DRIVER EDUCATION PROGRAM

North Carolina Standard Curriculum Guide

Adopted March 3, 2011

PUBLIC SCHOOLS OF NORTH CAROLINA
State Board of Education | Department of Public Instruction

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PUBLIC SCHOOLS OF NORTH CAROLINA
DEPARTMENT OF PUBLIC INSTRUCTION | June St. Clair Atkinson, Ed.D., *State Superintendent*
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FOREWORD

We are pleased to provide this standard curriculum for use in all Drivers Education Programs funded with state funds. As directed in the 2010-11 Special Budget Provision of the NC General Assembly, this curriculum has been developed and is ready for use in the school year beginning in the fall of 2011.

In developing this curriculum document, the NC Department of Public Instruction worked collaboratively with the Highway Safety Institute, UNC-Chapel Hill, East Carolina University, the North Carolina Driver and Traffic Safety Education Association as well as the NC Department of Transportation, Division of Motor Vehicles, the NC State Highway Patrol, and other interested groups. In addition, numerous national, state and local experts, resources and research data and trends were utilized in the design of this curriculum.

This publication is a resource designed to enhance instruction so that each student receives the necessary information to develop knowledge, skills and the proper attitude to become a safe driver. While the required 30 hours of Driver Education classroom instruction is conducted outside the regular school day, it remains a critical part of a student's learning experience. It is my desire for our students to graduate having received all the necessary education leading them to be healthy and responsible students and successfully prepared for life in the 21st century.

People are much safer traveling our highways today than 20 years ago which is attributed mostly to better highway engineering, enactment and enforcement of traffic safety laws and education. I believe that quality driver education programs will help to insure that this trend continues.

Sincerely,

June St. Clair Atkinson

June St. Clair Atkinson

JSA:mw

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AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

North Carolina Driver Education Program

Our society today is in the midst of change. We seem to have become intrigued with new gadgets and with social networking venues and the opportunity they allow for us to always be connected. In years past, teens had to drive to the mall, to the grocery store parking lot or to the movies to get connected with other teens. Although driving is not absolutely required for teens to stay connected any longer, a driver's license still represents a considerable amount of freedom for our teens today. Today's youth still view the mobility and freedom associated with driving as tangible evidence of their becoming an adult. Driving still represents a certain rite of passage.

Because the automobile remains such an important component in our changing society, we need to be certain that all of our youth learn to drive using quality standards. This curriculum guide will demonstrate for our teachers how to give each student excellent information on how to become a safe and responsible driver. Using this guide will give the students that we teach a solid foundation in their learning to drive process.

Connie Sessoms, Jr.
President, North Carolina Driver and Traffic Safety Education Association
President Elect, American Driver and Traffic Safety Education Association

The development of this Driver Education Curriculum document represents the efforts of numerous professionals from a variety of agencies in the areas of driver and traffic safety education. The North Carolina State Board of Education expresses special thanks to the individuals listed below for leadership, curriculum design and dedicated service in creating this curriculum guide.

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UNIT ONE
BASIC CAR CONTROL
STUDENT OBJECTIVES

1. Students will be able to explain the three basic performance capabilities of vehicles.
    a. acceleration and speed
    b. directional control and cornering
    c. deceleration and braking

2. Students will be able to explain the two types of acceleration.

    The two types of acceleration are static and dynamic.
        a. Static acceleration is the capability of the vehicle to move from a stationary position to a given speed in a desired time or distance.
        b. Dynamic acceleration is the vehicle's capability to increase from one given speed to a higher one.

3. Students will be able to explain the three basic methods for controlling a car's acceleration capabilities.

    The three basic methods for controlling a vehicle's acceleration capabilities are:
        a. Creeping; a very slow and steady movement of a care without stalling or jerking.
        b. Smooth acceleration; a gradual build-up of speed from a stopped position or from a given speed to a higher speed.
        c. Rapid acceleration; the quickest for a maximum amount of increase in speed that the vehicle is capable of for the given conditions.

4. Students will be able to explain directional control and cornering.

    The ability to control the vehicle's direction depends on the vehicle's directional control and cornering ability.
    a. Directional control is the ability of a vehicle to hold a straight line. A series of slight steering wheel movements are required to keep a car centered in its lane due to wandering caused by road contour, traction and wind.
    b. Cornering is the capability of a vehicle to be steered around a turn without leaning too much. When going around a turn, a vehicle may oversteer or understeer. Oversteering is the tendency of a vehicle's front end to move to the inside of the pathway being steered toward.

5. Students will be able to list 3 ways to decrease the speed of a vehicle.

    Deceleration or decreasing the speed of a vehicle may be accomplished by different methods depending upon the situation or condition.
    a. using engine compression
    b. using downshifting
    c. using service brake system
    d. using parking/emergency brake

6. Students will be able to explain how to put the vehicle in motion efficiently.

Starting Motion

a. Check selector lever to see if it is in park
b. Apply foot brake with right foot and hold securely through step g.
c. Turn ignition switch to start, release when engine changes sound.
d. Move selector lever to drive position.
e. Release parking brake.
f. Check for traffic in rearview mirror.
g. Signal and check blind spot by looking over shoulder.
h. When move can be made safely, move foot from brake to accelerator, press gently and steer into proper lane.

7. Students will be able to explain how to enter and leave traffic safely without slowing down other traffic.

Entering Traffic

a. Signal
b. Check mirrors.
c. Check blindspots.
d. Position in lane.
e. Cancel signal

Leaving Traffic

a. Signal.
b. Check mirrors.
c. Position in lane.
d. Cancel signal

8. Students will be able to explain how to enter and leave expressway traffic safely without slowing down other traffic.

Expressway Entry

a. As you move along the entrance ramp make sure you are not closing in on other traffic ahead.
b. Signal left to show intentions of entering traffic and check to the left over your shoulder for an adequate gap into which you can merge. Continue to check to the front also.
c. Enter acceleration lane and accelerate to the speed of traffic on the expressway. Continue checking gap by glancing left over you shoulder.
d. When you have identified a safe gap, accelerate and steer left to merge. Adjust your speed to blend with the traffic.

Expressway Exit

a. Position car in lane closest to exit ramp. Lane changes may be necessary to achieve this. Change only one lane at a time.
b. Signal as you approach the deceleration lane and steer as you reach it. (This is the same procedure as a lane change).

c. Once in the deceleration lane, reduce speed to the posted ramp speed before entering exit ramp.

9. Students will be able to explain proper hand position for straight line driving, turns and backing up.

Straight line driving - Both hands should be on the steering wheel in a balanced position. The best position is at 9 and 3 or 10 and 2 as on the face of a clock. Keep arms and wrists relaxed.

Turns -Use hand-over-hand steering technique. Always grip the wheel from the outside, knuckles facing outward. Start all turns from10 and 2 or 9 and 3 hand position. Pull down with left hand to start left turn (Procedure for right turns). As left hand reaches the bottom, it comes off as the right hand continues to pull down. Left hand crosses over right hand and continues to pull down. Continue this procedure as needed for the turn. Loosen grip on wheel and let wheel straighten. Keep hand contact with wheel for control. Sometimes wheel may not straighten itself, so be ready to turn to straighten.

Straight backing - Place left hand near the top of the steering wheel with right arm on the back of the seat or on passenger seat.

10. Students will be able to explain how to make proper steering corrections to keep the vehicle on a desired path of travel.

All steering corrections should be made gently and smoothly with a slight pull down on the steering in the direction you want the car to go. Do not push up to steer.

UNIT TWO
H.T.S.
STUDENT OBJECTIVES

1. Students will be able to define the Highway Transportation System (HTS).
   The highway transportation system is a sub-system of the national transportation system, composed of many man/machine/environment combinations interacting in a loosely coordinated fashion.

2. Students will be able to list the three components of the HTS.
   The three components of the HTS are: Man, machines, and the environment they operate in.

3. Students will be able to state the goal of the HTS.
   The goal of the HTS is to provide safe, rapid and efficient transportation of persons and goods to a desired destination, in an environmentally sound fashion.

4. Students will be able to discuss the balance between safe, rapid and efficient travel.
   There has to be a balance between safe, rapid, and efficient. There is a balance between speed and safety, the faster we allow people to drive, the most speed related deaths. The more left turn yield traffic lights, the most accidents at those intersections. Right turn on red produces more accidents. What is the "acceptable" accident/injury/death rate for each?
   a. Assignment: Go to the Internet, and find articles regarding speed limits/accidents/deaths. www.highwaysafety.org
   b. Find related links.

5. Students will be able to state the death rate on US highways.
   The death rate on US highways is 1.16 deaths per 100,000,000 miles traveled. This is for all motor vehicles, 2009.

   The death rate on North Carolina highways is 1.32 deaths per 100,000,000 miles traveled. This is for all motor vehicles, 2009.

6. Students will be able to state the number of motor vehicle deaths in the US in the most recent year.
   There were nearly 34,000 motor vehicle related deaths in the US in 1999.
   There were 1,347 motor vehicle related deaths in North Carolina in 2009.

7. Students will be able to state the number of MV deaths in the US that involve alcohol.
   Of the 34,000 motor vehicle related deaths, about 12,000 (36%) were alcohol related. An additional 6,000 (18%) were drugs other alcohol.
   a. http://www.nhtsa.dot.gov.

In North Carolina alcohol accounted for 11,253 crashes, 394 fatalities and 8,736 injuries in 2009. This means that while alcohol played a part in just 5% of the total crashes, it accounted for 30% of all fatalities and 13% of all injuries.

8. Students will be able to list ten users of the HTS.

There are many users of the HTS.

a. Cars/SUVs make up most of the vehicles on today's highways. SUVs make up about 50% of all new vehicle sales.
b. Large trucks make up about 3% of vehicles on the roads today.
c. Buses are the safest means of highway transportation.
d. Motorcycles are the most dangerous type of highway transportation making up 4,800 deaths in 2009. (3,611 crashes, 394 fatalities and 8,736 injuries in North Carolina in 2009)
e. Bicycles account for about 750 deaths in the US each year. (400 head injury deaths) (13 fatalities in North Carolina in 2009)
f. Mopeds account for about 1200 deaths in the US each year. (25% DWI)
g. Pedestrians account for about 7,400 motor vehicle related deaths each year (18% of MV deaths)
h. Recreational vehicles, motor homes, trailers, boats etc. all add challenges for the driving public.
i. Farm vehicles because of size, speed restrictions, license requirements, present challenges.
j. Military vehicles also present unique legal problems if you hit them.
k. Emergency vehicles such as police, fire and rescue, create unique hazards for the driving public.

9. Students will be able to explain the problems and advantages of sport utility vehicles (SUVs).

SUVs are bigger, higher and safer for the occupants of them. But they are deadly for the smaller, lower vehicles that they run into (or over). The new Ford SUV weighs over 7,000 lbs. compared to most small cars weighing between 2000-3000 lbs. In accidents, the bigger, higher, survive. The problems of SUVs include high center of gravity, causing them to roll over, and gas mileage. The new Ford gets about ten miles per gallon. When gas prices rebound from the current bottom, and go much higher, the MPG of these vehicles will become more of an issue. The federal government is looking into ways to reduce size, height, and rigidity of these SUVs. In addition, the US government is considering requiring Stability Control Systems for these SUVs.

a. www.highwaysafety.org

10. Students will be able to explain the crash involvement problem of large trucks.

Large trucks create problems too. Although they account for only 3% of registered vehicles, they account for 7% of the miles traveled, and 11% of the fatal accidents (5300 deaths in 1998). A very small percentage of those killed are the truck driver. Again, weight wins. Trucks weigh in excess of 80,000 lbs.

Although alcohol involvement is only about 4%, marijuana use in fatal truck accidents, is estimated around 23%. (Not a misprint)

The "No-Zone" represents the danger areas around trucks and buses where crashes are more likely to occur. Some No-Zones are actual blind spots or areas around trucks and buses where your car "disappears" from the view of the drivers. These blind spots are the Side No-Zone, Rear No-Zone, and Front No-Zone areas. The right-side blind spot is doubly dangerous because trucks and buses make wide right turns! Knowing the No-Zones can save your life!

http://www.nozone.org/noZone/whatIsthenozone.asp

11. Students will be able to state the death rate of motorcycles in the US.
    Motorcycles are by far the most dangerous form of transportation. The death rate for motorcycles is about 37 deaths per 100,000,000 miles traveled, compared to 1.7 for all motor vehicles. You do not have to be wrong to die on a motorcycle, 70% of MC deaths are failure to yield to the motorcycle, but the motorcyclist is the one dead.

12. Students will be able to explain the problems with MOPEDs.
    MOPEDs are a part of the US highways. They are not a bicycle and not a motorcycle. They are slow, often operated by persons without a driver's license, and cause for concern as you approach them with a motor vehicle. Predict the worst. The only requirement to operate a MOPED is to be 16 and wear a DOT approved helmet.

13. Students will be able to explain the problems with farm vehicles.
    Farm vehicles have a right to use the highways. They create problems because they are slow, 15-18 mph, larger than the highway lane and can be operated by unlicensed persons, even minors. They cause drivers to take unnecessary chances in passing them.

14. Students will be able to state the number of pedestrian deaths each year in the US.
    There are about 4100 pedestrian/vehicle deaths each year in the US, 12% of all motor vehicle deaths. (1,667 crashes, 147 fatalities and 1,682 injuries in north Carolina in 2009)

15. Students will be able to explain the right of way considerations dealing with emergency vehicles.
    It is the responsibility of the driving public to yield to emergency vehicles. Emergency vehicles do NOT have the right of way, but drivers are required to yield to them. Each year

many deaths are a result of failure to yield right of way. Of further concern are the vehicles the police are chasing. They have no lights, siren and seeming disregard for the safety of others. Many enforcement agencies are rethinking the need to "chase". NEVER assume right of ways at intersections, green means go when the way is clear.

North Carolina has a “Move Over” law. The law requires motorists slow down and approach cautiously when an emergency vehicle is stopped on the shoulder of the roadway with its lights flashing. Motorists are required to move over to another lane away from the emergency vehicle on a multi-lane highway or slow down on a two lane highway and can do so safely. Motorists must slow down while maintaining a safe speed. G.S. 20-157 (f).

Effective July 1, 2006, fines increased to $250 along with the possibility of being charged with a felony if a collision occurs that results in serious injury or death.

16. Students will be able to define the driving task.
    The driving task involves everything it takes to operate a motor vehicle.

17. Students will be able to list and explain the three skills of the driving task.
    The three skills of the driving task are:

a. Physical skill: the person's coordination with the vehicle. Although an important part of driving, often over emphasized.

b. Social skill: the interaction with others on the highways. Unfortunately, we are not very social people. Drivers are often rude and inconsiderate. Road rage is on the rise and much of that has to do with our unsociable behavior while driving.

c. Mental skill. Driving is a mental skill. Anyone can physically drive a vehicle, but breakdowns in the HTS are usually poor decision-making skills. There are at least five mental skills of the driving task.

1. Understanding the motor vehicle. We must understand the vehicle; anti-lock brake systems are a good example of lack of understanding. People pump the brakes instead just push the pedal.
2. Perception based on stored knowledge. The brain's interpretation of what the eyes based on similar things seen before.
3. Understanding traffic laws.
4. Judge time/space relationships, such as judging the speed of oncoming cars.
5. Concentration.

18. Students will be able to list and explain the six means of management of the HTS.

There are at least six means of management of the HTS.

a. DMV. The department of motor vehicles regulates drivers licenses, truck weights and operators, license plates, fees, registration, taxes, titles to name a few. All with the intent of making the system safer for all users.

b. Enforcement agencies. Each of the police units, highway patrol, sheriff departments help in maintaining safe travel.

c. Traffic courts. The courts help assure proper enforcement of the law.

d. Engineering.

1. Highway engineering helps to make our HTS the safest system in the world.

2. Vehicle engineering helps to make vehicles the safest and easiest to operate (as well as the cleanest).

e. Medical Aid. The emergency response system and trauma centers in the US, reduce the losses caused by collisions.

f. Education. PSAs, high school driver education, truck drivers education, alcohol drugs education treatment schools, etc.

19. Students will be able to sate the three goals of driver education.

The goals of driver education are simple.

a. Provide entry level competencies (abilities) for beginning drivers.

b. Knowledge and thought processes.

c. Motivate students to be better/safer drivers.

