

A Public Service Agency

# Driver Education Lesson Plan

COURSE CORE TOPICS AND REQUIREMENTS
FOR STATE OF CALIFORNIA,
DEPARTMENT OF MOTOR VEHICLES
APPROVED DRIVER EDUCATION PROGRAM

## Table of Contents

IntroductionIntroduction	i
TIME FRAMES FOR LESSON PLAN	ii
LESSON PLAN OUTLINE	1
I. DRIVING IS YOUR RESPONSIBILITY  A. LICENSE TO DRIVE - A PRIVILEGE:  B. OPERATING A MOTOR VEHICLE IS A SERIOUS RESPONSIBILITY:  C. OBEY THE LITERAL INTERPRETATION OF EVERYDAY LAWS:  D. COMMON COURTESY IS A KEY TO SAFETY:  E. THE IMPORTANCE OF DRIVER EDUCATION:  F. HISTORY OF THE AUTOMOBILE:  II. THE DRIVER  A. THE PHYSIOLOGICAL NATURE OF THE DRIVER:  B. THE PSYCHOLOGICAL NATURE OF THE DRIVER:	11111
III. NATURAL FORCES AFFECTING THE DRIVER  A. NATURAL LAWS AND DRIVING AN AUTOMOBILE:  B. THE FORCE OF GRAVITY:  C. INERTIA AND ENERGY:  D. THE FORCE OF FRICTION:  E. CENTRIFUGAL AND CENTRIPETAL FORCE:  F. FORCE OF IMPACT:	344
IV. SIGNS, SIGNALS AND HIGHWAY MARKINGS  A. RECOGNIZING TRAFFIC CONTROL SIGNALS:  B. PAVEMENT AND CURB MARKINGS - PURPOSE AND MEANING:  C. ADDITIONAL PAVEMENT MARKINGS - COLOR AND PURPOSE:  D. INTERSECTIONS OR CROSSINGS THAT REQUIRE SPECIAL STOPS:  E. UNDERSTANDING PICTORIAL MESSAGES INSTANTLY:	4 5 6
V. CALIFORNIA VEHICLE CODE AND RULES OF THE ROAD.  A. PROVISIONAL DRIVER LICENSE:  B. AUTOMOBILE OWNERSHIP AND REGISTRATION:  C. TRAFFIC LAWS FOR PEDESTRIANS AND DRIVERS:  D. AUTOMOBILE EQUIPMENT:  E. CIVIL LIABILITY AND FINANCIAL RESPONSIBILITY:  F. CRIMINAL OFFENSES:	7 8 9 9
VI. CAUSES AND COSTS OF ACCIDENTS	10 11 13
VII. DIFFERENCES IN URBAN AND RURAL DRIVING  A. URBAN DRIVING:  B. FREEWAY DRIVING:  C. DRIVING ON OPEN HIGHWAYS:  D. PASSING:  E. HAZARDOUS CONDITIONS:	14 16 18 19
VIII. CRITICAL VEHICLE SYSTEMS AND SUBSYSTEMS.  A. CONSTRUCTION OF THE AUTOMOBILE:  B. SAFETY EQUIPMENT:  C. MAINTENANCE OF THE AUTOMOBILE:  D. ECONOMICAL AND SAFE USE OF THE AUTOMOBILE:	21 22 23

IX. PEDESTRIAN SAFETY	24
A. AS A PEDESTRIAN:	24
B. AS A DRIVER:	25
C. AVOIDING COLLISIONS WITH ANIMALS:	25
X. EFFECTS OF ALCOHOL AND DRUGS	25
A. ALCOHOL:	25
B. DRUGS:	
C. AVOIDING DRIVING WHILE INTOXICATED:	
D. AVOIDING THE INTOXICATED DRIVER:	28
XI. MOTORCYCLE SAFETY	
A. SHARING THE ROAD WITH MOTORCYCLES:	28
B. RIDING A MOTORCYCLE:	
C. RIDING AS A PASSENGER ON A MOTORCYCLE	29
XII. RISK TAKING AND RISK PERCEPTION OF TEENAGERS	29
A. YOUTHFUL RISK TAKING:	
B. RISK PERCEPTION BY YOUNG DRIVERS:	29
XIII. SUBSTANCE ABUSE	30
A. ILLEGAL FOR UNDER 21 TO POSSESS OR USE ALCOHOL:	30
B. STATISTICS:	30
C. CYCLE OF ABUSE:	30
D. DRUG ACTIONS WITHIN THE BODY:	
E. AVAILABILITY OF DRUGS	31
F. LEGALITIES:	31
XIV. DRIVING INEXPERIENCE	31
A. INEXPERIENCE VS. IMMATURITY:	31
XV. ROAD RAGE	32
A. ANGER MANAGEMENT:	
B. STATISTICS:	32

## COURSE CORE TOPICS AND REQUIREMENTS FOR STATE OF CALIFORNIA DEPARTMENT OF MOTOR VEHICLES APPROVED DRIVER EDUCATION PROGRAM

## Introduction

- A. The Driver Education Course should include a minimum of thirty (30) periods of fifty (50) minutes each of classroom instruction. Breaks may range from 5 to 10 minutes.
- B. Each student may receive a maximum of seven (7) hours of instruction per day.
- C. The course shall utilize at least five contemporary (5) films or video tapes. All those used must be listed by title and producer (source). The length of each presentation must be shown, along with a short description of its subject matter. Films should comprise no more than 180 minutes of the total class time.
- D. The course shall make use of contemporary textbooks.
- E. Each lesson plan submitted for department approval shall provide sufficient detail and content to allow the department to adequately review the course for content, method of instruction, and amount of instruction time. It should be balanced as to provide a good overview of the subject matter pertinent to Driver Education. Commonly available traffic safety publications may be used as supplemental materials. The bulk of the course should be a program of original composition. It is inappropriate to substitute copied material for detailed course content.
- F. A lesson plan should contain enough detail to explain WHAT will be covered, WHY it needs be covered, HOW it will be covered, and WHEN it will be covered. The attached lesson plan outline provides the recommended framework, or structure, for your lesson plan. You need to develop the details.
- G. The lesson plan shall either follow the format of this outline or include a detailed index indicating where each topic and sub-topic can be found.
  - 1. WHAT will be covered is the content of the course and sets forth what is to be taught in sufficient detail for an inexperienced instructor to conduct a thorough class. This information is usually in outline form, but other formats may be used.
  - 2. WHY is the learning objective for the students. This is easier to understand if stated at the beginning of each segment of instruction.
  - 3. HOW the material will be covered will enable the department to determine, to some degree, the effectiveness of the course. The intent is to ensure against situations where the student is left to read, with little other direction. The use of a variety of techniques, using a variety of supplemental materials is encouraged. The following are some common way of covering the material:

- Lecture (normally the predominant portion)
- Films and review
- Student reading and review
- Tests and review
- Guest speaker
- Demonstration
- Discussion
- 4. WHEN each topic is covered; indicating the time devoted to each topic.
- E. All topic and sub-topic areas listed on the attached class outline are to be thoroughly discussed.

