THE UNIVERSITY OF CALIFORNIA

CORE PLUS™

DRIVER SAFETY
TRAINING PROGRAM

DEVELOPED BY THE
DRIVER AND VEHICLE SAFETY WORKGROUP
OF THE
UC RISK MANAGEMENT LEADERSHIP COUNCIL

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MISSION:
To make sure that every person who drives in support of University of California research, teaching and public service is able to do so safely.

GOALS:
• Prevent injury and loss of life
• Reduce fuel and maintenance costs; property and liability losses and operational disruptions,
• Raise the driving skill level of UC drivers above that of the general population
• Provide a solid foundation of knowledge about advanced driving safety principles
• Verify by direct observation that identified categories of drivers are actually able to apply driving safety principles in typical driving situations
• Provide regular, ongoing training to maintain and enhance the skill levels of UC drivers
• Provide appropriate collision prevention training when analysis of a driving problem identifies a deficiency in knowledge or skill

PROGRAM OVERVIEW:
The UC CORE PLUS™ Driver Safety Training Program is based on the view that an effective driver training program has as its foundation sound principles of operational and defensive driving that are applicable in virtually all driving situations – which are then sharply focused on the particular type(s) of driving the trainee is most likely to perform. While the methods and delivery systems employed to communicate these principles may vary from location to location, the content is universally applicable across the UC System. For most drivers, this means they will eventually complete the CORE TRAINING and at least one PLUS TRAINING MODULE.

The UC CORE and CORE PLUS™ recommended curricula encompass three distinct mandatory areas (plus a fourth elective area):
1. Vehicle Inspections
2. Defensive Driving
3. Collisions, Breakdowns and Other Mishaps
4. Behind-the-Wheel Evaluation (elective)

THE CORE TRAINING:
The CORE TRAINING material constitutes the foundation upon which all subsequent training is built. Each PLUS MODULE then applies these same general principles to the specific characteristics, challenges and operational realities of each separate category of vehicles and usage. Every person who drives while performing UC business or otherwise operates a university vehicle should eventually complete the CORE TRAINING and the appropriate PLUS MODULE(s) for every category of vehicle they drive.

Vehicle Inspections, the first CORE area, is intended to reduce the likelihood that mechanical failure will contribute to a collision or other mishap. Additionally, training drivers to detect emerging problems before they cause a breakdown can help reduce both maintenance costs and the subsequent indirect consequences of unanticipated vehicle failures.

Defensive Driving, the second CORE area, is the heart of CORE PLUS™ collision prevention. Defensive driver training will teach the driver's role and responsibilities, as well as basic safety concepts, including visual scanning, space management, speed control and hazard perception.

In addition to collision prevention, the Defensive Driving area also introduces the concept of low-forces driving for reduced energy consumption and extended vehicle life. Finally, a review of basic vehicle mechanical systems provides a foundation for understanding crucial operational differences between different types of vehicles.
Defensive driving courses and training materials are widely available from multiple vendors, including the National Safety Council. While each UC location is free to select their own source of defensive driving content, a number of locations have reported considerable satisfaction with the Smith System™ and use this program’s strategy in their approach to the Defensive Driving portion of CORE PLUS™. Locations needing to contract with outside vendors for driver training due to insufficient internal resources should discuss the entire Core Plus content with their vendors to determine what customization of “standard” commercial curricula may be possible in order to incorporate the expanded CORE PLUS™ material.

Collisions, Breakdowns and Other Mishaps, the third CORE area, provides essential information to prepare drivers to deal safely with unplanned events, to mitigate damage and to minimize the risk of further harm, regardless of setting or type of event. This area also introduces the key differences between preventable/nonpreventable and at-fault/not-at-fault findings of collision analyses.

Behind-the-Wheel Self-Evaluation is the final and elective part of the CORE TRAINING, which every participant should be encouraged to complete. Each participant will have an opportunity for structured practice in applying their CORE TRAINING knowledge to the actual practice of driving a vehicle and to prepare themselves for the instructor-led behind-the-wheel coaching and evaluation component of the subsequent CORE PLUS™ MODULES.

A detailed description of recommended course content for the CORE TRAINING appears in Appendix A.

The CORE PLUS™ MODULES

Each CORE PLUS™ MODULE follows the same general format as the CORE TRAINING:

- Vehicle checkout and inspection
- Defensive driving
- Collisions, breakdowns and other mishaps

While CORE TRAINING material is generally not repeated in the PLUS MODULES, key principles introduced in the CORE TRAINING are applied to the particular types of vehicles and driving situations for which each PLUS MODULE is designed. Most importantly, each PLUS MODULE includes an observed behind-the-wheel, vehicle-specific skill practice and demonstration component to ensure that graduates are actually able to meet UC performance standards. Detailed descriptions of course content for the initial CORE PLUS™ MODULES appear in Appendix B.

The following categories of vehicles and usage have been initially identified as warranting individual PLUS TRAINING MODULES:

- Bus/Shuttle Operations
- Emergency Vehicle Operations
- Low-Speed Vehicle Operations
- Off-Road Vehicle Operations
- Passenger Automobile Operations
- Passenger Van Operations
- Service Vehicle Operations
- Specialized Vehicle Operations
- Trailer Operations
- Van Pool Operations

Characteristics of the above classifications are summarized in the table on the next page.
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>INCLUDES</th>
<th>CHARACTERISTICS</th>
<th>TYPICAL RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus/Shuttle Operations</td>
<td>Full-size buses and various transit buses and shuttle vans usually operated on a continuous basis</td>
<td>Continuous passenger transportation by professional drivers with commercial licenses</td>
<td>Constant starts and stops, loading/unloading, distractions, seriously extended stopping distance, impaired visibility at side and back, multiple potential litigants onboard, schedule demands</td>
</tr>
<tr>
<td>Emergency Vehicle Operations</td>
<td>Police, fire and ambulance vehicles in emergency operation only</td>
<td>Depending on branch of emergency service, may include cars, vans, light trucks and heavy trucks</td>
<td>Hazards of emergency (Code 3) operation including intersection collisions, loss of control and unsafe acts of other drivers</td>
</tr>
<tr>
<td>Low-Speed Vehicle Operations</td>
<td>Low-speed electric- and gas-powered vehicles, including NEVs (such as GEM, Taylor Dunn, Columbia, Miles, etc.)</td>
<td>Low-speed vehicles routinely used for service and deliveries on paths and service roads; some may operate on public streets</td>
<td>Reduced visibility to other vehicles, rollover hazard, pedestrian mishaps due to quiet operation and surprises, roll-away and joyride thefts due to failure to secure vehicle properly while parked</td>
</tr>
<tr>
<td>Off-Road Vehicle Operations</td>
<td>Vessels and equipment with incidental road travel (such as ATVs, tractors, backhoes, forklifts, etc.)</td>
<td>Operation at and between job sites by assigned equipment operators</td>
<td>Impaired visibility, awkward driving positions, inconsistent seat belt use, rollover/ejection hazard, unstable at road speeds, proximity to pedestrians at job sites, high noise levels</td>
</tr>
<tr>
<td>Passenger Automobile Operations</td>
<td>Passenger cars, including sport utility vehicles, operated by employees (including student-employees) and others on behalf of the university</td>
<td>Includes personally owned, department-owned, fleet, and rental cars used for business purposes</td>
<td>Distractions from passengers, operation with unfamiliar vehicle and/or unfamiliar surroundings, drivers who may be young and/or inexperienced, fatigue on long trips</td>
</tr>
<tr>
<td>Passenger Van Operations</td>
<td>Passenger vans operated by nonprofessional drivers on an occasional basis</td>
<td>Fleet, department-owned or commercially rented vans driven by nonprofessional drivers</td>
<td>Unfamiliarity with vehicle, extended stopping distance, impaired visibility, fatigue on long trips, inconsistent seat-belt use, rollover/ejection hazard</td>
</tr>
<tr>
<td>Service Vehicle Operations</td>
<td>Pickup trucks, cargo vans, flat-bed trucks, utility trucks, mail trucks</td>
<td>Work trucks used for deliveries or to transport tools or goods to job sites</td>
<td>May include frequent starts/stops, visibility may be impaired, external equipment needs to be properly secured, vehicles may be older, drivers often alone (backing hazard and potential seat belt compliance issues)</td>
</tr>
<tr>
<td>Specialized Vehicle Operations</td>
<td>Trash trucks, dump trucks, bucket trucks, straight trucks, street sweepers, tow trucks and nonemergency operation of fire trucks</td>
<td>Often large, with specialized equipment for specific tasks – may require commercial license</td>
<td>May include frequent starts/stops, potentially heavy payloads, extended stopping distance, impaired visibility, routine operations with light clearances</td>
</tr>
<tr>
<td>Trailer Operations</td>
<td>All trailers, such as those used for bikes, heavy equipment and boats, as well as towable equipment, such as mixers, chippers and portable climbing walls</td>
<td>Local and long-distance, low-speed and highway speed, with and without trailer brakes</td>
<td>Connection failures, extended stopping, jackknife risk with sudden braking/evasive maneuvers, engine/brake overheating risk, loading/unloading hazards</td>
</tr>
<tr>
<td>Van Pool Operations</td>
<td>Passenger vans operated by nonprofessional drivers who drive vans regularly</td>
<td>Voluntary commuter transport by volunteer drivers making one round trip/day</td>
<td>Some loading/unloading, distractions, impaired visibility at side and back, inconsistent seatbelt use, rollover/ejection hazard</td>
</tr>
</tbody>
</table>
Additional PLUS MODULES may be developed by any location to address other vehicle types (e.g., agricultural equipment). Likewise, subject-specific TARGET MODULES addressing individual topics, such as backing or stationary object collisions, may be developed in response to trends in loss experience data.

**DRIVER TRAINING NEEDS:** The CORE PLUS™ Program is intended to address the full spectrum of driver training needs across the university. As new needs are identified, CORE PLUS™ will evolve to meet those needs. At the present time, three distinct driver training needs are recognized:

1. Initial training for current employees and future hires/rehires
2. Periodic general refresher/update training for all drivers
3. Subject-specific retraining for drivers with identified gaps in knowledge or skill.

CORE PLUS™ will first focus on initial driver training. Development of additional tracks for routine refresher training and subject-specific retraining will follow.

Since all drivers cannot be trained simultaneously, it is logical to first train those most at risk. The degree of risk for each driver is primarily determined by two factors: exposure and driving performance.

*Exposure* is measured by either amount of driving time (e.g., hours per month) or number of miles driven in a defined period of time.

*Driving Performance* is shaped by attitude, knowledge, skills, age and experience. Other significant factors include vehicle type and operating condition, road and environmental conditions, distractions and the driver’s degree of familiarity with the geographical area and roadways.

Here is an example of a four-category system for classifying drivers by *exposure*, using hours driven per month:

- Occupational Driver (drives daily, or more than 25 hours per month)
- Frequent Driver (drives from 10 to 25 hours per month)
- Semi-Frequent Driver (drives from 5 to 10 hours a month)
- Occasional Driver (drives less than 5 hours per month)

Alternately, here is an example of a three-category system for classifying drivers by evaluating their *performance*, using such factors as collision/citation history, observed/reported skill problems, prior training, long-distance driving, youth, inexperience with vehicle type, etc.:

- High risk
- Moderate risk
- Low risk

Eventually, all UC drivers should receive initial and ongoing training appropriate to their duties and level of risk. During the implementation phase across the system, resources should be deployed towards those identified as being at greatest risk. Individual locations’ loss experience data will also be critical in prioritizing which driver groups receive the initial focus.

**DELIVERY METHODS:** A number of delivery methods can be used to deliver the CORE PLUS™ content, and these are expected to vary, at least initially, from location to location. Printed handouts (brochures/pamphlets), instructor-led face-to-face classes, computer or Web-based courses, and in-vehicle observation and skill practice all have pros and cons. One approach would be to develop a computer-based, system-wide CORE PLUS™ driver training series to which location-specific information and enhancements could easily be appended, ideally using the UC Learning Management System as the delivery platform. In the coming months, the Driving and Vehicle Safety Workgroup of the Risk Management Leadership Council, with the assistance with other interested parties, will continue to develop driver training recommendations for the University of California.
APPENDIX A
THE CORE TRAINING
THE UNIVERSITY OF CALIFORNIA CORE PLUS™ DRIVER SAFETY TRAINING PROGRAM

The CORE TRAINING

**Intended for:** All persons who operate any vehicle on UC business or otherwise drive UC-owned vehicles – faculty, staff, students, volunteers and others.

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers.

**Implementation:** Initially, it will target *Occupational* and other *High Risk* drivers – then others according to locally determined implementation schedules. Goal is initial training of all new hires within 30 days of their being hired.

**Delivery Format(s):** Driver safety pamphlet, instructor-led classroom sessions, Web-based interactive course, behind-the-wheel evaluation and/or self-assessment.

**Enhancements:** Certificate of Completion; Job Aid reminder card/decals of key principles; “UC Core Plus™ Safe Driver” pin; plus other incentives/rewards.

**Refresher Content and Frequency:** Three-year cycle recommended. Content to be recommended system-wide and customized locally. CORE refresher content may be integrated with PLUS MODULE refresher content.

**Subject-Specific Training:** Individually tailored training sessions based on identified individual training needs – may also be assigned to attend a vehicle-specific PLUS class and/or behind-the-wheel training.

**Content:**

- Introduction to the CORE PLUS™ Driver Safety Training Program
  - Why train experienced drivers?
    - Most adults have not had any driver training since high school
    - “It’s what you learn after you know it all that counts!”
    - Differences between driving for pleasure and driving for work
    - Increase knowledge of defensive driving techniques
    - Upgrade everyday driving skills
  - Likelihood of harm to self or others
    - National and UC statistics/profile
    - Prevalence of backing and fixed-object collisions
    - Workers' Comp, GL and property losses
    - Direct and indirect costs of vehicle collisions and failures

- The CORE PLUS™ Program Explained
  - The CORE TRAINING
  - The PLUS MODULES
  - Behind-the-wheel practice/evaluation or self-assessment for targeted driver groups

**Vehicle Inspections**

- Why vehicle inspections
- Safety
- Legal requirements
- Prevention of breakdowns/mechanical failures
- Liability/personal responsibility

**Types of Inspections**

- Pre-trip
- Checklist
- What not to check

**Enroute/Midshift**

- Tires
- Fluids
Glass
Lights
Load

Post-trip
Checklist
What not to check

Inspection Areas
Engine
Exterior
Interior

Reporting Procedures
Commercial vehicle requirements
Problems needing resolution before further operation
Problems needing resolution at end of task
Problems noted for next regular service

Sample Inspection Forms for Various Applications
See Appendix C

Introduction to Driving Defensively
Low-forces driving explained
Reducing “G” forces – acceleration, deceleration, and cornering
Benefits of low-forces driving
Self
Others
Vehicle

Differences between vehicles
Visibility
Handling
Stopping distances – including anti-lock brakes
Clearances
Parking
Cargo vs. passengers

Driver’s role and responsibilities
Professionalism— a professional driver:
Is courteous
Is reliable
Shows commitment to safety
Follows preventative maintenance
Is knowledgeable of departmental safe driving rules
Rested and ready to drive
Self-awareness/choosing how to respond
Image and road courtesy
Aggressive driving/road rage
Multitasking/self-distraction/unsafe behaviors
Seat belts – click it or ticket
Cell phones
Compare and contrast University policy on cell phones with state law
Speed control
Following distance/space cushion
Lane control
Communication
Visual scanning

External factors
- Traffic conditions
- Time of day/visibility
- Weather conditions
- Aggressive drivers/road rage
- Distractions
- Unfamiliar areas
- Road conditions/hazardous surfaces

Driver/mechanic teamwork
- Brief overview of systems
- Starting
- Electrical
- Cooling
- Braking
- Steering

Awareness of early signs of mechanical problems
- Using all the senses
- Gauges – knowing what is “normal”
- Smells – rubber, oil, fuel, coolant, exhaust
- Smoke and steam

Communications between driver and mechanic
Preventing mechanical failures
- Downshifting on long down hills
- Never coasting in neutral
- Early reporting of malfunctions

Advanced Defensive Driving Principles
*Proactive Awareness – “Be Alert…Don’t Get Hurt”*

Concentration on the art of driving
- Seeing/analyzing what’s developing ahead – looking “through” intersections
- Near, intermediate and far time zones
- Systematic scanning of all time zones
- Long distance visual scanning: Look ahead 12 to 15 seconds down the road to see hazards sooner and have more time to react

Eliminate visual barriers
- Keep your eyes scanning – avoid the fixed stare

Check your mirrors frequently: Check at least one mirror every 3 to 5 seconds
- Develop/maintain peripheral vision

Be aware of others using the road (drivers, cyclists, pedestrians, etc.)
- Be aware of changing road and weather conditions

Resist distraction from passengers and other sources
- Be aware of hazards of fatigue/medication/illness

Avoid backing up whenever possible
If *necessary* to back up:
- Perform a circle of safety – identify hazards around vehicle
- Be aware of blind spots and clearances, including height
• Avoid distractions: lower driver’s window; turn off radio; turn off fans (air conditioning or heater)
• Check all mirrors BEFORE backing
• While backing check a different mirror every 2 to 3 seconds.

