

National Motorcycle Training begin2ride program™ Range Guide

Instructors are educators first, and motorcyclists second!

People are not as
dumb as you think they are,
and they are not as smart as
they think they are.

Anonymous

National Motorcycle Training's begin2ride program focuses participants on the basic physical skills required to operate a motorcycle with control. We do not encourage riding motorcycles on the street. It takes much more than basic physical skills to operate a motorcycle with control in traffic. We encourage people to be informed before they decide to ride.

Chapter 1: Introduction and Range Management

Chapter 2: Demonstrating the Riding Exercises

Chapter 3: Conducting the Riding Exercises

Appendix A: Range Layout



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Table of Contents

Chapter One **Introduction to Range Management**

Chapter Two **Demonstrating the Exercises**

Demonstrating Session 1 **Introduction to Beginning Motorcycling**

- Exercise 1.1 Getting introduced to your motorcycle
- Exercise 1.2 Practice using the front brake and holding on
- Exercise 1.3 Starting Controls and shifting when the engine is off
- Exercise 1.4 Patient throttle-control and shifting when the engine is on
- Exercise 1.5 Adding more power, rocking and power-walking
- Exercise 1.6 Getting underway smoothly

Demonstrating Session 2 **Introduction to Beginning Motorcycling**

- Exercise 2.1 Session 1 Review
- Exercise 2.2 Review posture and primary controls
- Exercise 2.3 Building confidence with clutch control
- Exercise 2.4 Practice Braking
- Exercise 2.5 Practice Straight-line stability
- Exercise 2.6 Practice looking well ahead
- Exercise 2.7 Introduction to controlling lean

Demonstrating Session 3 **Combination Skills**

- Exercise 3.1 Practice for efficient braking
- Exercise 3.2 Practice adjusting speed
- Exercise 3.3 Practice controlling lean
- Exercise 3.4 Basic cornering technique
- Exercise 3.5 Smooth shifting while moving
- Exercise 3.6 Practice skills in combination
- Exercise 3.7 Basic skills practice

Chapter Three **Conducting the Exercises**

Conducting Session 1 **Introduction to Beginning Motorcycling**

- Exercise 1.1 Getting introduced to your motorcycle
- Exercise 1.2 Practice using the front brake and holding on
- Exercise 1.3 Starting Controls and shifting when the engine is off
- Exercise 1.4 Patient throttle-control and shifting when the engine is on
- Exercise 1.5 Adding more power, rocking and power-walking
- Exercise 1.6 Getting underway smoothly

Conducting Session 2 **Introduction to Beginning Motorcycling**

- Exercise 2.1 Session 1 Review
- Exercise 2.2 Review posture and primary controls
- Exercise 2.3 Building confidence with clutch control
- Exercise 2.4 Practice Braking
- Exercise 2.5 Practice looking well ahead

Exercise 2.6 Introduction to controlling lean

Conducting Session 3

Exercise 3.1

Exercise 3.2

Exercise 3.3

Exercise 3.4

Exercise 3.5

Exercise 3.6

Combination Skills

Practice for efficient braking

Practice adjusting speed

Practice controlling lean

Basic cornering technique

Smooth shifting while moving

Basic skills practice

Appendix: Range Layout

Chapter 1: Introduction to Range Management

Striving for excellence motivates you;
striving for perfection is demoralizing.
Anonymous

This chapter introduces the instructor range management techniques. It is written assuming that you have complete and immediate knowledge of what is contained in the b2r outline document, the Student Booklet, and the exercise's Range Cards. Please study these documents first and thoroughly.

To evaluate one's self as an instructor, ask: Is my conduct that of an educator? How is my Visual Range Control (VRC)? What can I do to improve my Communication? Am I Mechanically Correct? Did I finish the Collateral Duties?

We prepare the students to be successful in these sessions. This starts with first contact of the school by the student. Be familiar with the information flow from the office staff to the students. This out-going information has been carefully constructed so that the students' education begins with initial contact. Instructors are required to know what this out-going information is and should use similar terminology when working with students and potential students.

Please remember we are teaching students how to ride our training motorcycles, not any and all motorcycles. We are teaching the students the physical skills of manipulating and effectively using the controls so that they may get underway smoothly, stop efficiently, control speed, and control direction of our training motorcycles on our riding range (not the street). Answer student questions appropriately, specifically drawing their attention back to the training motorcycles and the information needed to be successful in "today's" activity.