## TIME FRAMES FOR LESSON PLAN

TOPIC AREAS		RECOMMENDED TIME
I.	Driving is Your Responsibility	2 hours
II.	The Driver	2 hours
III.	Natural Forces Affecting Driving	2 hours
IV.	Signs, Signals, and Highway Markings	2 hours
V.	California Vehicle Code and Rules of the Road	5 hours
VI.	Major Causes Of Accidents	3 hours
VII.	Differences in Urban and Rural Driving	2 hours
VIII.	Critical Vehicle Systems and Maintenance	2 hours
IX.	Pedestrian Safety	1/2 hour
X.	Effects of Alcohol and Drugs	3 hours
XI.	Motorcycle Safety	1/2 hour
XII.	Risk Taking and Risk Perception of Teenagers	1 hour
XIII.	Substance Abuse	1 1/2 hour
XIV.	Driving Experience	1 hour
XV.	Road Rage	1 1/2 hour
	ΤΩΤΛΙ	30 hours

TOTAL 30 hours

## LESSON PLAN OUTLINE

#### I. DRIVING IS YOUR RESPONSIBILITY

## A. LICENSE TO DRIVE - A PRIVILEGE:

- 1. What your driver license means to you
- 2. What your license means to others

## B. OPERATING A MOTOR VEHICLE IS A SERIOUS RESPONSIBILITY:

- 1. Motor vehicle is a weapon
- 2. Dangerous as a loaded gun, if not operated properly
- 3. Parking responsibly (to avoid runaways)

## C. OBEY THE LITERAL INTERPRETATION OF EVERYDAY LAWS:

- 1. Why stop completely at stop signs?
- 2. What does yield really mean?

## D. COMMON COURTESY IS A KEY TO SAFETY:

- 1. Roadway is shared by all drivers
- 2. Courtesy makes order out of chaos.
- 3. Treat other drivers the way you want to be treated.

## E. THE IMPORTANCE OF DRIVER EDUCATION:

- 1. Provides the knowledge, understanding, skills, and attitudes needed for greater safety both as an operator of an automobile and as a pedestrian
- 2. Lessens the possibility of costly, injurious and sometimes deadly accidents
- 3. Reduces the cost of policing, property replacement, etc.

## F. HISTORY OF THE AUTOMOBILE:

- 1. Development of the automobile
  - a. Sociological changes caused by the automobile
  - b. Economic conditions created in part by the automobile
- 2. The automobile and the future

#### II. THE DRIVER

## A. THE PHYSIOLOGICAL NATURE OF THE DRIVER:

- 1. The eyes and vision
  - a. Eye physiology
  - b. Visual acuity
  - c. Distance judgment (depth perception)

- d. Peripheral vision
- e. Night vision
- f. Color vision
- g. Compensation for subnormal vision
- 2. The ears and hearing
  - a. Auditory acuity
  - b. Partial deafness
  - c. Total deafness
  - d. Compensation for impaired hearing
- 3. Other physical conditions that can affect one's ability to safely operate a vehicle
  - a. Fatigue
  - b. Illness
  - c. Deformities
  - d. Steadiness
  - e. Muscular condition
  - f. Disqualifying conditions (when applying for a driver license)
    - 1) Cerebral palsy (depending on severity)
    - 2) Epilepsy (depending on severity)
    - 3) Heart development
    - 4) Paralysis (depending on severity
    - 5) Insanity
    - 6) Others
- 4. Effects of carbon monoxide poisoning

## B. THE PSYCHOLOGICAL NATURE OF THE DRIVER:

- 1. Attitudes essential to good driving
  - a. Readiness and motivation
  - b. Analysis of desired habit patterns
  - c. Establishment of habit patterns by repeated performance (practice)
  - d. Maintenance of habit pattern by unvarying performance
- 2. Causes of behavior variables
  - a. Emotional tension
  - b. Environmental conditions
  - c. Heredity
  - d. Physical conditions
  - e. Training
- 3. Undesirable traits of a driver
  - a. Aggressiveness
  - b. Egotism
  - c. Emotional instability

- d. Inattentiveness
- e. Exhibitionism
- f. Irresponsibility

## III.NATURAL FORCES AFFECTING THE DRIVER

## A. NATURAL LAWS AND DRIVING AN AUTOMOBILE:

- 1. How natural laws affect the movement of an automobile
  - a. Natural laws determine how an automobile may be operated safely.
  - b. Natural laws enforce themselves.
  - c. Types of accidents caused by misjudging natural forces

## **B.** THE FORCE OF GRAVITY:

- 1. Definition: the force that pulls objects towards the center of the earth
- 2. Effect of gravity on the movement of automobiles
  - a. Low gears, and their use to overcome gravity while driving uphill and downhill
  - b. Use of gears, brakes, and wheel blocks in parking on inclines

## C. INERTIA AND ENERGY:

- 1. Definition of inertia: property in matter that, if at rest, causes it to remain at rest, or if in motion, causes it to remain in motion, unless it is acted upon by an outside force
- 2. Counteracting inertia's effects with seat belts
- 3. Potential energy
  - a. Definition of potential energy: energy a body possesses because of its position or form. Example: Car parked on a hill (position), or a battery (form)

## 4. Kinetic energy

- a. Definition of kinetic energy: energy a body possesses because of its motion
- b. Effects of kinetic energy on driving
  - 1) Doubling speed quadruples kinetic energy
  - 2) The force of gravity decreases the effect of kinetic energy as a car moves uphill.
  - 3) The force of gravity increases the effect of kinetic energy as a car moves downhill.
  - 4) A moving automobile can be stopped by applying the brakes, thus transferring kinetic energy into heat energy.
  - 5) In a collision, kinetic energy is dissipated into energy and heat.

#### D. THE FORCE OF FRICTION:

- 1. Definition of friction: the resistance to movement of one surface over another surface
- 2. Friction in starting, moving, and turning
  - a. Friction between the tires and the road
  - b. Friction of the engaged clutch
- 3. Friction in stopping
  - a. Between the brake lining and drum
  - b. Between the tires and the road
- 4. Road, brake, and tire conditions affecting the amount of friction
- 5. Excessive wear due to friction
  - a. Tires traction secured by tread of tire and road surface
  - b. Moving parts of automobile other than tires
- 6. Friction reduction through lubrication

## E. CENTRIFUGAL AND CENTRIPETAL FORCE:

- 1. Centrifugal force (not a real force) is the reaction to the centripetal force (force which keeps an object moving in a curved path) necessary to hold an object at a fixed point in a rotating frame.
  - a. Means of affecting centrifugal force
    - 1) When cornering, a bicycle or motorcycle leans toward the inside.
  - b. Means of affecting centripetal force
    - 1) Reduce speed before entering curve
    - 2) Build banked curves
    - 3) Brake gradually and gently, if braking is needed while cornering.