Proactive Defense – “Expect the Unexpected”
Anticipate unsafe actions by other drivers
Always be prepared to take evasive action

Maintain and protect a space cushion wherever possible
Maintain a 4 to 6 second following distance
Continually adjust space cushion
Check rearview mirror before braking

Never drive faster than is safe for conditions
Adjust speed as conditions change
Respect the speed limit

Cover the brake when a hazard is observed
Watch for distracted pedestrians

Respond safely to sudden mechanical failure
• Loss of power steering/power brakes
• Tire blowout
• Headlight failure

Respond safely to running off the pavement edge – avoid overcorrecting

When parking:
• Be aware of personal safety when selecting parking spots
• Position vehicle to avoid backing whenever possible
• Select a spot that provides room to maneuver and does not create a hazard
• Select a spot that is out of traffic flow
• Turn wheels appropriately on inclines – noting presence or absence of curbs
• Always set parking brake

When backing:
• First rule of backing to prevent a collision is to AVOID BACKING if at all possible
• Use a ground guide (backer) whenever possible
• Driver and ground guide should agree on signals to be used
• Use backup alarms, sensors and cameras as available
• Back slowly
• When possible, set up vehicle so you can turn in the direction of the driver’s side as you back for better visibility. Stop, get out and check to see if there is a hazard in your backing path that isn’t visible in your mirrors

Proactive Communications – “Don't Hesitate – Communicate”
Always communicate intentions – use turn signals when turning and making lane changes

Lights on for visibility
Activate four-way emergency flashers when appropriate
Activate any auxiliary lights, beacons, flashers and arrow boards as necessary
Make eye contact with other road users, including pedestrians

Use the horn as appropriate to alert other drivers or to avoid a collision

Signal turns and lane changes early and as needed

When backing:
- Tap horn before you back
- Make sure back-up alarm is on (for those vehicles equipped with an alarm cut-off switch)
- Activate four-way emergency flashers
- Communicate with ground guide if available

Collisions, Breakdowns and Other Mishaps

Collisions
Assess personal safety first
Get help by calling 911, or use local seven-digit emergency numbers
Encourage injured parties to remain in vehicles unless danger is imminent
Collision kit/triangle placement
Photograph or mark locations before moving vehicles
Identify witnesses
Exchange information without statements of fault
Location towing protocol – determine need for ramp-type tow truck

Breakdowns
Pull over at first sign of a mechanical problem
Warning lights
Warnings from other drivers
Overheating/steam versus smoke
Low/flat tires – don’t drive on flats
Dead batteries/jump starts
Location protocol for assistance
Logging noncritical maintenance items for next service

Other Mishaps
Breakins/thefts
Lockouts
Fueling errors (e.g., putting gas in a diesel vehicle)

“At Fault” and “Preventable” Collisions
Definitions
“AT FAULT” is a legal term based on a review of applicable traffic laws – it is not a defensive driving concept.
“PREVENTABLE” is a defensive driving term. According to the National Safety Council, “A collision is preventable unless the driver did everything reasonably possible to prevent the collision, including anticipating the hazard.”

Why the difference is critical
Why we don’t say “accident”

Written Test of Core Plus™ Knowledge
Behind-the-Wheel Self-Assessment – Optional by Location

Trainees are asked to complete and document a structured, behind-the-wheel practice session and self-assessment, including but not limited to the following skills while actually driving:

- Identify and perform systematic scanning of the near, intermediate and far time zones
- Establish and maintain a 4 to 6 second following distance in different traffic conditions
- Establish and maintain a space cushion around the vehicle
- Check mirrors every 3 to 5 seconds
- Activate four-way emergency flashers and tap horn before backing into a parking space
- Perform a self-directed verbal commentary while practicing the skills above
UNIVERSITY OF CALIFORNIA CORE PLUS®
CORE DRIVER TRAINING
DRIVING SELF-EVALUATION

DRIVER: ___________________________ U.C. LOCATION: ___________________________

DATE: _______________ START TIME: _______________ END TIME: _______________

TRAFFIC CONDITIONS: [ ] LIGHT [ ] MODERATE [ ] HEAVY
ROADS USED: [ ] RURAL [ ] URBAN [ ] FREEWAY

INSTRUCTIONS TO DRIVER: Please review the skill exercises below prior to driving so you know what you are going to practice. Do not attempt to read the form while driving. If necessary, pull over to read the next section – every stop provides an opportunity to practice turning knowledge into skill. Turn off all audio distractions while performing your self-evaluation. While safely stopped, place an [X] next to each item you have completed. After completing, please turn in your self-evaluation form as directed by your instructor. Most trainees complete this self-evaluation in under thirty minutes. Thank you for taking the time to Be Smart About Safely!

INSPECTION
[ ] Check tires for inflation and tread wear
[ ] Check headlights, taillights, turn signals and four-way flashers
[ ] Adjust seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Check your driving knowledge and awareness by continuous commentary driving during your self-evaluation
[ ] Check your eye lead time – pick out distant objects and count the time to get there – try for 15 seconds minimum
[ ] By counting, locate the near (4-6 second) intermediate (12-15) and far (20-30) time zones at different speeds
[ ] Keep your eyes scanning – don’t stare as you count your eye lead times
[ ] Check your mirrors frequently – one mirror every 3-5 seconds
[ ] If backing will be necessary, both look back and check a different mirror every 2-3 seconds

PROACTIVE DEFENSE
[ ] Identify distracted drivers, pedestrians and cyclists
[ ] Cover the brake pedal and horn when a hazard is observed
[ ] Check your following distance at least four times – practice maintaining a 4-5 second distance at different speeds
[ ] Establish and maintain space cushions – align your vehicle so you maintain routes of escape
[ ] Move out from behind large vehicles blocking your view to preserve your 15 second eye lead time
[ ] Check your mirrors as you begin to slow or stop – know how close the vehicle behind you is
[ ] Park your vehicle in a way that won’t require backing

PROACTIVE COMMUNICATIONS
[ ] Assures headlights are on for safety
[ ] Signal turns and lane changes early and consistently
[ ] Sound your horn when needed for other vehicles and pedestrians
[ ] Make eye contact with other road users and pedestrians – don’t assume recognition
[ ] Tap horn before backing

SELF-EVALUATOR COMMENTS – ASSESS YOUR OWN PERFORMANCE
Which skills are you naturally good at?

What are your goals for self-improvement?
Appendix B
The Core Plus Modules
Core Plus™ Module
Bus/Shuttle Operations
CORE PLUS™ MODULE

Bus/Shuttle Operations

**Intended for:** Professional drivers of transit buses and shuttles.

**Classification Characteristics:** Continuous passenger transportation by professional drivers with commercial licenses.

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers.

**Implementation:** Initially, it will target occupational drivers – then others according to recommended implementation schedule. The goal is the initial training of all new hires prior to initial driving assignment.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by behind-the-wheel practice, evaluation and skill-building.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Three-year cycle recommended.

**Subject-Specific Retraining:** Individually designed based on identified individual training needs.

**Content**

**Introduction to BUS/SHUTTLE Operations**

- **Why train experienced commercial drivers?**
  - Protecting your commercial driving record
  - Likelihood of harm to others

- **Vehicle-specific risks**
  - Constant starts and stops
  - Distractions during loading/unloading
  - Seriously extended stopping distance
  - Impaired visibility at sides and back
  - Schedule demands
  - Multiple potential litigants onboard

**Vehicle Inspections in BUS/SHUTTLE Operations**

- **Safety**
  - Legal requirements – Commercial Driver requirements
  - Prevention of breakdowns/mechanical failures
  - Liability/personal responsibility

- **Types of Inspections**
  - Pre-trip
  - Checklist-driven – a legal document
  - Appropriate procedures for hydraulic and air brake systems

- **Midtrip/Midshift – walk-around mini-check**
  - Tires – pressure, tread failure, embedded objects
  - Wheels – check for loose lug nuts – visually/physically
  - Fluids – evidence of leaks
  - Windshield – clean
  - Lights – clean and functioning
  - Hand off report to replacement driver

- **Post-trip/out of service**
  - walk-around mini-check
  - Tires
Body damage
   The “rolling billboard”
Fuel
Interior trash and sweeping

Inspection Areas
   Engine
   Belts
   Hoses
   Fluids – levels and leaks are critical
   Compartment visual
   Electrical connections

Exterior
   Lights and Signals
   Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks
   on inside sidewalls
   Body damage
   Exterior compartment covers secure
   Wipers – secure and pliable
   Mirrors – secure and clean
   Glass – clean and clear along critical sight lines
   Exhaust tailpipe secure
   Fuel tank straps secure
   Driveline retainers intact
   Springs/shocks – visual inspection for problems
   Steering linkage – visual inspection

Interior
   Mirror/seat adjustment
   Brakes/air
   Heater/defroster
   Door operation
   Damage
   Cleanliness
   Collision reporting kit
   First aid kit
   Fire extinguisher – gauge/inspection date
   Glass – clear of interior condensation

Reporting Procedures
   Commercial vehicle requirements
   Problems needing resolution before further operation
   Problems needing resolution at end of task
   Problems worthy of note for next service

Driving Defensively in BUS/SHUTTLE Operations

   Achieving low-forces driving in BUS/SHUTTLE Operations
Reducing “G” forces – acceleration, deceleration and cornering

**Benefits of low-forces driving**
- Self
- Others
- Vehicle

**Vehicle differences with BUS/SHUTTLE Operations**
- Visibility
- Handling
- Stopping distances
- Clearances
- Parking
- Passengers

**Driver’s role and responsibilities in BUS/SHUTTLE Operations**
- Passenger safety
- Professionalism
  - Rested and ready to drive/substance-free (including Rx medications)
  - Hours of service/fatigue management
  - Multitasking/unsafe behaviors
  - Image and road courtesy
  - Seat belts
  - Cell phones
    - Use (including texting) prohibited while driving
  - AM/FM radios/CD players/other sound systems
  - Speed control
  - Following distance/space cushion
  - Visual scanning

**External factors**
- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions

**Distractions**

**Road surface conditions**

**Driver/mechanic teamwork**
- Early signs of mechanical problems/safety sensitive issues
- Steering play
- Brake pedal travel
- Starting problems
- Communications between driver and mechanic
- Preventing failures

**Collisions, Breakdowns and Other Mishaps in BUS/SHUTTLE Operations**
Collisions
Assess personal and passenger safety first
Get help by calling 911 and Dispatch
Emergency exit operation
Encourage injured parties to remain in vehicle(s)
Collision kit/triangle placement
When and how to move vehicles
Witness(es)/passenger counts and names
Photos
Information exchange/statements
Towing

Breakdowns
Pull over before vehicle stops running
Warning lights
Smoke vs. steam
Flat tires
Dead batteries/jump starts
Getting help
Logging small items for next service

Other Mishaps
Fueling errors (e.g., putting gas in a diesel vehicle)
Fluid spills/leaks – use of spill kits to prevent environmental damage

“At Fault” and “Preventable” Collisions
Definition review
“AT FAULT”
“PREVENTABLE

Written Test of BUS/SHUTTLE OPERATIONS Knowledge

BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in BUS/SHUTTLE OPERATIONS
Proactive Awareness – “Be Alert…Don’t Get Hurt”
See/analyze what’s developing ahead
Systematically scan all time zones
Eliminate visual barriers, including passengers blocking view of mirrors

Keep eyes scanning – avoid the fixed stare
Check mirrors frequently: Check at least one mirror every 3 to 5 seconds
Demonstrate awareness of changing road and weather conditions
Resist distractions from passengers and other sources
Demonstrate awareness of hazards posed by fatigue/medication/illness

Avoid backing up whenever possible
If forced to back up:
• Perform a circle of safety – identify hazards around the vehicle
• Demonstrate awareness of blind spots and clearances, including height
• Avoid distractions, especially from passengers
• Check all mirrors BEFORE backing
• While backing, check a different mirror every 2 to 3 seconds.

**Proactive Defense – “Expect the Unexpected”**
Anticipate unsafe actions by other drivers
Demonstrate preparedness to take evasive action

Maintain and protect a space cushion wherever possible
Maintain a 4 to 6 second following distance

Never drive faster than is safe for conditions
Adjust speed as conditions change

Cover the brake when a hazard is observed
Watch for distracted pedestrians

**Respond safely to sudden mechanical failure**
• Loss of steering/brakes
• Tire failure
• Headlight failure

**Respond safely to running off the pavement edge – avoid overcorrecting**

**When parking**
• Avoid backing whenever possible
• Select a spot that provides room to maneuver and does not create a hazard
• Select a spot that is out of traffic flow
• Always set parking brake – curb wheels on inclines

**When backing:**
• AVOID BACKING if at all possible
• Use a ground guide (backer) whenever possible
• Driver and ground guide agree on signals to be used
• Back up slowly
• When possible, set up vehicle so you can turn in the direction of the driver's side as you back for better visibility
• Stop, get out, and check to see if a hazard is in the backing path that isn't visible in mirrors

**Proactive Communications – “Don't Hesitate – Communicate”**
Always communicate intentions – use turn signals when turning and making lane changes

Lights on for visibility
Activate four-way emergency flashers when appropriate
Make eye contact with other road users, including pedestrians
Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision
Signal turns and lane changes early and as needed

**When backing:**
• Tap horn before backing
  • Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
  • Make sure backup camera is on (for vehicles equipped with video)
  • Activate four-way emergency flashers
  • Communicate with the ground guide if available
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
BUS/SHUTTLE OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: _______________________________ U.C. LOCATION: _______________________________

☐ PASS ☐ NO PASS OVERALL SCORE: _____ TRAFFIC: L/M/H ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Demonstrates proper procedures for air brake system (if so equipped)
[ ] Identify what to look for with critical engine compartment components
[ ] Identify critical exterior and interior inspection components
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Systematically scans all time zones – proper eye lead time (seconds) ______ ______ ______ ______
[ ] Eliminates visual barriers
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds ______ ______ ______ ______
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety – identifies hazards around the vehicle
[ ] If forced to back, checks a different mirror every 2-3 seconds ______ ______ ______ ______

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by other drivers – identifies distracted pedestrians
[ ] Demonstrates preparedness to take evasive action – covers the brake when hazard is observed
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______ ______
[ ] Adjusts speed as conditions change
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure
[ ] If forced to back, uses a ground guide whenever possible – agrees on signals
[ ] Sets up vehicle to back from the driver’s side
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on
[ ] Activates 4-way hazard lights when appropriate
[ ] Communicates with ground guide if available

ADDITIONAL COMMENTS:


Rev: 11/25/2008
CORE PLUS™ MODULE
Emergency Vehicle Operations
Emergency Vehicle Operations

**Intended for:** Licensed/certified drivers of authorized emergency vehicles who may operate that vehicle under the exemptions of California Vehicle Code § 21055 (emergency operations) for response, rescue, pursuit or as otherwise permitted by law.

**Classification Characteristics:** Intermittent emergency driving of law enforcement, fire or emergency medical service vehicles on behalf of the university. Additional training by qualified instructors may be necessary for such emergency driving. Training in non-emergency driving of such vehicles is provided under the PLUS MODULE appropriate to that category of vehicle.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers – implementation schedule to be determined locally.

**Implementation:** Initially, it will target Occupational Drivers – then others according to local implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by in-vehicle practice and evaluation.

**Enhancements:** Certificate of completion; “UC Core Plus Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

**Content**

TO BE DEVELOPED IN CONSULTATION WITH UC EMERGENCY SERVICES AND RELEASED AT A LATER DATE.
CORE PLUS™ MODULE
Low-Speed Vehicle Operations
CORE PLUS™ MODULE
Low-Speed Vehicle Operations

**Intended for:** Regular drivers of low-speed electric- and gas-powered vehicles, including Neighborhood Electric Vehicles (NEVs) (e.g., GEM, John Deere E-Gator, E-Ride, Ford Think, Columbia, Zenn, Miles, Zap, etc.).

**Classification Characteristics:** Short range, speed-limited electric- and gas-powered vehicles with extremely limited crash protection.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. Goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by behind-the-wheel practice and evaluation.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

Content

**Introduction to LOW-SPEED VEHICLE Operations**

Why train *LOW-SPEED VEHICLE* drivers?

