a) 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; f) collision involvement.</p> <p>DE.20 The student will demonstrate competency in map-reading and trip-planning skills. Key concepts/skills include</p> <p>a) route planning; b) map-reading and trip-planning technologies.</p> <p>DE.21 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</p> <p>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; e) energy conservation, alternative or renewable sources of energy, and conservation of natural resources.</p>	DE.19 DE.20 DE.21	M.9 T.1-4	Driver Responsibilities: Making Informed Choices	M.10 Worksheet M.10 Quiz M.10 Test
Week 12	<p><input type="checkbox"/> Module Eleven – Laboratory Instruction – Behind-the-Wheel and In-Car Observation</p> <p>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</p> <p>a) driving at night; b) smoke- and weather-related conditions; c) road conditions and construction; d) vehicle stability and traction control systems.</p> <p>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</p> <p>a) active restraint systems; b) passive restraint systems; c) child restraint systems;</p>	DE.13 DE.14 DE.15 DE.16 DE.17	In Car	Laboratory Instruction – Behind-the-Wheel and In-Car Observation	Seven 50 min. on road driving sessions Seven 50 min. in car observations

	<p>d) highway safety design.</p> <p>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</p> <p>a) evasive maneuvers, using braking and steering combinations;</p> <p>b) off-road recovery;</p> <p>c) front and rear traction control.</p> <p>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</p> <p>a) pedestrians and animals;</p> <p>b) bicycles, scooters, mopeds, and motorcycles;</p> <p>c) tractor-trailers, trucks, and construction vehicles;</p> <p>d) sport utility vehicles, recreation vehicles, and trailers;</p> <p>e) emergency vehicles;</p> <p>f) funeral processions;</p> <p>g) passenger and school buses;</p> <p>h) farm machinery and horse-drawn vehicles.</p> <p>DE.17 The student will compare vehicle-braking systems and explain proper braking techniques for various weather and roadway conditions. Key concepts/skills include</p> <p>a) conventional brake systems of small and large vehicles;</p> <p>b) two- and four-wheel anti-lock brake systems (ABS);</p> <p>c) controlled braking, trail braking, threshold braking, and antilock braking.</p> <p>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</p> <p>a) vehicle warning devices;</p> <p>b) lights and signals;</p> <p>c) steering and suspension systems;</p> <p>d) tires and braking systems;</p> <p>e) cooling system and belts;</p> <p>f) fuel and ignition electronics.</p>	<p>DE. 18</p>			