Additionally we provide specific mental skills to manage risk, and a mental attitude (and example) for the students, i.e., that motorcycling is a choice. Memorize the techniques described in the student booklet. Those are the techniques to teach the students.

Focus the students on component skill development. Teach them to use this focus "on the calisthenics" and to become proficient through purposeful practice of the component skills. In particular, when a student is struggling with an exercise, evaluate which previous component skill the student did not gain confidence with, then have that student focus on just that skill first before re-trying the current exercise.

Much importance has been placed on having our instructors "choreographed". When one instructor is doing what the other instructor expects, and vice versa, the appearance to our students is of a high level of professionalism. This, of course, is an accurate perception for them to have.

Visual Range Control (VRC): We instructors must observe all the range, all the time. Typically we coach, then scan for the other instructor. Be aware of what the other instructor is doing during the conduct of an exercise.

The cone movements and student breaks are included on the "Orientation" Card of the range cards. The riding instructor typically ensures the cones have been properly set up. However, both instructors are equally responsible for proper cone movements and set up, and both have equal responsibility of moving the cones.

Corner #1 is the first corner encountered after a rider has left the staging area. Corner #4 is the last corner rounded before staging.

On a standard range, the dimensions of the "box" are 220 feet by 120 feet. There is a dot at each corner.

Cones may be left on the range as long as they do not interfere with the current exercise's path of travel. Do not stack cones on range.

As an instructor, you have to make judgment calls often. If you are in an "unknown" area and are uncomfortable, or unsure of how, to continue, stop. Call the office or another instructor for consultation. You, the instructors, are in charge of the educational environment of the class as well as using the principle of eliminating the unnecessary risks in the conduct of the class.

Late students: There is no perfect answer for managing every possible scenario. You must exercise good judgment and adhere to the educational principle we embrace. In general, a student is not late if the introductions have not been completed. The student is late and should be offered a reschedule for later that day, or that weekend, or the next weekend, if they have arrived after the bolded sentence, "**We do not encourage you to attempt any exercise that makes you uncomfortable. Please inform your instructor, at any time, if you are uncomfortable, or unsure of how to continue**" Has been read.

Chapter 2: Demonstrating the Exercises

This chapter provides details to riding the demonstrations. It is written assuming that you have complete and immediate knowledge of what is contained in the b2r outline document, the Student Booklet, the exercise's Range Cards, and Chapter 1 of this Range Guide. Please study these documents first and thoroughly.

The first and second demos of Session 1 are during the lecture. When reviewing page 1 in session 1, you will demonstrate putting on and removing a helmet. The second demo is done when reviewing the instructor signals on page 2. Remember in Session 1 you show and tell the signals. In Session 2 & 3, you show and the students tell.

Demonstrating Session 1

Exercise 1.1 – Getting introduced to your motorcycle:

For exercise 1, place motorcycles in rows of up to eight motorcycles, with six feet of separation, between the motorcycles laterally and six feet of separation between the front row's rear tires and back row's front tires. If there are two rows, the second row is positioned "Off-Set" to the first row so that both instructors can easily see the second row.

For exercises 1 and 2, gather the students to the center and in front of the motorcycles for the directions and demonstration.

Use a student bike in front, near the center. Demonstrate proper mounting, correct upper body posture, and dismounting. Do not put your feet on the pegs. When mounting, emphasize: squeeze the front brake with the fingertips. You are not required to wear your helmet for this demonstration.

While sitting, emphasize: slide forward on the seat to have bent elbows, cover the clutch; do not cover the brake. Show how to check your elbows by turning bars left and right. As you do this say, "Let the bike move under you."

Show the students the right-wrist position and throttle roll-on/roll-off. Tell them, "Notice that my wrist is flat at the highest point, and it goes down from there as I roll on." Emphasize the correct wrist position.

When dismounting, emphasize: squeeze the brake with your finger tips and checking that the side-stand is fully forward and out. Say, "Check the side stand twice before leaning the weight to the left."

Exercise 1.2: Practice looking well ahead, using the front brake, and holding on:

For exercises 1 through 2, gather the students to the center and in front of the motorcycles for the directions and demonstration.