## F. FORCE OF IMPACT:

- 1. Factors determining force of impact
  - a. Kinetic energy; i.e., vehicle and occupant speed and weight
  - b. Vehicle characteristics; body rigidity, and "crush zones"
  - c. Above characteristics as they relate to opposing object

## IV. SIGNS, SIGNALS AND HIGHWAY MARKINGS

## A. RECOGNIZING TRAFFIC CONTROL SIGNALS:

- 1. Purpose of traffic controls
  - a. Regulation
  - b. Warning
  - c. Information
  - d. Guidance

- 2. Meaning of traffic control signals
  - a. Traffic lights
  - b. Arrows
  - c. Flashing signals
  - d. Lane signals
- 3. Intersection safety
  - a. Scan for traffic controls and prohibitive signs.
  - b. Scan for potential hazards.
  - c. Entering controlled intersections on yellow light
  - d. Controlled intersections
    - 1) Signal lights
    - 2) Flashing signal lights
    - 3) Circular arrows
    - 4) Right turn on red signals
    - 5) Designated lanes

## **B. PAVEMENT AND CURB MARKINGS - PURPOSE AND MEANING:**

- 1. Yellow center line marking
  - a. Broken line
  - b. Solid line next to broken line
  - c. Double solid lines on two lane roadways
  - d. Double solid lines on four lane roadways
- 2. White line markings
  - a. Broken
  - b. Solid
  - c. Lines with arrows
- 3. Curb markings
  - a. Purpose
  - b. Color
  - c. Placement

## C. ADDITIONAL PAVEMENT MARKINGS - COLOR AND PURPOSE:

- 1. Edge of pavement
- 2. Obstructions
- 3. Stop lines
- 4. Crosswalks
- 5. Railroad crossings
- 6. School warnings

## D. INTERSECTIONS OR CROSSINGS THAT REQUIRE SPECIAL STOPS:

## 1. Railroad crossings

#### a. General

- 1) About 500 people are killed and 1500 are injured each year in car vs. train accidents.
- 2) About 500 people are killed each year trespassing on railroad tracks and property.
- 3) A motorist is 30 times more likely to be killed in a crash involving a train than in a collision involving another motor vehicle.
- 4) More people die in highway-rail crashes each year than in commercial airline crashes in the average year.
- 5) It takes the average train over a mile to stop.
- 6) The majority of vehicle-train crashes occur when the train is traveling less than 30 M.P.H.

#### b. Controls

- 1) Flashers they mean stop
- 2) Crossing gate don't drive around
- 3) Crossing sign
- c. Rail crossing safety (including rail transit)
  - 1) Never stop on railroad tracks; let traffic ahead clear before trying to cross tracks.
  - 2) Watch for vehicles required to stop at all rail crossings.
  - 3) Never walk on railroad tracks.
  - 4) When crossing multiple tracks, wait a few seconds after a train has passed to be sure there isn't one traveling the other way.
  - 5) Never race a train to the crossing.
  - 6) If your vehicle stalls on tracks get out. Only attempt to restart if you can post someone outside the car to watch for trains.
  - 7) Do not misjudge the train's speed and distance. Large objects appear to be going much slower than they really are.

## 2. School buses

- a. Flashing red lights mean that both directions of traffic must stop at a safe distance away from the school bus and remain stopped until the red lights stop flashing.
- b. School busses are now required to activate red lights at all stops.
- c. Always obey hand signals and other instructions of school bus drivers.
- d. Be as courteous as possible to school busses and give them the right of way whenever possible.
- e. Do not pull out in front of school busses or otherwise cause them to maneuver abruptly.

- f. Be very cautious around stopped school busses, even if the red lights are not flashing. Assume that a child might dart out in front of you.
- g. Treat school bus stops as school zones; drive 25 M.P.H. or less if children present.

## E. UNDERSTANDING PICTORIAL MESSAGES INSTANTLY:

- 1. Red, black, or red on white
  - a. Stop, yield or a prohibition
- 2. Guide green
  - a. Movement permitted or directional guidance
- 3. Warning yellow
  - a. General warning
- 4. Construction orange
  - a. Warning and guidance, information for construction and maintenance zone operation
- 5. Service blue
  - a. Motorists' services
- 6. Recreational brown
  - a. Public recreation and cultural interest guidance
- 7. Shapes
  - a. Octagon stop
  - b. Triangle yield
  - c. Round Railroad Crossing
  - d. Vertical rectangle Regulatory
  - e. Pentagon School
  - f. Pennant No Passing
  - g. Diamond Warning
  - h. Horizontal Rectangle Information and guide

## V. CALIFORNIA VEHICLE CODE AND RULES OF THE ROAD

## A. PROVISIONAL DRIVER LICENSE:

- 1. Applications (12800 CVC)
- 2. Fee (14900 CVC)
- 3. Examination (12803 CVC)
- 4. Temporary license (12509 CVC)
- 5. Instruction permit (12509 CVC)
- 6. Provisional driver license (12814.6 CVC)
  - a. Provisional driver license restrictions (12814.6(b) CVC)

- 7. Renewal (12814, 12816 CVC)
- 8. Restricted license (12813, 13360, 14603 CVC)
- 9. Student license (12650, 12653 CVC)
- 10. Non-resident drivers (12502-12505 CVC)
- 11. Junior Permits (12513, 12514 CVC)
- 12. Possession of license (12951 CVC)

## B. AUTOMOBILE OWNERSHIP AND REGISTRATION:

- 1. Automobile ownership (4450 CVC)
- 2. Registration of motor vehicles (4000, 4601, 4602, 4607 CVC)
- 3. Change of address (4159, 4160 CVC)
- 4. Change of motor (4161, 4163 CVC)
- 5. Display of registration (4454 CVC)
- 6. Display of license plates (4460, 5200-5203 CVC)

## C. TRAFFIC LAWS FOR PEDESTRIANS AND DRIVERS:

- 1. Pedestrians rights and duties
  - a. Right of way at crosswalk (21950 CVC)
  - b. Vehicles stopped for pedestrians (21951 CVC)
  - c. Right of way on sidewalk (21952 CVC)
  - d. Tunnel or overhead crossing (21953 CVC)
  - e. Crossing at other than crosswalk (21954 CVC)
  - f. Crossing between controlled intersections (21955 CVC)
  - g. Pedestrian on roadway (21956 CVC)
  - h. Hitchhiking (21957 CVC)
  - i. Skiing and tobogganing on roadway (21959 CVC)
  - j. Freeways (21960 CVC)
  - k. Local regulation of pedestrians (21961 CVC)
- 2. Basic laws for drivers
  - a. Speeding (22349-22352 CVC)
  - b. Red means "Stop" (21453 CVC)
  - c. Right of way (21800-21806 CVC)
  - d. Unsafe lane changes (21658 CVC)
  - e. Left turns and turns (21801 CVC)
  - f. Following too closely (21703 CVC)
  - g. Slow moving vehicles (21654 CVC)

- 3. Other important laws for drivers
  - a. Signaling (22107-22111 CVC)
  - b. Overtaking and passing (21750-21755 CVC)
  - c. Turning movements into or out of traffic (22100-22105 CVC)
  - d. Stopping, standing or parking (22500, 22502, 22504, CVC)
  - e. Traffic signs, signals and road markings (21450-21462 CVC)
  - f. Stopping at streetcar or bus loading zones (21756 CVC)
  - g. Stopping when school buses are loading or unloading (22454 CVC)
  - h. Other special stops (22450-22452 CVC)
  - i. Duty to stop, give reasonable assistance and report accidents (20001-20006, 20008, 20009 CVC)
  - j. Bicycles (21200-21212 CVC)
  - k. Motorcycles (25451, 25650, 27802, 12804 CVC)