- Significantly different handling characteristics
- Deceptive perception that they’re “harmless”

Vehicle-specific risks

- Tip-over hazards – especially cornering
- Low-tech braking systems (no ABS)
- High center of gravity – minimal evasive capability
- Rollover/ejection hazard
- Minimal body protection from side impacts
- Small wheel/tire diameter
- Little/no suspension
- Unexpected visual blind spots
- Frequently operated on irregular terrain
- Surprise factor/silent operation
- Load restrictions
- Infrequent mechanic contact

**Vehicle Inspections in LOW-SPEED VEHICLE Operations**

**Safety**

- Prevention of mechanical failures

**Types of Inspections**

- Pre-use (Minimum once daily)
- Checklist-driven – responsibility assigned

- Midtrip/Midshift – typically not applicable

**Post-trip/out of service – walk-around mini-check**

- Tires
- Body damage
Fully charged/charging
Interior cleanliness
Secure/locked against theft
Removable tools/equipments secured

**Inspection Areas**
Motor – per location policy
Electrical connections/charger operational
Belt and fluids (if applicable)

**Exterior**
Lights – clean and functioning
Signals functioning properly
Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
Body damage and cleanliness
Wipers – secure and pliable
Mirrors – secure and clean
Windshield – clean
Load – secure

**Interior**
Mirror/seat adjustment
Seatbelts functional (all)
Steering – excessive play
Brake pedal travel
Heater/defroster (if present)
Gauges/warning lights
Glass – clean
Damage
Cleanliness
Collision reporting kit
Extension cord for field charging
Next scheduled service

**Reporting Procedures**
Problems needing resolution before further operation
Problems needing resolution at end of task
Problems worthy of note for next service

**Introduction of Local UTILITY CART Inspection Forms**

**Driving Defensively in LOW-SPEED VEHICLE Operations**
Achieving low-forces driving in LOW SPEED VEHICLE Operations
Reducing “G” forces in cornering
Benefits of low-forces driving
Self
Vehicle

Vehicle differences with LOW SPEED VEHICLE Operations
Visibility (to other vehicles)
Handling
Steering
Suspension
Reduced braking power/regenerative braking on downgrades
Lower ground clearance
Governed speeds (14 and 24 mph)
Additional battery draw of aftermarket additions
Rollaway risk if parking brake not set
Passengers

Driver's role and responsibilities in LOW SPEED VEHICLE Operations
Safety for operator and passengers
Not a toy
Vehicle use restricted per local policy
Concentration on the art of driving
Multitasking/unsafe behaviors
Image and road courtesy
Seat belts – no passengers without seatbelts
Cell phones
Use (including texting) prohibited while driving
No headsets/earbuds (iPods, etc.)
Speed control appropriate for terrain and traffic conditions
Following distance/space cushion
Visual scanning

External factors
Traffic conditions and pedestrians
Time of day/visibility – effect on mirrors
Weather conditions
Exterior distractions
Terrain/road surface conditions

Driver/mechanic teamwork
Early signs of mechanical problems/safety-sensitive issues
Steering play
Brake pedal travel
Charging/lighting problems

Communications between driver and mechanic
Vehicle maintenance requests

Preventing failures

Collisions, Breakdowns and Other Mishaps in LOW-SPEED VEHICLE Operations

Collisions
Assess personal and passenger safety first
Get help by calling 911
Collision reporting
Moving vehicles
Witnesses/passenger names
Photos
Information exchange/statements
Towing – local protocol
Breakdowns
- Pull over before vehicle stops running
- Gauges/charge level
- Smoke/burning smell
- Flat/low tires
- Dead batteries
- Getting help – local towing protocol
- Logging small items for next service

Other Mishaps
- Breakins/thefts/vandalism
- Lockouts

Review of “At Fault” and “Preventable” collision concepts

Written Test of LOW-SPEED VEHICLE OPERATIONS Knowledge

BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in LOW-SPEED VEHICLE OPERATIONS

Proactive Awareness – “Be Alert…Don’t Get Hurt”
- See/analyze what’s developing ahead
- Systematically scan all time zones
- Generally focus on 15 seconds ahead
- Eliminate visual barriers
- Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds

Demonstrate awareness of changing road/surface, weather, and pedestrian traffic conditions – especially transitions

Resist distractions from passenger and other sources

Avoid backing up whenever possible
If forced to back up:
- Perform a circle of safety – actively look for hidden hazards before backing
- Demonstrate awareness of blind spots and clearances including height
- Avoid distractions, especially from passengers
- Check all mirrors BEFORE backing
- Check a different mirror every 2 to 3 seconds while backing
- Enlist support of passengers – asks for a ground guide when appropriate

Proactive Defense – “Expect the Unexpected”
- Anticipate unsafe actions by other drivers
- Remain prepared to take evasive action
- Maintain and protect space cushions wherever possible
- Maintain a 4 to 6 second following distance
- Never drive faster than is safe for conditions
- Adjust speed as conditions change
- Cover the brake when a hazard is observed
- Watch for distracted pedestrians
Avoid driving across inclined surfaces

Demonstrate techniques to respond safely to sudden mechanical failures

- Loss of steering/brakes
- Tire failure
- Headlight failure
- Jammed accelerator

Demonstrate ability to make safe transition between different surface types

When parking

- Avoid backing whenever possible
- Select a spot that provides room for others to maneuver and does not create a hazard
- Assure clear access to building entrances, electrical panels and fire lanes
- Select a spot that is out of traffic flow
- Set the parking brake – curb wheels on inclines
- Remove key to prevent vehicle theft

AVOID BACKING if at all possible

Proactive Communications – “Don’t Hesitate – Communicate”

Always communicate intentions – use turn/hand signals when turning and making lane changes

Use lights as conditions require
Activate four-way emergency flashers when appropriate

Make eye contact with other road users — especially pedestrians

Use the horn or other audio warning devices appropriately to alert other drivers, pedestrians and cyclists to avoid a collision

- When forced to back:
- Tap horn before backing
- Make sure back-up alarm is on (for those vehicles equipped with an alarm cut-off switch)
- Activate four-way emergency flashers (if present)
- Communicate with ground guide when necessary
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
LOW SPEED VEHICLE OPERATIONS

DRIVER: ___________________________ EVALUATOR: ___________________________

DATE: ___________________________ U.C. LOCATION: ___________________________

□ Pass □ No Pass  OVERALL SCORE: _____  TRAFFIC: L/M/H  ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Assesses state of battery charge on electric vehicles
[ ] Identifies critical exterior and interior inspection components
[ ] Confirms all seatbelts are accessible and in good operating condition
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Systematically scans all time zones – proper eye lead time (seconds) ______ ______ ______ ______
[ ] Recognizes visual barriers and demonstrates awareness of vehicle blind spots
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds ______ ______ ______
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Demonstrates awareness of safety hazards associated with nearly silent electric vehicles
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds ______ ______ ______

PROACTIVE DEFENSE
[ ] Consistently uses seatbelt whenever vehicle is moving; asks passengers to do the same
[ ] Assures all external tools and equipment are properly secured
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______ ______
[ ] Adjusts speed as conditions change
[ ] Anticipates unsafe actions by other drivers, cyclists and pedestrians – covers the brake when a hazard is observed
[ ] Checks for hidden surface and other hazards when transitioning from regular paved roads and paths
[ ] Avoids driving across inclined surfaces whenever possible
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
[ ] Selects parking spot out of traffic flow – assures clear access to building entrances, electrical panels and fire lanes
[ ] Cuts or turns wheels when parked on inclines, removes key to prevent vehicle theft

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds horn or other warning device when needed for other vehicles, cyclists and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – assures back-up alarm is on

ADDITIONAL COMMENTS:

[N] = Not Observed

Rev: 12/03/2008
CORE PLUS™ MODULE
Off-Road Vehicle Operations
CORE PLUS™ MODULE
Off-Road Vehicle Operations

**Intended for:** Drivers of special-purpose vehicles and equipment, such as tractors, backhoes, dozers, trenchers, loaders, excavators, riding mowers and all-terrain vehicles (ATVs).

**Classification Characteristics:** Intermittent or continuous driving and/or operation of specialized vehicles and accessory equipment, primarily in off-road environments where road usage is typically between job sites. Additional training by qualified instructors is necessary for equipment operations other than driving.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. Goal is initial training within 30 days of their being hired.

**Implementation:** Initially it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course followed by in-vehicle practice and evaluation.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

**Introduction to OFF-ROAD VEHICLE Operations**

*Why train OFF-ROAD VEHICLE drivers?*
- Likelihood of harm to self and others
- Unique challenges of campus and off-road driving environment
- Apply appropriate defensive driving techniques to off-road operations
- Adjust driving technique to compensate for specific characteristics of the vehicle

**Vehicle-specific risks**
- Driving generally a secondary function of the vehicle – may be unstable even at low speed
- Some vehicles may need to be operated in reverse for road travel
- High center of gravity and off-road slopes create serious rollover hazard – most common cause of fatalities
- Failure to use seatbelts may result in control and/or ejection hazards
- Risk of falls entering and exiting elevated cabs
- Risk of personal injury during loading/unloading vehicle from transport trailer
- Roll-away risk due to improper parking
- Operation of many types of specialized off-road vehicles and equipment require specific instruction and certification
- Unique hazards specific to the particular vehicle (e.g., trenching and shoring)

**Vehicle Inspections in OFF-ROAD VEHICLE Operations**

**Safety**
- Prevention of breakdowns/mechanical failures
- Prevention of harm to other drivers, pedestrians and persons working around the vehicle

**Types of Inspections**
- Pre-shift
- Checklist-driven
- Introduction of local OFF-ROAD VEHICLE inspection forms
Midshift

Post-shift/out of service – walk-around mini-check
- Tires/wheels or tracks
- Fuel
- Fluid Levels
- Vehicle security for vandalism

Inspection Areas
- Engine – per location policy
- Belts
- Hoses
- Fuel levels – to prevent engine from stopping at a critical moment
- Fluids – levels and leaks are critical
- Compartment visual
- Electrical connections

Exterior
- Lights (if equipped) – clean and functioning
- Signals and warning devices functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Physical damage
- Mirrors – secure and clean
- Windshield (if present) – clean

- Body and rollover protective structures – broken bolts, cracked welds, fatigue fractures
- Wheel chocks – if provided
- Shielding on power take off (PTO) and other hazardous moving parts
- Specialized accessory equipment – connections, fluid leaks, cables, etc.

Interior
- Mirror/seat adjustment
- Seatbelts functional (all)
- Procedures for hydraulic and brake systems
- Gauges/warning lights
- Back-up alarm (if so equipped)
- Back-up camera (if so equipped)
- Glass – sightlines clear of interior condensation
- New damage
- Collision/incident reporting kit and warning triangles
- Next vehicle service date

Reporting Procedures
- Local reporting instructions
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service

Driving Defensively in OFF-ROAD VEHICLE Operations

- Achieving low- forces driving in OFF-ROAD VEHICLE Operations
- Reducing “G” forces – acceleration, deceleration and cornering
- Benefits of low-forces driving
- Self
- Vehicle
Vehicle differences with OFF-ROAD VEHICLE Operations
- Rollover hazard – increased with soft surfaces and sharp turns
- Extended stopping distances
- Clearances – sides and overhead (including energized power lines)
- Operation of specialized vehicle equipment

Driver’s role and responsibilities in OFF-ROAD VEHICLE Operations
- Professionalism
- Rested and ready to drive/substance-free (including Rx medications)
- Multitasking/unsafe behaviors
- Seatbelts and other safety equipment (helmet or hard hat, safety glasses or goggles, safety shoes) – consistent use
- Cell phones
  - Use (including texting) prohibited while driving
- Speed control
- Space cushions
- Visual scanning within the field of operation

External factors
- Traffic or job site conditions, including lighting and terrain
- Other workers and equipment
- Weather conditions
- Exterior distractions
- Road surface/off-road conditions
- Recurring operations at “familiar” sites

Driver/mechanic teamwork
- Early signs of mechanical problems/safety sensitive issues
- Control problems
- Brake problems
- Starting problems
- Specialized equipment problems
- Communications between operators and mechanics
- Preventing failures

Collisions, Breakdowns and Other Mishaps in OFF-ROAD VEHICLE Operations

Collisions
- Assess personal safety first
- Get help by calling 911
- Encourage injured parties to remain in place
- Collision kit/triangle placement
- Moving vehicles/equipment
- Witness names and contact information
- Location-specific reporting protocol
- Photos
- Information exchange/statements
- Towing – local protocol

Breakdowns
- Pull over/shut down before vehicle stops running
- Triangle placement
- Flat/low tires
Specialized equipment problems
Getting help – local towing protocol
Logging small items for next service

Other Mishaps
Injuries/damage/conflicts during specialized operations
Hazardous material spills/releases
Fires
Vandalism/sabotage/thefts
Fueling errors (e.g., putting gas in a diesel vehicle)

Review of “At Fault” and “Preventable” collision concepts

Written Test of OFF-ROAD VEHICLE OPERATIONS Knowledge

AT THE CONTROLS EVALUATION – Application of Advanced Defensive Driving Principles in OFF-ROAD VEHICLE OPERATIONS

Proactive Awareness – “Be Alert…Don't Get Hurt”
See/analyze what’s developing ahead
Systematically scan all time zones
Generally focus on 15 seconds ahead
Keep eyes scanning – avoid the fixed stare

Demonstrate awareness of blind spots
Check mirrors frequently (if so equipped)
Change body position as needed to expand sight angles
Pull over frequently to let faster road traffic pass

Demonstrate awareness of changing road and weather conditions
When going off-road, check for hidden or partially hidden surface and overhead obstructions, especially power lines

Resist distractions – including cell phones and two-way radios

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary
If forced to back up:
• Perform a circle of safety before entering the vehicle – identify hazards around the vehicle
  Never back up in traffic without checking behind the vehicle
• Ask co-worker or other person to help as ground guide
• If using cones, pick up cone behind vehicle last
• Demonstrate awareness of blind spots and clearances, including height
• Avoid distractions
• Check all mirrors BEFORE backing – change body position to improve sight angles
• Check a different mirror every 2 to 3 seconds while backing

Demonstrate awareness of safety hazards associated with operation of specialized vehicle equipment

Proactive Defense – “Expect the Unexpected”
Anticipate unsafe actions by other drivers, pedestrians and co-workers
Maintain and protect space cushions wherever possible
Maintain a 6 to 8 second following distance
Never drive faster than is safe for conditions
Adjust speed as conditions change
Cover the brake when a hazard is observed
Slow significantly for turns
Watch for distracted pedestrians

Use appropriate defensive measures when operating specialized vehicle equipment:
- Establish an operating “danger zone” around the vehicle at the job site
- Keep dozer blade between unit and edge when operating near embankments
- Know the lift capacity of loaders to avoid tip-overs
- Back the tractor up if necessary to climb a slope

Proactive Communications – “Don't Hesitate – Communicate”

Always communicate intentions – signal when turning and making lane changes
Use available lights for visibility when operating on streets and roads
Place a slow-moving vehicle (SMV) emblem on rear of vehicle when forced to drive on public roads
Make eye contact with other road users including pedestrians
Use the horn appropriately to alert other drivers or pedestrians, or to avoid a collision

When forced to back:
- Tap horn before backing
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on (for vehicles equipped with video)
- Communicate with ground guide (if available) using prearranged signals

Communicate appropriately when operating specialized vehicle equipment
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
OFF-ROAD VEHICLE OPERATIONS

DRIVER: _____________________ EVALUATOR: _____________________

DATE: _____________________ U.C. LOCATION: _____________________

☐ PASS ☐ No PASS OVERALL SCORE: _____ TRAFFIC: L/M/H ROADS: URBAN/RURAL/OFF

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identify what to look for with critical engine compartment components (if included at your location)
[ ] Identify critical exterior and specialized equipment inspection components
[ ] Adjusts seat and belts for optimal driving position; identifies necessary personal protective equipment

PROACTIVE AWARENESS
[ ] Demonstrates driving knowledge and awareness (as observed by evaluator in trailing vehicle)
[ ] Scans all time zones ahead
[ ] Identifies and responds appropriately to pertinent information ahead.
[ ] Pulls over frequently to let faster road traffic pass
[ ] Checks for hidden surface and overhead hazards when going off-road
[ ] Avoids backing whenever possible
[ ] If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
[ ] Identifies specific terrain or worksite hazards pertinent to the vehicle
[ ] Demonstrates awareness of safety hazards associated with operation of specialized vehicle equipment

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by others – responds pro-actively
[ ] Demonstrates preparedness to take evasive actions – covers the brake when hazard is observed
[ ] Maintains and protects space cushions including 6-8 second following distance ______ ______ ______ ______
[ ] Slows significantly for turns
[ ] Stops, gets out and checks if hazard possibly in backing path – requests ground guide if available
[ ] Responds appropriately to terrain and other hazards present on a worksite
[ ] Takes appropriate defensive measures while operating specialized equipment

PROACTIVE COMMUNICATIONS
[ ] Communicates intentions to others – signals all turns
[ ] Assures available lights to enhance visibility when operating on roadways
[ ] Uses horn or other signal when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – utilizes backing alarm but watches for workers who may not hear backing alarm
[ ] Communicates with ground guide using pre-arranged signals

ADDITIONAL COMMENTS:

[N] = Not Observed

Rev: 11/30/2008
CORE PLUS™ MODULE
Passenger Auto Operations
CORE PLUS™ MODULE

Passenger Auto Operations

**Intended for:** Drivers of both UC-owned and non-UC-owned passenger automobiles operated on UC business.

**Classification Characteristics:** Operation of passenger autos, including sport utility vehicles, for UC business purposes by both regular and occasional drivers, including student drivers and non-emergency fire and law enforcement operations. Applies to fleet-owned, department-owned, personally owned, and rental vehicles in local and long-distance business travel operations.