Show how to straighten motorcycle and put the side stand up while standing beside it. Demonstrate finding a comfortable position for holding the motorcycle.

After the demo, show the stop signal and ask, "What is this signal?". Remind them to only use the front brake for this exercise. (Note that front brake use is the only required braking for all of session 1.)

Do not cover the brake or the clutch.

Exercise 1.3 – Starting Controls and shifting when the engine is off.:

For exercises 3 through 6, gather students to the left of the center motorcycle such that they can easily see the clutch lever and shift lever.

The three parts of this exercise are: 1. Point out starting controls, 2. Shifting with the engine off, 3. Starting and stopping the engine (and warming the engine).

Exercise 3 demonstration is integrated with directions.

Emphasize the required starting controls. Do not emphasize the fuel valve, students should leave it in the on position.

When demonstrating the shifter, do not use the clutch. The first shift of the demonstration is from N to 2nd. Take your time with this demonstration. Shift up to 5th, then back to N. At the end, demonstrate shifting from first to second, and second to first. Be sure to emphasize that you are using very little pressure on the lever and that it is the alignment by rolling that matters for the smooth shift.

When warming the engine in the demo, use smooth and patient throttle control, however, do not emphasize that, since the next exercise is designed specifically for that practice. The students are to experience the starting and stopping of the engines only, without involving the throttle. The choke is used here to warm the engines.

Exercise 1.4 – Practice patient throttle-control, and shifting when engine is on:

For exercises 3 through 6, gather students to the left of the center motorcycle such that they can easily see the clutch lever.

Exercise 4 demonstration integrated with directions. First demonstrate the patient throttle control. This will help warm the engine for the shifting part.

The first shift of the demonstration is from N to 2nd. Take your time with this demonstration. Shift up to 5th, then back to N. At the end demonstrate shifting from first to second, and second to first. Be sure to emphasize that you are using very little pressure on the lever and that it is the alignment by rolling that matters for the smooth shift.

Carefully demonstrate shifting from N to 2nd without the clutch. This will cause it to stall. Then show that the motorcycle can be started in gear.

Exercise 1.5 – Adding more power while rocking and power-walking:

Rocking:

Properly mount and start the motorcycle. Assume the correct posture. First show the students your foot positions. Then draw their attention that you are releasing the clutch halfway and holding it there with your finger-tips. Work on the clutch several times. Then add a little throttle. Add more throttle when appropriate. Do each step slowly and deliberately.

Straddle/Power walking:

During the straddle walk, open the throttle, and hold it steady. Release the clutch halfway and take large straddle steps stopping at mid-range by squeezing the brake and the clutch. (It is OK for the engine to rev some before you ease the clutch out.) Then

repeat, stopping at the cone. Select neutral, briefly raise your left hand, then turn around using the same method as the students in exercise 1.2. Repeat same on return.

Exercise 1.6 – Getting underway smoothly:

Power-walk across the range without stopping at the center. Lift you feet several inches up for the middle part of the path. Do not drag your feet or put your feet on the pegs.

For the ride back, follow page 6 exactly, taking 4 straddle steps. As you stop, put both feet out and return to straddle walking, only using the front brake to stop.

Demonstrating Session 2:

Exercise 2.1 - Practice, Session 1 review: No Demo.

Exercise 2.2 - Practice looking well ahead and holding on: No demo.

Exercise 2.3 – Building confidence with clutch control.

Rocking:

Mount and start the motorcycle. Assume the correct posture. First show the students your foot positions. Then draw their attention that you are releasing the clutch halfway and holding it there with your finger-tips. Rock with the clutch several times. Then add a little throttle. Add more throttle when appropriate. Do each step slowly and deliberately.

Straddle/Power walking:

During the straddle walk, open the throttle, and hold it steady. Release the clutch halfway and take large straddle steps stopping at mid-range by squeezing the brake and the clutch. (It is OK for the engine to rev some before you ease the clutch out.) Then repeat, stopping at the cone. Select neutral, briefly raise your left hand, then turn around using the same method as the students will use. Repeat same on return.

Note: Do not demonstrate getting underway smoothly. Focus the students here on clutch control. Since this is session 2, they have previously ridden. This exercise is to develop clutch control.