## D. AUTOMOBILE EQUIPMENT:

- 1. Brakes (26450, 26451, CVC)
- 2. Lights (280, 24250, 24251, 24400, 24600-24603, 24950-24953 CVC)
- 3. Horn (27000-27001 CVC)
- 4. Muffler (425, 27150 CVC)
- 5. Fenders and mudguards (27600 CVC)
- 6. Rearview mirror (26709 CVC)
- 7. Windshield and wipers (26700, 26701, 26703-26710 CVC)
- 8. Seat belts (27302, 27304, 27315 CVC)
- 9. Smog control devices (27156 CVC)

## E. CIVIL LIABILITY AND FINANCIAL RESPONSIBILITY:

- 1. Financial responsibility (16250, 16251, 16370-16374 CVC)
- 2. Proof of ability to respond in case of damages (16430, 16431, 16433-16435 CVC)
- 3. Failure to report accident to DMV (16000-16002, 16004, 16005, 40833 CVC)
- 4. Suspension of driving privileges (16070-16072 CVC)
- 5. Deposit of security required (16020 CVC)
- 6. Minor's liability imputed to others (17706-17711 CVC)

## F. CRIMINAL OFFENSES:

- 1. Negligent operator (12810 CVC)
- 2. Misdemeanor and felony violations (42000 CVC)
  - a. Speeding and reckless driving (23103 CVC)
  - b. Drunk Driving (23101, 23152, 23153 CVC)

- c. Drug violations (23105, 23106, 23152, 23153 CVC)
- d. Theft and malicious mischief (10851-10853 CVC)
- 3. Suspension and revocation of license by court procedure
  - a. Speeding and reckless driving (13200 CVC)
  - b. Driving while intoxicated (13352 CVC)
  - c. Speed in excess of 100 miles per hour (13200.5 CVC)
  - d. Revocation required (13350, 13351, 13355, 13356 CVC)
  - e. Additional grounds for suspension (13201, 13361 CVC)
- 4. Offenses against licensing laws
  - a. Driving with a suspended or revoked license (14601-42001 CVC)
  - b. Driving by unlicensed minor (12500, 14607 CVC)
  - c. Driving by unlicensed person (12500, 14604, 14607 CVC)
  - d. Misstatement on driver's license application (20 CVC)
  - e. Civil liability when signing minor's application (17700-17710 CVC)

## VI. CAUSES AND COSTS OF ACCIDENTS

## A. FAULTY DRIVER PERFORMANCE:

- 1. Fatigue, physical and mental
- 2. Emotional problems
  - a. Depression
  - b. Anger
  - c. Preoccupation with problems
- 3. Operator error
  - a. Driving too fast for conditions
  - b. Following too closely
  - c. Inattentive driving
  - d. Poor visual and scanning habits
  - e. Making poor decisions
    - 1) As a result of disregarding law
    - 2) As a result of not knowing law
  - f. Improper lane changes
  - g. Unsafe passing
  - h. Failure to yield right of way to vehicles and/or pedestrians
  - i. Failure to keep to the right (hogging the road)
  - j. Driver lacks skill to handle vehicle in a skid

- 4. Faulty pedestrian performance
  - a. Jaywalking
  - b. Walking across or along a street or highway while intoxicated, inattentive, or wearing stereo headphones
  - c. Failure to walk against traffic
- 5. Faulty automotive equipment
  - a. Bald tires
  - b. Bad brakes
  - c. Bad lighting equipment
  - d. Bad steering and/or suspension
- 6. Hazardous driving conditions
  - a. Intersections, controlled and uncontrolled
  - b. Poor visibility due to fog, rain, and darkness
  - c. Road variations
    - 1) Curves, parked vehicles
    - 2) Hills
    - 3) Slick road surface

#### **B. ACCIDENT AVOIDANCE AND PREVENTION:**

- 1. Defensive driving techniques
  - a. Be alert
  - b. Don't make assumptions about other driver's intentions
  - c. Skid techniques (keep front tires aligned with intended path)
  - d. Three second rule
  - e. Escape techniques
  - f. Emergency braking Pump drum brakes, use threshold braking for disc brakes and slam on anti-lock brakes
  - g. Effective use of horn
  - h. Be flexible in selecting appropriate speed for conditions.
- 2. Avoiding a collision with the car ahead
  - a. Importance of correct vehicle lane placement
  - b. When to increase following distance to more than three seconds
    - 1) When being tailgated
    - 2) When vision is blocked or visibility is poor
    - 3) When speed is increased
    - 4) When adverse roadway, traffic, or weather conditions exist

- c. Momentary distractions pick a safe time to look away
  - 1) Check the situation ahead
  - 2) Take short looks
  - 3) Have a passenger help with navigation and other non-driving chores
- d. Look ahead for trouble
  - 1) Look over and around the car ahead
  - 2) Check ahead for speed on hilltops and curves
  - 3) Watch brake lights in adjacent lanes
  - 4) Start braking early
- e. Locations to watch for trouble
  - 1) Traffic controlled intersections
  - 2) Approaching crosswalks
  - 3) Lanes next to parked cars
  - 4) Parking lot entrances
  - 5) Interchanges where cars enter and leave
  - 6) Slippery or ice covered streets

Where children are at play

- 3. Avoid being rear-ended by another vehicle
  - a. Increase the following distances from vehicles ahead.
  - b. Signal early for turns, stops, and lane changes.
  - c. Brake smoothly and gradually.
  - d. Keep pace with traffic when possible and legal.
  - e. Check mirrors for following distance of other vehicles.
  - f. Before changing lanes, check direction of travel.
  - g. After stopping, keep brake pedal depressed.
  - h. Keep rear lights clean and functioning.
- 4. How to choose an alternate path of travel as an escape route
  - a. Importance of maintaining adequate visual lead
  - b. Select speeds which position vehicle between clusters of vehicles
  - c. Select a safe lane position within traffic clusters.
  - d. Avoiding multiple hazards
    - 1) Identify hazards early
    - 2) Predict potential hazards
    - 3) Adjust speed and position to avoid potential hazards
    - 4) Anticipate and plan escape routes

#### C. PROCEDURES WHEN INVOLVED IN AN ACCIDENT:

- 1. Stopping requirements
  - a. Victims at the scene
  - b. Property damage unable to locate owner
- 2. Aid to the injured
  - a. Sending for help
  - b. When to move an injured person
- 3. Preventing further damage
  - a. Reducing chances of fire
  - b. Warning oncoming vehicles
- 4. Reporting requirements
  - a. When a report must be filed
  - b. Use of reports
- 5. Exchanging information
  - a. Identifying information
  - b. Noting damage and injury
- 6. Additional steps
  - a. Obtain names and addresses of other witnesses
  - b. Give accurate facts to police
  - c. Seek medical attention