**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Upon presentation of proof of successful completion of UC Core Training within the previous three years, only a documented behind-the-wheel skill practice and evaluation by a UC-approved instructor/evaluator is required.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award,

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

Content

**BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in PASSENGER AUTO OPERATIONS**

**Proactive Awareness – “Be Alert...Don’t Get Hurt”**
- See/analyze what’s developing ahead
- Systematically scan all time zones
- Generally focus on 15 seconds ahead
- Eliminate visual barriers
- Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds

Change body position to expand sight angle

Demonstrate awareness of changing road and weather conditions and posted speed limits

Resist distraction by passengers and other sources

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary.

If forced to back up:
- Perform a circle of safety before entering vehicle – *actively look for obvious and hidden hazards before backing*
- Demonstrate awareness of blind spots and clearances, including overhangs
- Avoid distraction, especially by passengers
- Check all mirrors BEFORE backing
- Check a different mirror every 2 to 3 seconds while backing
- Enlist support of passengers – ask for a ground guide when appropriate

**Proactive Defense – “Expect the Unexpected”**
Anticipate unsafe actions by other drivers
Remain prepared to take evasive action
Maintain and protect space cushions wherever possible
Maintain a 4 to 6 second following distance
Never drive faster than is safe for conditions
Adjust speed as conditions change
Cover the brake when a hazard is observed
Watch for distracted pedestrians, bicyclists, skateboarders, etc.
Wait with wheels straight when stopped for turns in intersections

Demonstrate how to respond safely to sudden mechanical failures:
- Loss of steering
- Loss of brakes
- Tire failure
- Headlight failure

Describe how to respond safely to running off the pavement edge – avoiding overcorrecting

When parking:
- Avoid backing up whenever possible – selects “drive-through” spots
- Select a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Set the parking brake – turn wheels appropriately on inclines with and without curbs

Avoid backing up whenever possible
When forced to back up, take necessary time to follow safe backing procedures despite external pressures

Proactive Communications – “Don't Hesitate – Communicate”

Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility
Activates four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians and cyclists – don't assume they recognize your intention

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

When forced to back:
- Tap horn before backing
- Partially open driver's window
- Activate four-way emergency flashers
- Communicate with ground guide (if available) using prearranged signals
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
PASSenger Auto OPERATIONS

DRIVER: ___________________________ EVALUATOR: ___________________________

DATE: ___________________________ U.C. LOCATION: ___________________________

☐ PASS  ☐ NO PASS  OVERALL SCORE: _____  TRAFFIC: L/M/H  ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identify what to look for with critical engine compartment components (if included at your location)
[ ] Identify critical exterior and interior inspection components
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Systematically scans all time zones – proper eye lead time (seconds) _____ _____ _____ _____ _____
[ ] Eliminates visual barriers
[ ] Keeps eyes moving – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds _____ _____ _____
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Avoids backing whenever possible
[ ] If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
[ ] If backing will be necessary, both looks back and checks a different mirror every 2-3 seconds _____ _____ _____

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by other drivers – identifies distracted pedestrians
[ ] Demonstrates preparedness to take evasive action – covers the brake when hazard is observed
[ ] Maintains and protects space cushions including 4-6 second following distance _____ _____ _____ _____ _____
[ ] Adjusts speed as conditions change – knows posted speed limit
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure
[ ] Checks rear-view mirror before backing
[ ] Stops, gets out and checks if hazard possibly in backing path

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights
[ ] Assures headlights are on for safety
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing
[ ] Activates 4-way hazard lights when appropriate

ADDITIONAL COMMENTS:

[0] = Not Observed

Rev: 11/25/2008
CORE PLUS™ MODULE

Passenger Van Operations

Intended for: Regular but nonprofessional (CDL not required) UC drivers of passenger vans.

Classification Characteristics: Operation of vans and minivans for passenger transport purposes other than organized vanpools by both regular and occasional drivers, including student drivers. Includes fleet and rental vehicles in local as well as long-distance operation.

Application: All existing drivers and all subsequent new drivers, including rehires and transfers – implementation schedule to be determined locally.

Implementation: Initially it will target Occupational Drivers. The goal is initial training of all new hires within 30 days of their being hired.

Delivery Format(s): Instructor-led classroom sessions and/or Web-based interactive course followed by behind-the-wheel practice and evaluation.

Enhancements: Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

Refresher Content and Frequency: Every three years.

Subject-Specific Retraining: Individually designed based on identified needs.

Content

Introduction to PASSENGER VAN Operations

Why train PASSENGER VAN drivers?

- Likelihood of harm to others
- Increase knowledge of defensive driving techniques
- Upgrade everyday driving skills
- Adjust driving technique to compensate for specific characteristics of passenger vans

Vehicle-specific risks

- Heavier than passenger car – slower acceleration/extended stopping distance
- Wider/longer/taller than passenger car – increased susceptibility to cross winds and clearance hazards
- High center of gravity – reduced evasive capability
- Rollover/ejection hazard
- Impaired visibility side and back – use of mirrors is critical
- Size impairs forward visibility for vehicles driving behind
- Driving position forward of usual – changes steering perspective
- Extended overhang behind rear wheels affects backing
- Reduced body protection from side impacts
- Inconsistent seatbelt use by passengers
- Loading/unloading risks
- Conversational distractions from greater number of passengers
- Schedule/distance demands may result in monotony/fatigue
- Increased exposure to impaired drivers when driving during nighttime hours on long trips
- Travel may require operation in unfamiliar environments

Vehicle Inspections in PASSENGER VAN Operations

Safety

- Prevention of breakdowns/mechanical failures
- Personal responsibility for passengers
- Learning to operate an unfamiliar vehicle safely

Types of Inspections

- Pre-trip
- Checklist-driven
Introduction of local PASSENGER VAN inspection forms

Midtrip/Midshift
- Tires – pressure, tread failure
- Fluids – evidence of leaks
- Windshield – clean
- Lights – clean and functioning

Post-trip/out of service – walk-around mini-check
- Tires
- Body damage
  - The “rolling billboard”
- Fuel
- Interior cleanliness

Inspection Areas
- Engine – per location policy
- Belts
- Hoses
- Fluids
- Compartment visual

Exterior
- Lights – clean and functioning
- Signals functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Body damage
- Wipers – secure
- Mirrors – secure and clean
- Windshield – clean

Interior
- Mirror/seat adjustment
- Seatbelts functional (all)
- Brake pedal travel
- Heater/defroster
- Gauges/warning lights
- Glass – sightlines clear of interior condensation
- Damage
- Cleanliness
- Collision reporting kit
- Fire extinguisher/first aid kit
- Next vehicle service date

Reporting Procedures
- Local reporting instructions
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service
Driving Defensively in PASSENGER VAN Operations

Achieving low-forces driving in PASSENGER VAN Operations
- Reducing “G” forces – acceleration, deceleration and cornering
- Benefits of low-forces driving
  - Self
  - Others
  - Vehicle

Vehicle differences with PASSENGER VAN Operations
- Visibility
- Handling/cornering
- Stopping distances – brakes overheating on long downgrades
- Clearances
- Parking
- Passengers

Driver’s role and responsibilities in PASSENGER VAN Operations
- Passenger safety
- Professionalism
- Rested and ready to drive/substance-free (including Rx medications)
- Pull over immediately if drowsy – address problem
- Concentration on the Art of Driving
- Multitasking/unsafe behaviors
- Image and road courtesy
- Seatbelt use by passengers – personal legal exposure
- Hanging garments and right-side windows
- Cell phones
  - Use (including texting) prohibited while driving
- AM/FM radios/CD players/other sound systems
- Speed control
- Following distance/space cushion
- Visual scanning

External factors
- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions
- Exterior distractions
- Road surface conditions

Driver/mechanic teamwork
- Early signs of mechanical problems/safety-sensitive issues
- Steering play
- Brake pedal travel
- Starting problems
- Communications between driver and mechanic
- Assistance during long and/or out-of-state trips
- Preventing failures
Collisions, Breakdowns and Other Mishaps in PASSENGER VAN OPERATIONS

Collisions
Assess personal and passenger safety first
Get help by calling 911
Encourage injured parties to remain in vehicle(s)
Collision kit
Moving vehicles
Witnesses/passenger names
Local notification protocol (UCPD, Fleet, Risk Management, etc.)
Photos – remember cell phone cameras
Information exchange/statements
Towing – local protocol

Breakdowns
Pull over before vehicle stops running
Emergency flashers
Dashboard warning lights
Steam vs. smoke
Flat/low tires
Dead batteries/jump starts
Getting help – local and long-distance towing protocol – other UC locations as resources
Logging small items for next service

Other Mishaps
Breakins/thefts
Lockouts
Fueling errors (e.g., putting gas in a diesel vehicle)

Review of “At Fault” and “Preventable” collision concepts

Written test of PASSENGER VAN OPERATIONS Knowledge

BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in PASSENGER VAN OPERATIONS

Proactive Awareness – “Be Alert…Don’t Get Hurt”
See/analyze what’s developing ahead
Systematically scan all time zones
Generally focus on 15 seconds ahead
Eliminate visual barriers
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – checks at least one mirror every 3 to 5 seconds
Change body position to expand sight angle

Demonstrate awareness of changing road and weather conditions

Resist distractions from passengers and other sources

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary.
If forced to back up:
• Perform a circle of safety – actively look for obvious and hidden hazards before backing
• Demonstrate awareness of blind spots and clearances, including overhangs
• Avoid distractions, especially from passengers
• Check all mirrors BEFORE backing
• Check a different mirror every 2 to 3 seconds while backing
• Enlist support of passengers – ask for a ground guide

Proactive Defense – “Expect the Unexpected”
Anticipate unsafe actions by other drivers
Remain prepared to take evasive action
Maintain and protect space cushions wherever possible
Maintain a 4 to 6 second following distance
Never drive faster than is safe for conditions
Adjust speed as conditions change
Cover the brake when a hazard is observed
Watch for distracted pedestrians, bicyclists, skateboarders, etc.
Wait with wheels straight when stopped for turns in intersections

Demonstrate techniques to respond safely to sudden mechanical failures:
• Loss of steering
• Loss of brakes
• Tire failure
• Headlight failure

Describe how to respond safely to running off the pavement edge – avoiding overcorrecting
• When parking:
  • Avoid backing whenever possible – selects “drive-thru” spots
  • Select a spot that provides room to maneuver and does not create a hazard
  • Select a spot that is out of traffic flow
  • Set the parking brake – turn wheels appropriately on inclines with and without curbs

Avoid backing up whenever possible
When forced to back up, take necessary time to follow safe backing procedures despite external pressures

Proactive Communications – “Don’t Hesitate – Communicate”
Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility
Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians and cyclists – don’t assume they recognize your intention

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

When forced to back up:
• Tap horn before backing
• Partially open driver’s window
• Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
• Make sure backup camera is on (for vehicles equipped with video)
• Activate four-way emergency flashers
• Communicate with ground guide (if available) using prearranged signals
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
PASSENGER VAN OPERATIONS

DRIVER: ________________________ EVALUATOR: ________________________

DATE: ________________________ U.C. LOCATION: ________________________

☐ PASS ☐ NO PASS OVERALL SCORE: _______ TRAFFIC: L/M/H ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identifies what to look for with critical engine compartment components (if included at your location)
[ ] Identifies critical exterior and interior inspection components
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Confirms seatbelt use by all occupants
[ ] Systematically scans all time zones – proper eye lead time (seconds) ______ ______ ______
[ ] Eliminates visual barriers, including interior factors affecting window visibility
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds ______ ______ ______
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Avoids backing whenever possible
[ ] If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
[ ] If backing will be necessary, asks for a ground guide and checks a different mirror every 2-3 seconds ______ ______

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
[ ] Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______
[ ] Adjusts speed as conditions change – knows posted speed limit
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
[ ] Selects “drive-thru” parking spots when possible
[ ] Enlists support of passengers for backing – asks for a ground guide; checks rear-view mirror before backing
[ ] Stops, gets out and checks if hazard possibly in backing path

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights
[ ] Assures headlights are on for safety
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing
[ ] Communicates with ground guide using pre-arranged signals

ADDITIONAL COMMENTS:

________________________________________

Rev. 12/02/2008
CORE PLUS™ MODULE

SERVICE VEHICLE OPERATIONS
CORE PLUS™ MODULE
Service Vehicle Operations

**Intended for:** Regular drivers of service-related work trucks, such as pickups, cargo vans, utility trucks, mail trucks, etc.

**Classification Characteristics:** Intermittent or continuous driving of trucks most commonly used to transport tools or goods to job sites or delivery destinations. Does not typically require specialized commercial license.

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and evaluation.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

**Introduction to SERVICE VEHICLE Operations**

Why train SERVICE VEHICLE drivers?
Likelihood of harm to self and others
Unique challenges of the campus driving environment
Increase knowledge of defensive driving techniques
Upgrade everyday driving skills
Adjust driving technique to compensate for specific characteristics of vehicle

**Vehicle-specific risks**
- Heavier than passenger car – higher center of gravity
- Equipment may be older
- Cab seats and floors may be cluttered
- Impaired visibility at side and back – use of mirrors is critical
- Inconsistent seatbelt use resulting in control/ejection hazards
- Typically slower acceleration and greater stopping distances than passenger cars
- Difficulty finding parking near job sites – possible obstruction of transit or fire lanes
- Frequent parking and exiting the vehicle – roll-away risk due to improper parking
- Personal injury during loading/unloading
- Failure to secure exterior compartment doors properly, resulting in accidental opening
- Loss or injury caused by improperly secured loads or exterior materials/equipment
- Exhaust (carbon monoxide) intrusion while driving with back doors or windows opened improperly
- Operation of specialized equipment – lift gates, winches, hoists, specialized racks, etc.

**Vehicle Inspections in SERVICE VEHICLE Operations**

Safety
Prevention of breakdowns/mechanical failures

**Types of Inspections**
- Pre-trip
- Checklist-driven
- Introduction of local SERVICE VEHICLE inspection forms

Midtrip/midshift – important if working off-road
- Dual tires for embedded rocks
- Underside for suspension/steering damage
Post-trip/out of service – walk-around mini-check
Tires
  Body damage
    The “rolling billboard”
Fuel
Interior cleanliness

Inspection Areas
  Engine – per location policy
  Belts
  Hoses
  Fluids – levels and leaks are critical
  Compartment visual
  Electrical connections
  Steering linkage – visual inspection

Exterior
  Lights – clean and functioning
  Signals and warning devices functioning properly
  Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
  Body damage
  Wipers – secure and pliable
  Mirrors – secure and clean
  Windshield – clean
  Springs/shocks – visual inspection for problems
  Removable exterior equipment and cargo – present and properly secured

Interior
  Mirror/seat adjustment
  Seatbelts functional (all)
  Brake pedal travel
  Heater/defroster
  Gauges/warning lights
  Glass – sightlines clear of interior condensation
  Damage
  Cleanliness
  Collision reporting kit
  First aid kit
  Fire extinguisher (if present) – pressure/inspection date
  Next vehicle service date

Reporting Procedures
  Local reporting instructions
  Problems needing resolution before further operation
  Problems needing resolution at end of task
  Problems worthy of note for next service

Driving Defensively in SERVICE VEHICLE Operations
  Achieving low-forces driving in SERVICE VEHICLE Operations
  Reducing “G” forces – acceleration, deceleration and cornering
  Benefits of low-forces driving
Self
Others
Vehicle

Vehicle differences with SERVICE VEHICLE Operations
Weight
Handling
Stopping distances
Clearances
Blind spots
Removable external equipment
Maximum safe speed on curves and ramps will often be less than posted
Importance of parking brake use

Driver’s role and responsibilities in SERVICE VEHICLE Operations
Professionalism
Rested and ready to drive/substance-free (including Rx medications)
Concentration on the art of driving
Multitasking/unsafe behaviors
Image and road courtesy
Seat belts – consistent use
Cell phones
  Use (including texting) prohibited while driving
AM/FM radios/CD players/other sound systems
Securing accessible tools/equipment when leaving vehicle
Speed control
Following distance/space cushion
Visual scanning

External factors
Traffic conditions and pedestrians
Unsafe actions by others
Time of day/visibility – effect on mirrors
Weather conditions
Exterior distractions
Road surface/off-road conditions

Driver/mechanic teamwork
Early signs of mechanical problems/safety-sensitive issues
Steering play
Brake pedal travel
Starting problems
Problems with specialized equipment
Communications between driver and mechanic
Preventing failures

Collisions, Breakdowns and Other Mishaps in SERVICE VEHICLE Operations

Collisions
Assess personal and passenger safety first
Get help by calling 911
Encourage injured parties to remain in vehicle(s)
Collision kit/triangle placement
Moving vehicles
Witnesses/passenger names
Local notification protocol (UCPD, Fleet, Risk Management, etc.)
Photos – consider cell phone camera – appropriate/inappropriate photographs
Information exchange/statements
Towing – local protocol