Exercise 2.4 – Practice Braking:

Sequence:

- a. Start in Corner #2, ride toward the braking area stopping between the orange cones at the end of the brake chute.
- b. Do not shift to neutral. Straddle walk under power to the next start cones.
- c. Repeat stopping in other brake chute. Straddle walk under power to the next line and shift to neutral. After shifting to neutral and raising your hand, return the motorcycle to its original position. Narration includes “power-walk to line, shift to neutral while

waiting in line.” On the second stop mention the demonstrators posture.

Exercise 2.5 - Practice Straight-line stability

Similar to exercise 2.4. Be sure to keep your shoulders relaxed and do not tighten your grip. Ride over the board no faster than 12 mph.

Exercise 2.6 – Practice looking well ahead

This demonstration emphasizes head position for visual directional control, proper speeds for stability, and smooth application of the controls.

When demonstrating, start your acceleration just before entering the long sides and reach a speed of 15 mph well before the middle of the long sides. Adjust your throttle and do not exceed 15 mph. Stabilize your speed.

As you approach the end of the long side, about 60 feet before the corner dot (which is about 20 feet before the three-cone marker), gradually start turning your head and continue turning your head until you are looking across the range. The demonstration is emphasizing where the students should be looking, so begin gradually turning your head before braking. While you continue gradually turning your head, about 45 feet before the corner dot, slow by applying both brakes, reducing speed to about 8 mph, making a rounded turn onto the short side of the perimeter.

Maintain a speed of approximately 8 mph on the short sides. At the end of the short side, round off the corner without braking.

Since this is the first exercise the students will be leaning the motorcycles, be sure to not lean very much. Follow an oval path around the short end of the range, using up what room there is, appropriately leaving some space cushion to the outside of the path of travel. If a line is drawn between the two corner dots of the short side, the apex of the path of travel will be at least 20 feet from this line; and more than 20 feet if space cushion to the outside can be maintained.

Note the difference between the perimeter demonstration and the “ovals” demonstration. With the perimeter ride our students are practicing visual directional control and speed for stability. So the “look” is the primary skill. The braking aspect of the perimeter ride is to slow down students going too fast to gradually round off the corner, and/or for general speed adjustment. During the “ovals” exercise, our students are practicing setting their entry speed using the brakes, so the braking is emphasized and the “look” is just the timing for the release of the brakes.

Sequence:

- a. Choose any student motorcycle and move it to the perimeter.
- b. Perform smooth “take-off” as in exercise 7 demonstration. Do not use your brakes prior to corner #1 after taking off. Do not exceed 10 mph prior to corner #1.
- c. Accelerate quickly to 15 mph on the long sides.

- d. About 60 feet from the corner, gradually start turning your head.
- e. Slow to about 8 mph before releasing your brakes when approaching the end of the long side. Maintain a steady speed of about 8 mph on the short sides. Do not use your brakes on the short sides.
- f. After rounding corner #4 for the second time, maintain speed and enter staging area.
- g. Stop with proper technique in the staging area. Use correct staging: stopping, shutting off engine. Note, do not approach the staging area at a slow/unstable speed.
- h. You may, but are not required to, return the bike to the original position.

Exercise 2.7 – Introduction to controlling lean (5 cone)

Note: For exercise 2.6 and beyond, instructors do not take straddle steps when getting underway. Students may or may not take straddle steps, they should be encourage to do whatever makes there “take-offs” smooth.

This demonstration shows achieving speed for stability and using counter-steering to control lean.

First gather the students in front of you and demonstrate the press to initiate lean. Use lightly applied pressures with small wheel deflection. Let the bike lean under you.

For the riding portion, ride the perimeter rounding off and to the outside of the corners, if run-out room is sufficient. As you enter the long sides of the perimeter, accelerate to 13 mph. Keep your head up, and look well ahead. Keep your body centered and lean the motorcycle beneath you.

Ride the weave at a steady speed. On the first pass, barely lean the motorcycle, on the second pass use moderate lean riding about 4 feet from the cones as you pass the cones. On the third pass, while maintaining the same speed as before, increase lean such that you pass the cones 6 to 10 feet out. Your path of travel should have you crossing the center line at the midpoint between cones.