## D. FINANCIAL RESPONSIBILITY REQUIREMENTS:

- 1. When a report is required
  - a. Property damage amounts
  - b. Injury
  - c. Time frames for reporting
- 2. Purpose of insurance
- 3. Dangers of underinsuring
- 4. Required amounts of coverage
  - a. Minimum amounts of insurance coverage
  - b. Additional forms of coverage
    - 1) Collision
    - 2) Comprehensive
    - 3) Bodily injury
    - 4) Uninsured driver (required)
- 5. Suspension for failure to provide proof of coverage
  - a. Period of suspension
- 6. Proof required when registering a vehicle or renewing

#### VII. DIFFERENCES IN URBAN AND RURAL DRIVING

#### A. URBAN DRIVING:

- 1. Reducing speed allows more time to
  - a. See details and identify their meaning
  - b. Analyze information and predict what might happen
  - c. React
  - d. Execute decisions or avoid dangerous situations
- 2. Looking ahead of traffic
  - a. Look ahead for traffic hazards
  - b. Leave enough distance to maneuver
  - c. Look ahead for signal changes
- 3. Covering the brake, not riding it
  - a. Slow for reduced stopping distances
  - b. Situations in which the brake pedal should be covered
    - 1) Next to parked cars
    - 2) When you see brake lights of other cars
    - 3) Approaching signal lights
- 4. City passing
  - a. Passing over center line of travel
  - b. Passing in or near an intersection
- 5. Lane choice
  - a. Choose a lane appropriate to use
  - b. Choose a less congested lane unless planning to turn
- 6. Vehicle position
  - a. Keep up with traffic speed while remaining within legal limits.
  - b. Avoid other drivers' blind spots.
  - c. Avoid letting another driver drive in your blind spot.
  - d. Avoid side-by-side driving.
  - e. Avoid driving in bunches or packs.
- 7. Choosing a safe route
  - a. Time of day and traffic density
  - b. Through streets vs. side streets
  - c. One-way streets vs. two-way streets
- 8. Interacting at intersections
  - a. Identifying an intersection
    - 1) controlled signs or signals
    - 2) uncontrolled no signs or signals

- b. Skills required for crossing and turning
  - 1) Judging maneuvering time, i.e. speed and distance of other vehicles.
  - 2) Choosing a traffic gap or space to enter or cross traffic.
- c. Left turns protected and unprotected
  - 1) Scan for hazards other vehicles, pedestrians, and bicycles
  - 2) Vehicle position before and after turn
  - 3) When view is blocked
- d. Right turns protected and unprotected
  - 1) Scan for hazards other vehicles, pedestrians and bicycles
  - 2) Check for controlled lanes and signals
  - 3) Vehicle position before and after turn
  - 4) When view is blocked
  - 5) Use of bike lane for turns
- e. U-turns
  - 1) Scan for hazards other vehicles, pedestrians and bicycles
  - 2) Check for prohibitive signs.
  - 3) Vehicle position before and after turn
  - 4) Business vs. residential district
- f. Proceeding straight
  - 1) Scan for hazards other vehicles, pedestrians and bicycles
  - 2) Covering the brake pedal
- g. Signaling for turns and stops
  - 1) Purpose of signaling
  - 2) Distance required
- 9. Backing up safely
  - a. Check behind the vehicle for children and small objects.
  - b. Proper body and head position while steering
  - c. Speed control using brake and/or clutch
  - d. Backing around corners and sharp turns
  - e. Backing when body movement is constricted
    - 1) Use mirrors and passengers to help navigate.
    - 2) Avoid backing whenever possible.
    - 3) Find parking spaces that don't require backing.
- 10. Special problems associated with city traffic
  - a. Parked cars obscuring view of oncoming traffic
  - b. Detours
  - c. Two-way left turn center lane use

- d. Turning at corners
- e. Driving on one-way streets
  - 1) Identifying
  - 2) Entering
  - 3) Speed
  - 4) Lane choice
  - 5) Exiting
  - 6) Dealing with wrong way drivers

#### **B. FREEWAY DRIVING:**

- 1. Planning a route in advance
  - a. Know how to read a map and use one when traveling unknown routes.
  - b. Guide signs which indicate distance and route direction
  - c. Plan time of travel to avoid unfamiliar or congested traffic situations.
- 2. Entering the freeway using acceleration lanes
  - a. Be familiar with entrance warning signs.
  - b. Observe ramp speed limit.
  - c. Check speed of freeway traffic.
  - d. Watch vehicle ahead for sudden stops.
  - e. Locate a gap in traffic.
  - f. Adjust speed for merging onto freeway.
  - g. Signal until freeway completely entered
- 3. Common mistakes made when using acceleration lane
  - a. Sudden slowing or stopping
  - b. Merging at too slow a speed
- 4. Entering directly onto freeway no acceleration lane
  - a. Check for yield or merge signs before entering.
  - b. Wait for longer gap before entering.
  - c. Accelerate sufficiently to blend into traffic.
- 5. Special situations
  - a. Timed entrance lights
  - b. Double merge lanes
  - c. Diamond lanes
- 6. Leaving the freeway
  - a. Scan ahead for signs indicating desired exit lane
  - b. What to do when an exit is missed

#### 7. Exit lanes

- a. Deceleration lanes allow drivers to safely reduce speed.
- b. Yielding to other drivers on multiple deceleration lanes
- c. Adjusting speed to posted limit and/or sharpness of curve

## 8. Choosing lanes of travel

- a. Use of right and left lane on two lane freeway
- b. Use of right, left and center lanes of multi-lane freeways
- c. Lane use and avoiding merging conflicts when approaching interchanges

## 9. Speed limits

- a. Posted maximum speed
- b. Minimum speed
- c. Speed for conditions
- d. Lane use for slower vehicles

## 10. Establishing and maintaining a safe space cushion

## 11. Helping other drivers enter or exit

- a. Merging signs warning of freeway entrance
- b. Adjusting speed to open up a gap
- c. Moving into an adjacent lane

## 12. Freeway emergencies

- a. Steering around partial blockages
- b. Stopping
  - 1) Warning drivers to the rear with brake or hazard lights

## 13. Breakdowns

- a. Pulling to the shoulder whenever possible
  - 1) Signaling
  - 2) Shoulder use and vehicle position
- b. Warning approaching traffic with hazard lights, flares and other devices

## 14. Re-entering freeway from shoulder

- a. Signaling
- b. Accelerating on shoulder
- c. Entering into an adequate gap

## 15. Special freeway problem

- a. Velocitation unconsciously going too fast
- b. Highway hypnosis avoiding drowsiness

#### 16. Toll booths

- a. Reduced speed limits
- b. Distance ahead
- c. Designated lane for special vehicles