UNIT THREE
LICENSES AND PERMITS
STUDENT OBJECTIVES

1. Students will be able to explain the purpose of driver licensing.
   The purpose of driver licensing is to assure that no one using the HTS is an unreasonable risk to themselves or others.

2. Students will be able to list the three driving permits used in North Carolina.
   There are three types of permits available for use in North Carolina. They are:

   a. A "Driver Education" permit. This is the paperwork to prove age, (eligible to enroll in driver education) Social Security number (to prove registration), and eyesight. A driver education teacher must have this paperwork with him/her any time a student is behind the wheel. This information is usually secured by the DMV representative when administering the vision test. (20/40 "corrected" is considered the standard).

   b. A Limited Learner's Permit. This permit requires: (Level 1)

   1. Successful completion of driver education (certificate)
   2. Be 15 years old
   3. A Driving Eligibility Certificate (DEC)
   4. Pass the DMV written test, sign test
   5. Pay $10

   This permit allows a child to drive with a properly licensed parent of guardian (maximum of two) and is good for 18 months.

   c. A temporary learner's permit. This permit allows 16 year olds (or older) to drive with any licensed driver over 18 years. They must have passed driver education, and be in school if under 18 years. Over 18 there are no requirements other than, if not already completed, they must:

   1. Pass the vision test
   2. Pass the DMV written test
   3. Produce a social security card (or other proof)
   4. Prove their age.

   This permit is $10, and is good for 18 months as well.

3. Students will be able to explain the Graduated License law in North Carolina.
   The graduated license law is an attempt to allow licensure at age 16 without just turning these inexperienced, immature children out on the general public. It is generally accepted that a person needs at least 30,000 miles of driving experience to get to "average". Six hours of BTW (behind the wheel) is just a drop in the bucket of the necessary experience needed. Therefore, the graduated license law is being used around the world, nation and North

Carolina, in an attempt to reduce the accident involvement of beginning drivers. 25% of 16 year olds, 17% of 17 year olds, 14% of 18-19 year olds, 10% of 20-24 year olds are involved in a traffic accident each year. Those over 24 years have a 5% involvement rate.

The North Carolina graduated license law is required by anyone under 18 who wants to drive in this state. It has been in effect since December 1, 1997. Level one has the following requirements:

a. Pass an approved driver education course
b. Have a limited learner's permit for one year
c. Limited to driving 5 am to 9 pm during the first six months
d. .00 BAC
e. All occupants of the vehicle belted in
f. Drive with licensed driver with five years experience
g. Must complete 6 months driving without any type of moving violation before "graduating" to the next level.
h. You must have this permit for 12 months.

Level two (intermediate) license. This license allows a 16 year old to drive alone under the following conditions:

a. .00 BAC
b. All passengers belted in
c. 5 am to 9 pm
d. After 9 pm with licensed driver with five years experience
e. Must be violation free for six months to "graduate". Any violation starts the six months over again. Repeat until age 18.
f. Only one peer passenger is allowed.

Level three of the graduated license law is the provisional license. By definition, a provisional license is anyone under age 18. (not the above).

Cell phones including texting, are prohibited at all three levels, except for emergencies.

At age 18, a standard class C license is obtained.

4. Students will be able to explain the Dropout Prevention law in North Carolina.

Now the new (August 1998) dropout prevention law also requires those under 18 to be in school and successfully moving towards graduation to obtain or retain their permit or license.

The purpose is to use the driver's license as an incentive to stay in school, and graduate. Dropout rates are above 15% and considered unacceptable.

North Carolina's version of a dropout prevention law went in to effect in August of 1998 and includes:

a. Applies to those under 18
b. Must be in school

c. Must make satisfactory progress towards graduation. i.e. pass 70% of their classes. This is essentially the same as the requirement to participate in high school athletics.

Students who do not meet these requirements, lose their permit, or license. If they reenroll, and/or pass a semester (70%) they may then get a DEC certificate from the principal and reapply for their permit or license. There is a $25 restoration fee and a $10 fee for the actual license or permit.

The school has the responsibility to keep records, notify DMV, supply DEC certificates and serve as an appeals board. They also deal with "hardship" cases. Hardships include:

a. Not able to pass classes
b. Provide for household needs. (Need a car to work and provide >50% of household income) is generally considered.
c. Medical constrictions
d. Other

So far, the law appears to be working in North Carolina. Only time will tell. For more information on any of the subjects above, contact: www.highwaysafety.org and click on facts.

5. Students will be able to define the three types of Classified Licenses In North Carolina.

The three classifications of driver's licenses in North Carolina were designed to allow person to only drive a vehicle type (class) that they are licensed to drive. We do not need just anyone driving a truck with gasoline, munitions, or other hazardous cargo. The three classifications are:

a. A class A license allows someone to drive any vehicle including combination vehicles in excess of 26,000 lbs.

b. A class B license allows someone to drive a single vehicle in excess of 26,000 lbs.

c. A class C license allows someone to drive a combination vehicle up to 26,000 lbs. a

6. Students will be able to list and explain the six license endorsements in North Carolina.

Each of these licenses may have restrictions and/or endorsements. Endorsements include:

H	Hazardous materials
M	Motorcycles
N	Tank vehicles
P	Passengers
T	Double trailers
X	Combination of H & N

7. Students will be able to list and explain the license restrictions which are used in North Carolina.

Restrictions include:

L	No air brakes
S	School bus
O	None
1	Corrective lenses
2	45 mph max.
3	Daylight only
4	NC intrastate only
5	Wrecker only
6	Mobile home transport only
7	Outside mirror required
8	No tractor trailers
9	Others as shown
10	Accompanied by licensed driver with five years experience
11	Drive from 5 am to 9 pm only
12	Automatic transmission only
13	Passenger class B&C
14	Passenger class C

There is no additional charge for these restrictions.

8. Students will be able to explain the Commercial Driver's License (CDL).

As of April of 1992, the federal government has required stated to have Commercial Driver's Licenses. (CDL). In NC, a person can get a class A, B, or C CDL. The tests are different and involve written and road tests with and about the commercial vehicle you plan to drive. Your license will be issued for a period of 5 or 8 years depending on your age. Ages 18 through 65 will be issued for 8 years. Ages 66 and older will be issued for 5 years. The cost of your license and any endorsements will be computed based on the yearly charge.

9. Students will be able to explain a provisional license in North Carolina.

A provisional license in NC is any licensed driver under age 18. The purpose is to restrict those not yet legally adults, and hold them to a higher standard of conduct. Such as:

a. Require driver education
b. Different BAC penalties
c. Graduated license and dropout laws

10. Students will be able to explain what a DL-123 form is and what it is used for.

A DL 123 form is proof of liability insurance. It is obtained from you insurance agent to prove to DMV that a person is insured. This form is used for at least:

a. New drivers
b. Renewals with driver license points
c. To get a limited privilege for DWI

11. Students will be able to explain implied consent.

The implied consent law is simply, when you get a drivers license in NC, you agree that you know what the laws are in the state and that you agree to abide by them. If you cannot agree to these terms, don't get a license. This also applies to those driving in another state (or ours). If you use that state's roads, it is implied that you know that state's laws and agree to abide by them. This applies to DWI, radar detectors, and construction zones (any traffic law including the breathalyzer).

12. Students will be able to explain DMV Identification cards.

The state of NC allows minors and adults to obtain a DMV ID card. This allows persons without a license to cash a check, rent a video, or buy alcohol. The cost is $10.

13. Students will be able to explain the need for organ donors, and the designation on a driver's license.

The driver's license is also used to identify possible organ donors. The decision to donate can be included on your driver's license. This is used by emergency medical personal to contact next of kin, and start the process. There is no reason not to donate. We lose about 80% of available organs each year in this country while thousands wait for those organs. (7/DAY DIE waiting). For more information visit www.transweb.org/

14. Students will be able to state the time frame in which they must have information corrected on their driver's license in NC.

In NC, a person has 60 days to change their address on their license. This is required when you change permanent addresses, or move into this state as a resident. You must also get a new license when you change your name.

15. Students will be able to explain the Lose Control, Lose Your License law.

"Lose Control, Lose Your License" law. Effective July 1, 2000. The law will suspend a license or permit of a student for one year for: Being suspended for more than 10 consecutive days or assigned to an alternative educational setting for more than 10 days for one of the following:

1. Possession or sale of an alcoholic beverage or an illegal controlled substance on school property.
2. Possession of a weapon on school property.
3. Physical assault on a teacher or other school personnel on school property.

Students who are at lease 14 years old on July 1, 2000 are subject to this law. The year’s suspension can go beyond their 18th birthday.

UNIT FOUR
SIGNS, SIGNALS, & TRAFFIC MARKINGS
STUDENT OBJECTIVES

1. Students will be able to state the general principle of traffic signs.

   The general principle of traffic signs is to make a message known quickly, (70mph) accurately, with minimum reading skills required. This should allow traffic to meet the goal of the HTS with safe, rapid, and efficient transportation. Poor signs, signal, and traffic markings can lead to a break down in the system. They are recognizable by shape and color, message, and diagram.

2. Students will be able to list and explain the three types of traffic signs.

   There are three types (classifications) of traffic signs. They are regulatory, warning and guide.

   a. Regulatory. These signs are regulations. They are to be followed and not doing so could result in a citation (or worse).

      1. Stop signs. Stop signs are red octagons and mean come to a complete stop. They are the only sign so shaped. Easily recognizes at a distance.
      2. Yield signs. Yield signs are red and triangular. This sign requires a driver to allow other drivers first use of the road.
      3. Speed limit signs. Speed limit signs are white with black lettering. They are also vertical rectangles. They can also be orange. A construction speed limit is a regulatory sign as well. North Carolina posts a black and white sign along with the orange work zone sign to remind drivers of this fact. There can be minimum speed limits too. These are normally found on interstate highways. Although there could be minimum speed limits elsewhere, they must first be posted by the highway department.
      4. Other regulatory signs also include: Do not enter, one way, no passing, no left or U turn. These are combinations of white, black and/or red.

   b. Warning signs are information to warn drivers of hazards they are about to encounter. They are usually yellow and diamond shaped. There are messages to help drivers understand these hazards. Although these are not regulatory signs, not heeding the warning may result in an accident and/or a citation for driving too fast for existing conditions. There are several other shapes used for warning signs. School zone warning signs are a pentagon. Railroad warning signs are round. No passing signs are a pennant shaped sign and are placed at the beginning of the no passing zone and on the left side of the road to make them visible to drivers trying to pass.

   c. Guide signs. Guide signs are used to inform drivers of routes, gas, food, lodging, hospitals, rest areas and others. Guide signs are designated by color and shape.
      1. Blue is motorist services (gas, food, lodging, hospitals, etc.)
      2. Green is for highways and route information.
      3. Brown is for recreational areas.

3. Students will be able to state the colors and their meaning, for each type of sign.
   See Chapter 2, Drive Right, other text, or DMV.

4. Students will be able to explain the meaning of each shape of traffic sign.
   See Chapter 2, Drive Right

5. Students will be able to explain the basic speed law.
   The Basic Speed law requires that a driver always drive at a speed safe for existing conditions. A driver may be sighted for speeding when traffic, roadways, or weather conditions are not ideal.

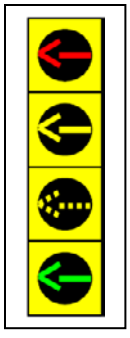
6. Students will be able to explain the "right of way" laws in North Carolina.
   There are no absolute "right of ways" in traffic. Each law is written describing which driver yields right of way. For example: the person on the left yields to the person on the right. The turning driver yields to the driver going straight. The person entering traffic yields to those in traffic. No one, including emergency vehicles, has absolute right of way.

7. Students will be able to restate the goal of the HTS.
   The goal of the HTS is to provide safe, rapid, and efficient transportation of persons and goods from one location to another.

8. Students will be able to list and explain five types of traffic lights.
   There are at least five types of traffic light systems.

There is a new style left-turn traffic signal head is designed to make it easier for drivers to know what to do when making a left turn. The traffic signal head adds a flashing yellow arrow. When the flashing yellow arrow is displayed, left turns are permitted but drivers **must yield** to oncoming traffic.

Here is what the new style left-turn traffic signal head looks like and what drivers should do as the light changes:



Solid Red Arrow – Stop. No turns are allowed.

Solid Yellow Arrow – clearance.

Flashing Yellow Arrow – Left turns are allowed, but first they must yield to oncoming traffic and pedestrians.
Solid Green Arrow – Left turns allowed, and they do not need to yield to oncoming traffic and pedestrians. Proceed with caution.

a. Progressive lights are set up so that traffic moving at the correct speed will be able to keep moving as the lights change in sequence.
b. Traffic activated lights are designed to change according to traffic loads. No traffic, no green light, many vehicles, longer green lights. The key to efficient use of these lights is to know what and how each intersection is set up. The uses of computer-assisted traffic lights are also traffic activated. They try to anticipate the traffic coming, not react to traffic that has just stopped.
c. Timed lights are the least expensive and therefore used in many smaller communities. They are set for so many seconds green for each direction of traffic.
d. Pedestrian activated lights are used at cross walks to aid their crossing of busy streets.
e. Railroad grade crossing lights are used to warn drivers of trains in close proximity to the crossing.

9. Student will be able to explain the colors of the traffic light.
The three colors used in traffic lights have specific meaning.
a. Red is always stop. If it is flashing red, you may go as if a stop sign. A solid red you might be allowed to turn under certain circumstances.
b. Green means you may go, if safe to do so. There is no right of way given by a green light.
c. Yellow is used for caution, but it is a clearance light. You may clear an intersection if the light is yellow, but you are not allowed to <u>enter</u> an intersection once the light has changed to yellow.

10. Students will be able to explain the Right on Red law in NC.
Drivers in all 50 states are allowed to complete a right turn on red but drivers must come to a complete stop, yield to any and all traffic and make sure there is no sign prohibiting the turn, before completing a right on red.

11. Students will be able to explain the Left on Red law in NC.
There is no left turn on red in NC. Many states do have one. A left on red law has been introduced into the NC legislature, but has never been passed.

12. Students will be able to explain multiple use lane signals.
In larger cities, the use of reversible lanes increases the capacity of the existing streets. Center lanes are reversed to allow heavy traffic, in one direction or the other, to have more lanes. These lanes are marked with a green arrow or a red X above the lane.

13. Students will be able to state the purpose of pavement markings.
Pavement markings, like signs and signals, are designed to move traffic safely, rapidly, and efficiently. Markings therefore, should communicate a simple, clear message for all highway users.

14. Students will be able to explain the difference between white and yellow pavement markings.
Generally, yellow traffic markings are used to separate traffic traveling in opposite directions. White liens are for marking sides of roadways, crosswalks, warnings, and to separate traffic traveling in the same direction.

15. Students will be able to explain the legal use of the left turn lane.
    Left turn lanes are usually yellow lines showing two-way traffic, and are used for exiting traffic. (See Drive Right or other text). At intersections, the left side of the lane may be double yellow while the right side is broken white. This means that this lane is one way for crossing the white lines. At no time is a driver supposed to pull into this lane to enter the traffic flow.

16. Students will be able to explain the approaching of a school bus on a five-lane street.
    The left turn lane is defined as a physical barrier meaning you are not required to stop for a school bus coming from the other direction. Watch out for other drivers who are not sure about this. Everywhere else, you must stop for a school bus with lights flashing designating children.

17. Students will be able to explain proper lane choices when driving.
    Drivers should choose a traffic lane with fewest conflicts. Law requires traveling in the right hand lane unless passing or turning left. In heavy traffic either lane is legal.

18. Students will be able to explain crosswalk markings.
    White crosswalks and marked in several different ways. Who yields right of way depends on traffic lights, and the type of marking. Standard crosswalks with two lines, depend on streets and lights. Bold markings are used for increased visibility.

19. Students will be able to state the use of blue pavement markings.
    Blue pavement markings are used for handicapped parking.

20. Students will be able to explain the use and purpose of HOV lanes.
    HOV lanes (High Occupancy Vehicles) are used in large cities to encourage car pooling. Generally, they are left lane(s) marked with a white diamond and require at least three occupants of a vehicle.