Breakdowns
Pull over before vehicle stops running
Triangle placement
Warning lights
Steam vs. smoke
Flat/low tires
Dead batteries/jump starts
Getting help – local towing protocol
Logging small items for next service

Other Mishaps
Breakins/thefts
Lockouts
Fueling errors (e.g., putting gas in a diesel vehicle)
Loss of exterior equipment
Getting stuck during off-road operation

Review of “At Fault” and “Preventable” collision concepts

Written Test of SERVICE VEHICLE OPERATIONS Knowledge

BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in SERVICE VEHICLE OPERATIONS

Proactive Awareness – “Be Alert…Don't Get Hurt”
See/analyze what’s developing ahead
Systematically scan all time zones
Generally focus on 15 seconds ahead
Eliminate visual barriers
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds
Change body position as needed to expand sight angle

Demonstrate awareness of changing road and weather conditions
If necessary to go off-road, check for hidden or partially hidden surface and overhead obstructions

Resist distractions from passengers and other sources

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary
If forced to back up:
• Perform a circle of safety – identify hazards around the vehicle – actively look for hidden hazards before backing up
• If using cones, pick up cone behind vehicle last
• Demonstrate awareness of blind spots and clearances, including height
• Avoid distractions, especially from passengers
• Partially open driver’s window
• Check all mirrors BEFORE backing up
• Check a different mirror every 2 to 3 seconds while backing
• Enlist support of passengers – ask for a ground guide

Demonstrate awareness of safety hazards associated with operation of specialized vehicle equipment

Proactive Defense – “Expect the Unexpected”
Anticipate unsafe actions by other drivers
Remain prepared to take evasive action
Maintain and protect space cushions wherever possible
Maintain a 4 to 6 second following distance
Never drive faster than is safe for conditions
Adjust speed as conditions change
Cover the brake when a hazard is observed
Watch for distracted pedestrians
Wait with wheels straight when stopped for turns in intersections
Demonstrate techniques to respond safely to sudden mechanical failures:
• Loss of steering
• Loss of brakes
• Tire failure
• Headlight failure

When parking:
• Avoid backing whenever possible
• Select a spot that provides room to maneuver and does not create a hazard
• Select a spot that is out of traffic flow – uses signs/cones appropriately
• Set the parking brake – turn wheels appropriately on inclines with and without curbs

AVOID BACKING in all situations
Take necessary time to follow safe backing procedures despite external pressures
Use appropriate defensive measures when operating specialized vehicle equipment
Make sure specialized equipment is properly secured before moving vehicle

Proactive Communications – “Don’t Hesitate – Communicate”
Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility
Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians
Use horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision
Signal turns and lane changes early and as needed

When forced to back up:
• Tap horn before backing
• Partially open driver’s window
• Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
• Make sure backup camera is on (for vehicles equipped with video)
• Activate four-way emergency flashers
• Communicate with ground guide (if available) using prearranged signals

Communicates appropriately when operating specialized vehicle equipment
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
SERVICE VEHICLE OPERATIONS

DRIVER: ____________________ EVALUATOR: ____________________

DATE: ____________________ U.C. LOCATION: ____________________

☐ PASS ☐ NO PASS OVERALL SCORE: _____ TRAFFIC: L/M/H ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identifies what to look for with critical engine compartment components (per location policy)
[ ] Identifies critical exterior and interior inspection components
[ ] Confirms all seatbelts are accessible and in good operating condition
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Systematically scans all time zones – proper eye lead time (seconds) ______ ______ ______ ______
[ ] Eliminates visual barriers and demonstrates awareness of vehicle blind spots
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds ______ ______ ______ ______
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Demonstrates awareness of safety hazards associated with specialized vehicle equipment
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds ______ ______ ______ ______

PROACTIVE DEFENSE
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______ ______
[ ] Adjusts speed as conditions change – knows the posted speed limit
[ ] Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure
[ ] Checks for hidden surface and overhead hazards when going off-road
[ ] If forced to back, uses a ground guide whenever possible
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
[ ] Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately
[ ] Utilizes proper defensive measures when securing or operating specialized vehicle equipment

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on
[ ] Communicates with ground guide if available, using pre-arranged signals

ADDITIONAL COMMENTS:

[N] = Not Observed

Rev: 12/02/2008
CORE PLUS™ MODULE

Specialized Vehicle Operations

**Intended for:** Regular drivers of special purpose work trucks, such as straight trucks, waste collection trucks, bucket trucks, tow trucks, street sweepers, and fire apparatus engaged in nonemergency driving.

**Classification Characteristics:** Intermittent or continuous driving and operation of trucks where the vehicle and its accessory equipment are an integral part of the work being performed. Additional training/re-training and a specialized commercial license or endorsement may be required for some assignments (e.g., hazardous materials transport).

**Application:** All existing drivers and all subsequent new drivers, including rehires and transfers. Goal is initial training of all new hires within 30 days of their being hired.

**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.

**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and skill-building.

**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.

**Refresher Content and Frequency:** Every three years.

**Subject-Specific Retraining:** Individually designed based on identified needs.

### Content

**Introduction to SPECIALIZED VEHICLE Operations**

- Why train SPECIALIZED VEHICLE drivers?
- Likelihood of harm to self and others
- Unique challenges of the campus driving environment
- Increase knowledge of defensive driving techniques
- Upgrade everyday driving skills
- Adjust driving technique to compensate for specific characteristics of the vehicle

**Vehicle-specific risks**

- Heavier/slower than passenger car – higher center of gravity
- Slower acceleration/greater stopping distance than passenger cars
- Size may result in other drivers misjudging truck’s speed
- Seriously impaired visibility at side and back – use of mirrors is critical
- Driving position may be forward of usual – changes steering geometry
- Flat-sided vehicles especially vulnerable to cross-winds
- Failure to use seatbelts may result in control/ejection hazards
- Frequent parking and exiting the vehicle – roll-away risk due to improper parking
- Risk of falls entering and exiting elevated cabs
- Personal injury risk during loading/unloading operations
- Failure to properly secure exterior compartment doors resulting in accidental opening/loss of contents
- Loss or injury caused by improperly secured loads or exterior materials/equipment
- Operation of specialized equipment – winches, hoists, booms, lift gates, hydraulic forks and other bin lifting systems, rotating brushes, specialized racks, etc.
- Unique hazards specific to the vehicle
Vehicle Inspections in SPECIALIZED VEHICLE Operations

Safety
Prevention of breakdowns/mechanical failures
Prevention of harm to other drivers, pedestrians and persons working around the truck

Types of Inspections
Pre-trip
Checklist-driven
Introduction of local SPECIALIZED VEHICLE inspection forms

Midtrip/Midshift – important if working off-road
Dual tires for embedded rocks
Underside for suspension/steering damage

Post-trip/out of service – walk-around mini-check
Tires/wheels
Body damage
The “rolling billboard”
Fuel
Interior cleanliness

Inspection Areas
Engine – per location policy
Belts
Hoses
Fluids – levels and leaks are critical
Compartment visual
Electrical connections
Steering linkage – visual inspection

Exterior
Lights – clean and functioning
Signals and warning devices functioning properly
Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
Body damage
Wipers – secure and pliable
Mirrors – secure and clean
Windshield – clean
Springs/shocks – visual inspection for problems
Utility body and mounts – broken bolts, cracked welds, fatigue fractures
Wheel chocks – if provided
Specialized accessory equipment – connections, fluid leaks, cables, etc.
Removable exterior equipment – present and properly secured

Interior
Mirror/seat adjustment
Seatbelts functional (all)
Procedures for hydraulic and air brake systems
Heater/defroster
Gauges/warning lights
Backup alarm (if so equipped)
Backup camera is on (if so equipped)
Glass – sightlines clear of interior condensation
Damage
Cleanliness
Collision reporting kit and warning triangles
First aid kit
Fire extinguisher – pressure/inspection date
Next vehicle service date

Reporting Procedures
Local reporting instructions
Problems needing resolution before further operation
Problems needing resolution at end of task
Problems worthy of note for next service

Driving Defensively in SPECIALIZED VEHICLE Operations

Achieving low-forces driving in SPECIALIZED VEHICLE Operations
Reducing “G” forces – acceleration, deceleration and cornering

Benefits of low forces driving
Self
Others
Vehicle

Vehicle differences with SPECIALIZED VEHICLE Operations
Weight
Handling – hydroplaning risk at speeds as low as 30 mph
Stopping distances
Clearances – sides and overhead
Blind spots
Removable external equipment
Operation of specialized vehicle equipment
Maximum safe speed on curves and ramps will often be 5 to 10 mph less than posted

Driver’s role and responsibilities in SPECIALIZED VEHICLE Operations
Professionalism
Rested and ready to drive/substance-free (including Rx medications)
Concentration on the art of driving
Multi-tasking/unsafe behaviors
Image and road courtesy
Seat belts – consistent use
Cell phones
Use (including texting) prohibited while driving
AM/FM radios/CD players/other sound systems
Speed control
Following distance/space cushion
Visual scanning

External factors
Traffic conditions and pedestrians
Time of day/visibility – effect on mirrors
Weather conditions
Exterior distractions  
Road surface/off-road conditions  
Recurring operations at “familiar” sites

**Driver-mechanic teamwork**
- Early signs of mechanical problems/safety-sensitive issues
- Steering play
- Brake pedal travel and other problems
- Starting problems
- Specialized equipment problems
- Communications between drivers and mechanics
- Preventing failures

**Collisions, Breakdowns and Other Mishaps in SPECIALIZED VEHICLE Operations**

**Collisions**
- Assess personal and passenger safety first
- Get help by calling 911
- Encourage injured parties to remain in vehicles
- Collision kit/triangle placement
- When and how to move vehicles
- Witness names and contact information
- Location reporting protocol
- Photos
- Information exchange/statements
- Towing – local protocol

**Breakdowns**
- Pull over before vehicle stops running
- Triangle placement
- Warning lights
- Steam vs. smoke
- Flat/low tires
- Dead batteries/jump starts
- Specialized equipment problems
- Getting help – local towing protocol
- Logging small items for next service

**Other Mishaps**
- Injuries/damage/conflicts during specialized operations
- Hazardous material spills/releases
- Fires
- Breakins/thefts
- Lockouts
- Fueling errors (e.g., putting gas in a diesel vehicle)
- Loss of exterior equipment

Review of “At Fault” and “Preventable” collision concepts

**Written Test of SPECIALIZED VEHICLE OPERATIONS Knowledge**

**BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in SPECIALIZED VEHICLE OPERATIONS**

*Proactive Awareness – “Be Alert…Don’t Get Hurt”*
- See/analyze what’s developing ahead
Systematically scan all time zones
Generally focus on 15 seconds ahead
Eliminate visual barriers
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds
Change body position as needed to expand sight angles

Demonstrate awareness of changing road and weather conditions
If necessary to go off-road, check for hidden or partially hidden surface and overhead obstructions

Resist distractions, including cell phones and two-way radios

Avoid backing up whenever possible – stop sufficiently far behind other vehicles to pull around if necessary
If forced to back up:
Perform a circle of safety – identify hazards around the vehicle
  • Never back in traffic without checking behind the vehicle
  • Ask partner or other person to help as ground guide
  • If using cones, pick up cone behind vehicle last
  • Demonstrate awareness of blind spots and clearances, including height
  • Avoid distractions
  • Check all mirrors BEFORE backing – change body position to improve sight angles
  • Check a different mirror every 2 to 3 seconds while backing

Demonstrate awareness of safety hazards associated with operation of specialized vehicle equipment

*Proactive Defense – “Expect the Unexpected”*
Anticipate unsafe actions by other drivers
Remain prepared to take evasive action
Maintain and protect space cushions wherever possible
Maintain a 4 to 6 second following distance
Never drive faster than is safe for conditions
Adjust speed as conditions change
Cover the brake when a hazard is observed
Watch for distracted pedestrians
Demonstrate techniques to respond safely to sudden mechanical failures:
  • Loss of steering/brakes
  • Tire failure
  • Headlight failure

*When parking:*
  • Avoid backing up whenever possible
  • Select a spot that provides room to maneuver and does not create a hazard
  • Select a spot that is out of traffic flow
  • Set the parking brake – turn wheels appropriately on inclines with and without curbs
  • Chock wheels when appropriate

Use appropriate defensive measures when operating specialized vehicle equipment

*Proactive Communications – “Don’t Hesitate – Communicate”*
Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility
Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

**When forced to back up:**
- Taps horn before backing
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on (for vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide (if available) using prearranged signals

Communicate appropriately when operating specialized vehicle equipment
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
SPECIALIZED VEHICLE OPERATIONS

DRIVER: ___________________________ EVALUATOR: ___________________________

DATE: ___________________________________ U.C. LOCATION: ___________________________

☐ Pass  ☐ No Pass  OVERALL SCORE: _____  TRAFFIC: L/M/H  ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Demonstrates proper procedures for air brake system (if so equipped)
[ ] Identifies what to look for with critical engine compartment components (per location policy)
[ ] Identifies critical exterior and interior inspection components
[ ] Confirms all seatbelts are accessible and in good operating condition
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Systematically scans all time zones – proper eye lead time (seconds) _____ _____ _____ _____ _____
[ ] Eliminates visual barriers and demonstrates awareness of vehicle blind spots and clearance requirements
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds _____ _____ _____
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Checks for hidden surface and overhead obstructions when going off-road
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds _____ _____ _____

PROACTIVE DEFENSE
[ ] Maintains and protects space cushions including 4-6 second following distance _____ _____ _____ _____ _____
[ ] Adjusts speed as conditions change – knows the posted speed limit
[ ] Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure
[ ] If forced to back, uses a ground guide whenever possible
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
[ ] Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately, picks up rear cone last
[ ] Demonstrates proper safety measures when securing or operating specialized vehicle tools and equipment

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on as well as back-up camera, if so equipped
[ ] Communicates with ground guide if available, using pre-arranged signals

ADDITIONAL COMMENTS:

[N] = Not Observed
Rev: 12/03/2008
CORE PLUS™ MODULE
Trailer Operations
CORE PLUS™ MODULE

Trailer Operations

Intended for: Regular and occasional UC drivers whose driving duties include towing of trailers and towable equipment.

Classification Characteristics: Towing trailers of various sizes, including travel trailers, those used for general cargo, heavy equipment, boats, bicycles, etc., as well as towable equipment, such as compressors, wood chippers, cement mixers, recreational climbing walls, vehicular tow bars, etc. Includes both local and long-distance towing.

Application: All existing drivers and all subsequent new drivers who tow trailers, including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.

Implementation: Initially, it will target Occupational Drivers – then others according to locally developed implementation schedule.

Delivery Format(s): Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and evaluation.

Enhancements: Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principle, local incentive/award.

Refresher Content and Frequency: Every three years.

Subject-Specific Retraining: Individually designed based on identified needs.