## C. DRIVING ON OPEN HIGHWAYS:

- 1. Areas of potential hazards
  - a. Unmarked farm and field driveways
  - b. Livestock crossing areas
  - c. Rough road conditions
  - d. Unmarked shoulders
  - e. Roadside stands or gas stations
- 2. Other users of the roadway
  - a. Trucks
  - b. Slow moving vehicles
  - c. Animals
- 3. Environment
  - a. Curves
    - 1) Speed and braking
  - b. Hills
    - 1) Shifting gears
    - 2) Visibility and speed
    - 3) Brake failure or overheating
  - c. Mountain driving
    - 1) Vehicle condition
    - 2) Speed
    - 3) Allowing for other vehicles to pass
  - d. Special problems at high altitudes
    - 1) Loss of power for hill climbing and passing
    - 2) Vapor lock and overheating
  - e. Meeting or approaching other vehicles on open roadways
    - 1) Meeting lines of cars
    - 2) Meeting at hilltops
    - 3) Meeting at night
    - 4) Meeting slow-moving vehicles
  - f. Road conditions
    - 1) Rough roads
    - 2) Traction
    - 3) Width of road
    - 4) Field of view
    - 5) Line of sight

## D. PASSING:

- 1. Demands of proper passing
  - a. Good judgment
  - b. Rapid decision making
  - c. Knowledge of your vehicle's performance abilities
- 2. When passing is authorized or prohibited
  - a. Passing lanes
  - b. Pavement markings
  - c. Passing on right
- 3. Special situations
  - a. Without sufficient clearance
  - b. On a hill
  - c. Intersections or railroad crossings
  - d. School bus
  - e. Bridges or abutments
- 4. Dangerous passing situations
  - a. Long line of cars ahead
  - b. Intention to stop or turn
  - c. Oncoming car too close
  - d. Car ahead is at or near the speed limit
  - e. Maneuver cannot be completed before reaching a no-passing zone
- 5. Assessing passing potential
  - a. Identifying a safe distance ahead to complete pass
  - b. Identify an end-of-pass gap to pull back into lane
  - c. Establish a safe response for hazards
  - d. Checking for road traffic
- 6. Steps for successful passing
  - a. Scan for hazards
    - 1) Oncoming vehicles
    - 2) Vehicles approaching from rear
    - 3) Merging vehicles
  - b. Check for blind spots
  - c. Signal intent
  - d. Warn the driver ahead
  - e. Obtain a speed advantage
  - f. Re-check conditions ahead
  - g. Create a return space
  - h. Signal return

## 7. When being passed

- a. Maintain speed
- b. Yield if required

#### E. HAZARDOUS CONDITIONS:

## 1. Driving in the fog

- a. Obtaining maximum visibility and reducing glare
  - 1) Appropriate use of headlights
  - 2) Mounting and use of fog lights
  - 3) Windshield wipers and defrosters
- b. Reduce speed, but keep moving when entering a fog bank.
- c. Watch for slow moving vehicles ahead.
- d. Look in the rearview mirror for vehicles approaching from rear.
- e. Listen for traffic you cannot see.
- f. Avoid crossing roadways or passing long lines of cars.
- g. Keep headlights and taillights clean.
- h. Consider postponing driving until conditions clear.
- i. When your vehicle stalls in the fog
  - 1) Move off roadway as quickly as possible
  - 2) Move away from vehicle
  - 3) Restricted use of flashers or flares

## 2. Driving in the rain

- a. Obtain maximum visibility with headlights and windshield washers.
- b. Keep below dry road speed.
- c. Decrease speed when entering a curve.
- d. Stay on paved portion of roadway.
- e. Drive in tracks of car ahead
- f. Allow more of a space cushion.
- g. Avoid sudden movements.

## 3. Going through deep water

- a. Avoid splashing water into engine compartment by proceeding slowly.
- b. Do not proceed through strong currents that may reach the bottom of car.

## 4. Hydroplaning

- a. A product of vehicle weight, speed, tire width and tread depth
- b. Regain control by taking foot off accelerator do not brake

## 5. Driving in snow and ice

- a. Obtain maximum visibility with headlights and windshield wipers.
- b. Maintain slow, steady speed
- c. Reduce speed in corners and shady areas (black ice)

- d. Maintain a longer space cushion
- e. Watch for areas where ice collects
- f. Avoid turning, swerving or braking suddenly or sharply
- g. Do not downshift at too fast a speed.
- h. When to use chains
- 6. How to stop skidding
  - a. Avoid using brakes
  - b. Avoid oversteering keep front tires in line with intended path
  - c. Keep looking in your intended direction.
  - d. Keep clutch engaged
  - e. Lift foot from accelerator gradually
- 7. How to rock out
  - a. Start slowly in low gear
  - b. Shift rapidly to reverse
  - c. Back until wheels start to spin
  - d. Shift back into low gear
  - e. Repeat as necessary
- 8. Mechanical failure
  - a. Accelerator stuck
  - b. Blowout
  - c. Brake failure
  - d. Overheating
  - e. Headlight failure
  - f. Power steering failure

## VIII. CRITICAL VEHICLE SYSTEMS AND SUBSYSTEMS

## A. CONSTRUCTION OF THE AUTOMOBILE:

- 1. Frame
- 2. Body
- 3. Engine
- 4. Steering system
- 5. Suspension system
- 6. Electrical system:
  - a. Battery
  - b. Alternator
  - c. Starter motor
  - d. Ignition system
  - e. Lighting system

## 7. Fuel system

- a. Tank
- b. Pump
- c. Filter
- d. Carburetor/Fuel injection
- e. Manifold

## 8. Cooling system

- a. Radiator
- b. Water pump
- c. Fan and belt
- d. Thermostat
- e. Hoses and antifreeze

## 9. Brake system

- a. Lining and drum/disc
- b. Master cylinder and wheel cylinders/calipers
- c. Brake fluid
- d. Parking brake

## **B. SAFETY EQUIPMENT:**

- 1. Lighting Purpose and use
  - a. High/low beams
  - b. Taillights
  - c. Brake lights
  - d. Back-up lights
  - e. Turn signals
  - f. Emergency flashers
  - g. Hours of use
  - h. Visibility requirements
  - I. Signaling and dimming distances

## 2. Use of brakes

- a. Maintaining control with regular vs. anti-lock brakes
- b. Braking wastes gas anticipate ahead
- c. Braking smoothly

## 3. Windshields and mirrors

- a. Keep windshields and mirrors clean and obstruction-free at all times.
- b. Ensure mirrors are properly adjusted before starting out.
- c. Keep defroster in good order.
- d. Replace wiper blades each fall.
- e. Do not excessively tint

#### 4. Horn

- a. Warning device not to be used casually
- b. Use to warn oncoming traffic on tight, blind curves
- c. Audible distance

## 5. Tires

- a. Required condition, inflation and tread
- b. Tire rotation
- c. Effects of under-inflation or over-inflation
- d. Importance of proper balance and wheel alignment
- e. Spinning tires on fast starts = poor acceleration, excessive tire wear and possible citation for "exhibition of speed"
- f. High cornering speeds = excessive tire wear and reduced safety margin for emergency maneuvers

## 6. Safety belts

- a. Most important thing a person can do to increase safety while in vehicle
- b. Proper use and positioning
- c. Child safety seats
- d. Required for passengers in pick-up beds
- e. Maintenance

#### C. MAINTENANCE OF THE AUTOMOBILE:

- 1. Inspect tires for wear, inflation, or damage
- 2. Electrical system
  - a. Electrolyte level in battery
  - b. Alternator belt
  - c. Lights; operation and adjustment
  - d. Windshield wipers; condition and function