Sequence:

- a. Choose any student motorcycle and move it to the perimeter.
- b. Demonstrate the “press” with the engine off.
- c. Start smoothly, using **no** straddle steps.
- d. Begin weaving on the far side of the range. Continue weaving on the near side and again on the far side of the range.
- e. Stop exactly as in exercise 2.5.

Demonstrating Session 3:

Exercise 3.1 – Practice for Efficient braking:

Part a. Demo is the same as exercise 2.4.

Part b demo is the same path of travel as part a.

Part b. demo: Gather the students on the brake side of the brake chute. Focus them on your right hand and how you will do the progressive squeeze, increasing intensity as you stop. Do Not perform a quick stop. Stop just beyond midway of the brake chute.

Exercise 3.2 – Practice adjusting speed:

Path of travel is the same as exercise 2.5.

In this demo, quickly speed up to and stabilize at 15 mph. Approximately 40 feet before you round of the end of the long side, quickly slow to 7 mph. Maintain a speed of 7 mph on the short sides.

Exercise 3.3 – Practice controlling lean:

Path of travel: Ride up the middle of the range and demonstrate weave riding to the right. Emphasize constant speed of 12-13 mph. Demo is ridden similarly to exercise 2.6.

Exercise 3.4 – Basic cornering technique

This demonstration introduces the cornering technique of brake-look-roll, with emphasis on smooth throttle roll-on through out the turn. Proper braking to adjust speed prior to the entrance of the turn, i.e. knowing where and how to set your entry speed is also emphasized.

To demonstrate, approach at 15 mph, slow with both brakes to 7 mph before each entrance cone. You must release the brakes and turn your head to look to the exit cone before the front tire passes the entry cone. Begin the gradual roll-on of the throttle as your front tire passes the entry cone. The motorcycle should not be accelerating as your front tire passes the entrance cone because there is a slight delay from the beginning of the roll-on to when the motorcycle begins the gradual acceleration.

Be careful to only open the throttle slightly at the entrance, that way you can continue to increase the opening of the throttle throughout the turn. As you pass the 3 o'clock point of the oval; be sure to be looking well ahead to the next entrance cone.

Sequence:

- a. Choose any student motorcycle and move it to approximately 10 feet from the entrance cone. Leave on the sidestand with the front wheel pointed straight ahead.
- b. With your feet on the pegs, demonstrate the brake-look-roll with the engine off, looking to the left since the motorcycle is leaning left on its sidestand.
- c. Start the riding demonstration by riding straight into the turn, do not use your brakes here.
- d. Complete a total of five corners riding outside the oval. Exit ovals entering the perimeter riding to the left.
- f. Stop exactly as in exercise 2.5.

Exercise 3.5 – Smooth shifting while moving:

This demonstration shows the shifting procedures detailed in the student booklet, with special emphasis on smooth clutch release, without opening the throttle, while downshifting. (Note that this exercise is emphasizing smooth clutch release to match road speed with engine speed.)

To demonstrate, ride the perimeter rounding off the corners to the outside if run-out room is sufficient. Start your acceleration just prior to entering the long side and accelerate to 13 MPH. Lift the shift lever at the cue cones and maintain your speed. Do not exceed 15 mph. Press the shift lever at the downshift cone and immediately begin to ease the clutch out. Do not use the throttle on the downshift and do not use your brakes. The clutch should be fully released before rounding off the corner.

Sequence:

- a. Choose any student motorcycle and move it to the perimeter.
- b. Demonstrate shifting up and down on the far side of the range.
- c. Continue shifting up and down on the near side and then again on the far side of the range.
- d. Stop exactly as in exercise 2.4.

Exercise 3.6 - Practice skills in combination

Similar to exercise 2.5, with the addition of upshifting to 2nd gear before the board.

The sequence for stopping is written on page 6 of the student booklet. The students should roll off the throttle at the cue cones, then apply the brakes. After the brakes are applied, they should squeeze the clutch and downshift. The downshift can be timed anywhere between the application of the brakes and before putting the feet down.

Optional Session 3 Exercise 3.7: Basic skills practice:

Optional Session 3 Exercise 3.7 – Weaving and choosing 1st or 2nd gear:

No demo. Start weaving in 1st or 2nd gear (student choice) using the 5 cone weave (30 feet). May go to 7 cone weave (20 foot) as time and student accomplishment permit.