21. Students will be able to explain the pavement marking on freeway entrances and exits.
    All the freeway entrances and exits are white lines. Single solid lines are used to discourage changing lanes. Double white solid lines prohibit changing.

UNIT FIVE
DRIVING SYSTEMS
STUDENT OBJECTIVES

1. Students will be able to explain the three skills of the driving task.
   The three skills of the driving task are:
   A. Physical-coordination with the vehicle
   B. Social-interaction with other highway users
   C. Mental
      1. Understanding the motor vehicle
      2. Perception based on stored knowledge
      3. Understanding traffic laws
      4. Judging time/space relationships
      5. Concentration on task

2. Students will be able to explain what causes most motor vehicle accidents.
   Of the three components of the highway transportation system, 90-95% of accidents are caused by human errors.

3. Students will be able to list and explain the five steps of the Smith system.
   The five steps of the Smith System are:
   A. Aim high in steering. Look 12-15 seconds ahead of your vehicle.
   B. Keep your eyes moving. Move your sight to critical areas in an orderly visual search pattern.
   C. Get the big picture. Know everything around your vehicle that may affect you.
   D. Make sure others see you. Many accidents are caused by inattention. Make sure other highway users see you. Use your lights, horn; even drive a bright colored vehicle. Studies show daytime running lights reduce accidents by 7%.
   E. Leave yourself an out. Make sure to avoid collision traps. Do not leave your safety up to other drivers. You should always be able to get away from other highway users. Always leave an escape path for any mistakes you or others may make.

4. Students will be able to list four things necessary for safe driving.
   There are four things necessary for safe driving. They are: Traction, time, space and visibility.

5. Students will be able to list unsafe driving acts young people tend to make.
   Young people tend to make many unsafe driving acts. These include: driving too fast driving too close, inattention/distraction, right of way violations, sign non-observance, over estimating their ability while under estimating the risk.

6. Students will be able to explain eye lead time.
   Eye lead-time is how far you are looking down the road. When aiming high in steering, you are keeping track of 12-15 seconds in front of your vehicle. While most drivers look only 3-5 seconds down the road, research has shown that 80% of collisions could have been avoided had drivers had one more second to react.

7. Students will be able to explain how to determine a safe following distance.

Following distance should be at least tow to three seconds behind the vehicle in front under ideal conditions. As the vehicle in front passes a fixed object, your vehicle should not get to that spot for at least two to three seconds. In poor weather or road conditions, increase the time and distances between you and the other vehicles.

8. Students will be able to list four ways to deal with vehicles following too closely.

A major problem in traffic today is tailgating. You can reduce your chance of being rear-ended in several ways. First, increase your following distance so you do not need to make any sudden stops. Other ways include:

A. Move over/Change lanes
B. Slow down/pull over encouraging them to pass
C. Tap your brake lights to alert the driver behind
D. Signal your turns early/slow down early
E. Don't anger the following driver

9. Students will be able to explain an orderly visual search pattern.

An orderly visual search pattern consists of looking at all the traffic information in a systematic fashion. Look 12-15 seconds ahead of your vehicle, to the front and sides, scanning for anything that might come in front of your vehicle. Check mirrors on a regular basis. Keep track of all vehicles behind and around you in other lanes of traffic. Thirdly, check your vehicle instruments as necessary. This means knowing what the gauges and controls should be and what to do when a gauge is not reading normally.

10. Students will be able to list and explain the IPDE process.

The IPDE process is a way for highway users to better process the information available to them.

I: Identify. With your eyes moving and getting the big picture, your learn to identify potential hazards in the traffic scene.

P: Predicting potential conflicts are critical to collision free driving. Many drivers do not realize the risk of a collision until it is too late. Drivers must always be vigilant, predicting "worse case scenarios".

D: Decide what to do if the worst case comes true.

E: Execute your decision to slow down, change lanes, flash your lights are other actions to minimize the risk of a collision.

11. Students will be able to explain how drivers sort information.

Drivers must sort information as to importance, and then decide what things to deal with first. This ability to differentiate hazards is critical to collision free driving.

12. Students will be able to define perception.

Perception is the brain's interpretation of what the eyes see. We interpret based on previous experience and knowledge. That is why experience is critical to perception.

13. Students will be able to explain separating hazards.
    Separating hazards is predicting hazards ahead of you and adjusting your speed or direction to get to them individually instead of all at once.

14. Students will be able to explain compromising lane position.
    Compromising lane positions is to change lanes or even moving over to give more clearance between your vehicle and other highway users.

15. Students will be able to list four ways to communicate with other HTS issues.
    Ways to communicate with other drivers include: horn, lights, hand motions, turn signal, brake lights, even hazard lights.

UNIT SIX
PHYSICAL ASPECTS OF DRIVING
STUDENT OBJECTIVES

1. Students will be able to list the three components of the HTS.
   The three components of the highway transportation system (HTS) are: People, machines and the environment they operate them in.

2. Students will be able to explain the cause for most motor vehicle crashes.
   90-95% of vehicle accidents are caused by people not vehicles or roadways. Human errors are the problem in traffic accidents.

3. Students will be able to explain the purpose of driver licensing.
   The purpose of driver licensing is to make sure that no user of the HTS is an unreasonable risk to other users of the system or themselves.

4. Students will be able to explain the importance of vision on driving.
   Most information used when using the HTS, is acquired visually. Generally, it is accepted that 90% of driving information is received through the eyes.

5. Students will be able to list five things that may effect a person's vision.
   There are many things that may affect a person's vision. These are genetics, fatigue, smoking, alcohol or other drugs, age, illness such as allergies or colds. If 90% of driving information is received visually, we must have reasonable vision. NC requires 20/40 corrected vision.

6. Students will be able to explain field of vision.
   Field of vision is all the area you need in front of you. Normally people can see 180-210 degrees of the area to the front.

7. Students will be able to list the components of field of vision.
   Field of vision includes three types of vision.
   A. Central vision is the area where you see things clearly. The DMV eye test measures visual acuity, how clear central vision is.
   B. Fringe vision is outside central vision where you can recognize objects but not clearly.
   C. Peripheral vision is the outside of your field of vision where you see motion but not objects.

8. Students will be able to list five things that may affect a person's field of vision.
   There are many things which can affect your field of vision.
   A. Tunnel vision cause by genetics.
   B. Other traffic blocking parts of your field of vision.
   C. Your vehicle's design can block your vision.
   D. illness, even temporary illness can cause vision restrictions.

E. Age can reduce a person's field of vision as well as the other effects age can have on vision.

9. Students will be able to explain depth perception.
   Depth perception is the ability to judge distance.

10. Students will be able to explain the effect color blindness may have on driving.
    Although red and green are typically the affected colors, persons who are colorblind can compensate for the problem and are no greater risk of collisions because of their problems.

11. Students will be able to explain glare resistance and glare recovery.
    Glare resistance is the ability of the pupil to shut out light (glare). Glare recovery is the ability of the pupil to reopen once the bright light is gone and the eye needs to readjust to low light conditions.

12. Students will be able to explain alcohol as a sedative.
    Alcohol is a sedative. It affects many areas of the body from mental functions to relaxing muscles and reflexes.

13. Students will be able to list and explain five ways alcohol sedates the eyes.
    Alcohol sedates the eyes in at least five ways:
    A. Slowing the pupil, increasing glare and slowing glare recovery.
    B. Relaxing the muscles that control the lens reducing visual acuity.
    C. Sedating the retina causing problem of color recognition especially shades of darkness while driving. (Seeing pedestrians, bicycles or even the side of trains at night.)
    D. Binocular vision: the ability of the eyes to focus together on an object.
    E. Peripheral vision can be narrowed by alcohol.

14. Students will be able to explain why North Carolina has a DWI law.
    DWI (Driving While Impaired) only requires that a person have a blood alcohol concentration of.08 to be convicted of DWI. One reason is that no one can see well enough, even at .08 BAC to drive safely. They are an unreasonable risk.

15. Students will be able to list and explain six disabilities, which may affect a person's fitness to drive.
    Other disabilities that may affect a person's ability to drive include:
    A. Hearing loss. There is usually no increased risk because of visual compensation by the driver.
    B. Physically challenged persons are not normally a greater risk. Safe driving is a mental skill so physical limitations can usually be overcome.
    C. Age. Aging affects all of a person's senses, including vision, hearing, reactions, and even mental sharpness. These effects often appear over years and sometimes not recognized by persons as they age.
    D. Epileptics are allowed to have a driver's license (class C) if they are on medication and have gone seizure free for one year.

E. Diabetes is a major problem because of the serious effect of high or low blood sugar.
F. Mental ability. The DMV officer can ask for medical referral if he/she suspects an individual's mental ability may be a problem.

UNIT SEVEN
STUDENT OBJECTIVES

1. Students will be able to explain how we are emotional people.
   Emotions effect our every thought and action. We are not able to separate ourselves from our emotional state. We drive as we are.

2. Students will be able to explain two mental effects of emotions.
   The two mental effects of emotions are:
   a. Distraction from the driving task. Our thoughts tend towards the cause of the emotion.
   b. Reaction to events around us. If we are upset, we may tend to react in a more aggressive manner to others around us.

3. Students will be able to explain three physical effects of emotions.
   We are affected by emotions physically as well.
   a. Heart rate increases
   b. Digestion slows down
   c. Your body may release adrenaline as it prepares for a fight.
   d. Your body may produce coagulates in your blood system also preparing for a fight.

4. Students will be able to list six different emotions and the effects of each on a driver's concentration.
   Emotions range from highs to lows, all of which affect us and our ability to drive safely. They include:
   a. Anger
   b. Fear
   c. Anxiety
   d. Depression
   e. Discouragement
   f. Sorrow
   g. Even excitement can distract us.

5. Students will be able to explain four ways to reduce the effect of emotions on driving.
   There are several ways to reduce the effect emotions have on our driving.
   a. Recognize in yourself when you are not "at your best". Take a break or even let someone else drive.
   b. Recognize that other highway users are emotional people too and that they may have had a very bad day. We will look at "road rage" in a minute.
   c. Drive in an organized manner. Use all the correct driving procedures so that when your mind is not fully concentrating on the driving task, you are still following correctly, going a proper speed, using your turn signals, traveling in the right lane, etc out of habit.

6. Students will be able to explain the goal of emotional control.
   The goal of emotional control is to recognize and understand your mental and physical limitations and drive within those limits.

7. Students will be able to explain how to reduce the risk of road rage while driving.

   Road rage is an increasing problem on our highways today. There are thousands of road rage problems each year in the US. Do not challenge other drivers, do not make eye contact, get away from the situation, even dial 911, *Hp, or *SP and get help. Drive to the police station. Do not get out of your car. Keep in mind the other person may be armed and if upset, dangerous. For more information on Road Rage see: http://www.aaafts.org/Text/research/RoadRageFinal.htm

8. Students will be able to list ten risk factors people take in automobiles.

   There are many ways drivers increase their risk when driving. They include:

   a. Speeding
   b. Following too close
   c. Distractions such as:
      1. Radio
      2. CD player
      3. Cell phone/texting
   d. Vehicle type
   e. Vehicle conditions
   f. Drag racing
   g. Assuming right of way at intersections
   h. Passing other vehicles
   i. Not using restraint systems
   j. Railroad grade crossings
   k. Driving While Impaired

9. Students will be able to explain "lifetime risk" as it is related to accumulation of risk.

   "Lifetime Risk" is a realization that taking risks are cumulative. The more you take a given risk, the more likely it is to "catch up with you".

10. Students will be able to explain seven means of reducing risk while driving.

    There are many ways to reduce risk when driving.

    a. Select a safer vehicle
    b. Slowdown
    c. Increase following distance
    d. Drive sober
    e. Wear restraints properly
    f. Use headlights day and night
    g. Avoid peer pressure in the vehicle
    h. Select the proper lane for travel
    i. Avoid high congestion areas

11. Students will be able to list and explain the three outcomes of an unsafe situation.

    An unsafe situation can be caused by many factors, environmental or human. These include all those addressed above. The three outcomes of an unsafe situation are:

    a. An accident with its consequences: Death, injury, property damage
    b. A near accident (or near miss) which can be a learning experience

c. A potential accident with no apparent consequences. Here we learn that risks have little or no consequences so we are willing to take the same risk again or even a more dangerous risk the next time.

UNIT EIGHT
STUDENT OBJECTIVES

1. Student will be able to state eight ways that alcohol abuse costs the U.S.
   Alcohol abuse cost the US in many ways.
   a. 100,000 alcohol-related deaths
   b. 36,000 alcohol-related accidental deaths
   c. 25,000,000 problem drinkers
   d. 10% of social drinkers become problem drinkers
   e. Alcohol abuse costs us $480 billion/year
   f. 28% of all motor vehicle deaths are alcohol related.
   g. 30% of suicides are alcohol involved
   h. 25% of all hospital admissions are alcohol related
   i. Fetal alcohol syndrome (and Fetal alcohol effects)

2. Student will be able to state the number of alcohol related traffic deaths each year in the U.S.
   There are about 12,000 alcohol related (DWI) traffic deaths each year in the US.

3. Student will be able to state the number of serious alcohol related traffic injuries each year in the U.S.
   There are about 600,000 serious injuries as a result of impaired drivers.

4. Student will be able to state the percentage of Americans that will be involved in an alcohol related traffic accident in their lifetime.
   Nearly 40% of Americans will be involved in a serious impaired driving accident in their lifetime.

5. Student will be able to state the approximate number of DWI arrests in NC each year.
   North Carolina arrests about 16,000 each year for DWI.
   a. About 2/3rds conviction rate

6. Student will be able to state the economic cost of DWI in NC.
   North Carolina spends about one billion dollars each year on drunk driving. Over $200 per licensed driver in the state.

7. Student will be able to state the leading highway safety issue.
   Alcohol abuse is the leading cause of death and injuries as well as economic loss in North Carolina and the US.

8. Student will be able to list four statistics related to young people and DWI.
   Young people and driving impaired
   a. *25%* of males killed under 21 are impaired, 12% of females.
   b. 50% plus, of males 21 to 30 killed, are impaired, *25%* of females.
   c. 40-60% of high school students report drinking in the last 30 days
   d. 20-25% of high school students report getting drunk in the last 30 days

e. 10-30% of high school students report drinking and driving in the last 30 days
f. 30-40% of high school students report riding with a drinking driver in the last 30 days

9. Student will be able to state the three types of alcohol.
The three types of alcohol are:
    1. methanol—wood alcohol
    2. propanol—rubbing alcohol
    3. Ethanol—drinking, gas additive. Distilled from a fruit or grain.

10. Student will be able to state the medical nature of ethyl alcohol.
Alcohol is a sedative, depressant, and a tranquilizer.

11. Student will be able to state the approximate percentage of alcohol in beer, wine, and liquor.
Alcohol percentage varies greatly. But normally percentages are:
    a. Beer 0-6%
    b. Wine 10-20%
    c. Liquor 40-50%

12. Student will be able to list the three ways alcohol is eliminated from the blood.
Alcohol is eliminated from the blood by:
    a. Liver-90%
    b. Breath-8%
    c. Sweat glands-2%

13. Student will be able to determine blood alcohol concentration based on weight, type of drink, time, and number of drinks.
BAC is figured by weight, percent of alcohol, rate of consumption and other factors. See Page 318 in Drive Right or other text on how to approximate BAC.

14. Student will be able to state the progressive effect of alcohol on the brain.
Alcohol sedates the brain, starting with the higher learning center, then muscle control, then vital functions (i.e. heart rate, respiration).