Content

Introduction to TRAILER Operations

Why train drivers for trailer towing?
- Likelihood of harm to others
- Potential loss of cargo
- Potential damage to trailer/towable equipment

Towing-specific risks
- Extended stopping distances – brakes overheating on long downgrades
- Minimal evasive capability
- Jackknife response to sudden steering corrections
- Susceptibility to crosswinds
- Engine overheating in tow vehicle
- Impaired visibility at side and back of trailer – use of mirrors is critical
- Connection failures
- Specific loading/unloading hazards (e.g., boats, heavy equipment)
- Loss of cargo or contents when transporting bulk materials
- Exceeding trailer’s or tow vehicle’s maximum weight capacity
- Unique backing challenges

Inspections in TRAILER Operations

Safety
- Prevention of control problems
- Prevention of accidental disconnection
- Prevention of breakdowns/mechanical failures
- Prevention of loss of load

Types of Inspections
- Pre-trip
- Checklist-driven
- Hitch/chains
- Tires
Lights
Balanced cargo distribution – front/back, side/side
Cargo weight within limits for trailer
Load secure – tie-down straps or chains

Midtrip/Midshift
Hitch/chains
Tires
Lights
Load secure

Post-trip/out of service – walk-around mini-check
Hitch/chains
Tires
Body/cargo damage

Inspection Areas
Hitch
Pin securing ball mount to receiver intact
Connection point properly lubricated
Hitch coupler completely over ball and latching mechanism locked
Spring bar hinges tight with safety clips in place (if so equipped)
Safety chains crossed in “X” fashion and properly secured (hooks facing out)
Electrical plug properly connected

Trailer
Brake lights and turn signals functioning properly
All running lights functioning properly
Tires/wheels – condition and pressure, visual for cracks/damage
Trailer damage
Wheel chocks/jack stand
Ramps/gates secured
Next trailer service date
Trailer brakes tested for function while moving forward slowly
Load properly fastened/secure

Reporting Procedures
Problems needing resolution before further operation
Problems needing resolution at end of task
Problems worthy of note for next service

Introduction of Local TRAILER inspection forms

Driving Defensively in TRAILER Operations
Achieving low-forces driving in TRAILER Operations
Reducing “G” forces – acceleration, deceleration
and cornering

Benefits of low-forces driving
Self
Others
Towing vehicle
Trailer
Vehicle differences with TRAILER Operations

Visibility
Handling/swaying/fishtailing
Speed limitations
Lane restrictions
Stopping distances
Lane changes
Clearances and turning – effects of bumps and dips
Parking challenges
Loading and unloading
Backing

Driver's role and responsibilities in TRAILER Operations

Concentration on the art of driving
Multitasking/unsafe behaviors
Image and road courtesy
Speed control
Extended following distance/space cushions
Enhanced visual scanning
Ensuring adequacy of tow vehicle for load demands
Ensuring safety in trailer connections and towing technique

External factors

Traffic conditions and pedestrians
Time of day/visibility – effect on mirrors
Weather/wind conditions
Road surface conditions

Driver-mechanic teamwork

Early signs of mechanical problems/safety-sensitive issues
Braking problems
Hitch problems
Wheel and bearing problems

Communications between driver and mechanic
Questions about various weight capacities – trailer, tow vehicle, hitch weight
Use of vehicle scales
Notification of mechanic if trailer wheels are immersed in water (especially salt water) so bearings can be inspected and greased

Preventing failures

Collisions, Breakdowns and Other Mishaps in TRAILER OPERATIONS

Collisions
Assess personal and passenger safety first
Get help by calling 911
Encourage injured parties to remain in vehicles
Collision kit/triangle placement
When and how to move vehicles
Witness names
Photos
Information Exchange/Statements
Towing procedures for vehicle and/or trailer if necessary – location protocol

Breakdowns
- Pull over at first sign of a problem
- Triangle placement
- Hitch failures
- Flat/low tires
- Wheel loss/bearing problems
- Brake failures
- Electrical failures
- Connection/disconnection problems
- Getting help – location towing protocol
- Logging small items for next service

Other Mishaps
- Breakins/thefts
- Loss of cargo
- Loading/unloading incidents – boats, heavy equipment, etc.

Review of “At Fault” and “Preventable” collision concepts

Written Test of TRAILER OPERATIONS Knowledge

BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in TRAILER OPERATIONS

Proactive Awareness – “Be Alert…Don’t Get Hurt”
- Demonstrate ability to perform a complete inspection using appropriate checklist
  - See/analyze what’s developing ahead
  - Systematically scan all time zones
  - Generally focus on 15 seconds ahead
  - Eliminate visual barriers
  - Keep eyes scanning – avoid the fixed stare
  - Check mirrors frequently – adjust awareness for trailer length

Demonstrate awareness of changing road and weather conditions – slow appropriately for trailer-specific hazards

Avoid backing up whenever possible
If forced to back up:
- Performs a circle of safety – identify hazards around the vehicle – ask partner or other person to help as ground guide
- Demonstrate awareness of blind spots and clearances, including height
- Avoid distractions, including passengers
- Check all mirrors BEFORE backing up
- Check a different mirror every 2 to 3 seconds while backing up
- Move hand at bottom of steering wheel to reduce directional confusion (right turns right, left turns left)

Proactive Defense – “Expect the Unexpected”
- Connect/disconnect trailer using proper technique
Anticipate unsafe actions by other drivers
Remain prepared to take evasive action
Maintain and protect space cushions wherever possible
Allow more time to brake, accelerate, pass and stop
Maintain a 4 to 6 second following distance
Never drive faster than is safe for conditions – slow for bumpy roads, railroad crossings and ditches
Adjust speed as conditions change
Cover the brake when a hazard is observed
Downshift on long downgrades for added speed control – apply brakes at intervals
Use trailer brakes properly
Allow for wider turning radius

Demonstrate techniques to respond safely to sudden mechanical failures or handling problems:
- Loss of trailer brakes
- Trailer tire failure
- Hitch failure
- Sudden excessive sway/fishtailing

Demonstrate ability to respond safely to running off the pavement edge – avoid overcorrecting

- When parking:
  - Avoid backing up whenever possible
  - Select a spot that provides room to maneuver and does not create a hazard
  - Select a spot that is out of traffic flow
  - On inclines;
    - Curb the tow vehicle’s wheels
    - Set the parking brake
    - Place transmission in PARK (or first gear with manual transmission)
    - Block trailer wheels

Avoid backing up whenever possible
When forced to back up – take necessary time to follow safe backing procedures despite external pressures
Follow special procedures for boat launching

When uncoupling a trailer
- Block trailer wheels front and rear to prevent rollaways

Proactive Communications – "Don't Hesitate – Communicate"

Always communicate intentions – use turn signals well in advance when turning and making lane changes

Turn lights on for visibility
Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

When forced to back up:
- Taps horn before backing up
- Make sure backup alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure backup camera is on if appropriate (for vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide if available
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
TRAILER OPERATIONS

DRIVER: ___________________ EVALUATOR: ___________________

DATE: ______________________ U.C. LOCATION: ___________________

☐ PASS ☐ NO PASS OVERALL SCORE: ______
TRAFFIC: L/M/H       ROADS: URBAN/RURAL/FWAY

INSPECTION
[ ] Demonstrates ability to perform a complete trailer inspection, utilizing designated checklist
[ ] Identifies critical checks — hitch, safety chains, tires, load balance and total weight, cargo secured within trailer
[ ] Confirms proper electrical plug connection—trailer taillights, brake lights and turn signals functioning properly
[ ] Tests trailer brakes for function while moving forward slowly

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Systematically scans all time zones — proper eye lead time (seconds) ______ ______ ______
[ ] Eliminates visual barriers and demonstrates awareness of vehicle blind spots
[ ] Checks mirrors frequently — one mirror every 3-5 seconds ______ ______ ______ adjusts awareness for trailer length
[ ] Identifies and correctly assesses trailer-specific hazards ahead
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds ______ ______ ______

PROACTIVE DEFENSE
[ ] Connects and disconnects trailer using proper technique
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______
[ ] Adjusts speed as conditions change — knows the posted and trailer towing speed limits
[ ] DOWNSHIFTS ON LONG DOWNGRADES FOR ADDITIONAL SPEED CONTROL — USES BRAKES INTERMITTENTLY TO AVOID HEAT BUILDUP
[ ] Demonstrates proper use of trailer brake — describes response to tire failure, fishtailing and trailer brake failure
[ ] Allows for wider turning radius of trailer — safely completes right turns at intersections with curbs
[ ] If forced to back, uses a ground guide whenever possible
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
[ ] Moves hard to bottom of steering wheels to reduce directional confusion while backing
[ ] Selects parking spot out of traffic flow and preferably a drive-thru spot — uses traffic cones appropriately
[ ] When parking on inclines — curbs low vehicle wheels, sets parking brake, transmission in PARK, blocks trailer wheels
[ ] Follows special procedures for boat launching if applicable

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn — sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians — doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing — ensures back-up alarm is on
[ ] Communicates with ground guide if available, using pre-arranged signals

ADDITIONAL COMMENTS:

[N] = Not Observed

Rev: 12/04/2008
CORE PLUS™ MODULE
Van Pool Operations
CORE PLUS™ MODULE

Van Pool Operations

**Intended for:** Regular but non-professional UC drivers of commuter passenger vans.
**Classification Characteristics:** Elective commuter transport by volunteer drivers making one round trip per day. May or may not have commercial licenses.
**Application:** All existing drivers and all subsequent new drivers including rehires and transfers. The goal is initial training of all new hires within 30 days of their being hired.
**Implementation:** Initially, it will target Occupational Drivers – then others according to locally determined implementation schedule.
**Delivery Format(s):** Instructor-led classroom sessions and/or Web-based interactive course, followed by behind-the-wheel practice and skill-building.
**Enhancements:** Certificate of completion, “UC Core Plus™ Advanced Driver” pin, Job Aid static decal/reminder card of key principles, local incentive/award.
**Refresher Content and Frequency:** Every three years.
**Subject-Specific Retraining:** Individually designed based on identified needs.

Content

**Introduction to VAN POOL Operations**

*Why train Van Pool drivers?*
- Likelihood of harm to others

*Vehicle-specific risks*
- Extended stopping distance
- High center of gravity – minimal evasive capability
- Rollover/ejection hazard
- Little body protection from side impacts
- Impaired visibility at side and back – use of mirrors is critical
- Inconsistent seatbelt use
- Loading/unloading and conversational distractions
- Schedule demands
- Infrequent mechanic contact

**Vehicle Inspections in VAN POOL Operations**

*Safety*
- Prevention of breakdowns/mechanical failures
- Personal responsibility

*Types of Inspections*
- Pre-trip
  - Checklist-driven – solely driver’s responsibility

- Midtrip/Midshift – typically not applicable

- Post-trip/Out of service – walk-around mini-check
  - Tires
  - Body damage
  - The “rolling billboard”
  - Fuel
  - Interior cleanliness
Inspection Areas

- Engine – per location policy
- Belts
- Hoses
- Fluids – levels and leaks are critical
- Compartment visual
- Electrical connections
- Steering linkage – visual inspection

Exterior

- Lights – clean and functioning
- Signals functioning properly
- Tires/wheels – condition and pressure, visual for cracks/damage/brake fluid leaks on inside sidewalls
- Body damage
- Wipers – secure and pliable
- Mirrors – secure and clean
- Windshield – clean
- Springs/shocks – visual inspection for problems

Interior

- Mirror/seat adjustment
- Seatbelts functional (all)
- Brake pedal travel
- Heater/defroster
- Gauges/warning lights
- Glass – sightlines clear of interior condensation
- Damage
- Cleanliness
- Collision reporting kit
- First aid kit
- Fire extinguisher – pressure/inspection date
- Next vehicle service date

Reporting Procedures

- Commercial vehicle requirements (if applicable)
- Problems needing resolution before further operation
- Problems needing resolution at end of task
- Problems worthy of note for next service

Introduction of Local Van Pool inspection forms

Driving Defensively in VAN POOL Operations

Achieving low-forces driving in VAN POOL Operations

- Reducing “G” forces – acceleration, deceleration and cornering
- Benefits of low-forces driving
- Self
- Others
- Vehicle

Vehicle differences with VAN POOL Operations
Visibility
Handling
Stopping distances – brakes overheating on long downgrades
Clearances
Parking
Passengers

Driver’s role and responsibilities in VAN POOL Operations
- Passenger safety, including proper weight distribution of partial loads
- Professionalism
- Vehicle use restricted per local policy
- Rested and ready to drive/substance-free (including Rx medications)
- Concentration on the art of driving
- Multi-tasking/unsafe behaviors
- Image and road courtesy
- Seat belts
- Cell phones
  - Use (including texting) prohibited while driving
- AM/FM radios/CD players/other sound systems
- Speed control
- Following distance/space cushion
- Visual scanning

External factors
- Traffic conditions and pedestrians
- Time of day/visibility – effect on mirrors
- Weather conditions
- Exterior distractions
- Road surface conditions

Driver/mechanic teamwork
- Early signs of mechanical problems/safety-sensitive issues
- Steering play
- Brake pedal travel
- Starting problems
- Communications between driver and mechanic
- Preventing failures

Collisions, Breakdowns and Other Mishaps in VAN POOL OPERATIONS

Collisions
- Assess personal and passenger safety first
- Get help by calling 911
- Emergency Exit operation
- Encourage injured parties to remain in vehicles
- Collision kit/triangle placement
- When and how to move vehicles
- Witnesses/passerger names
- Photos
- Information exchange/statements
- Towing – local protocol

Breakdowns
- Pull over before vehicle stops running
- Triangle placement
Warning lights
Steam versus smoke
Flat/low tires
Dead batteries/jump starts
Getting help – local towing protocol
Logging small items for next service

Other Mishaps
Breakins/thefts
Lockouts
Fueling errors (e.g., putting gas in a diesel vehicle)
Missed pick-ups/stranded passengers – local procedure

Review of “At Fault” and “Preventable” collision concepts

Written Test of VAN POOL OPERATIONS Knowledge

BEHIND-THE-WHEEL EVALUATION – Application of Advanced Defensive Driving Principles in VAN POOL OPERATIONS

Proactive Awareness – “Be Alert…Don’t Get Hurt”
See/analyze what’s developing ahead
Systematically scan all time zones
General focus on 15 seconds ahead
Eliminate visual barriers
Keep eyes scanning – avoid the fixed stare

Check mirrors frequently – check at least one mirror every 3 to 5 seconds

Demonstrate awareness of changing road and weather conditions

Resist distractions from passengers and other sources

Avoid backing up whenever possible
If forced to back up:
• Perform a circle of safety – identify hazards around the vehicle – actively look for hidden hazards before backing up
• Demonstrate awareness of blind spots and clearances, including height
• Avoid distractions, especially from passengers
• Check all mirrors BEFORE backing
• Check a different mirror every 2 to 3 seconds while backing up
• Enlist support of passengers – ask for a ground guide

Proactive Defense – “Expect the Unexpected”
Anticipate unsafe actions by other drivers
Remain prepared to take evasive action
Maintain and protect space cushions wherever possible
Maintain a 4 to 6 second following distance
Never drive faster than is safe for conditions
Adjust speed as conditions change
Cover the brake when a hazard is observed
Watch for distracted pedestrians
Demonstrate techniques to respond safely to sudden mechanical failures:

- Loss of steering/brakes
- Tire failure
- Headlight failure

Demonstrate ability to respond safely to running off the pavement edge – avoid overcorrecting

When parking:

- Avoid backing up whenever possible
- Selects a spot that provides room to maneuver and does not create a hazard
- Select a spot that is out of traffic flow
- Set the parking brake – curb wheels on inclines

Proactive Communications – "Don't Hesitate – Communicate"
Always communicate intentions – use turn signals when turning and making lane changes

Turn lights on for visibility
Activate four-way emergency flashers when appropriate

Make eye contact with other road users, including pedestrians

Use the horn appropriately to alert other drivers and/or pedestrians, or to avoid a collision

Signal turns and lane changes early and as needed

When forced to back up:

- Tap horn before backing
- Make sure back-up alarm is on (for vehicles equipped with an alarm cut-off switch)
- Make sure back-up camera is on (for those vehicles equipped with video)
- Activate four-way emergency flashers
- Communicate with ground guide if available
UNIVERSITY OF CALIFORNIA CORE PLUS®
DRIVING EVALUATION
VAN-POOL OPERATIONS

DRIVER: ___________________________ EVALUATOR: ___________________________

DATE: ___________________________ U.C. LOCATION: ___________________________

☐ PASS ☐ NO PASS OVERALL SCORE: _____ TRAFFIC: L/M/H ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identify what to look for with critical engine compartment components (if included at your location)
[ ] Identify critical exterior and interior inspection components
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Confirms seatbelt use by all occupants
[ ] Systematically scans all time zones – proper eye lead time (seconds) ______ ______ ______ ______
[ ] Eliminates visual barriers, including interior factors affecting window visibility (condensation, hanging garments, etc.)
[ ] Keeps eyes scanning – avoids the fixed stare
[ ] Checks mirrors frequently – one mirror every 3-5 seconds ______ ______ ______
[ ] Identifies and correctly assesses pertinent information on all sides of vehicle
[ ] Avoids backing whenever possible
[ ] If backing is necessary, performs a circle of safety to identify hazards prior to entering the vehicle
[ ] If backing is necessary, asks for a ground guide and checks a different mirror every 2-3 seconds ______ ______
[ ] When forced to back, takes time to follow safe backing procedures despite external pressures

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
[ ] Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______ ______
[ ] Adjusts speed as conditions change – knows posted speed limit
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
[ ] Selects “drive-thru” parking spots when possible – safely out of the line of traffic and preferably well-lit
[ ] Picks up and discharges passengers in safe environments – requests they cross behind van if necessary
[ ] Stops, gets out and checks if hazard possibly in backing path

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers, brake lights and headlights for safety
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on if so equipped
[ ] Communicates with ground guide using pre-arranged signals

ADDITIONAL COMMENTS:

[N] = Not Observed

Rev: 12/04/2008
APPENDIX C
SAMPLE VEHICLE INSPECTION FORMS
Office of Physical Education, Recreation and Sports
University of California, Santa Cruz

DRIVER'S VEHICLE LOG

VEHICLE # __________ TRAILER # __________ DESTINATION: __________

DRIVER: __________ PROGRAM: __________ EVENT: __________

DATE: __________ TIME OUT: __________ ENDING MILEAGE: __________

DATE: __________ TIME IN: __________ BEGINNING MILEAGE: __________

TOTAL MILES: __________

The following check-list must be completed whenever transporting passengers:

✓ - Okay  X - Defective  ☐ - Repaired

<table>
<thead>
<tr>
<th>VAN</th>
<th>VAN</th>
<th>TRAILER #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Brake</td>
<td>Horn</td>
<td>Brake Lights</td>
</tr>
<tr>
<td>Foot Brake</td>
<td>Wipers</td>
<td>Turn Signals</td>
</tr>
<tr>
<td>Head Lights</td>
<td>Engine Oil*</td>
<td>Tires/Spare</td>
</tr>
<tr>
<td>L</td>
<td>Fares</td>
<td>Hitch</td>
</tr>
<tr>
<td>R</td>
<td>Fire Extinguisher</td>
<td>Chains</td>
</tr>
<tr>
<td>Brake Lights</td>
<td>First Aid Kit</td>
<td>Carabiners</td>
</tr>
<tr>
<td>Reflectors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tires/Spares</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Check only if gas tank must be filled

REPAIRS NECESSARY: __________

In the event defects are noted, the driver should make every effort to have them repaired prior to trip departure. If this is not possible, the driver is responsible for determining if the vehicle should be used.

