# **Chapter 4 Lesson Plan and Activity Directions**

Title: Find, Solve, Control

# **Concepts:**

- 4.1 Perceptual Skill Development
- 4.2 The Zone Control System
- 4.3 Hill and Forward Angle Parks

**Prerequisite**: Participation in previous sessions, successful completion of previous assignments, and 80% or better on previous chapter exit exams

Time: 2 hours

### **Required Equipment, Lesson Resources, and Support Materials:**

- NDRPC 2014 DVD Interface, computer, projector, screen, and speakers
- Chapter 4 Lesson Plans and Activity Directions, and Overview Notes
- NDRPC 2014 Playbooks (students are required to bring hard copy to class)
- North Dakota Noncommercial Drivers License Manual
- Playbook Flash Cards (O & C located in back of Playbook)
- Envelopes for Flash Cards 1 envelope per student
- Ticket to Concept 4.2 Key
- Chapter 4 Exit Exams & Key

#### **Optional Materials:**

- Ten Habits Keep the Monster Caged! Using the Dynamics of Zone Control
- Partnership for EXPERT Driving 7th ed. IN-CAR Guides

Teacher Activities	Learner Activities
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# **4.1 Perceptual Skill Development**

# Time: 40 minutes

# **Objectives**

- The learner will be able to measure space in seconds and accurately judge distance in time.
- The learner will be able to identify and describe the three searching ranges of the Zone Control System.
- The learner will use perceptual skills to recognize zone changes that affect line-of-sight and path-of-travel, and be able to classify a zone as open or closed.

#### The Key to Perception - Ask the Right Question

Direct learners to photo in Playbook.

Ask questions to help the learner understand the process of perception.

- 1. What did you look for to find the face?
- 2. Why do some people see the face quickly, while others can only find it after a long search?
- 3. Once you see the face, it is difficult to not see it when you look at the picture of the tiger. Why do you think that is?
- 4. What does that say about "Finding" or "Perceiving" things when we are driving

Discuss how easy or hard it was to find the hidden face in the tiger photo.

Participate in discussion with teacher as he or she leads you through some questions.

#### **Target Area Searching**

Video Activity: Target Area Searching Practice

Launch video and direct learners to keep central vision on target area and into curves. Instruct them to count the number of oncoming vehicles they see as they look to their target area. You may want to play the video more than once to reinforce target area searching.

Practice searching from one target area to the next by counting oncoming vehicles as they appear in each new target area. Practice monitoring other zone conditions around camera vehicle with your fringe vision.

#### Time is a Gift

Interactive PPT Activity: Time to Search

Launch PPT presentation and guide learners through the slides. After presentation discuss results for different searching times. Questions you may want to ask:

- 1. Why is it important to know the amount of time you have from objects and cars in your path-of-travel?
- 2. What is the danger of not having enough time? What happens to your driving actions when you run out of time?
- 3. Why do you think most people don't allow enough time in front of them when they are driving?

Complete searching activity - discuss results.

Consider and answer teacher-directed questions.

#### **Judging Space in Time**

Take a Guess Activity: How long will it take...?

Guide learners through this activity. See Activity Directions below for more information. Help learner to make the connection between time/space/speed.

Video Activity: Measuring time in space.

This activity will allow learners to gain experience counting seconds accurately and measuring space and time needed to accomplish several different things.

Launch video and direct learners to count aloud as a group to find out how much time each given situation takes. See Activity Directions below for more information. Guess and then practice counting seconds accurately: "1001, 1002, 1003..." Get used to counting aloud; you will be counting aloud during in-car lessons.

Discover how long it takes to:

- walk/run across a room
- complete a turn
- cross a small intersection

Discover how to judge the size of a gap when you want to enter or cross.

# **Three Searching Ranges**

Review three searching ranges and the purpose of each. Tie the concept back to the judging space and time section.

Ask learners to define closed and open zones. Remind learners that a closed zone condition may be found in any of the three searching ranges. Make the point that when they are able to FIND a problem early, they will have more time to SOLVE it. Ask learners to explain the point of no return.

Ask/answer questions to clarify searching ranges.

### The Key Question for Perception is...

Rehearsal Activity: Open or Closed Zones?

Direct learners to O and C flash cards they will use during this activity. Pass out envelopes for students to store their flash cards. (They will need them again.)

Launch PPT presentation and guide learners through situations. Observe and evaluate individual understanding of and ability to identify zone conditions accurately. Provide feedback as needed.

Use flash cards and practice identifying zone conditions as open or closed.

# **Assign Homework**

4.1 Judging Space in Seconds and provide a due date.

Complete Homework Assignment 4.1 Judging Space in Seconds

# **4.2 The Zone Control System**

**Time: 20 minutes** 

# **Objectives**

- The learner will be able to use the zone control system to get more information, create time and space, and control the 4-second danger zone, as well as apply previously learned space management skills.
- The learner will be able to FIND problems and use the best lane position and speed control options.

#### **Ticket to Concept 4.2**

Lead class through a self or peer evaluation of responses to questions using Ticket to Concept 4.2 Key. Allow students to keep for future reference.

Evaluate responses to E-Ticket 4.2. Save for future use.

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Be sure learners understand where a "related" zone can be. Lead learners in disccusion of which zones to check in response to line-of-sight and path-of-travel blockages. Ask:

- When the front is closed, what is the related/other zone you need to check?
- On a simple two-lane roadway, if the left front is closed, what other zone should you check?