15. Student will be able to state the effects of BAC on functions of the body.
Alcohol effects on the body are:

A. Reason and judgment	.02 and up
B. Sensory	.06-. 10
C. Motor coordination	.08-. 10
D. Vision	.08-.10
E. Speech	.08-. 10
F. Sequential abilities	.08-. 10
G. Hearing	.08-. 10
H. Respiration	.20 and up
I. Heart rate	.20 and up
J. Body temperature	.20 and up

K. Death .50

16. Student will be able to list eight things that can affect the degree of intoxication on the body.
Many factors affect the degree of intoxication of an individual.

a. Weight
b. Type of drink
c. Rate of consumption
d. Food in stomach
e. Age
f. Fatigue
g. Emotional state
h. Drinking experience
i. Tolerance to alcohol
j. Male or female
k. Other drugs in the body

17. Student will be able to list 6 possible outcomes of abusing alcohol.
There are many potential effects of abusing alcohol

a. Alcoholism
b. Injury or death
c. Causing injury or death
d. DWI loss of license
e. Increased insurance rate (+900%)
f. Court costs and fees
g. Professional costs
h. Personal costs
i. Grades
j. Weight gain

18. Student will be able to list five rules when using a designated driver.
There are several guidelines when designating a driver:

a. Don't drink
b. Know your riders
c. Set rules up front (sober)
d. Limit the # of people to take care of
e. Take all keys
f. Agree on payment of gas, food, clean up

19. Student will be able to state four problems to expect when using a designated driver.
Problems to expect as the designated driver include:

A. Dealing with someone's parents
B. Clean up of a vehicle
C. Dealing with intoxicated persons
D. Sexual victimization

20. Student will be able to explain the background of DWI laws in the US and NC.
Drunk driving reform started in the 1 970s. A major contributor was Candy Lightner, the founder of MADD. MADD was a “grass roots” organization founded to change drinking laws, courts and enforcement dealing with the drinking driver. President Reagan appointed a National Task force on drunk driving in 1981. NC Governor Jim Hunt appointed a state task force on drunk driving shortly there after. These task forces, made up of lay people, traveled the country and state hearing from people what needed to change in regard to drinking and driving. Recommendations included: raising the drinking age to 21; seat belt laws to protect against drunk drivers; lowering legal BAC limits to name a few. Many of these laws were enacted in 1983 in NC. Referred to in NC as the Safe Roads Act. This was the first real step towards reforming drunk driving laws in NC. There have been several changes since then and we will address most of these shortly.

21. Student will be able to state the differences between DWI and DUI.
Under the old DUI laws in NC, officers had to prove that drivers were “under the influence”. NC’s DWI law only requires that a driver be above the legal BAC limit to be impaired. This allows for roadblocks such as “Booze it and lose it”. There is no probable cause necessary to charge and convict. Only BAC.

22. Student will be able to state the legal BAC in NC for first, second, and three or more offenses.
The legal BAC limit was set at .08 in 1993. Now the legal BAC for second offense is .04 and subsequent offenses .00 are the legal limit. Anyone above the limits is DWI.

23. Student will be able to state the penalties for .08 or refusal to take a chemical test.
The penalty for refusing to take a breathalyzer is a 30 day pre-trial revocation of License and a one-year revocation of license without limited privilege available. Being above .08 is also a 30-day pre-trial revocation of license.

24. Student will be able to explain the use of search warrants after refusal to take a clinical test.
Police can now get search warrants for a blood test after a refusal when someone is injured in an accident.

25. Student will be able to state the resulting accident reduction after lowering the BAC to .08.
After NC lowered the legal limit to .08 the state had a 20% reduction in DWI related deaths. In the 17 states that have lowered their limits to .08 there has been a 16% reduction in DWI related deaths.

26. Student will be able to explain the vehicle forfeiture law in NC.
NC allows for forfeiture of vehicle when someone is DWI while their license is revoked for DWI. The first year of this law, police confiscated 2,000 vehicles.

27. Student will be able to state the legal drinking age in NC.
The legal drinking age in NC was raised from 18 to 19 in 1983 and to age 21 in 1986. Now all 50 states are 21.

28. Student will be able to explain the youthful offender provision of the NC DWI law.
The youthful offender provision includes two sections. First, those under 18 must have .00 BAC if driving. The penalty is loss of license until 18 or one year. Second, those aged 18,19,20 must also be .00 BAC. The penalty is one year revocation of license.

29. Student will be able to state the penalty for attempting to purchase alcohol underage.
Attempting to purchase alcohol underage is one year revocation of your license, up to $200 fine and a misdemeanor.

30. Student will be able to state the penalty for buying for someone else who is underage.
Buying alcohol for someone underage can result in a minimum fine of $500 and 25 hours of community service, up to $2000 fine and 2 years in jail. Second offense in four years, is a $1000 minimum fine and 150 hours of community service. (12/1/99)

31. Student will be able to state the penalty for selling to someone underage.
The penalty for selling alcohol to underage persons is $250 fine and 25 hours of community service minimum. 2nd offense, $500 fine and 150 hours of community service minimum. (12/1/99)

32. Student will be able to explain the open container law in NC.
North Carolina prohibits an open container of alcohol in the passenger compartments of a vehicle.

33. Student will be able to explain the Dram Shop law in NC.
The Dram Shop provision of the North Carolina law holds that provider liable for negligent provision (selling or giving) of alcohol. Persons providing alcohol negligently can be held responsible for deaths, injuries that occur because of the alcohol.

34. Student will be able to define negligent provision in the Dram Shop law.
Negligent provision is defined as providing to someone underage or already intoxicated.

35. Student will be able to explain the restriction of plea-bargaining in DWI cases in NC.
North Carolina law does not permit judges to reduce the charge of DWI to a lesser-included offense. i.e. careless and reckless driving

36. Student will be able to explain when limited privilege is available after conviction for DWI in NC.
Since 1983, limited driving privilege has only been available to levels 3, 4 and *5* of the DWI sentence structure. Levels 1 and 2 are not allowed a limited privilege.

37. Student will be able to explain the use of road blocks (Booze it and lose it) in NC.
Because a DWI law does not need probable cause, road blocks are allowed in NC under

specific restrictions. i.e. approved by superior, not targeting any age or group of people.

38. Student will be able to state the legal BAC limit for commercial vehicles in NC.
Commercial vehicles are now restricted to .00 BAC in North Carolina.

39. Student will be able to explain why the arresting officer does not have to observe the offense to charge a person with DWI.
The NC law does not require an officer to observe DWI to charge someone with DWI. After an accident, with sufficient proof of DWI, a person can be charged even though the officer did not observe the person driving.

40. Student will be able to explain the courts use of ignition interlocks for convicted DWI.
North Carolina allows judges to require ignition interlocks for convicted DWI to have limited privilege or get a suspended license back. The vehicle will not start if the driver has been drinking.

41. Student will be able to state the approximate increase in insurance rates for a DWI conviction.
A DWI conviction carries 12 insurance points. This will increase insurance rates from about $300 a year to $2800 a year for three years. A 900% increase or about $7500 total.

42. Student will be able to list and explain five grossly aggravating factors of NC DWI sentencing.
The sentencing structure for DWI includes grossly aggravated, aggravated and mitigating factors. The grossly aggravated factors are:

1. Second offense in seven years
2. Third offense in seven years. Level One
3. DWI with a revoked license for DWI
4. Causing serious injury while DWI
5. DWI with 16 years old in car

43. Student will be able to list and explain ten aggravating factors of NC DWI sentencing.
Aggravated factors are:

1. Gross impairment
2. BAC.16
3. Driving was especially reckless
4. Driving was especially dangerous
5. Property damage in excess of $500
6. Personal injury
7. DWI with revoked license
8. Two prior convictions in *5* years of 3 or more points
9. DWI more than 7 years ago
10. Speeding while, or attempting to elude apprehension
11. Speeding 3 0mph over the legal limit

12. Passing a stopped school bus
13. Any other aggravating factor (refuse the test)

44. Student will be able to list and explain six mitigating factors of NC DWI sentencing.
Mitigating factors are:

1. Slight impairment (.08 or .09)
2. No chemical test available
3. Safe and lawful driving
4. No serious traffic offenses in 5 years
5. Impairment due primarily to a lawfully prescribed drug
6. Voluntary submittal to mental health facility for assessment
7. Any additional factors i.e. DL 123 form

45. Student will be able to list the five level sentences for DWI.

Level one: A judge must impose Level 1 punishment when two or more grossly aggravating factors exist. Punishment includes a mandatory minimum of 30-day jail sentence. The judge may sentence the defendant to a maximum of two years in jail and impose a fine of up to $4,000. Repeat offenders, 12 months minimum jail. 49 months for 4th offense in 7 years. No limited privilege.

Level two: A judge must impose Level 2 punishment when one grossly aggravating factor exists. Punishment includes a mandatory minimum jail sentence of seven days. The judge may sentence the defendant to a max of one year in jail and impose a fine of up to $2,000. No limited privilege.

WHERE NO GROSSLY AGGRAVATING FACTORS ARE PRESENT

Level three: When the aggravating factors outweigh the mitigating factors, the judge must sentence the defendant to a minimum of 72 hours in jail, or a minimum of 72 hours of community service, or a 90-day loss of driving privileges, or any combination of the three. The judge may also impose a fine of up to $1000.

Level four: When neither set of factors outweigh the other, the judge must impose 48 hours of jail, or 48 hours of community service, or a 60-day loss of driving privileges, or any combination of the three. The judge may also impose a fine of up to $500.

Level five: When the mitigating factors outweigh the aggravating factors, the judge must impose 24 hours in jail, or 24 hours of community service, or a 30-day loss of driving privileges, or any combination of the three. The judge may impose a fine of up to $200.

UNIT NINE
STUDENT OBJECTIVES

1. Student will be able to state the percentage of accidents that involve drugs other than alcohol.

   Alcohol is responsible for 38% of traffic deaths. Drugs other than alcohol account for at least 18% of traffic deaths in the US.

2. Student will be able to explain three problems with drugged driving enforcement.

   Drugs and driving are more difficult than alcohol to enforce for several reasons:
   A. Testing is a blood sample not a breathalyzer
   B. There is not per se limit as with BAC
   C. There are thousands of drugs, legal and illegal and interactions
   D. There are seizure laws complicating the whole issue with drugs.

3. Student will be able to explain three reasons for the rampant drug use in our society.

   Drugs are a part of our society. Most people take some form of drug on a regular basis. There is a widespread belief that medicine/drugs can solve any problems we might have. Secondly, there is a disregard of the law by many in our society. Third, no one thinks it will happen to them. Drug addiction, or even death, happens to someone else.

4. Student will be able to explain the three effects of taking one drug.

   A drug can have any of three effects: Therapeutic effects, side effects and residual effects.

5. Student will be able to explain the three effects of taking two or more drugs in combination.

   The interactions between drugs taken together can be very dangerous. First, the additive effect is that you get both or all of the drug's effects. 1+1=2. Second, an antagonistic effect is where one drug cancels or counteracts another. This might be deadly when taking drugs for high blood pressure or diabetes and another drug stops them from working as they are supposed to. 1+1=0. Third, a synergistic effect is where the resulting interaction is greater than the sum of the parts. 1 + 1=3. Barbiturates and alcohol for example. These interactions can cause brain damage or even death. All of these may cause serious impairment when attempting to drive, and can result in a DWI charge.

6. Student will be able to list and give examples of each of the three classes of drugs.

   The three classes of drugs are:
   A. Depressants. Alcohol, barbiturates, tranquilizers, narcotics, codeine, morphine and the volatile chemicals.
   B. Stimulants. Amphetamines, cocaine.
   C. Hallucinogens. LSD, PCB, STP as well as marijuana.

7. Student will be able to explain the classification of marijuana.

   Although many consider marijuana as a depressant and would prefer it reclassified so legalization would become easier, the medical profession still lists it as a hallucinogen.

8. Student will be able to explain possible effects of drugs on driving.

   All drugs, legal and illegal, may have serious effects on anyone's ability to drive. Before operating a vehicle at 60 or 70 mph, make sure you are fit to drive.

UNIT TEN
STUDENT OBJECTIVES

1. Student will be able to explain the difference between man made and natural laws.

The man-made laws we have discussed so far, can be good or even unreasonable. They also need police enforcement, a judge and jury to convict. Natural laws that control our universe, need no police or courts, they will enforce themselves.

2. Student will be able to explain the importance of natural laws on vehicle handling characteristics.

It is our job to know and understand the natural laws that are going to effect vehicle handling characteristics. To break a natural law (or attempt to) might have dire consequences.

3. Student will be able to define gravity.

Gravity is the force that tends to pull all objects toward the center of the earth. Gravity obviously will effect acceleration and braking when going up or down hills.

4. Student will be able to define center of gravity.

The center of gravity is the point around which all the weight in a vehicle is centered or balanced. The higher the center of gravity, the more likely the vehicle to roll over. A major concern with sport utility vehicles (SUV) is their tendency to flip in a collision. The center of gravity can be too far forward or backwards due to vehicle design or load. This too can cause handling problems.

5. Student will be able to define inertia.

Inertia is a body at rest stays at rest, a body in motion stays in motion in a straight line until acted upon by an outside force.

6. Student will be able to define friction.

Friction is resistance to motion between any two objects that touch.

7. Student will be able to explain coefficient of friction.

Coefficient of friction is the measurement of friction.

8. Student will be able to list and explain the three types of traction.

There are three types of traction. Each is to overcome inertia (rest, motion, straight line).

1. Acceleration traction
2. Braking traction
3. Cornering traction

9. Student will be able to list eight things, which can affect traction.

There are many things which will affect traction.

1. Tires
    a. Type
    b. Wear
    c. Inflation
2. Road surface
    a. Asphalt
    b. Concrete
    c. Gravel
    d. Dirt

3. Condition of road surface.
    a. Rain
    b. Snow
    c. Ice
4. Weight of vehicle
5. Type of vehicle
6. Bank of road/curve
7. Speed of vehicle
8. Driver response
9. Temperature of road/tires

10. Student will be able to list three reasons for maintaining proper air pressure in your tires.

Proper tire inflation is critical to handling of the vehicle, life of the tire and gas mileage.

11. Student will be able to explain the three tire ratings on the tire.

Tires have three ratings for consumers to make better choices. First is a mileage rating. A 100 rating is supposed to mean the tire should last 30,000 miles. A 200 rating then, should last 60,000. Although the rating may be inaccurate, they can be used for comparison shopping. Secondly, is a temperature rating. A being the best, B not as good, C being the lowest rating. C rated tires should not be used in hot weather or severe road conditions. The last rating is a fraction rating. This rating is specifically a wet road braking rating. Again A is the highest, C is the lowest.

12. Student will be able to state where to find the proper air pressure for tires.

Proper air pressure can be found stamped on the tire and in your owner's manual.

13. Student will be able to explain the coefficient of friction effects.

The coefficient of friction is = force/weight
A. Dry asphalt is .78
B. Wet asphalt is .60
C. Dirt roads are .20
D. Dry snow is .20
E. Wet snow is .l0

It takes nearly *25%* longer to stop on wet asphalt as dry and four times longer to stop on dirt road as dry asphalt. Wet snow is almost impossible to start, stop or turn a vehicle.

14. Student will be able to list and explain the three parts of total stopping distance.

The three parts of total stopping distance are:
1. Perception time/distance
2. Reaction time/distance
3. Braking distance

15. Student will be able to define kinetic energy.

Kinetic energy is energy of motion. Potential energy stored within a moving object. Kinetic energy can be determined by speed and weight of an object.

16. Given speed and weight of a vehicle, student will be able to calculate the kinetic energy of that vehicle.

$$KE = \frac{1/2 \text{ weight } (\text{speed}2)}{32.2}$$

Since we are determining foot pounds of kinetic energy, speed is in feet per second. Ft/sec = *1.5* X MPH

17. Student will be able to explain the effect stopping distance has on force of impact.

Force of impact is kinetic energy divided by stopping distance (in feet). The longer the distance, the less severe the force of the impact.

UNIT ELEVEN
STUDENT OBJECTIVES

1. Student will be able to explain the concept of insurance.

   Any form of insurance is that, you pay a relatively small amount, so no one gets caught with a large financial loss i.e. a $500/year homeowner's policy will pay for a $1000 house or a $500,000 lawsuit.

2. Student will be able to list four types of insurance other than automobile insurance.

   All forms of insurance are the same concept. You protect against a large financial loss. Homeowners, life, health, renters, disability, dental are just some of the forms of insurance other than car insurance.

3. Student will be able to explain what "financial responsibility" is in NC.

   In North Carolina, as most other states, an owner/driver is required to prove financial responsibility in order to legally operate a motor vehicle. A driver must be responsible for any damage he/she does to someone else or their property.

4. Student will be able to explain two ways for someone to prove financial responsibility in NC.

   There are two ways to prove financial responsibility, post a cash bond (in effect, self insuring you or your company) or buy liability insurance.