Please return vehicle and keys to the East Fieldhouse Facility Center.

- Seat belts must be worn at all times
- Headlights ON 100% of the time
- Two drivers will be required on outings when the length of the trip exceeds 4 hours. (drivers are allowed 4-5 hours at a time max. Multiple drivers for each vehicle are required to allow for frequent switches
- Switch Rule—any time a second driver feels that the current driver is tired or no longer functioning at peak ability, the co-driver will say “let’s switch” and the transfer takes place without argument.
- Drivers focus primarily on driving and are not to be in conversations with the rest of the passengers. A designated second driver is shotgun and helps keep the driver alert, interprets info from the passengers as needed, handles radio, temperature control, navigation, etc., so the driver can focus.
- Awareness Rule: The responsibility of the vans are slow and react slower when steering and braking so you have to allow yourself more time to maneuver and give yourself a larger following distance to ensure safe stopping.
PRE-TRIP CHECKLIST
This sheet remains in the vehicle until it returns to the garage

VEHICLE #: DATE: M T W TH F S S

ODOMETER:

☐ OK, X = DEFECTIVE, NS = NOT APPLICABLE

☐ WATER, OIL, BELTS, RADIATOR, HOSES, BATTERIES, BRAKE FLUID

☐ HORN, GAUGES, INDICATOR LIGHTS

☐ WINDSHIELD WIPERS, DEFROSTER

☐ MIRRORS AND SUPPORTS

☐ SEATS (PASSENGER, DRIVER, BELTS)

☐ ENTRANCE DOOR

☐ HANDRAILS, FLOOR, WINDOWS, LIGHTS

☐ EMERGENCY EXITS, WARNING DEVICES

☐ FIRE EXTINGUISHER (CHARGED, SEALED)

☐ TRIANGLE REFLECTORS (5)

☐ LICENSE PLATE LIGHT

☐ RUNNING LIGHTS, REFLECTORS

☐ HEADLIGHTS (HL) / HIGH BEAM INDICATOR

☐ STOP LIGHTS, TAIL LIGHTS, BACK-UP LIGHTS

☐ TURN SIGNALS / INDICATORS

☐ PARKING BRAKE / BRAKE / LOW METER CYLINDER WARNING LIGHT

☐ TIRES, WHEELS, LUG NUTS, HUBS

☐ ELECTRIC STEP

☐ HITCH, CHAINS, PINS, LOCKS & CLIPS

ALL DEFICIENCIES HAVE BEEN DISCUSSED WITH RELIEF DRIVER.

PRIMARY DRIVER INITIALS BEFORE BREAK AND RELIEF DRIVER INITIALS AFTER BREAK.

RELIEF DRIVER /'S IF NO CHANGE

X = NEW PROBLEM DETAILED ON REVERSE SIDE

TIRE PRESSURE / LIFT / EXTINGUISHER MUST BE CHECKED WHEN LAST DIGIT OF DATE AND LAST DIGIT OF VEHICLE # MATCH
(AIR BRAKE CHECKOUT AND TIRE PRESSURE CHART ON REVERSE)

SIGNEDATURE OF PERSON MAKING FIRST INSPECTION

[Checklist and charts]
PRE-TRIP INSPECTION CHECKLIST

VEHICLE#: __________ DATE: __________

ODOMETER: __________

✓= OK, X=Defective

☐ Vehicle Walk-Around Inspection

☐ Running Lights, Reflectors

☐ Windshield Wipers, Defroster

☐ Horn, Gauges, Indicator Lights

☐ Seat Belts

☐ Headlights/High Beam Indicator

☐ Parking Brake

☐ Stoplights, Tail Lights, Back-Up Lights, Flashers

☐ Turn Signals/Indicators

☐ Water, Oil, Belts, Radiator, Hoses, Battery, Brake Fluid

☐ Tires, Wheels, Lug Nuts

☐ Lift Gate

Explain any defects from above list or note any new problems:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

SIGNATURE OF PERSON MAKING INSPECTION
## UCLA RECREATION
### ELECTRIC VEHICLE CHECKLIST

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Brake lights are functioning properly?</strong> On the club care the brake light will stay on until brakes are in the park mode. On the Taylor Dunn, the brake light will light up when pressed upon to stop. This is the same for both the EZGO and G.E.M.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Charge cord OK?</strong> Check for fraying, cuts, bent prongs and exposed insulation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Turn signals working?</strong> Make sure right, left, and emergency turn signals work. If turn signals are not available then follow proper traffic lane signals. Club cars do not have electric &quot;signature&quot;.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <strong>Battery OK?</strong> Battery light indicator on dashboard should be solid red and not blinking. If light is blinking, do not use. Call for service.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. <strong>Tires OK?</strong> Visually check tires for under/inflation or abnormal wear. Also check for tire chock and remove from tire before driving if one is in place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. <strong>Rear view mirror available?</strong> Also check adjustment and angle of mirror and adjust to your viewing level.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. <strong>Safety belts present and working properly?</strong> Ensure that you and all passengers buckle up.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. <strong>Cable lock down with lock present?</strong> Ensure use when leaving the vehicle.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. <strong>Tire chock present?</strong> Use when parking the vehicle on a hill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. <strong>Parking brake functional?</strong> Make sure parking break is engaged when parking electric vehicle.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. <strong>First aid kit present?</strong> First aid kit should be located underneath glove compartment on the passenger side.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. <strong>Accident report forms present?</strong> A folder containing accident reporting forms and emergency contact cards will located on the roof interior.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Driver: ___________________________ Date: _____________
### BUS SAFETY INSPECTION CHECKLIST

<table>
<thead>
<tr>
<th>1. INCIDENT NAME/NUMBER</th>
<th>2. ORDER/REQUEST NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. OWNER/VENDOR NAME &amp; COMPANY NUMBER</td>
<td></td>
</tr>
<tr>
<td>4. AGREEMENT, PO, CONTRACT NO.</td>
<td>5. EXPIRES</td>
</tr>
<tr>
<td>6. MAKE</td>
<td>7. MODEL, TYPE</td>
</tr>
<tr>
<td>8. SERIAL NO/VIN</td>
<td>9. LICENSE NO.</td>
</tr>
</tbody>
</table>

* Safety Items, Do Not Accept Until Repaired

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-Use</th>
<th>Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DGCT inspection in previous 12 months when required</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>2. Gauges and lights</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>3. Seat belts</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>4. Glass and mirrors</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>5. Wipers and horn</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>6. Clutch pedal: proper adjustment, 3/8” free travel</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>7. Cooling system: check radiator and hoses</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>8. Oil level/condition: full and clean</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>9. Battery: check for corrosion, loose terminals, tie downs</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>10. Fuel system</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>11. Electrical system: alternator and starter working</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>12. Engine running: check for knocks and leaks</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>13. Transmission: check for leaks</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>14. Steering (See specialty item)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>15. Tie rods, ball joints: check for looseness or heat</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>16. Lubrication: check for dry fittings</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>17. Brakes (See specialty item)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>18. Drive line U-joints: check for looseness</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>19. Springs and shocks</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>20. Differential: check for leaks</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>21. Exhaust system (See specialty item)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>22. Frame</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>23. Tire and wheels: 3/8” front, 3/16” rear tread required</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>24. Accessory jack, lug wrench, mounted spare</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>25. Body and interior condition: damage &amp; leaky damage on back side of form</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>26. Emergency Equipment required: Fire Extinguisher</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>27. Operators’ properly licensed; State: License No. Class</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>28. Endorsements: Med Cert Exp Date</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

### 10. PRE-USE INSPECTION

<table>
<thead>
<tr>
<th>MILES:</th>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
</table>

**REJECTED**

<table>
<thead>
<tr>
<th>INSPECTOR NAME</th>
<th>REJECT</th>
</tr>
</thead>
</table>

**ACCEPTED**

<table>
<thead>
<tr>
<th>MILES:</th>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
</table>

**VENDOR SIGNATURE**: TITLE

**INSPECTOR SIGNATURE**: TITLE

---

### Bus Specialty Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PERSONAL PROTECTIVE EQUIPMENT (PPE): Flame Resistant Clothing, Boots, Goves, Handrail &amp; Fire Extinguisher</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>2. SAFETY CAGE: Nails will NOT be accepted</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>3. EMERGENCY DOORS: Marked with 1-inch letters and identified with a red electric lamp that works when lights are needed 393.92</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>4. DRIVE SHAFT PROTECTION: Must have at least one gear or bracket at the end of the shaft that would prevent whipping of the shaft in the event of failure</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>5. EXHAUST SYSTEM: Gas powered buses: Tailpipe will exit at or within 6” forward of the rear most part of the bus. Diesel Buses: Tailpipe will exit within 11/16” of the rear most part of the bus or to the rear of all doors or windows designed to be opened except windows designed to open only as emergency exits 393.83</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>6. SPARE TIRE: Full size, mounted on wheel required or all buses: Tire must be secured</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>7. STEERING SYSTEM: 388.209 See table in CCR book for maximum steering lash allowed. Clear box, u-joints, ball joints and tie rods must be in good condition. Power steering systems will NOT have ANY leaks. Belts in good condition, steering wheel spokes may not be cracked or missing</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>8. BRAKES: Parking brake must hold, air brakes must meet position regulations for air warning devices and working air pressure gauge. Slack adjusters must be properly adjusted. Brake lining will conform to specs. NO tags of air or fluid allowed</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

**COMMENTS:**

______________________________
Print
**DRIVER'S VEHICLE INSPECTION REPORT**

**CARRIER:________________________**

**ADDRESS:________________________**

**DATE:______________**

**TIME:____________________________**

**TRACTOR/TRUCK NO.:________________________**

**ODOMETER READING:________________________**

<table>
<thead>
<tr>
<th>Item</th>
<th>Checkmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Compressor</td>
<td></td>
</tr>
<tr>
<td>Air Lines</td>
<td></td>
</tr>
<tr>
<td>Battery</td>
<td></td>
</tr>
<tr>
<td>Belts and Hoses</td>
<td></td>
</tr>
<tr>
<td>Body</td>
<td></td>
</tr>
<tr>
<td>Brake Accessories</td>
<td></td>
</tr>
<tr>
<td>Brakes, Parking</td>
<td></td>
</tr>
<tr>
<td>Brakes, Service</td>
<td></td>
</tr>
<tr>
<td>Clutch</td>
<td></td>
</tr>
<tr>
<td>Coupling Devices</td>
<td></td>
</tr>
<tr>
<td>Defroster/Heater</td>
<td></td>
</tr>
<tr>
<td>Drive Line</td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td></td>
</tr>
<tr>
<td>Exhaust</td>
<td></td>
</tr>
<tr>
<td>Fifth Wheel</td>
<td></td>
</tr>
<tr>
<td>Fluid Levels</td>
<td></td>
</tr>
<tr>
<td>Frame and Assembly</td>
<td></td>
</tr>
<tr>
<td>Front Axle</td>
<td></td>
</tr>
<tr>
<td>Fuel Tanks</td>
<td></td>
</tr>
<tr>
<td>Horn</td>
<td></td>
</tr>
<tr>
<td>Lights</td>
<td></td>
</tr>
<tr>
<td>Head - Stop</td>
<td></td>
</tr>
<tr>
<td>Tail - Dash</td>
<td></td>
</tr>
<tr>
<td>Turn Indicators</td>
<td></td>
</tr>
<tr>
<td>Mirror</td>
<td></td>
</tr>
<tr>
<td>Muffler</td>
<td></td>
</tr>
<tr>
<td>Oil Pressure</td>
<td></td>
</tr>
<tr>
<td>Radiator</td>
<td></td>
</tr>
<tr>
<td>Rear End</td>
<td></td>
</tr>
<tr>
<td>Reflectors</td>
<td></td>
</tr>
<tr>
<td>Safety Equipment</td>
<td></td>
</tr>
<tr>
<td>Fire Extinguisher</td>
<td></td>
</tr>
<tr>
<td>Flags</td>
<td></td>
</tr>
<tr>
<td>Flares</td>
<td></td>
</tr>
<tr>
<td>Fuses</td>
<td></td>
</tr>
<tr>
<td>Reflective Triangles</td>
<td></td>
</tr>
<tr>
<td>Spare Bulbs and Fuses</td>
<td></td>
</tr>
<tr>
<td>Spare Sea Beam</td>
<td></td>
</tr>
<tr>
<td>Steering</td>
<td></td>
</tr>
<tr>
<td>Suspension System</td>
<td></td>
</tr>
<tr>
<td>Tire Chains</td>
<td></td>
</tr>
<tr>
<td>Tire</td>
<td></td>
</tr>
<tr>
<td>Transmission</td>
<td></td>
</tr>
<tr>
<td>Trip Recorder</td>
<td></td>
</tr>
<tr>
<td>Wheels and Rims</td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td></td>
</tr>
<tr>
<td>Windshield Wipers</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**TRAILER(S) NO.(S):________________________**

<table>
<thead>
<tr>
<th>Item</th>
<th>Checkmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brake Connectors</td>
<td></td>
</tr>
<tr>
<td>Brakes</td>
<td></td>
</tr>
<tr>
<td>Coupling Devices</td>
<td></td>
</tr>
<tr>
<td>Coupling (King) Ph</td>
<td></td>
</tr>
<tr>
<td>Doors</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Landing Gear</td>
<td></td>
</tr>
<tr>
<td>Lights - All</td>
<td></td>
</tr>
<tr>
<td>Reflectors/Reflective Tape</td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td></td>
</tr>
<tr>
<td>Suspension System</td>
<td></td>
</tr>
<tr>
<td>Tarpsaulin</td>
<td></td>
</tr>
<tr>
<td>Tires</td>
<td></td>
</tr>
<tr>
<td>Wheels and Rims</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:________________________________________**

**CONDITION OF THE ABOVE VEHICLE IS SATISFACTORY**

**DRIVER'S SIGNATURE:________________________**

**ABOVE DEFECTS CORRECTED**

**ABOVE DEFECTS NEED NOT BE CORRECTED FOR SAFE OPERATION OF VEHICLE**

**MECHANIC'S SIGNATURE:________________________**

**DATE:________________________**

**DRIVER'S SIGNATURE:________________________**

**DATE:________________________**

**VEHICLE COPY**
APPENDIX D
DRIVER EVALUATION FORMS
**INSTRUCTIONS TO DRIVER:** Please review the skill exercises below prior to driving so you know what you are going to practice. Do not attempt to read the form while driving. If necessary, pull over to read the next section – every stop provides an opportunity to practice turning knowledge into skill. Turn off all audio distractions while performing your self-evaluation. **While safely stopped**, place an [X] next to each item you have completed. After completing, please turn in your self-evaluation form as directed by your instructor. Most trainees complete this self-evaluation in less than thirty minutes. Thank you for taking the time to Be Smart About Safety!

---

### INSTRUCTION

**INSPECTION**
- [ ] Check tires for inflation and tread wear
- [ ] Check headlights, taillights, turn signals and four-way flashers
- [ ] Adjust seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**
- [ ] Check your driving knowledge and awareness by continuous commentary driving during your self-evaluation
- [ ] Check your eye lead time – pick out distant objects and count the time to get there – try for 15 seconds minimum
- [ ] By counting, locate the near (4-6 second) intermediate (12-15) and far (20-30) time zones at different speeds
- [ ] Keep your eyes scanning – don’t stare as you count your eye lead times
- [ ] Check your mirrors frequently – one mirror every 3-5 seconds
- [ ] If backing will be necessary, both look back and check a different mirror every 2-3 seconds

**PROACTIVE DEFENSE**
- [ ] Identify distracted drivers, pedestrians and cyclists
- [ ] Cover the brake pedal and horn when a hazard is observed
- [ ] Check your following distance at least four times – practice maintaining a 4-6 second distance at different speeds
- [ ] Establish and maintain space cushions – align your vehicle so you maintain routes of escape
- [ ] Move out from behind large vehicles blocking your view to preserve your 15 second eye lead time
- [ ] Check your mirror as you begin to slow or stop – know how close the vehicle behind you is
- [ ] Park your vehicle in a way that won’t require backing

**PROACTIVE COMMUNICATIONS**
- [ ] Assure headlights are on for safety
- [ ] Signal turns and lane changes early and consistently
- [ ] Sound your horn when needed for other vehicles and pedestrians
- [ ] Make eye contact with other road users and pedestrians – don’t assume recognition
- [ ] Tap horn before backing

**SELF-EVALUATOR COMMENTS — ASSESS YOUR OWN PERFORMANCE**

Which skills are you naturally good at?