Participate in discussion.

Answer questions.

Prepare to practice checking related zones for problems and options.

#### **SOLVE: Create Time and Space**

# Rehearsal Activity: Lane Position Activity

This activity is designed to give learners experience seeing how a problem is SOLVED using correct lane position, as well as the opportunity to continue developing correct use of their central and fringe vision. (See zone condition words with central vision, see lane position with fringe.)

Launch activity and guide learners through the instructions and the example slide.

Gain experience seeing how proper use of lane position is used to SOLVE problems.

Practice using central and fringe vision correctly.

# **CONTROL** – Reevaluate the 4-second Danger Zone

Ask learners to explain what other space management principles they will use for the following activity.

# **Rehearsal Activity:** Zone Control

The activity gives learners the opportunity to practice using The Zone Control System. They will FIND problems, check related zone conditions, and choose the best speed and lane position options to make the best zone control decisions.

Launch activity and guide learner through it. Reinforce correct searching and space management principles. Give feedback as needed.

Answer questions, participate in discussion.

Practice managing space using Zone Control.

# 4.3 Hill and Forward Angle Parks & Chapter 4 Exit Exam

# **Time: 60 Minutes**

# **Objectives**

- The learner will demonstrate correct application of behavior patterns used to park on hills and enter and exit forward angle spaces.
- The learner will complete Chapter 4 Exit Exam with a minimum score of 80%.

#### **Prep for Class**

Begin this section by asking learners to describe places where it is illegal to park. You may wish to direct them to the Driver Maunal for more information on parking regulations.

Launch and play video. Encourage learner participation. Affirm correct responses and explain incorrect responses. The video plays quickly and repeats some of the places where it is legal and illegal to park. Don't worry if they don't get them all.

Prepare for this lesson by reading the section in the Driver Manual to determine where it is legal and illegal to park.

Participate in video activity providing answers based on information from Driver Manual.

# **Hill Parking**

**Think This Through Activity:** Where would you go if your car was to roll?

Lead learners through in-desk hill parking activity. Launch PPT and encourage learner participation.

Participate in activity and PPT presentation. Ask and answer questions as needed.

#### **Angle Parking**

WS 4.3 Reference Point Discovery Activity

Direct learners to Worksheet 4.3 Forward Angle Parking and Reference Point Discovery, and direct them to read the directions and connect the dots to discover the reference points Discover reference points used to forward angle park by completing WS 4.3.

Participate in discussion.

they will use for a forward angle park. Observe and coach as needed. Have them share what they discover with the class.		
Video Demonstration: Angle parking Launch video and encourage participation. You may wish to show the video several times and identify key elements of the parking	Watch video and discuss as needed.	
maneuver.		
Chapter 4 Exit Exam	Learners take chapter 4 exit exam.	
Administer exam, collect and correct.	Learners take enapter 4 exit exam.	
Assign and Wrap Up		
Read Playbook Chapter 5		
Ticket to Concept 5.3		
	Estimated Time: 2 Hours	

**Assessments:** Learner will complete Ticket to Concept 4.2 and demonstrate accountability for completing chapter reading assignments. Learner will answer informal questions, and participate in class discussions, demonstrations, and activities. Learner will complete Chapter 4 Exit Exam with a minimum score of 80%.

## **Student Assignments**

- Judging Space in Seconds
- Read Playbook Chapter 5
- Ticket to Concept 5.3

# 4.1 Perceptual Skill Development Activity Directions

# Take a Guess Activity: How long will it take...?

The purpose of this activity is to give learners the opportunity to practice measuring space in seconds <u>accurately</u>.

Ask for a volunteer to come to the front of the classroom.

Ask the class to guess how many seconds it will take for the student to walk across the room.

Say "go" and listen to how the class counts. Some will count "one, two, three..." Others will count at the pace of the walker, and still others will count "1001, 1002, 1003..."

First help learners to count seconds accurately by using timers on smart phones or a clock with a second hand and counting full seconds of time aloud "1001, 1002, 1003..." Repeat enough for them to get used to the rhythm and cadence of the count.

Then have them guess and count aloud again as your volunteer walks across the room at a faster or slower pace. Ask for another volunteer and repeat the process until you are confident they are counting accurately.

#### **Variation outdoors**

Choose 3 or 4 volunteers to help. Class guesses how long it will take for each student to reach a certain point. Out of ear shot of class, direct one to move at a slow walking pace, the next to walk at a fast pace, the third to skip, and the fourth to run. Make the point that the faster the speed, the more space is consumed in the same amount of time.

# Video Activity: Measuring time in space

It is important for drivers to be able to judge distances. However, measuring space in time while one is driving means the driver must have the ability to count second accurately. Novice drivers (especially teens) don't really enjoy counting aloud; they would rather think or guess quietly. The problem is thinking in time, guessing, or counting "1, 2, 3..." are not accurate ways to measure.

Use the video clips in this activity to help learners:

- 1. have a better understanding of what is developing in the three searching ranges
- 2. develop patience for pedestrians in crosswalks

- 3. develop judgment of the amount of time needed to enter a gap or hole when turning or crossing traffic flow
- 4. develop the ability to create adequate following time
- 5. develop an understanding of the point of no return

Encourage students and listen to them counting; coach as needed for correct and accurate performance.