5. Student will be able to explain personal injury liability.

   Personal injury liability (PIL) insurance protects the owner/driver against having to pay for injuries they have caused to others. PIL will pay up to the limit (amount purchased) of the policy. The minimum amount allowed by law in NC is $60,000 per accident (All persons injured) and $30,000 per person (any one person). This is not enough coverage to adequately protect you if you seriously hurt someone. 100/300 or 300/300 might be a better choice even if it costs a little more in premiums.

6. Student will be able to explain property damage liability.

   Property Damage Liability (PDL) insurance pays for damage you do to another person's property (car, house, yard, mailbox, etc.). Your company will pay, up to the limit of the policy, to fix other's property. NC requires a minimum of $25,000 PDL. For about $4 more per year, you can buy $50,000 coverage.

DMV requires proof of both types of liability insurance to get a license plate or a driver's license. A DL 123 form is filled out by an insurance agent as proof of liability coverage.

7. Student will be able to explain collision coverage insurance.

   Collision insurance protects your car when you are at fault in a collision. Your company will pay up to the "book" value of your car in the event you damage it, minus the deductible. Deductibles are the portion you pay first before the insurance company pays. Deductibles are usually $250-$ 1000. The higher the deductible, the lower the premium. Any collision claim will raise your future premiums. Collision is required if you lease or borrow money against your vehicle.

8. Student will be able to explain comprehensive insurance.

   Comprehensive insurance pays to repair your vehicle from "acts of God," or theft, vandalism, even a deer damaging your car or any damage that you are not responsible For. Again your company will pay up to the book value. Comprehensive claims do not increase your rates because they are not your fault. Comprehensive is also required for a loan or lease.

9. Student will be able to explain medical payments insurance.

   Medical payments insurance pays for you or your passenger's medical bills, regardless of fault, up to the limit of the policy. $10,000 is currently the maximum amount available in NC. This will pay for minor injuries, ambulance, ER visits, and deductibles on major medical policies. It is not intended to cover all medical bills. You are not required to have medical payments coverage.

10. Student will be able to explain uninsured motorist insurance.

    Uninsured motorist coverage protects the owner/driver against another driver, at fault, not having any insurance. Your company will pay your medical and vehicle repair bills if the other driver does not (up to the limit of the policy). You are required to have uninsured motorist coverage.

11. Student will be able to explain underinsured motorist insurance.

    Underinsured motorist coverage protects the owner/driver in the event the other driver (at fault) has insurance but not enough to cover the judgment. Your company pays what their company does not (up to the limit of your policy). You are not required to have underinsured motorist coverage.

12. Student will be able to explain towing insurance.

    Towing insurance pays if it is necessary to have your car towed after a wreck or a breakdown. The maximum it will pay is usually *$50* and does not cover cars parked illegally. Not required.

13. Student will be able to explain rental reimbursement coverage.

    Rental reimbursement coverage will pay for a rental car when your car is being repaired under collision coverage. Not required.

14. Student will be able to explain no-fault insurance.

    North Carolina does not have “no-fault” insurance. But if you run into someone from a state with this type of coverage, you will be covered as you would any other type of coverage. Their company will pay if their policy holder is at fault.

15. Student will be able to explain necessary coverage for a rental car.

    If you rent a car, the rental company requires you to insure their car. If you have comprehensive and collision on your vehicle, it will cover the rental car at no extra charge.

16. Student will be able to explain the difference between driver license points and insurance points in NC.

    Driver license points are used to revoke a person’s license. Insurance points are used to determine rates. See the handout.

17. Student will be able to explain how much insurance points will affect rates.

    Insurance points increase premiums:
    1 point is *15%*
    2 points is 40%
    3 points is *65%*
    4 points is 90%
    5 points is 120%
    6 points is 150%
    7 points is 180%
    8 points is 220%
    9 points is 260%
    10 points is 300%
    11 points is 350%
    12 points is 400%

18. Student will be able to list and explain factors in NC, which will affect insurance rates.

    There are many factors, which can and do affect insurance rates.

    a. Driving record (see above)
    b. What the vehicle is used for.
    c. Where you live and drive.
    d. Driving experience. ~An inexperienced driver pays an additional 150% for the first two years and 100% for the third year. After three years experience the rates return to normal.]
    e. If you have more than one vehicle on a policy, you get a 20% car discount for each vehicle.
    f. The amount of coverage (30/60/25, 100/300/50) will effect your premiums.
    g. Type of vehicle insured. Expensive vehicles cost more to insure. Vehicles with high accident rates cost more. Vehicles that are stolen more, cost more. Check with your agent before leasing or buying that new vehicle.
    h. Living in North Carolina costs you less too. Only Idaho, Nebraska, North and South Dakota and Iowa have cheaper car insurance.
    i. Being a high risk driver can put you in the Reinsurance Facility.

19. Student will be able to list six factors, which will not affect insurance rates in NC.

    Insurance rates in NC are not based on: Age, gender, marital status, grades, driver education or color of the vehicle. Even your credit rating can affect your rates.

20. Student will be able to explain how vehicle use affects rates.

    Rates are based on what you used to vehicle for.

    a. Pleasure use only
    b. To work >10 miles
    c. To work <10 miles + 20%
    d. For business +25%
    e. Farm use—25%

21. Student will be able to explain rates for inexperienced drivers in NC.

    Driving experience. An inexperienced driver pays an additional 150% for the first two years and 100% for the third year. After three years experience the rates return to normal.

22. Student will be able to explain the use of the “assigned risk facility” in NC.

    23% of NC drivers are insured through the reinsurance facility and pay about a third more for their insurance. Once in the reinsurance facility, the only way out is to convince an insurance agent that you are no longer at high risk. Normally no

23. Student will be able to explain the “recoup surcharge” in NC.

The “recoup charge” in NC is to pay for losses in the reinsurance facility. Each year all the premiums paid in and the judgments paid out must equal. So when these high-risk drivers cause more damage than their premiums can cover, the rest of the policyholders in NC have to make up the difference.

24. Student will be able to explain insurance point waivers in NC.

There are two insurance point waivers, a less than 10 MPH over the speed limit is no insurance points for the first offense in three years. You are also allowed a prayer for judgment continued once in three years. A second violation for either case results in revoking of the waiver and receiving both violation points.

25. Student will be able to explain the insurance rate increase for a two-point traffic violation.

A two point violation increases premiums by 40% for three years. So a 10 MPH over ticket will cost you about $300 in insurance premiums over the next three years.

26. Student will be able to explain the insurance rate increase for a DWI in NC.

A 12 point DWI will increase your insurance from $300/year to about $2800 a year for three years (about $7500 total increase) for liability coverage only. Comprehensive and collision are even more.

UNIT TWELVE
STUDENT OBJECTIVES

1. Student will be able to list and explain four accident prevention programs.

Four traditional accident prevention programs have been used for the last 100 years in an attempt to prevent traffic accidents and resulting injuries.

A. Driver licensing. The purpose of driver licensing is only allow competent drivers on the highways. This includes getting the worst drivers off the road.
B. Engineering. Engineering of both vehicles and highways to reduce the probability of an accident.
C. Enforcement of traffic laws. Compliance with traffic laws is in direct proportion to the perceived level of enforcement. Without enforcement of traffic laws, we would have chaos.
D. Education. Driver and traffic safety education attempts to reduce the number of accidents by education of beginning drivers, education of problem drivers as well as public service ads designed toward the general population. i.e. “friends don’t let friends drive drunk”

2. Student will be able to explain “loss reduction” in traffic safety.

Loss reduction is an acceptance that we can not prevent all accidents from occurring. Therefore we must do what we can to reduce losses when accidents do take place specifically loss of life, injuries and property damage.

3. Student will be able to state the number of deaths, injuries, and amount of economic loss due to motor vehicle accidents each year in the US.

There are about 42,000 deaths, 2,000,000 serious injuries and $100 billion lost in traffic accidents each year in the US.

4. Student will be able to list three roadway design changes to improve safety along our highways.

There are numerous roadway designs to reduce losses when a vehicle leaves the roadway. Divided highway, guard rails, bridge design, bridge supports, and removal of light poles, signs and trees next to the road. All of these lessen the chance of crashing when leaving the road surface.

5. Student will be able to list six vehicle design features to reduce losses to the vehicle or its occupants.

There are many design features on vehicles over the past 30 years. Some of them are:
seat belts for all passengers; shoulder harnesses; windshield design; head restraints; air bags; padded dash boards; door locks and recessed handles; seat anchors; side impact reinforcement; side air bags; adjustable gas and brake pedals; roof crush reinforcement;

tempered side windows; fuel tank integrity; seat back locks for two door cars; collapsible steering columns; crush zone; and flame retardant seat materials. The vehicle today is the safest to crash ever built. See: www.highwaysafety.org for vehicle design and crash test results.

6. Student will be able to list three vehicle design features to help prevent an accident.

Accident prevention is also a continuing design feature. These features include: high mounted brake lights; anti-lock brakes; dual brake systems; standard operational controls; ergonomic seats/controls; daytime running lights; electronic stability control systems; even seat belts help the driver maintains control of the vehicle in an emergency.

7. Student will be able to list and explain six reasons for wearing a seat belt.

There are at least six reasons for wearing a seat belt.

A. Prevent ejection from the vehicle. A driver/passenger is 25 times more likely to die outside the vehicle in a crash.
B. Lessen the collision with the interior of the vehicle. What you hit, where you hit it, and how hard you hit it.
C. Provide better protection in fire or water. Belts keep your head from hitting the wheel or dash and being knocked unconscious. Awake you can get yourself out of water or a burning car.
D. Better control of the vehicle in an emergency. If you are not behind the wheel, you cannot drive. If you are struggling to stay behind the wheel, you cannot drive well.
E. Air bags present a threat to life if you are too close to them. Seat belts help keep you in position to allow the air bags to work as designed, not kill you.
F. It's the law. About 80% of North Carolina drivers now wear the seat belts. That number is about 70% in the US.

8. Student will be able to state the number of lives saved each year by seat belts in the US.

Seat belt usage at 80% nationally (up from 14% twenty years ago) is estimated to save 9,000 lives a year, and save about $17 billion each year.

9. Student will be able to state the increased chance of being killed when thrown out of a vehicle.

Your chances of being killed are 25 times greater outside the vehicle. We have spent forty years designing safer vehicles. Stay in them.

10. Student will be able to explain the use of child restraint in the U.S.

Twenty-five years ago, only 4% of children were properly restrained. With laws requiring restraint use in all US jurisdictions, the percent of children restrained is 80-*85%*. The major problem with child restraints is the proper use. Improper use can compromise safety.

11. Student will be able to explain the NC child restraint law.

    The child restraint law. In NC all children under 16 must be restrained. Those under 5 years old (or 40 lbs) must be in a DOT approved child restraint. Children under 9 years old or 80 lbs, must be in a booster seat. The penalty is $25 plus court costs. The child restraint law is primary enforcement. This means an officer can stop someone for a violation of this law without any other traffic violation necessary.

    There are two license points for violation of this child restraint law.

12. Student will be able to state the seat belt use rate in North Carolina and the US.

    The belt use rate in NC is 90%. In the US it is closer to 80%. NC is among the highest use rates of the states. “Click it or ticket” is one reason.

13. Student will be able to explain the North Carolina restraint law.

    The front seat occupant law states that all front seat occupants must be properly restrained. This is regardless of age. In addition, rear seat passengers must wear their belts too. There are no points attached to these seat belt use laws in NC.

14. Student will be able to explain indirect costs of people not wearing seat belts.

    The people who refuse to wear a restraint, cost us all in increased medical bills, insurance premiums and other ways (see *#15).*

15. Student will be able to list five indirect costs of people not wearing seat belts.

    There is a list of ways failure to wear seat belts cost us all indirectly:
    A. Insurance Rates
    B. Court costs
    C. Social security
    D. Education
    E. EMT
    F. Court systems
    G. Medical availability
    H. Time off work
    I. Police services
    J. Medical costs

Each year, in the US, there are about 600,000 spinal cord injuries, 179,000 brain injuries and 638,000 facial injuries. Seat belts with air bags can prevent a significant percentage of these.

16. Student will be able to list and explain four problems with air bags.

Air bags have several problems.

A. Cost about $1,000 per vehicle.
B. Cost about $2,000 to reinstall them
C. They only work in front end, front angular collisions. (About *50%* of all collisions).
D. Minor burns and injuries.
E. Noise and "gas" in vehicle when deployed.
F. Deaths —(Later)

17. Student will be able to list and explain four suggestions for improving air bag safety.

The suggestions for improving their effectiveness are:

A. Slow them down to 160 MPH
B. Allow for ignition shut off switches for children who have to use the front seat.
C. "Smart" airbags to determine the size and location of passengers
D. Pedal and steering columns adjustments for short people to get away from the air bag
E. Education to get children in the back seat away from the airbag.

18. Student will be able to list and explain the three advantages of air bags.

The advantages far outweigh the problems.

A. They work. The mechanics are not a significant problem.
B. They are a passive system. It takes no action on the part of the passengers to allow it to work. (Remember it always works best with the active restraint— seatbelt).
C. They work best in the most serious type of accident—head-on and front angular collisions.

19. Student will be able to state the number of vehicles with air bags.

All cars since 1993 have to have airbags. All vehicles since 1996 have airbags from the factory. See www.highwaysafety.org for the latest numbers.

20. Student will be able to state the number of deaths caused by air bags.

There are less than 10 fatalities a year caused by airbags. All these were caused by the misuse of the airbag. See below.

21. Student will be able to list and explain the three types of air bag related deaths.

Most airbag deaths are for misusing them. They are typically in three categories:

A. Adults without seat belts and/or too close to the wheel.
B. Children without belts on.
C. Children in rear facing child restraint in the front seat.

22. Student will be able to state the web site for current data on air bags and air bag fatalities.

    www.highwaysafety.org

23. Student will be able to state the number of lives saved by air bags.

    Airbags are credited with saving thousands of lives each year.

24. Student will be able to explain the use of side impact air bags.

    The fact remains that of the 24,500 vehicle occupants killed each year in the US, nearly 9,000 of them are side impact collisions. More needs to be done to reinforce and pad the sides of vehicles to protect occupants.

    The federal requirement is for all vehicles to have side impact airbags by 2013.

UNIT THIRTEEN
STUDENT OBJECTIVES

1. Student will be able to list three considerations for selecting engine oil.

   There are at least three considerations for selecting engine oil.
   A. Brand name
   B. Grade, SE or better
   C. Weight. Consult your owner's manual.

2. Student will be able to state two factors regarding engine coolant.

   Engine coolant should be:
   A. Strong enough to protect your engine.
   B. Clean. When it becomes dirty, have the system flushed and replace with new coolant.

3. Student will be able to explain what battery maintenance needs to be done.

   Most maintenance free batteries are just that. It is still a good idea to have the battery terminals cleaned each year (Fall is best).

4. Student will be able to explain what a "tune up" means.

   On today's vehicles, there is virtually no tune up necessary. New cars require new plugs at 100,000 miles. Be careful of dealerships wanting to bring your car back for "routine" maintenance.

5. Student will be able to state how often a timing belt should be replaced.

   Timing belts are an exception. They need to be replaced at least every 60,000 miles, before they break. When they break, they will leave you stranded on the road or may cause serious damage to your engine. (Timing chains are not necessary to replace because they seldom break). Check your owner's manual.

6. Student will be able to state how to test a vehicle's brakes.

   There are two simple tests for brakes.
   A. With the vehicle running-push the brake pedal hard for 60 seconds. If the pedal stays in the same position, the hydraulic system is probably OK.
   B. Drive at 20 MPH, take your hands off the wheel and apply the brakes. The car should stop smoothly and straight. If the car pulls either way—have them checked soon. Be careful!

If at any time you hear strange noises when applying the brakes, have them checked. Unfortunately, on some vehicles, some noise is inevitable.

7. Student will be able to list three rules for selection of a vehicle.

   There are at least three general rules when selecting a vehicle.
   A. Know what you want.
   B. Know how much you can spend.
   C. Don't get in a hurry.

8. Student will be able to explain the top three considerations that sell vehicles.

   What sells vehicles shows how poor of consumers we can be.
   A. Color is the #1 factor.
   B. Safety—people want safe vehicles.
   C. Performance. We want to go real fast--but safely.

