

**San Diego County Sheriff's Department  
In Service Training  
All-Terrain Vehicle Drivers Course**

**COURSE GOAL:**

The course will provide the student with the minimum topics of safe and responsible all-terrain vehicle operations. Topics include: driver safety, vehicle inspection and familiarization, vehicle dynamics, closed course vehicle exercises, and open trail exercises.

The course consists of hands-on/practical application for in-service deputies.

**DRIVER TRAINING/AWARENESS**

**Minimum Topics/Exercises:**

- a. Policy, legal and moral issues
- b. Side by side familiarization
- c. Vehicle Dynamics
- d. Class Exercises/Student Evaluation/Testing
- e. Trail exercises

**COURSE OBJECTIVES:**

The student will:

1. Demonstrate knowledge of their all-terrain vehicle operation skills and techniques.
2. Demonstrate a minimum standard of psychomotor skills with every technique and exercise, to include:
  - A. Policy, Legal and Moral Issues
  - B. Judgment
  - C. Decision Making
  - D. Basic Driving Principles
  - E. Vehicle Dynamics

**Minimum standards of performance shall be tested by an instructor observing the trainee during their performance of each technique and exercise. If the trainee does not meet minimum standards, as established by the presenter, remediation will be provided until the standard is met.**

## EXPANDED COURSE OUTLINE

- I. Equipment, Inspections, and Familiarization
  - A. Personal Protective Equipment (PPE)
    - 1. Manufacturer requirements
      - a) Helmet
      - b) Eye protection
      - c) Gloves
      - d) Boots
      - e) Long pants
    - 2. Department requirements
      - a) Vary by department
      - b) Should follow manufacturer guidelines
    - 3. Failing to wear PPE
      - a) Injuries associated with no PPE
      - b) Potential for death
      - c) Civil liability
      - d) Violation of department policy
    - 4. Law enforcement and PPE
      - a) Lack of seatbelt use
        - (1) Cannot exit quickly
        - (2) Fear of ambush
        - (3) Ejection from vehicle
      - b) Lack of helmet use
        - (1) Too hot in certain conditions
        - (2) Lack of visibility
        - (3) Difficult during use of force
      - c) Changing the culture
        - (1) Enforcing good habits
        - (2) Instructional liability
        - (3) Reducing line of duty deaths
  - B. Pre-shift vehicle inspections
    - 1. Purpose of inspections
      - a) Determining vehicle operational ability
      - b) Noting deficiencies
      - c) Documenting damages
    - 2. Procedure for inspections
      - a) Tires
      - b) Controls
      - c) Lights
      - d) Oil and fluids
      - e) Chassis and accessories

3. Vehicle familiarization
    - a) Vehicle dimensions
    - b) Body overhang
    - c) Determining angles
      - (1) Approach angle
      - (2) Ramp over angle
      - (3) Departure angle
    - d) Frame
    - e) Tires
    - f) Wheels
    - g) Suspension
    - h) Seating
    - i) Handgrips
    - j) Individual vehicle features
  4. Vehicle starting procedure (BONE-C)
    - a) B - Set parking brake
    - b) O - Turn on ignition and fuel
    - c) N - ATV in neutral
    - d) E - Engine stop switch on run
    - e) C - Choke on
- C. ATV operational safety concerns and application
1. Rollovers
    - a) Speeding
    - b) Turning radius
    - c) Driving surface and traction
  2. Equipment storage
    - a) Higher center of gravity
    - b) Weight
    - c) Securing cargo
    - d) Transporting liquids
  3. Environmental factors
    - a) Civilians and animals
      - (1) Parks
      - (2) Beaches
      - (3) Desert
      - (4) Maintained trails
      - (5) Special events
    - b) Trail availability
    - c) Weather
    - d) Time of day

II. Closed range exercises

A. Range Signals

1. Review of all range signals and safety rules

- B. Shifting Gears and Braking
  - 1. Gear positions
  - 2. Braking with foot and handbrake
  - 3. Stopping smoothly
  - 4. Tire spin
  - 5. Traction
  - 6. Driving surface
  - 7. Skidding to a stop
- C. Positioning of ATV in turns
  - 1. Apexing turns
    - a) High/outside approach
    - b) Low point of turn
    - c) Exit high/outside
    - d) Potential obstacles
    - e) Availability of trail space
  - 2. Rear-wheel cheat
    - a) Inside tracking of rear tires
    - b) Increases with increased steering input
    - c) Potential of impact at apex
- D. Driver input and suspension
  - 1. Acceleration
    - a) Rearward weight transfer
    - b) Loss of traction in front tires
    - c) Potentially Diminished steering
  - 2. Deceleration
    - a) Forward weight transfer
    - b) Lifting of rear tires
  - 3. Turning
    - a) Lateral weight transfer
    - b) Compounded with additional weight
    - c) Rollover and tipping concerns
- E. Stopping quickly and collision avoidance
  - 1. Evasive maneuvers in UTV
    - a) Civilians
    - b) Animals
    - c) Environmental factors
  - 2. Stopping quickly
    - a) Straight line braking
    - b) Tire lock and skidding
    - c) Threshold braking
  - 3. Collision avoidance
    - a) Sudden path changes to avoid obstacle
    - b) Avoid braking while turning

- c) Too much steering input
- d) Not enough steering input
- e) Straight line braking

### III. Vehicle recoveries

- A. Policy and procedure
  - 1. Recovery policy
  - 2. Non-recovery policy
  - 3. Failing to act
    - a) Exigency
    - b) Communications
    - c) Time delay
    - d) Weather
- B. Recovery equipment
  - 1. Winches
  - 2. Tow straps
  - 3. Chains
  - 4. Shovel
  - 5. D-rings
- C. Conducting recoveries
  - 1. Communication
  - 2. Safety procedures
  - 3. PPE
  - 4. Recovery lines
  - 5. Safe areas
  - 6. Calculating weight limits
    - a) Vehicle weight
    - b) Grading
    - c) Terrain

### IV. Open trail exercises

- A. SIPDE Riding Technique
  - 1. S – Scan ahead
  - 2. I – Identify hazards
  - 3. P – Predict what may happen
  - 4. D – Decide what to do
  - 5. E – Execute your decision
- B. Navigating hills
  - 1. Driver ability
  - 2. Grading
  - 3. Surface
- C. Aborting hill climb
  - 1. Parking procedure
  - 2. Surrounding environment
- D. Side hilling

1. Avoid if possible
  2. Angle of hill (vehicle dependent)
  3. Steering
  4. Speed
- E. Rocky terrain
1. Picking appropriate paths
  2. Cross axeling
  3. Left-foot braking
  4. Spotter responsibilities
- F. Operating in soft sand
1. Torque vs traction
  2. Momentum
  3. Sand and water
  4. Avoid excessive braking
- G. Navigating through water
1. Depth and current
  2. Electrical devices
  3. Gear selection
  4. Throttle control
  5. Bow wave