## 3. Fuel system

- a. Lines, pump, carburetor, and tank free of leaks
- b. Tank secure and cap always in place and in good condition
- 4. Gauges and instruments proper operation; speedometer, high beam indicator, turn signal indicator, gear shift position indicator, oil pressure gauge, ammeter, fuel gauge, and engine temperature indicator
- 5. Lighting, heat, and ventilation controls
- 6. Safety aids
  - a. Flares
  - b. First aid kit
  - c. Fire extinguisher
  - d. Basic tools

- e. Flashlight
- f. Tire chains
- g. Food and warm clothing when traveling in desolate areas
- 7. Periodic lubrication and oil changes
- 8. Brake maintenance
- 9. Inspection at least twice a year
  - a. Replace brake linings as indicated by inspection, squeaking or fading.
  - b. Inspection of rubber hoses, lines, fittings, and hydraulic cylinders for leaks
- 10. Engine tune-ups and transmission service as recommended
- 11. Shock absorber/strut operation and security of mounting
- 12. Exhaust system inspect for security and leakage
- 13. Cooling system inspection
  - a. Leaks, fluid level
  - b. Fluid condition
  - c. Fan belts
  - d. Water pump bearing
- 14. Steering and wheel alignment inspection/service
- 15. Ensure smog control devices are intact and connected properly.

## D. ECONOMICAL AND SAFE USE OF THE AUTOMOBILE:

- 1. Avoiding fast starts and stops
- 2. Speed, fuel consumption and tire wear
- 3. Anticipating stops, and braking smoothly and gently
- 4. Maintenance costs
- 5. Calculating overall operational costs:
  - a. Cost per year
  - b. Cost per mile

## IX. PEDESTRIAN SAFETY

## A. AS A PEDESTRIAN:

- 1. Pedestrian/bicycle accidents are #1 cause of death for ages 8-14
- 2. Safety at intersections with traffic signals
  - a. Obey all signals.
  - b. Check for vehicles failing to stop.
  - c. Never forcibly claim right of way.

- 3. Safety at intersections with stop signs
  - a. Make sure you are seen by drivers before crossing.
  - b. Don't assume others will stop when one car has stopped.
- 4. Cross only at intersections don't jaywalk.
- 5. Walk facing traffic.
- 6. Wear bright and/or reflective clothing.
- 7. Don't wear headphones.
- 8. Don't walk on railroad tracks.

## B. AS A DRIVER:

- 1. Always yield right of way to pedestrians, regardless of who's right.
- 2. Watch for pedestrians near
  - a. Crosswalks
  - b. Schools
  - c. Buses
  - d. Schoolhouses (Must stop when red lights are flashing
  - e. Parked cars
- 3. Stop behind limit line, don't block crosswalks.
- 4. Use special care when backing.
- 5. Don't drive in bike lanes, except where permitted.

## C. AVOIDING COLLISIONS WITH ANIMALS:

- 1. Vehicle damage, and human injury from larger animals
- 2. Animals most active an dusk and dawn
- 3. Don't jeopardize vehicle control when avoiding animals.

## X. EFFECTS OF ALCOHOL AND DRUGS

## A. ALCOHOL:

- 1. What is alcohol?
  - a. A drug; a depressant that affects the entire nervous system
  - b. Typical drink contains about three fifths of an ounce of alcohol
  - c. The following drinks contain about the same amount of alcohol:
    - 1) One twelve ounce beer that is 5% alcohol
    - 2) One five ounce glass of wine that is 12% alcohol
    - 3) One shot of 80 proof distilled spirits
  - d. When ingested, 5% is absorbed by mouth and throat, remainder by digestive system

- e. Alcohol cannot be stored in tissue
  - 1) Less than 10% is eliminated by kidneys, lungs and skin
  - 2) Two to five percent is passed unchanged by bodily functions
  - 3) The liver eliminates the other 90% through oxidation

## 2. How alcohol affects driving ability

- a. Judgment
  - 1) Depth perception
  - 2) Risk taking
- b. Awareness
  - 1) Impaired drivers tend to stare rather than scan.
  - 2) Impaired drivers have difficulty performing more than one task at a time.
  - 3) Impaired drivers often forget to turn on lights or dim bright.
  - 4) Impaired drivers drive at erratic speeds, make frequent lane changes, miss stop signs and commit other blunders.
- c. Vision
  - 1) Eyes don't adjust rapidly enough to changing light conditions.
  - 2) Normal rapid lateral eye movement is impaired (tunnel vision)
- d. Reaction Time
  - 1) Reactions to known threats or dangers slowed
  - 2) Process of identifying threats and making quick decisions slowed
  - 3) Basic reflexes slowed

#### 3. Alcohol and accidents

- a. Alcohol is involved in about 40% of all fatal highway accidents.
- b. A young driver with an ABC of only .02 to .05 percent is at least seven times more likely to be killed in an accident than a sober driver.
- c. The same driver with an ABC of 12% is 90 times more likely to be killed.

## 4. Alcohol and the law

- a. .08% Adult Driver is legally intoxicated
- b. .05% Driver can be found to be intoxicated when other factors are taken into account
- c. .01% Driver under 21 will lose license for one year
- d. Implied Consent As a condition of receiving a driver license, driver gives consent to be tested for alcohol at any time
- e. Admin Per Se Immediate loss of license for 90 days if found to be driving intoxicated
- f. Penalties first offense
  - 1) Subsequent offenses

#### B. DRUGS:

- 1. Over the counter (non-prescription drugs)
  - a. Drowsiness from various cold and allergy medicines
  - b. Many over the counter cough syrups, etc., contain alcohol

## 2. Prescription drugs

- a. Narcotics (codeine, Demerol, and other painkillers)
  - 1) Cause drowsiness, stupor, false sense of well being, poor coordination
- b. Depressants (sleeping pills, tranquilizers, and barbiturates)
  - 1) Cause drowsiness, falling asleep uncontrollably, slowed reactions, and poor coordination
  - 2) Medical marijuana
- c. Stimulants (amphetamines, and diet pills)
  - 1) Cause false sense of well being, lack of concentration, aggressiveness and impatience

## 3. Illegal Drugs

- a. Marijuana
  - 1) Causes drowsiness and can distort time and space
  - 2) Slows pupil response to light
- b. Narcotics (Heroin)
  - 1) Cause stupor, coma, and sometimes death.
  - 2) Slow reaction time, cause visual distortion, impaired motor skills
- c. Stimulants (Amphetamines, cocaine, and "pep" pills)
  - 1) Same as prescription stimulants, only much higher intensity.
  - 2) Can lead to paranoia with continued use
- d. Hallucinogens (LSD, mescaline, PCP, peyote)
  - 1) Cause hallucinations that can interfere with vision
  - 2) Create a feeling of super strength, causing aggressive behavior
- e. Synergism (the combining of drugs)
  - 1) Combining drugs can result in an intensified effect higher than dosage levels would suggest

## 4. Drugs and the law

- a. Drivers can be found to be driving while intoxicated when any amount of illegal drugs are in their blood.
- b. Drivers can also be found to be driving while intoxicated when it can be shown that their driving was adversely affected by prescription drugs.