9. Student will be able to list five ways to plan a trip to conserve fuel.

   There are many ways to save fuel by better planning our vehicle use.
   A. Phone ahead. Don't waste trips.
   B. Dive the economy car, not your SUV.
   C. Car pool.
   D. Combine errands.
   E. Plan routes to avoid traffic and lights.
   F. Use transit system
   G. Avoid rush hour.

10. Student will be able to list five ways to drive more fuel efficiently.

    There are many ways to drive more fuel efficiently.
    A. Slow down *(45-50* MPH produce the best MPG)
    B. Increase following distance (avoid braking)
    C. Don't accelerate on hills.
    D. Keep moving, anticipate lights and traffic.
    E. *55* MPH saves *15%* over 65 MPH. At 75 MPH you are driving into a hurricane force wind.
    F. Accelerate slowly—the faster you accelerate, the more gas you use.

As fuel costs go up, vehicle selection, trip planning and how you drive will become more of a concern to all of us. Consider if gas was $7-8 a gallon as it is in Europe, would you change what, when and how you drive?

UNIT FOURTEEN
STUDENT OBJECTIVES

1. Student will be able to define adverse conditions.

   Adverse conditions usually refer to traction or visibility. Adverse conditions should include anything that makes the driving task more difficult.

2. Student will be able to explain the goal of driving in adverse conditions.

   The goal, when driving in adverse conditions, is to recognize and understand their limitations while driving accordingly. Adverse conditions include:
   a. Rain
   b. Snow
   c. Fog & darkness
   d. Sun glare
   e. Other vehicles blocking vision

3. Student will be able to list four ways to deal with reduced visibility.

   When dealing with reduced visibility, you can:
   a. Slowdown
   b. Increase following distance
   c. Have clean windshield, headlights etc.
   d. Use driving aids, reflectors, painted lines, other headlights and street lights.
   e. Turn down panel lights, no interior lights.
   f. Replace wiper blades, and have washer fluid.
   g. ALWAYS turn on your lights in reduced visibility. Make sure others see you!
   h. Wipers on, lights on. It's the law.

4. Student will be able to state the percentage of accidents that occur at night.

   Sixty percent of fatal accidents occur at night.

5. Student will be able to list four ways to deal with reduced traction.

   There are many ways to deal with reduced traction:
   a. Slow down.
   b. Increase following distance.
   e. Drive in another driver's tire track.
   d. Make sure of your tire pressure.
   e. Make no sudden movements. Braking, turning, or accelerating.
   f. Keep moving in snow or ice.
   g. If conditions warrant, stay off the roads.

6. Student will be able to explain how to deal with deep water on the road.

   If you are dealing with deep water, you should:
   a. Check the depth of water. Use other vehicles or landmarks.
   b. Never enter deep water that is moving. It can float your vehicle off the road with disastrous results.
   c. Always wait for other vehicles to clear the area. This allows you to drive in the middle of the road surface where the water is shallowest. It will also avoid splashing water into your engine compartment.
   d. Always go slow to avoid water splashing into your engine.
   e. If you can not see the road, it may not be there. Go around.
   f. Never take chances with deep water. Find another route.
   g. Check your brakes to make sure they still work.

7. Student will be able to explain the difference between using standard brakes and anti-lock brakes.

   The advent of antilock brakes has created some unforeseen problems. Unlike standard brakes, you just push them down and hope. If the driver “pumps” them, they will not stop the vehicle. Make sure which brake system you have before driving.

8. Student will be able to explain the three parts of total stopping distance.

   The three parts of total stopping distance are:
   a. Perception time/distance.
   b. Reaction time/distance.
   c. Braking distance.

UNIT FIFTEEN
HANDLING EMERGENCIES
STUDENT OBJECTIVES

1. Student will be able to reduce the chance of an emergency.

   Proper maintenance can prevent most vehicle malfunctions. Examples are brakes that make scraping sounds indicates that brake work is needed; tires that show extreme wear indicate that new tires are needed.

2. Student will be able to list at least five (5) emergency situations.

   The most common emergencies include tire blowout, brake failure, accelerator malfunctions, engine failure, hood flies up, driving off the road and avoiding objects in the roadway.

3. Student will be able to explain appropriate actions to take if a tire blows out.

   Take the following actions when a tire blows out:
   a. Grip the steering wheel firmly
   b. Ease up on the accelerator to slow the vehicle. Do not brake. Braking can cause the car to swerve. When car has slowed, gentle braking is okay.
   c. Check the traffic situation as you gain control of the vehicle.
   d. Signal and drive off the roadway slowly, braking gently.
   e. Turn on hazard flashers. Drive slowly until you find a safe place to stop

4. Student will be able to explain appropriate actions to take if the brakes fail.

   Follow these steps immediately if your brakes fail:
   a. Pump the brake pedal
   b. Downshift
   c. Apply the parking brake with steady pressure. If the car begins to skid, release the parking brake.

5. Student will be able to explain appropriate actions to take if the gas sticks and/or Cruise malfunctions.

   If the accelerator sticks, the driver might be able to use his/her right foot to unhang the pedal. This can be done by kicking the side of the pedal or by putting his/her foot underneath the pedal and pulling upward. Shifting the car to neutral and/or depressing the clutch in a manual shift is a safe technique to use in dealing with this problem. After shifting to neutral, slow the car by braking, signal and pull off the roadway. This technique should also be used when dealing with a cruise control that malfunctions.

6. Student will be able to explain steps to take if a flat tire occurs.

If a tire suddenly goes flat while driving, keep a firm, steady grip on the steering wheel and maintain a straight course. You must concentrate on keeping or regaining control. Step off the brakes. When the vehicle is under control, look for a safe place to pull off the roadway.

7. Student will be able to explain the correct process of changing a flat tire.

Steps to use when changing a tire include:

a. Park on level area away from traffic. Turn on hazard flashers. Put selector lever in park; use reverse if in a manual shift.
b. Set the parking brake.
c. Block the wheel that is diagonally opposite the flat tire. Carry two blocks of wood or two bricks in your trunk for this purpose. Place one block in front of the wheel and another block firmly behind the wheel. Blocking helps keep the vehicle from rolling once the jack raises it up.
d. Ask your passengers to get out of the vehicle and move to a safe place away from the roadway.
e. Take out the spare tire, jack, and lug wrench.
f. Assemble the jack. Position it under the vehicle.
g. Jack up the vehicle partway. The flat tire should touch the ground so that the wheel cannot turn.
h. Remove the wheel cover. Loosen the lug nuts, the devices that hold the wheel to the vehicle.
i. Jack up the vehicle until the tire completely clears the ground.
j. Use the lug wrench to remove the lug nuts. Place them in a safe place, such as your pocket.
k. Remove the wheel with the flat tire. Place the wheel to the side.
l. Mount the wheel with the spare tire. Rock it gently into position.
m. Replace and tighten the lug nuts.
n. Lower the vehicle slowly and remove the jack.
o. Use the lug wrench to tighten all the lug nuts again.
p. Leave the wheel cover off as a reminder to fix the flat. Put the wheel cover, flat tire, and tire changing equipment into the trunk. Remove the blocks. Replace or repair the flat tire as soon as possible. If your spare tire is a compact spare, drive on it only as necessary.

8. Student will be able to explain appropriate steps to take when the engine fails.

Usually you have very little warning that your engine is going to sputter or stop. With a stalled engine, you can still steer your vehicle. If you have power steering, you will have to steer harder. Follow these steps if your engine stops suddenly:

a. Shift to NEUTRAL when the engine first sputters or stops.
b. Begin moving out of traffic to the nearest shoulder. Turn on the hazard flashers. Do not brake.
c. Try to restart the engine while you are moving. If the engine starts, shift into a forward gear and proceed. If it does not start, move onto the shoulder or to the curb, if possible.

Steering will be harder when power is lost by engine failure. Try again to start the engine.

d. If the engine still fails to start, raise the hood and leave the hazard flashers on. Go for help. If you have a cellular phone, use it to secure assistance. If your vehicle becomes disabled in risky locations, set flares or other warning devices to alert other roadway users.

9. Student will be able to explain the steps to take when accidentally running off the pavement and onto the shoulder.

Driver errors cause many more emergencies than do vehicle malfunctions. Errors due to inexperience lack of attention, or poor decisions often create driving emergencies. Any driver can be put in an emergency situation by the unpredictable act of another driver.

Developing automatic responses to emergencies is a critical part of the total driving task. Identifying an emergency, predicting its consequences, making correct decisions, and executing decisions quickly will help you avoid a collision.

Driving Off the Road: When a front wheel leaves the edge of the roadway, returning to the roadway can be easy if the shoulder is paved and in good condition. However, the shoulder is often lower than the roadway or is not paved. Many fatal one-vehicle collisions result when drivers brake and return suddenly to the roadway. In such a situation, the vehicle often rolls over. Other collisions can occur when drives quickly return to the roadway and abruptly cross into other traffic.

Off-Road Recovery: Use your targeting skills and reference points to get back on the roadway when a front wheel leaves the pavement. Avoid quick steering. Regain control of your vehicle before returning to the lane of travel. You should take the following actions for a safe off-road recovery:

a. Hold the steering wheel firmly on the top half with both hands. The greater the drop-off between roadway and shoulder, the greater amount of steering control you need. Keep your vehicle heading straight toward your target.
b. Let up on the accelerator and brake gently to 5 or 10 mph. Avoid hard braking.
c. Position your vehicle so it straddles the roadway edge.
d. Select a place to return to the roadway where the shoulder is nearest the level of the roadway.
e. Check for traffic. Signal, check your blind spot, and return to the roadway.
f. Steer sharply toward the roadway to return. If the drop off is severe, you might need to slow more and turn very sharply to get back onto the pavement.
g. Counter steer sharply the instant the front tire touches the roadway. You counter steer when you steer in the opposite direction.
h. Center the vehicle in lane position 1 and reestablish your target. Cancel your signal. Accelerate to match the flow of traffic. If traffic is heavy when you go off the roadway, drive entirely off the roadway. Stop and wait for a large gap in traffic before you reenter. Sometimes an obstruction, such as a bridge or guardrail, might be on the shoulder ahead.

In this case, you must make a quick recovery. Grip the steering wheel firmly. Counter steer immediately when the front wheel touches the roadway.

10. Student will be able to explain appropriate steps to take when the hood flies up.

The Hood Flies Up: This rare emergency usually occurs because the hood is not securely latched. Stop your vehicle if the hood is vibrating. Release the hood and secure it. Take these actins if the hood flies up while you are driving:

a. Slouch down in your seat to look through the crack below the open hood. Check the rear zone.
b. If you cannot see under the hood, roll down your window. Look in the direction that your are driving.
c. Turn on the hazard flashers. Pump the brakes gently to warn other drivers of your emergency.
d. Slow down, and drive out of the traffic flow to a safe location.

11. Student will be able to explain actions to take when a vehicle fire occurs.

A vehicle fire can be dangerous. The fire can involve fuel, oil, grease, ordinary combustibles, electrical equipment, or a combination of sources. Carry an A-B-C type fire extinguisher that is designed to control such fires. Notify the fire department of any vehicle fires. Engine Compartment Fire: Most vehicle fires start in the engine compartment. Take these actions in case of fire:

a. Quickly steer the vehicle off the roadway to a safe, open area. Stay away from buildings and service stations. Turn off the ignition.
b. Have passengers move at least 100 feet away from the vehicle.
c. Estimate how serious the fire is. You might see flames and smoke around the hood. Do not try to put out the fire. Leave the hood closed. Move away from the vehicle while you wait for the fire department. The fuel tank could explode.

If you think that the fire is small enough to control and you have an A-B-C type fire extinguisher, you should take these steps:

a. Use gloves or a rag to protect your hands. Turn your face away to protect yourself from the heat and flames. Carefully open the hood. Once the hood is up, the fire will burn freely.
b. Direct the extinguisher on the fire. Water will not put out oil and fuel fires and can spread the fire.
c. Never try to disconnect the battery or work with your hands under the hood while it is still hot. Fire is possible in any collision where the engine compartment is smashed. Turn off the ignition, and get passengers out and away from the vehicle.

Passenger Compartment Fire: a carelessly handled match or burning tobacco product usually causes a passenger compartment fire. Pull off the roadway. Use water or a fire extinguisher, and make sure the fire is completely out. Upholstery fires often restart.

12. Student will be able to explain steps to take when experiencing animals in the roadway.

In dealing with animals in the roadway a driver should be aware of the fact that suddenly swerving to avoid the animal might result in losing control of the vehicle and/or increasing the threat of a head-on collision. Drivers need also to be reminded that panic braking may result in skidding out of control and/or being hit in the rear by another vehicle. If an animal can safely be avoided drivers are encouraged to do so but it may be necessary to hit the animal especially if it is a small animal.

13. Student will be able to explain steps to take when experiencing objects (other than animal) in the roadway (potholes, etc.).

Potholes can develop as water collects in cracks in the roadway. The water can freeze and thaw, causing the cracks to expand. As vehicles drive over these water-filled cracks, they break up the roadway even more.

Potholes often have sharp edges, which can severely damage tires. You can lose control of your vehicle - and severely damage it - if you hit a pothole at a fast speed.

Watch for potholes and avoid hitting them whenever possible. Drive carefully around or straddle a pothole. Stay in your own lane and check front zones as you try to avoid potholes in the roadway.

If you must drive through a pothole, slow down to prevent tire damage. By driving slowly, you can better keep control of your vehicle.

An object on the roadway creates a hazard, whether it is an object, leaves, an animal, or a person. A cardboard box in the street might not appear to be dangerous. Neither does a pile of leaves raked from a yard. However, avoid these and other objects on the roadway. You might not be able to identify the contents of the box. You cannot see a rake or other object in the leaf pile.

First check traffic, and then decide whether to steer around, brake, straddle, or drive over the object. Choose to straddle the object only if your vehicle can clear it and you cannot safely steer around it. Avoid swerving left across the centerline because you could encounter other traffic. Drive over an object only as a last resort.

14. Student will be able to explain actions needed when experiencing the threat of a collision.

Most drivers are involved in a collision at some time during their lives. If you know in advance how to react, you can lessen the effects of a collision.

<u>Minimizing Effects of a Collision</u>: Suddenly a vehicle emerges from a driveway and enters your path of travel. You know that you cannot avoid a collision. What should you do? If a collision is about to occur, act as follows:

- Above all, do not give up. Keep control of your vehicle. Any change of speed or direction that lessens the impact will help.
- Steer for something "soft" if you leave the roadway. Look for bushes or an open field.
- Avoid objects, such as trees and parked vehicles.
- Get yourself and passengers out and away from your vehicle if there is a change of another vehicle colliding with yours.

Threat of a Head-On Collision: Because a head-on collision produces the greatest force of impact of any collision, serious injuries and/or death are more likely to occur. Take these steps if you are threatened with a head-on collision:

a. Maintain vehicle control. Brake hard, but do not lock the wheels. Slowing lessens the force of impact and gives the other driver space and time to recover control.
b. Blow the horn and flash the headlights. These actions might alert an impaired driver. continues braking and move to the right if the driver does not heed your warning.
c. Steer right toward the shoulder. Do not steer left. The other driver likely will try to steer back into the proper lane. Prepare to drive entirely off the roadway tot eh right, if necessary.

Threat of a Rear-End Collision: You are nearly defenseless against a rear-end collision when your vehicle is stopped. If your vehicle is in motion, you might not realize that a vehicle approaching from the rear is coming too fast and might not be able to avoid hitting your vehicle. Take these actions if your are threatened with a rear-end collision:

a. Flash your brake lights early to alert the driver behind you.
b. As the vehicle nears, check you front zones for open space and move forward, if possible. This precaution gives the driver approaching from the rear more time and space to stop safely.
c. If the intersections are clear, accelerate to give the other drivers more space to stop. If your path is not clear, turn right.
d. If a collision is unavoidable, release your brakes just before the collision occurs. This helps soften the impact. Brake immediately after the collision to avoid sliding into another traffic lane. Maintaining a 3-second following distance and stopping so that your see the tires of the vehicle ahead are good habits. These actions often can help you avoid being hit from behind.