What are your goals for self-improvement?
UNIVERSITY OF CALIFORNIA CORE PLUS™
DRIVING EVALUATION
BUS/SHUTTLE OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: ________________________________ U.C. LOCATION: _____________________________

□ PASS □ NO PASS OVERALL SCORE: _____ TRAFFIC: L/M/H ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Demonstrates proper procedures for air brake system (if so equipped)
[ ] Identify what to look for with critical engine compartment components
[ ] Identify critical exterior and interior inspection components
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Systematically scans all time zones – proper eye lead time (seconds) _____ _____ _____ _____
[ ] Eliminates visual barriers
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds _____ _____ _____
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety – identifies hazards around the vehicle
[ ] If forced to back, checks a different mirror every 2-3 seconds _____ _____ _____

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by other drivers – identifies distracted pedestrians
[ ] Demonstrates preparedness to take evasive action – covers the brake when hazard is observed
[ ] Maintains and protects space cushions including 4-6 second following distance _____ _____ _____ _____
[ ] Adjusts speed as conditions change
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure
[ ] If forced to back, uses a ground guide whenever possible – agrees on signals
[ ] Sets up vehicle to back from the driver’s side
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on
[ ] Activates 4-way hazard lights when appropriate
[ ] Communicates with ground guide if available

ADDITIONAL COMMENTS:

________________________________________________________________________________

[N] = Not Observed

REV: 11/25/2008
**UNIVERSITY OF CALIFORNIA CORE PLUS™**

**DRIVING EVALUATION**

**LOW SPEED VEHICLE OPERATIONS**

**DRIVER:** _______________________________ **EVALUATOR:** _______________________________

**DATE:** ________________________________ **U.C. LOCATION:** _____________________________

□ **PASS** □ **NO PASS** **OVERALL SCORE:** _____ **TRAFFIC:** L/M/H **SURFACE:** IMPROVED/UNIMPROVED

**INSPECTION**

[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Assesses state of battery charge on electric vehicles
[ ] Identifies critical exterior and interior inspection components
[ ] Confirms all seatbelts are accessible and in good operating condition
[ ] Adjusts seat and mirrors for optimal driving position

**PROACTIVE AWARENESS**

[ ] Systematically scans all time zones – proper eye lead time (seconds) _____ ______ ______ ______
[ ] Recognizes visual barriers and demonstrates awareness of vehicle blind spots
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds _____ _____ _____
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Demonstrates awareness of safety hazards associated with nearly silent electric vehicles
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds _____ _____ _____

**PROACTIVE DEFENSE**

[ ] Consistently uses seatbelt whenever vehicle is moving; asks passengers to do the same
[ ] Assures all external tools and equipment are properly secured
[ ] Maintains and protects space cushions including 4-6 second following distance _____ _____ _____ _____
[ ] Adjusts speed as conditions change
[ ] Anticipates unsafe actions by other drivers, cyclists and pedestrians – covers the brake when a hazard is observed
[ ] Checks for hidden surface and other hazards when transitioning from regular paved roads and paths
[ ] Avoids driving across inclined surfaces whenever possible
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
[ ] Selects parking spot out of traffic flow – assures clear access to building entrances, electrical panels and fire lanes
[ ] Curbs or turns wheels when parked on inclines, removes key to prevent vehicle theft

**PROACTIVE COMMUNICATIONS**

[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds horn or other warning device when needed for other vehicles, cyclists and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on

**ADDITIONAL COMMENTS:**
UNIVERSITY OF CALIFORNIA CORE PLUS™
DRIVING EVALUATION
OFF-ROAD VEHICLE OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: ________________________________ U.C. LOCATION: _____________________________

□ PASS  □ NO PASS  OVERALL SCORE: _____  TRAFFIC: L/M/H  ROADS: URBAN/RURAL/OFF

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identify what to look for with critical engine compartment components (if included at your location)
[ ] Identify critical exterior and specialized equipment inspection components
[ ] Adjusts seat and belts for optimal driving position; identifies necessary personal protective equipment

PROACTIVE AWARENESS
[ ] Demonstrates driving knowledge and awareness (as observed by evaluator in trailing vehicle)
[ ] Scans all time zones ahead
[ ] Identifies and responds appropriately to pertinent information ahead.
[ ] Pulls over frequently to let faster road traffic pass
[ ] Checks for hidden surface and overhead hazards when going off-road
[ ] Avoids backing whenever possible
[ ] If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
[ ] Identifies specific terrain or worksite hazards pertinent to the vehicle
[ ] Demonstrates awareness of safety hazards associated with operation of specialized vehicle equipment

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by others – responds pro-actively
[ ] Demonstrates preparedness to take evasive actions – covers the brake when hazard is observed
[ ] Maintains and protects space cushions including 6-8 second following distance _____ _____ _____ _____ _____
[ ] Slows significantly for turns
[ ] Stops, gets out and checks if hazard possibly in backing path – requests ground guide if available
[ ] Responds appropriately to terrain and other hazards present on a worksite
[ ] Takes appropriate defensive measures while operating specialized equipment

PROACTIVE COMMUNICATIONS
[ ] Communicates intentions to others – signals all turns
[ ] Assures available lights to enhance visibility when operating on roadways
[ ] Uses horn or other signal when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – utilizes backing alarm but watches for workers who may not hear backing alarm
[ ] Communicates with ground guide using pre-arranged signals

ADDITIONAL COMMENTS:
________________________________________________________________________________
________________________________________________________________________________

[N] = Not Observed

REV: 11/30/2008
UNIVERSITY OF CALIFORNIA CORE PLUS™
DRIVING EVALUATION
PASSENGER AUTO OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: ________________________________ U.C. LOCATION: _____________________________

☐ PASS  ☐ NO PASS  OVERALL SCORE: _____  TRAFFIC: L/M/H  ROADS: URBAN/RURAL/FWY

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UNIVERSITY OF CALIFORNIA CORE PLUS™
DRIVING EVALUATION
PASSENGER VAN OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: ________________________________ U.C. LOCATION: _____________________________

□ PASS □ NO PASS OVERALL SCORE: _____ TRAFFIC: L/M/H ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identify what to look for with critical engine compartment components (if included at your location)
[ ] Identify critical exterior and interior inspection components
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Confirms seatbelt use by all occupants
[ ] Systematically scans all time zones – proper eye lead time (seconds) _____ _____ _____ _____
[ ] Eliminates visual barriers, including interior factors affecting window visibility
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds _____ _____ _____
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Avoids backing whenever possible
[ ] If backing will be necessary, performs a circle of safety to identify hazards prior to entering the vehicle
[ ] If backing will be necessary, asks for a ground guide and checks a different mirror every 2-3 seconds _____ _____

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
[ ] Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
[ ] Maintains and protects space cushions including 4-6 second following distance _____ _____ _____ _____
[ ] Adjusts speed as conditions change – knows posted speed limit
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
[ ] Selects “drive-thru” parking spots when possible
[ ] Enlists support of passengers for backing – asks for a ground guide; checks rear-view mirror before backing
[ ] Stops, gets out and checks if hazard possibly in backing path

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights
[ ] Assures headlights are on for safety
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing
[ ] Communicates with ground guide using pre-arranged signals

ADDITIONAL COMMENTS:

[N] = Not Observed

REV: 12/02/2008
UNIVERSITY OF CALIFORNIA CORE PLUS™
DRIVING EVALUATION
SERVICE VEHICLE OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: ________________________________ U.C. LOCATION: _____________________________

☐ PASS  ☐ NO PASS  OVERALL SCORE: _____  TRAFFIC: L/M/H  ROADS: URBAN/RURAL/FWY

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INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identifies what to look for with critical engine compartment components (per location policy)
[ ] Identifies critical exterior and interior inspection components
[ ] Confirms all seatbelts are accessible and in good operating condition
[ ] Adjusts seat and mirrors for optimal driving position

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PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Systematically scans all time zones – proper eye lead time (seconds) _____ _____ _____
[ ] Eliminates visual barriers and demonstrates awareness of vehicle blind spots
[ ] Keeps eyes scanning – avoids staring
[ ] Checks mirrors frequently – one mirror every 3-5 seconds _____ _____ _____
[ ] Identifies and correctly assesses pertinent information ahead
[ ] Demonstrates awareness of safety hazards associated with specialized vehicle equipment
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds _____ _____ _____

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PROACTIVE DEFENSE
[ ] Maintains and protects space cushions including 4-6 second following distance _____ _____ _____
[ ] Adjusts speed as conditions change – knows the posted speed limit
[ ] Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure
[ ] Checks for hidden surface and overhead hazards when going off-road
[ ] If forced to back, uses a ground guide whenever possible
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
[ ] Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately
[ ] Utilizes proper defensive measures when securing or operating specialized vehicle equipment

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PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on
[ ] Communicates with ground guide if available, using pre-arranged signals

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ADDITIONAL COMMENTS:

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[ N ] = Not Observed

REV: 12/02/2008
# UNIVERSITY OF CALIFORNIA CORE PLUS™
## DRIVING EVALUATION
### SPECIALIZED VEHICLE OPERATIONS

**DRIVER:** _______________________________  **EVALUATOR:** _______________________________

**DATE:** ________________________________  **U.C. LOCATION:** _____________________________

□ **PASS** □ **NO PASS**  **OVERALL SCORE:** _____  **TRAFFIC:** L/M/H  **ROADS:** URBAN/RURAL/FWY

### INSPECTION
- [ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
- [ ] Demonstrates proper procedures for air brake system (if so equipped)
- [ ] Identifies what to look for with critical engine compartment components (per location policy)
- [ ] Identifies critical exterior and interior inspection components
- [ ] Confirms all seatbelts are accessible and in good operating condition
- [ ] Adjusts seat and mirrors for optimal driving position

### PROACTIVE AWARENESS
- [ ] Demonstrates knowledge and awareness thru effective commentary driving
- [ ] Systematically scans all time zones – proper eye lead time (seconds) _____ _____ _____ _____ _____
- [ ] Eliminates visual barriers and demonstrates awareness of vehicle blind spots and clearance requirements
- [ ] Keeps eyes scanning – avoids staring
- [ ] Checks mirrors frequently – one mirror every 3-5 seconds _____ _____ _____
- [ ] Identifies and correctly assesses pertinent information ahead
- [ ] Checks for hidden surface and overhead obstructions when going off-road
- [ ] Avoids backing whenever possible
- [ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds _____ _____ _____

### PROACTIVE DEFENSE
- [ ] Maintains and protects space cushions including 4-6 second following distance _____ _____ _____ _____ _____
- [ ] Adjusts speed as conditions change – knows the posted speed limit
- [ ] Anticipates unsafe actions by other drivers and pedestrians – covers the brake when a hazard is observed
- [ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure
- [ ] If forced to back, uses a ground guide whenever possible
- [ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
- [ ] Selects parking spot out of traffic flow – uses traffic control signs and cones appropriately, picks up rear cone last
- [ ] Demonstrates proper safety measures when securing or operating specialized vehicle tools and equipment

### PROACTIVE COMMUNICATIONS
- [ ] Effectively uses turn signals, 4-way flashers and brake lights;
- [ ] Covers horn – sounds when needed for other vehicles and pedestrians,
- [ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
- [ ] Signals turns and lane changes early and consistently
- [ ] Taps horn before backing – ensures back-up alarm is on as well as back-up camera, if so equipped
- [ ] Communicates with ground guide if available, using pre-arranged signals

### ADDITIONAL COMMENTS:

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**KEY:**  
- [6] = Consistently Practiced  
- [4] = Often Practiced  
- [3] = Occasionally Practiced  
- [2] = Rarely Practiced  
- [1] = Not Practiced  
- [N] = Not Observed  

**REV:** 12/03/2008
UNIVERSITY OF CALIFORNIA CORE PLUS™
DRIVING EVALUATION
TRAILER OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: ________________________________ U.C. LOCATION: _____________________________

□ PASS    □ NO PASS    OVERALL SCORE: _____    TRAFFIC: L/M/H    ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete trailer inspection, utilizing designated checklist
[ ] Identifies critical checks — hitch, safety chains, tires, load balance and total weight, cargo secured within trailer
[ ] Confirms proper electrical plug connection—trailer taillights, brake lights and turn signals functioning properly
[ ] Tests trailer brakes for function while moving forward slowly

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Systematically scans all time zones — proper eye lead time (seconds) ______ ______ ______ ______
[ ] Eliminates visual barriers and demonstrates awareness of vehicle blind spots
[ ] Checks mirrors frequently – one mirror every 3-5 seconds ______ ______ ______ adjusts awareness for trailer length
[ ] Identifies and correctly assesses trailer-specific hazards ahead
[ ] Avoids backing whenever possible
[ ] If forced to back, performs a circle of safety, then checks a different mirror every 2-3 seconds ______ ______ ______

PROACTIVE DEFENSE
[ ] Connects and disconnects trailer using proper technique
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______ ______
[ ] Adjusts speed as conditions change – knows the posted and trailer towing speed limits
[ ] Downshifts on long downgrades for added speed control—uses brakes intermittently to avoid heat buildup
[ ] Demonstrates proper use of trailer brake—describes response to tire failure, fishtailing and trailer brake failure
[ ] Allows for wider turning radius of trailer—safely completes right turns at intersections with curbs
[ ] If forced to back, uses a ground guide whenever possible
[ ] Stops, gets out and checks if hazard possibly in backing path and not visible in mirrors
[ ] Moves hand to bottom of steering wheels to reduce directional confusion while backing
[ ] Selects parking spot out of traffic flow and preferably a drive-thru spot – uses traffic cones appropriately
[ ] When parking on inclines—curbs tow vehicle wheels, sets parking brake, transmission in PARK, blocks trailer wheels
[ ] Follows special procedures for boat launching if applicable

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers and brake lights;
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing – ensures back-up alarm is on
[ ] Communicates with ground guide if available, using pre-arranged signals

ADDITIONAL COMMENTS:


REV: 12/04/2008
UNIVERSITY OF CALIFORNIA CORE PLUS™
DRIVING EVALUATION
VAN-POOL OPERATIONS

DRIVER: _______________________________ EVALUATOR: _______________________________

DATE: ________________________________ U.C. LOCATION: _____________________________

□ PASS  □ NO PASS  OVERALL SCORE: _____  TRAFFIC: L/M/H  ROADS: URBAN/RURAL/FWY

INSPECTION
[ ] Demonstrates ability to perform a complete vehicle inspection, utilizing designated checklist
[ ] Identify what to look for with critical engine compartment components (if included at your location)
[ ] Identify critical exterior and interior inspection components
[ ] Adjusts seat and mirrors for optimal driving position

PROACTIVE AWARENESS
[ ] Demonstrates knowledge and awareness thru effective commentary driving
[ ] Confirms seatbelt use by all occupants
[ ] Systematically scans all time zones – proper eye lead time (seconds) ______ ______ ______ ______ ______
[ ] Eliminates visual barriers, including interior factors affecting window visibility (condensation, hanging garments, etc.)
[ ] Keeps eyes scanning – avoids the fixed stare
[ ] Checks mirrors frequently – one mirror every 3-5 seconds ______ ______ ______
[ ] Identifies and correctly assesses pertinent information on all sides of vehicle
[ ] Avoids backing whenever possible
[ ] If backing is necessary, performs a circle of safety to identify hazards prior to entering the vehicle
[ ] If backing is necessary, asks for a ground guide and checks a different mirror every 2-3 seconds ______ ______
[ ] When forced to back, takes time to follow safe backing procedures despite external pressures

PROACTIVE DEFENSE
[ ] Anticipates unsafe actions by other drivers – identifies distracted pedestrians and cyclists
[ ] Demonstrates preparedness to take evasive action – covers the brake when a hazard is observed
[ ] Maintains and protects space cushions including 4-6 second following distance ______ ______ ______ ______ ______
[ ] Adjusts speed as conditions change – knows posted speed limit
[ ] Describes proper response to loss of steering, brakes, headlight failure, tire failure, running off the pavement edge
[ ] Selects “drive-thru” parking spots when possible—safely out of the line of traffic and preferably well-lit
[ ] Picks up and discharges passengers in safe environments—requests they cross behind van if necessary
[ ] Stops, gets out and checks if hazard possibly in backing path

PROACTIVE COMMUNICATIONS
[ ] Effectively uses turn signals, 4-way flashers, brake lights and headlights on for safety
[ ] Covers horn – sounds when needed for other vehicles and pedestrians,
[ ] Makes eye contact with other road users and pedestrians – doesn’t assume recognition
[ ] Signals turns and lane changes early and consistently
[ ] Taps horn before backing—ensures back-up alarm is on if so equipped
[ ] Communicates with ground guide using pre-arranged signals

ADDITIONAL COMMENTS:
________________________________________________________________________________

[N] = Not Observed

REV: 12/04/2008