Chapter 3: Conducting the Exercises

This chapter provides details to conducting the beginner exercises. It is written assuming that you have complete and immediate knowledge of what is contained in the b2r outline document, the Student Booklet, the exercise's Range Cards, and Chapter 1 & 2 of this Range Guide. Please study these documents first and thoroughly.

Note that your proficiency to demonstrate the exercises will be directly connected to your proficiency to coach students in the exercise. Be able to demonstrate every exercise exactly the same as the students should ride the exercise.

Instructor Objectives:

We are teaching the basic skills needed to operate a beginner motorcycle with confidence and control, while riding in a parking lot.

By the end of Session 1, Students must be able to:

- First, understand and exhibit good posture
- Second, demonstrate some skill and knowledge of the controls
- Third, to get underway (start) and stop smoothly (note: Students who cannot demonstrate these skills will require remediation prior to attempting Session 2. This may be accomplished by having the student repeat Session 1 or a one-on-one session outside of the regular sessions.)

Students who were unfamiliar with motorcycles will now have some familiarity.

By the end of Session 2, Students must be able to:

- First, continue to exhibit good posture
- Second, demonstrate increased skill and knowledge of the controls
- Third, to get underway (start) and stop smoothly with increased control
- Fourth, demonstrate introductory skill and knowledge of turning and leaning

By the end of Session 3, In addition to previously learned skills, Students must be able to:

- First, adjust speed and position with control
- Second, demonstrate understanding of turning left and right with control
- Third, demonstrate smooth operation of combination skills to include shifting while moving and adjustment of speed and position while turning

Conceptually, a Session 3 graduate should be able to ride their first bike home from the dealer or seller.

Again, we are teaching the basic skills needed to operate a beginner motorcycle with confidence and control, while riding in a parking lot. **Do not** relate anything contained in the Sessions 1, 2, & 3 exercises to street riding, (except that, skillful application of “the basic physical skills” will be crucial to operating a motorcycle with control, anywhere). Students at times seem preoccupied with street riding, keep them focused on the component skills. You may relate that a particular exercise is “designed to practice the

basic physical skills of controlling a training motorcycle in ‘this’ parking lot”.

We are using a building block process technique of instruction. In general, focus your directions and efforts on the main component emphasized for the particular exercise.

Note: On the card, near the end of the directions, the statement, "Remember ..." is the component you are emphasizing.

Students (and other human beings, including instructors) learn by doing. We emphasize simple, brief, and clear directions, clean demonstration, and clear and “un-wordy” narration.

How to use the cards: In general, read the cards!(to the students prior to beginning the exercise)

The components are:

The Title

The Introduction

Point out path of travel

The Directions

Demonstration, narration includes “Remember” points

Ask for questions and answer appropriately

If necessary, briefly Q & A to ensure student understanding of the main component of the exercise.

Coach the students into and out of staging. Stand in front of the staging area, facing the perimeter. Return the students to the staging area after each exercise that begins from the staging area.

All reversals are done from the short side of the perimeter, down the middle of the range. This also applies to instructors working alone. All reversals are typically initiated by the senior instructor or as directed by the senior instructor.

Students do not always perform “path of travel” or reversals as expected, choosing a strong front or “lead” rider and being clear with instructions can prevent, unexpected actions. If they happen, stay calm and stage if necessary to repeat instructions. In general students should be directed to follow the rider in front of them.

If you need to stop a student for remediation during an exercise,

Separate them, from others by moving toward the center of the side you will be stopping the student on. Instruct the student to stop and go to neutral. Stand such that the student is between you and the range.

Coach them, while maintaining VRC.

Rejoin them, Direct the student to begin riding to the outside of the perimeter and the corners, and merge when there is enough space to merge. State that it is OK for them to take a complete lap outside the perimeter. Direct traffic as appropriate. (Note: Do not

have the student merge into the exercise from where you had stopped the student.)

When working with multiple instructors, as previously mentioned instructor movements should in general be choreographed and professional. When necessary movements should be communicated prior to exercises so both instructors know “where” and “what” they should coach.

Instructors share responsibility for “conducting the exercises as designed” however, the senior instructor is “in charge” and is ultimately accountable.