Threat of a Side-Impact Collision: Take these steps to avoid or lessen the effect of a side-impact collision:

a. Brake or accelerate quickly. Do whichever seems more likely to lessen the collision impact.
b. Blow the horn to alert the other driver.
c. Change lanes or swerve away from the impact. Be aware of the constantly changing traffic situation around you.

15. Student will be able to explain actions needed when experiencing deep water.

Do not attempt to drive through deep water on the roadway. Turn around or take another route. Take these actions if your vehicle goes into deep water:

a. Open the window that is the most out of the water. Power windows might short circuit in water so open these windows immediately.

b. Unfasten your safety belt. Check you passengers, and have them unfasten their safety belts.
c. Exit promptly through the open window.

If the windows will not open, attempt to exit through a door. Do not panic if the door is slow to open. Pressure will equalize as water enters your vehicle. You then can open the door.

If you become trapped in your vehicle underwater, turn on your headlights. This can help rescuers find your vehicle more quickly.

16. Student will be able to explain appropriate steps to take if in an accident.

If you collide with another vehicle, a pedestrian, or someone's property, you are legally required to follow specific procedures.

Each state has specific procedures that your must follow immediately when involved in a collision. All states require you to take these five steps:

a. **Stop immediately**. Failure to stop is a serious offense. Move your vehicle to the side of the road. Do not leave your vehicle where it can block traffic unless it is so damaged it cannot be moved. Turn off ignition. If you damage a parked vehicle even slightly, try to find the owner. If you cannot, write your name, address, and phone number on a note. Leave the note under a windshield wiper. Notify the police.
b. **Aid the Injured**. Never move an injured person unless there is danger of fire or another collision. Send for paramedics if anyone is seriously injured. Administer basic first aid for injuries such as sever bleeding, shock, and breathing stoppage only if you have completed a certified first-aid course.
c. **Prevent Further Damage**. Warn oncoming traffic with flares or reflectors placed at least 100 feet ahead of and behind the collision site (500 feet away in high-speed traffic). If you do not have such devices, another person might stand in advance of the site and direct vehicles around the collision. Do not put yourself or others in danger while directing traffic.
d. **Send for Police**. You must call the police if anyone is injured or killed. Some states require you to call the police for any collision, even if no personal injuries are evident.
e. **Exchange Information**. Get and provide this following information from other drivers involved in the collision: names, addresses, driver's license numbers, license plate numbers, and insurance company names and addresses. Note the names and addresses of passengers, the positions in which they were sitting, and the extent of their injuries. Getting and giving this information is your responsibility.
f. **Additional Steps**. Take these additional steps after a collision:
    - Record witnesses' names and addresses. Note the names and addresses of any witnesses to the collision. Make a sketch of the collision scene or take a photo. Record such facts as time, date, location, weather, and driving conditions. Note the name of the hospital to which any injured persons was taken. Note the name and badge number of the police officer at the collision scene.
    - Give police the facts. Provide hones, accurate facts. Never argue about who was to blame, and never admit blame. Stay at the scene until all information has been

recorded. Take your vehicle to a repair shop for any necessary repairs. You generally need two repair estimates for insurance purposes. Keep all the bills.

- File necessary reports. Each state requires drivers involved in a collision to file a written report if someone was killed or injured, or if property damage exceeds a set amount. Some states require that a report be filed within 24 hours of the collision. You must also produce proof of financial responsibility by showing a card that lists your current insurance coverage, or a bond card. Finally, notify your insurance agent promptly. If you fail to do this within the time specified in your policy, the company might refuse to pay your claim.

12 Thirty Minute BTW Lessons
Lesson One

Orientation
The Student will be able to:

A. Approach the vehicle with awareness
B. Check outside and inside of vehicle before unlocking & opening door
C. Lock doors, adjust head restraints, seat, mirrors, safety restraints & steering wheel
D. Check all occupants for safety belt use
E. Demonstrate effective meaning and usage of all gauges and controls

Start

A. Set or check parking brake
B. Select proper gear for starting
C. Secure foot brake pedal
D. Check alert lights and gauges for safety and operational accessories
E. Proper use of starting device
F. Turn headlights on

Placing Vehicle in Motion

A. Make appropriate gear selection
B. Identify open space to enter
C. Communicate to others
D. Place vehicle in motion smoothly
E. Recognize that too much acceleration pitches vehicle to rear

Stop

A. Search effectively ahead to determine braking needs
B. Check rear zone prior to braking
C. Use controlled braking efficiently with heel on the floor
D. Apply a firm squeezing braking force at the beginning
E. Bring the vehicle to a smooth stop by squeezing off brake
F. Recognize that too much braking action affects pitch to the front
G. Resume pressure on the brake to prevent vehicle creep

Steering Right and Left

A. Visually check rear view mirror, side mirrors and blind zones
B. Turn head and visually target in the direction of intended path of travel
C. Use a target, sightline, transition point and path of travel to determine steering entry and return
D. Use the hand over hand or hand to hand for turning; one hand for reverse or 9-3 for evasive actions
E. Recognize that too much steering affects vehicle roll toward the opposite direction
F. Determine the vehicle position in the lane
G. Determine where the front wheels are positioned for turning left; for turning right
H. Determine where the rear wheels are positioned for turning left, for turning right

Securing the Vehicle

A. Stop the vehicle in a safe and legal position
B. Set the parking brake
C. Shift into the appropriate gear before removing foot from brake
D. Turn of headlights and any other accessories
E. Turn off engine and remove key
F. Check traffic flow before opening door, lock doors and exit

Lesson Two

Residential Driving
The Student will be able to:
Target Area

A. Identify objects and areas that appear in the center and the end of the path of travel
B. Identify traffic problems and elements in or near the target area
C. Locate the target area, evaluate the line of sight and path of travel conditions and determine the best approach speed and lane position
D. Evaluate the target area and develop an image of the target path
E. Identify elements that can change the intended travel path
F. Determine risks associated with maintaining path of travel

Searching Path of Travel

A. Move focal vision from path of travel to other zones and back to path of travel
B. Move focal vision in ½ second time frames
C. Share attention more than one time to allow brain to perceive information
D. Search target area 20-30 seconds ahead to evaluate conditions to determine entry speed and lane position
E. Search for line of sight and path of travel changes that can affect approaching the target
F. Approach the target area, continually evaluating the risks in 4-6 second path of travel
G. As you approach the target area, search a new target area 20 – 30 seconds ahead

Space Judgment

A. Count seconds when approaching a fixed object, determine space for 4 seconds at various speeds
B. Search 20 – 30 seconds ahead for target are if possible
C. Continually evaluate 4 – 6 seconds ahead in the immediate path
D. Speed and lane position adjustments may be required when search areas cannot be maintained

Changes to LOS or POT

A. Evaluate modification in ability to see or maintain path of travel
B. Recognize LOS or POT change & evaluate other zones for speed & lane adjustments

Stopping at Stop Signs

A. Check mirrors for rear zone conditions
B. Apply gradual pressure to brake with adequate space to stop smoothly at speed and road condition
C. Just before stop is achieved, ease pressure on brake to allow for inertia
D. Just as stop is achieved, reapply brake to hold in place

Stopping at a Four way or No Controlled intersection

A. Check mirrors for rear zone conditions
B. Apply gradual pressure to brake with adequate space to stop smoothly at speed and road condition
C. Just before stop is achieved, ease pressure on brake to allow for inertia
D. Just as stop is achieved, reapply brake to hold in place
E. If intersection is clear, proceed through, checking cross traffic, stopping again if someone does not stop

Yield Signs

A. Check mirrors for rear zone conditions
B. Apply gradual pressure to brake, visually checking LOS to left and right
C. If both left and right zones are open, proceed through, increasing speed
D. If one or both zones are closed, apply brake with adequate space to stop smoothly at speed and road condition
E. Just before stop is achieved, ease pressure on brake to allow for inertia
F. Just as stop is achieved, reapply brake to hold in place

Starting at Stop or Yield Signs

A. Check mirrors for rear zone conditions
B. Visually check left, front and right zones
C. If zones are open apply pressure to accelerator to proceed through
D. To cross intersection, more space and time is required if there is traffic on the right
E. Space and time is affected by two things; distance and speed of oncoming vehicles
F. To turn right; more space and time is required if there is traffic on the left
G. To turn left; more space and time is required if there is traffic on the right
H. If there are multi lanes; more space and time is required for each of the above

Lesson Three

Open Road Driving
The student is expected to:
Intersections

A. Check rear view mirror when approaching intersections
B. Search for open zones to left, front and right when approaching intersections
C. Evaluate closed or changing zones and make necessary speed and lane adjustments
D. Search for open zones to left, front and right before entering intersection

Curves and Hills

A. Check rear view mirror when approaching a curve or hill
B. See curve in target area
C. Check all zones for options
D. Search LOS and POT through the curve or over the hill for possible closed or changing status
E. Evaluate the LOS and POT for appropriate speed and position adjustments

Speed Control

A. Check mirrors when approaching a closed or reduced LOS and POT
B. Travel speed should be based upon driver, vehicle, legal, roadway and environmental limitations
C. Constant adjustments to speed and position are based on driver processing information on existing conditions
D. Avoid using acceleration in closed or changing zones
E. Recognizing a closed zone, adjust speed to arrive as zone opens
F. When LOS and POT is reduced, adjust speed to maintain or establish an open zone
G. Recognize a speed limit sign as a cue to check gauges mirrors and evaluate LOS and POT conditions
H. Adjust Speed to meet driver, vehicle, legal, roadway and environmental limitations

Lane Position

A. Check mirrors when selecting lane position
B. Select the appropriate lane for space management, legal requirements and destination
C. Select a lane position to give best separation from closed or changing zones
D. Demonstrate ability to place vehicle in appropriate lane position

Lane Position Approaching Curves and Hills

A. Check mirrors when approaching curves and hills
B. Establish appropriate lane position on approach, at apex and on exiting

Rear Awareness

A. Determine if rear zone is open, closed or changing
B. When a tailgater is closing or changing the rear zone, determine the appropriate speed and lane adjustment needed

Following

A. Check mirrors when closing on vehicle in front zone
B. Approach the vehicle in front zone gradually, avoiding a fast closure rate
C. If moving at same speed, work to maintain a four second following distance
D. Stopping behind vehicles, be able to see rear tires touching road
E. Stopping behind a vehicle with no rear window, be able to see driver in their mirrors

Starting in Traffic

A. As the vehicle in front begins to move forward, check mirrors and release pressure on brake
B. As you begin to move, establish four second following distance
C. Check mirrors

Communication and Courtesy

A. Check mirrors
B. Use turn signal at least ½ block in town and ¼ mile on open road when making turn
C. Use signal when making lane change or moving to another lateral position
D. Use headlights to increase visibility
E. Use light tap on horn to make others aware of your presence
F. Tap brake lights to warn rear traffic of a slowdown or stop in traffic flow
G. Use vehicle speed and position to communicate driver's intention
H. Use hand signals to insure others know your intention, offer thanks or yield to others

Timing of Communication

A. Put signal on at least five seconds prior to moving since communication requires time to be sent, received and acted upon
B. Communicate early so that your safe POT can best be controlled
C. Make sure that your messages are acknowledged by others

Timing at Intersections

A. Traffic lights; check mirrors:
    a. Red means STOP
    b. Yellow means stop if you can before the intersection; go at same speed if you can't stop before the intersection, but watch side or turning traffic
    c. Green means go IF IT IS SAFE; cross light just turned red
B. Stop signs; check mirrors:
    a. ALWAYS complete stop
    b. Check Left, Right, Left before releasing pressure from brake
    c. Allow more time for:
        i. Straight through
        ii. Left turn
        iii. Wider streets
        iv. Median in street
        v. Higher speed limits
        vi. Poor environmental conditions
    d. If safe, accelerate smoothly through intersection, check as you proceed
        i. If something comes, you can stop since you are just starting
        ii. If you are in intersection, continue through as rapidly as safe
C. No Traffic Control or All Way Stop
    a. ALWAYS complete stop
    b. If nothing in the intersection, proceed through, watching for encroachment
    c. If necessary, stop again

Lesson Four

Three Point Turn Around
Student should be able to:
Preparation

A. Check Mirrors
B. Give right turn signal
C. Come to smooth stop 8 – 16 inches from right edge of road
D. Give left turn signal

Move to Point One

A. Check mirrors and blind spot in the left rear zone
B. Move the vehicle slowly, using accelerator and brake as needed, turn quickly left
C. Stop vehicle just before reaching left edge of road
    a. Apply visual memory and feel to determine edge of road

Move to Point Two

A. Keep foot firmly on brake and shift gear selector to reverse
B. Check left and right to be sure roadway is still clear
C. Look through rear window the entire time vehicle is in motion while in reverse gear
D. Move vehicle slowly, using accelerator and brake as needed, turn quickly right
E. Stop vehicle completely before turning eyes to the front

Move to Point Three

A. Keep foot firmly on brake and shift gear selector to drive
B. Check left and right to be sure roadway is still clear
C. Look through windshield, move vehicle slowly forward using brake and accelerator as needed and turn quickly left

Resume Travel

A. Check mirrors
B. Move forward using brake and accelerator as needed

Lesson Five

Side Road Turn Around to the Right or Two Point Turn
The Student will be able to:
Preparation

A. Check Mirrors
B. Give right turn signal
C. Come to smooth stop 8 – 16 inches from right edge of road, stopping just as rear bumper clears intersection

Move to Point One

A. With foot firm on brake, shift to reverse
B. Check mirrors, blind spots in right rear and left rear zones
C. Check front zone , when clear, check clear to side road to right
D. Check mirrors again, if clear, look out rear window and begin to back
E. Turn quickly right, moving smoothly
F. Three fourths of the way into the turn, still looking out back window, straighten wheels
G. After coming to complete stop turn head and eyes to check roadway to right and left

Move to Point Two

A. Shift to Drive gear and give left turn signal
B. Check left, right, left for clear zones
C. When clear make a regular left turn, going to midpoint before beginning turn

Resume Travel

A. Check mirrors
B. Move forward using brake and accelerator as needed

Lesson Six

Driving in Traffic
The Student will be able to:
Scanning

A. Move focal vision from POT to another location and back to POT
B. Move focal vision in ½ second time frames
C. Share attention more than one time to allow brain to perceive information
D. Fifty percent of focal vision time should be on POT

Approach to Intersections

A. Check mirrors for rear zone conditions
B. Identify and respond to open/closed zones
C. Establish and maintain proper lane usage and speed control
D. Search left, front and right zones for LOS and POT changes
E. Get open zones before entering
F. Use proper legal and safe stop

Timing Arrival for Open Zone

A. Check mirrors for rear zone conditions
B. Identify condition of traffic light
C. Adjust speed to arrive at open (green light) zone
D. Adjust speed for other traffic
E. Search left, front and right zones for LOS and POT
F. Adjust speed to have at least one open side zone
G. If green light changes, apply brake to a stop if enough space, more than 2 car lengths
H. When light changes and vehicle is within 2 car lengths from intersection, continue through at same speed, watching for drivers that make quick starts

Precision Turns

A. Check mirrors for rear zone conditions
B. Signal ½ block before intersection or place of turn
C. Search intersections left, front, right to ascertain open zones
D. Look into the turn before turning the steering wheel
E. Straighten the steering wheel ¾ through the turn
F. Check mirrors as they accelerate to evaluate decision to make turn at that time

Passing Oncoming Traffic

A. Maintain 20 – 30 second LOS and POT visual lead
B. Maintain Lane Position 1
C. Check mirrors for rear zone conditions
D. As oncoming vehicle reaches 4 – 6 second zone, ease pressure on accelerator for slight speed reduction
E. Maintain focal attention on POT, not oncoming vehicle
F. After passing vehicle, resume normal pressure on accelerator

Stopping at Stop Signs

A. Check mirrors for rear zone conditions
B. Apply gradual pressure to brake with adequate space to stop smoothly at speed and road condition
C. Just before stop is achieved, ease pressure on brake to allow for inertia
D. Just as stop is achieved, reapply brake to hold in place

Stopping at a Four way or No Controlled intersection

A. Check mirrors for rear zone conditions
B. Apply gradual pressure to brake with adequate space to stop smoothly at speed and road condition
C. Just before stop is achieved, ease pressure on brake to allow for inertia
D. Just as stop is achieved, reapply brake to hold in place
E. If intersection is clear, proceed through, checking cross traffic, stopping again if encroachment occurs