## C. AVOIDING DRIVING WHILE INTOXICATED:

- 1. Abstinence you retain control of your vehicle and your life
- 2. Use public transportation or a taxi
- 3. Appoint a designated driver.
- 4. Stay where you are.
- 5. Plan ahead, drink responsibly at home. Have friends come to your home and invite them to stay overnight if they over-indulge.

#### D. AVOIDING THE INTOXICATED DRIVER:

- 1. Highest incidence of DUI occurs from 10:00 P.M. to 2:00 A.M.
- 2. Typical behavior of intoxicated drivers
  - a. Unreasonably fast or slow speeds
  - b. Excessive lane changes
  - c. Sloppy passing
  - d. Overshooting or disregarding traffic signals
  - e. Weaving
  - f. Failure to turn on or dim headlights
- 3. If necessary, stop for a minute or two to put distance between you and the intoxicated driver.

## XI. MOTORCYCLE SAFETY

#### A. SHARING THE ROAD WITH MOTORCYCLES:

- 1. Motorcycles are harder to see.
  - a. Be aware of blind spots around your car.
  - b. Motorcycles can be easily obscured by other traffic.
- 2. Motorcycles are harder to steer in emergencies, and are committed to their previously chosen path.
- 3. Be aware that cyclists must make a more major adjustment in speed when
  - a. Encountering a storm drain, gravel surface, or pothole
  - b. Driving on a rain slick road or through a puddle
  - c. Rain and/or wind is strong
- 4. Be on the watch for careless motorcyclists. Even if it isn't your fault, hitting a motorcyclist usually results in injury.
- 5. Beware of motorcyclists "splitting" lanes.

#### **B. RIDING A MOTORCYCLE:**

- 1. Wear proper, lightly colored riding apparel, including
  - a. Proper fitting helmet

- b. Heavy jacket (preferably leather), and gloves
- c. Leather boots that cover ankles

## 2. Pre-ride inspection

- a. Tires should have good tread and not be dried out and/or cracked.
- b. Rims and spokes should be in good condition.
- c. Check brakes, clutch and associated controls and cables.
- d. Check for gas or oil leaks which can blow onto back tire and cause a skid.
- e. Chain should have about one inch of play and be properly lubricated
- f. Horn, headlight, and turn signals should all be checked

## 3. Ride defensively

- a. Don't expect to be seen.
- b. Be aware of the road surface at all times, especially when cornering.
- c. Use the front and rear brakes for everything but leisurely stops.
- d. When in traffic, follow the path of left rear wheel of the car ahead.
- e. Allow for sluggish handling when carrying a passenger.

## C. RIDING AS A PASSENGER ON A MOTORCYCLE

- 1. Responsibility of the passenger
  - a. Insist on a proper fitting helmet.
  - b. If possible, follow guidelines above on apparel.
  - c. Lean with the driver in turns.
  - d. Keep your feet on the passenger pegs at all times.

## XII. RISK TAKING AND RISK PERCEPTION OF TEENAGERS

## A. YOUTHFUL RISK TAKING:

- 1. Feelings of immortality, "It can't happen to me"
- 2. Dangerous behaviors
- 3. False sense of security
- 4. High rate of accidents when taking risks
- 5. Showing off for passengers
- 6. Lack of experience and good judgment
- 7. Willingness to take unnecessary chances

## **B. RISK PERCEPTION BY YOUNG DRIVERS:**

- 1. Lack of perception of unsafe conditions
- 2. Lack of maturity on roads and highways
- 3. Use of higher speeds, tailgating, headlights
- 4. Male vs. female drivers

- 5. "No one got hurt" attitude
- 6. Poor attitude toward life itself
- 7. How to change attitudes
- 8. Pedestrians and bicycles

## XIII. SUBSTANCE ABUSE

## A. ILLEGAL FOR UNDER 21 TO POSSESS OR USE ALCOHOL:

- 1. Reasons to rethink decision to drink
- 2. Designated driver
- 3. Zero tolerance, alcohol and drugs

## **B. STATISTICS:**

- 1. Teens less likely to drink and drive
- 2. Teens who do drink and drive at more risk
- 3. Comparatively inexperienced
- 4. Teens more likely to exhibit impaired driving skill at lower blood alcohol levels
- 5. Combination of lack of experience and alcohol or drugs compounds danger

## C. CYCLE OF ABUSE:

- 1. Drug Misuse
  - a. Choice
  - b. Physical dependence
  - c. Psychological dependence

## D. DRUG ACTIONS WITHIN THE BODY:

- 1. Uppers
  - a. Nervousness
  - b. Convulsions
  - c. Death
  - d. Paranoia
- 2. Downers
  - a. Listlessness
  - b. Behavioral changes
- 3. Narcotics
  - a. Opium
  - b. Heroin
- 4. Hallucinogens
  - a. LSD
  - b. Marijuana

## E. AVAILABILITY OF DRUGS

- 1. Over the Counter
  - a. Aspirin
  - b. Diet pills
  - c. Nicotine gum
  - d. Cough medicine
- 2. Social
  - a. Parties
  - b. Coffee break
  - c. Happy hour
  - d. Friends
  - e. Street sells

## F. LEGALITIES:

- 1. Arrests
- 2. Fines
- 3. Jail
- 4. Legal costs
- 5. Insurance costs
- 6. Loss of driving privileges

## XIV. DRIVING INEXPERIENCE

## A. INEXPERIENCE VS. IMMATURITY:

- 1. Lack of skill
- 2. Lack of attention
- 3. Maturity behind the wheel comes with age
- 4. Work on improving skills
- 5. Improper braking
- 6. Over reacting and over-steering
- 7. Handling skids
- 8. In car distractions
  - a. Cell Phone
    - 1) Phone calls
    - 2) Text Messages
    - 3) GPS and other navigation applications
    - 4) Use of other phone applications

- b. CD's, music
- c. Smoking
- d. Passengers
- e. Grooming
- f. Other distractions
- 9. Adjusting driving to fit weather and road conditions
  - a. Fog
  - b. Rain
  - c. Snow
- 10. Predicting other drivers reactions
  - a. 3 second rule
  - b. Scanning the road
  - c. Using mirrors

## XV. ROAD RAGE

## A. ANGER MANAGEMENT:

- 1. Symptom of immaturity
- 2. Not just teens
  - a. Over reaction to another motorists poor driving or lack of consideration
  - b. Waste of emotional energy
- 3. Acting out frustrations through vehicle
  - a. Anonymity of driver
  - b. Effects on other motorists
  - c. Tailgating
- 4. Anticipating rude or angry drivers
- 5. Negative response to inattentive or slow drivers
- 6. Lane changes and "cutting off" other motorists
- 7. Keeping out of the way of speeders
- 8. How you drive reflects who you are
- 9. Don't let others control your emotions

## **B. STATISTICS:**

- 1. Road rage on rise
  - a. Up to 50% since 1990
  - b. More people carrying weapons
  - c. More vehicles sharing the roads
  - d. Men vs. women, equal offenders of road rage
  - e. Road rage number one problem following drunk drivers