Yield Signs

A. Check mirrors for rear zone conditions
B. Apply gradual pressure to brake, visually checking LOS to left and right
C. If both left and right zones are open, proceed through, increasing speed
D. If one or both zones are closed, apply brake with adequate space to stop smoothly at speed and road condition
E. Just before stop is achieved, ease pressure on brake to allow for inertia
F. Just as stop is achieved, reapply brake to hold in place

Starting at Stop or Yield Signs

A. Check mirrors for rear zone conditions
B. Visually check left, front and right zones
C. If zones are open apply pressure to accelerator to proceed through
D. To cross intersection, more space and time is required if there is traffic on the right
E. Space and time is affected by two things; distance and speed of oncoming vehicles
F. To turn right; more space and time is required if there is traffic on the left
G. To turn left; more space and time is required if there is traffic on the right
H. If there are multi lanes; more space and time is required for each of the above

Lesson Seven

Multi Lane Driving and Lange changes
The Student will be able to:

All of the procedures from Lesson Six

Precision Turns

A. Proceed into proper lane to make turn; left lane for left turn, right lane for right turn
B. This will be done by:
    a. Check mirrors for rear zone conditions
    b. Turn on signal for intended direction
    c. If rear zone appears clear, check blind zone by looking over shoulder in the direction the turn is to be made
    d. If head check reveals clear proper rear zone, turn steering wheel very slightly in that direction
    e. If proper rear zone is not clear, maintain lane position, reducing speed to allow zone to clear
    f. Check mirrors for rear zone conditions
    g. If rear zone appears clear, check blind zone by looking over shoulder in the direction the turn is to be made
    h. If head check reveals clear proper rear zone, turn steering wheel very slightly in that direction
C. Continue signal for proper turn
D. Check left, front and right zones for LOS and POT
E. When zones are open, proceed through turn
F. If multi turn lanes, remain in lane as the turn is completed
G. Check mirrors as pressure is increased on accelerator as student straightens steering wheel

Passing/Being Passed

A. Be aware of traffic in all lanes by moving focal attention to the six zones
B. Identify tailgater problems:
    a. Maintain rear zone awareness as well as increasing front following distance
    b. If traveling speed limit, slow gradually to encourage tailgater to pass or increase following distance
    c. If traveling 10 or more mph than the speed limit, consider increasing speed
C. Maintain Lane position 1, unless there is a threat
D. Keep up with traffic flow, unless it is not legal
E. Evaluate gain versus risk prior to passing or lane changes
F. Check all zones for LOS and POT conditions
G. Control speed and lane position

Lesson Eight

Parking
The Student will be able to:
Entering Perpendicular Space

A. Check mirrors for rear zone conditions
B. Scan for available parking space
C. Signal for direction (right or left) of the available parking space
D. Check mirrors for rear zone conditions
E. Establish side position
    a. For space on the left; stay as far to the right as possible to allow better angle to pull into space
    b. For space on the right; stay as far to the left to allow better angle to pull into space
F. Evaluate alignment to space
G. Proceed into space at just a little more than a creeping speed
H. Turn as needed to enter the space
    a. For space on the left; turn to left, keeping as close to vehicle on right, without hitting
    b. For space on the right; turn to right, keeping as to vehicle on left, without hitting
I. Straighten wheels
    a. Center vehicle in the parking space
    b. This allows for easier exit of vehicle and for exiting the parking space leaving
    c. If another parked vehicle is in same direction, align steering wheels for depth of space
J. Secure vehicle (as in Lesson One)
K. Leave vehicle with key in hand

Leaving Perpendicular Space

A. Approach vehicle with key in hand
B. Enter and prepare to drive (as in Lesson One)
C. Check mirrors for rear zone conditions
D. Shift to reverse gear position
E. Visually check left rear and right rear zones
F. Look out rear window
G. Proceed straight back at just more than a creep
H. Stop when half way out of space
I. Visually check left rear and right rear zones
J. Look out rear window
K. Proceed back at just more than a creep and turn wheel
    a. There may be a choice of directions, if traffic flow is two way
    b. To exit right, turn steering wheel right
    c. To exit left, turn steering wheel left
    d. Maintain speed and turning and glance to:
        i. Right front, if turning to left to insure vehicle clearance
        ii. Left front, if turning to right to insure vehicle clearance
        iii. When front clears, look through rear window until vehicle is stopped
L. Check mirrors for rear zone conditions
M. Shift to Drive gear position
N. Visually check LOS and POT for open zone
O. Proceed forward, turning steering wheel to open zone

Entering Angle Space

A. Check mirrors for rear zone conditions
B. Scan for available parking space
C. Signal for direction (right or left) of the available parking space
D. Check mirrors for rear zone conditions
E. Establish side position
    a. For space on the left; stay as far to the right as possible to allow better angle to pull into space
    b. For space on the right; stay as far to the left to allow better angle to pull into space
F. Evaluate alignment to space
G. Proceed into space at just a little more than a creeping speed
H. Turn as needed to enter the space
    a. For space on the left; turn to left, keeping as close to vehicle on right, without hitting
    b. For space on the right; turn to right, keeping as to vehicle on left, without hitting
I. Straighten wheels
    a. Center vehicle in the parking space
    b. This allows for easier exit of vehicle and for exiting the parking space
        i. If another vehicle is parked on the left, when space is to the left, it should not be as far forward
        ii. If another vehicle is parked on the right, when space is to the left, it should be further forward
        iii. If another vehicle is parked on the right, when space is to the right, it should not be as far forward
        iv. If another vehicle is parked on the left, when space is to the right, it should be further forward

J. Secure vehicle (as in Lesson One)
K. Leave vehicle with key in hand

Leaving Angle Space
A. Approach vehicle with key in hand
B. Enter and prepare to drive (as in Lesson One)
C. Check mirrors for rear zone conditions
D. Shift to reverse gear position
E. Visually check left rear and right rear zones
F. Look out rear window
G. Proceed straight back at just more than a creep
H. Stop when half way out of space
I. Visually check left rear and right rear zones
J. Look out rear window
K. Proceed back at just more than a creep and turn wheel
    a. There will not be a choice of directions, regardless of traffic flow
    b. To exit right, turn steering wheel right
    c. To exit left, turn steering wheel left
    d. Maintain speed and turning and glance to:
        i. Right front, if turning to left to insure vehicle clearance
        ii. Left front, if turning to right to insure vehicle clearance
        iii. When front clears, look through rear window until vehicle is stopped
L. Check mirrors for rear zone conditions
M. Shift to Drive gear position
N. Visually check LOS and POT for open zone
O. Proceed forward, turning steering wheel to open zone

Lesson Nine

Expressway
The Student will be able to:
Entering Expressway
A. Check mirrors for rear zone conditions
B. Search for proper entrance to expressway
C. Make any needed lane changes to enter expressway
D. Signal for turn and make proper turn into entrance
E. On entrance ramp;
    a. If straight, increase speed quickly
    b. If curved, increase speed as safe
F. Visually check to left for open zone in the first lane
G. Give left turn signal
H. Time merge to the left to enter open zone in first lane without interfering with traffic flow
I. DO NOT BRAKE UNLESS ABOSUTELY NECESSARY, control speed with accelerator
J. Establish position and speed in traffic lane and check off signal

Traveling on Expressway

A. Maintain speed and lane position
    a. Keep up with traffic, unless it is going faster than speed limit or conditions permit
    b. Stay steady in lane, very little movement of wheel at higher speed
    c. Maintain good space in front (3 or 4 seconds if possible)
B. **CHECK MIRRORS** for rear zone conditions **OFTEN**
C. Note:
    a. That lanes are usually wider
    b. Curves are not as sharp and well banked, no need to slow for curves (at speed limit)
    c. Bridges eliminate intersections so there is no need for traffic lights or stop signs
    d. Road is designed to carry large amount of traffic at high speeds
    e. Few decisions; no left turns, no entry turns (merge) and no slowing in main lane to exit
    f. Moves a lot of traffic in a hurry and is usually safer
    g. Not much to do; BUT MUST REMAIN ALERT, things happen very quickly
    h. A mistake affects a lot of people in a hurry
    i. If possible, establish 10 – 12 second space cushion
        i. In front
        ii. On sides
        iii. To rear
    j. On long trip, speed control is helpful, use if possible
        i. Eliminate need to constantly control speed
        ii. Keep at a legal speed, if set at legal speed
        iii. Still need to be very alert to LOS – POT for clear zones

Exiting Expressway

A. Visually search for needed exit
B. Check mirrors for rear zone conditions
C. Move to exit lane, but maintain speed
D. Only a **slight** movement of the steering wheel is needed to move into exit lane
E. As you enter exit lane, check mirrors for rear zone conditions
F. Apply brake as needed to establish safe speed for exit ramp
G. Search LOS – POT for closed/open zones
H. Back in world of traffic lights and stop signs

Lesson Ten

More Traffic and Multi Lane Driving
This is a More Intense and Repetitive Lesson Seven
The Student will be able to:
Precision Turns

A. Proceed into proper lane to make turn; left lane for left turn, right lane for right turn
B. This will be done by:
    a. Check mirrors for rear zone conditions
    b. Turn on signal for intended direction

c. If rear zone appears clear, check blind zone by looking over shoulder in the direction the turn is to be made
d. If head check reveals clear proper rear zone, turn steering wheel very slightly in that direction
e. If proper rear zone is not clear, maintain lane position, reducing speed to allow zone to clear
f. Check mirrors for rear zone conditions
g. If rear zone appears clear, check blind zone by looking over shoulder in the direction the turn is to be made
h. If head check reveals clear proper rear zone, turn steering wheel very slightly in that direction

C. Continue signal for proper turn
D. Check left, front and right zones for LOS and POT
E. When zones are open, proceed through turn
F. If multi turn lanes, remain in lane as the turn is completed
G. Check mirrors as pressure is increased on accelerator as student straightens steering wheel

Passing/Being Passed

A. Be aware of traffic in all lanes by moving focal attention to the six zones
B. Identify tailgater problems:
    a. Maintain rear zone awareness as well as increasing front following distance
    b. If traveling speed limit, slow gradually to encourage tailgater to pass or increase following distance
    c. If traveling 10 or more mph than the speed limit, consider increasing speed
D. Maintain Lane position 1, unless there is a threat
C. Keep up with traffic flow, unless it is not legal
D. Evaluate gain versus risk prior to passing or lane changes
E. Check all zones for LOS and POT conditions
F. Control speed and lane position

Lesson Eleven

Review

The Student will be able to:

A. Divide Focal and Mental Attention between Intended POT and other tasks
    a. Move focal vision from POT to another location and back to POT
    b. Move focal vision within ½ second time frames
    c. Share attention more than one time to allow brain to perceive information
B. Precision Turns
    a. Demonstrate and explain a proper side position
    b. Demonstrate and explain the forward position
    c. Check mirrors for rear zone conditions
    d. Give proper signals
    e. Search intersections left, front and right to ascertain open zones
    f. Look into turns before turning steering wheel

C. Approach to Intersections
    a. See and respond to open/closed zones
    b. Check and respond to rear zone conditions
    c. Establish and maintain proper lane usage and speed control
    d. Search left, front and right zones for LOS and POT changes, get open zones before entering
    e. Demonstrate and use staggered, legal and safe stops when applicable
D. Timing Arrival for Open Zone
    a. See condition of traffic light, adjust speed to arrive at a green light, if possible
    b. See closed front zone; adjust speed to reduce closure rate and to arrive in an open zone
    c. Adjust speed to have at least one open side zone, if possible
E. Precision Lane Change
    a. Evaluate zones and mirror blind spots
    b. Move to LP2 (left side of lane) for left lane change
    c. Move to LP3 (right side of lane) for right lane change
    d. Make final mirror blind spot check
    e. Enter new lane in LP2 (left lane change) or LP3 (right land change)
    f. Decide on best lane position for conditions
F. Approach to Curves
    a. See curve in target area
    b. Check all zones for options
    c. Establish effective speed control
    d. Left curve approach LP3 if right zone is open, apex LP1, exit LP1
    e. Right curve approach LP2 if right zone is open, apex LP3, exit LP1
G. Passing/Being Passed
    a. Identify tailgater problem for speed and lane position adjustment
    b. Evaluate gain versus risk prior to attempting passing maneuver
    c. Check all zones for LOS – POT conditions
    d. Control lane and speed conditions
H. Getting On/Off Highways
    a. Control speed on entrance ramp for search time and options
    b. Evaluate gap to enter
    c. Effective speed on acceleration lane
    d. Getting off: plan ahead, use brake as needed
I. Backing Techniques
    a. Effective searching prior to and while backing
    b. Effective use of brake for speed control
    c. Effective use of accelerator for speed control
    d. Effective steering technique
J. Parking Techniques
    a. Establish side position
    b. Demonstrate proper forward position
    c. Evaluate alignment to space
    d. At pivot point, turn wheel
    e. Visually target center of vehicle to space
    f. Straighten tires, demonstrate front limitation point

K. Turnaround Techniques
    a. Establish side position
    b. Demonstrate proper forward position
    c. Evaluate alignment to space
    d. At pivot point, turn wheel
    e. Visually target center of space
    f. Straighten tires, demonstrate front & rear limitations
    g. Proceed to open zones
L. Responding to Emergency Situations
    a. Use vision control, motion control and steering control sequences
    b. Recognize and respond to adverse conditions that change vehicle traction
    c. Recognize front and rear wheel traction loss
    d. Demonstrate appropriate controlled, trail, threshold and antilock brake use
    e. Recognize and respond to vehicle mechanical failures

Lesson Twelve

Road Test
The Student will be able to:
Leave Parking Space

A. Check mirrors for rear zone conditions
B. Check left and right rear zones
C. Looking through rear window, back halfway out of parking space
D. Stop, check left and right rear zones
E. When they are open, continue backing, turning steering wheel to clear space
F. When stopped, turn visual search to front zone
G. Continue forward when zones are open

Proceed into Multi Lane Traffic

A. Check mirrors for rear zone conditions
B. Move into proper open zone
C. Proceed at appropriate speed for conditions
D. Take necessary actions to make a right turn
E. Take Necessary actions to make a left turn

Make a Three Point Turnaround

A. Check mirrors for rear zone conditions
B. Stop
C. Give left turn signal
D. Check mirrors and left blind spot
E. When open zones, proceed forward at a little more than a creep, steering quickly to the left
F. Stop just before reaching edge of roadway
G. Shift to reverse gear
H. Check left and right zones
I. Looking through back window proceed back at a little more than a creep, steering quickly to the right

J. Stop just before reaching the edge of the roadway
K. Shift to drive gear
L. Check left and right zones
M. Looking through windshield proceed forward at a little more than a creep, steering quickly to the left
N. Straighten wheels and proceed to an open zone

Back Straight

A. Check mirrors for rear zone conditions
B. Bring the vehicle to a stop
C. Visually check all zones for open/close conditions
D. Shift to reverse gear
E. With left hand at top of steering wheel and right hand on back of seat, look through back window and proceed back in open zone, holding the vehicle in the lane and keeping speed at 10 mph or below
F. Apply brake to bring vehicle to a smooth stop

Side Road Turnaround

A. Check mirrors for rear zone conditions
B. Establish side position
C. Establish forward position just past edge of intersection
D. Visually check all zones for open/close conditions
E. Evaluate alignment space
F. Looking through back window, back to pivot point and turn wheel to right
G. Visually target center of vehicle and space to rear
H. Straighten tires, demonstrate rear limitation reference before stopping
I. Shift to drive gear and give left turn signal
J. Visually check all zones for open/close conditions
K. Move into open zone and complete proper left turn
L. Proceed forward into available open zone

Emergency Stop

A. Proceed at 25mph
B. When asked to stop, check mirrors for rear zone conditions
C. Apply brakes with enough to bring vehicle to an immediate stop, not skidding or swerving
D. Should be abrupt enough so that seat belts are activated
E. Proceed on into open zones

Parking

A. Proceed to parking lot, making appropriate necessary turns and lane changes
B. Obey all traffic controls and speed limits
C. Make appropriate turn into parking lot, using appropriate signals and speeds
D. Pull correctly into parking space
E. Appropriately secure vehicle
F. Lock and exit vehicle with key in hand