Many beginners apply extra attention to squeezing the clutch so as not to stall. This in turn creates too much “squeeze” on the front brake (grabbing brake). Coach this immediately. Tell the student it is more important to learn how to use the front brake correctly than it is to stall while stopping (the motorcycles are electric start). For students having difficulty with grabbing the brake, coach them to squeeze both levers lightly.

Conducting Session 1:

Exercise 1.1 – Getting introduced to your motorcycle:

For exercise 1, place motorcycles in rows of up to eight motorcycles, with six feet of separation, between the motorcycles laterally and six feet of separation between the front row’s rear tires and back row’s front tires. If there are two rows, the second row is positioned “Off-Set” to the first row so that both instructors can easily see the second row.

The students should be assigned to an appropriately-sized motorcycle before exercise 1 is started. Students are required to be able to touch the ground with both feet while seated.

Have them walk around the bike and briefly inspect it and memorize the number on the head light so they can easily identify it. Then gather the students in front for the directions and demo.

Read the exercise name and introduction, then direct the students through the exercise by having them perform component skills while you direct the practice. The first time they mount, lead them through the mounting sequence. The first time they dismount, lead them through the dismount sequence. On subsequent mounting and dismounting, coach individually as appropriate.

Evaluation of posture is very important. Use extra time to establish the students good posture here. Have them assume the correct riding posture and then evaluate and coach every student on their posture before moving on. The evaluation of the students’ posture is your guide to make sure the motorcycle “fits” the student. Students are reminded throughout the exercise to keep their wrist down on the throttle hand and 4 fingers covering their clutch on the clutch hand.

Leaning and turning the handlebars in this exercise assists you in establishing posture and

“fitting” the motorcycle to the students. The students are directed to turn the bars all the way to the left and right several times, have them scoot forward toward the gas tank and turn left and right again, ask if they feel they have more control. They should do this on their own several times, and be able to turn the bars without turning their shoulders or completely extending their arms. The students should then be directed to lean the bike to the left and right several times. They should lean the motorcycle back and forth underneath them several times, while keeping their head up.

Guide the students through dismounting, congratulate them on not falling and have them remount on their own so we can practice using the primary controls.

Part 1 b

When mounted, remind students to assume correct posture or “fix their hands”(cover the clutch not the brake, throttle wrist down)

It is important for the students to actively manipulate the primary controls.

When identifying the throttle, instructors must evaluate the student's throttle operation to assure smooth roll-on and roll-off application. Direct them to hold the throttle comfortably (not tightly). Then ask the students to perform the 1/4, 1/2, full, and close throttle movements, in addition to verbalizing that the movement should be smooth and controlled, carefully evaluate that they are operating it smoothly with control and their wrist down.

After introducing the wrist down and throttle use, have them place their wrist up and then simulate that they inadvertently over-revved the engine, as a result they would lean back causing even more acceleration. Tell them “that is why it is important to keep your wrist down ‘while learning’ to ride”. Practice with the wrist down once or twice more before moving to the front brake lever.

The first thing they need to practice on the brake is releasing it and returning their hand to the throttle, simple squeeze and release commands work well. Once they know to release the brake and return their hand to the throttle explain that the brake is not used with only one intensity, so have them lightly squeeze, then squeeze more, and then release, that is what we mean when we say “progressive squeeze”.

For the clutch have them squeeze it in quickly(they should already be covering it) then instruct them to release it half way and hold, mention that the last portion or fingertip portion is where all the power is delivered to the wheel.

Have them Squeeze both levers at the same time, they should notice the difference in the feel of these controls. Working the hands simultaneously and in combinations is important here.

We do not manipulate the gear shift lever in this exercise since it will be thoroughly

addressed in later theory and exercises.

Students need to understand where to place their feet on the pegs. They should be able to place the ball of their feet on the respective peg without touching the brake or gear shift lever (one at a time of course). Tell them it is okay to look at first, however once they gain confidence they should perform this without looking down.

We briefly work the rear brake; however, do not emphasize the rear brake here. In this exercise, do not address braking technique for efficient stopping, or using both brakes at the same time. All of session 1 is to emphasize properly using the front brake only.

Review of controls in combination

Tell them to relax their hands.

Then perform a short review of the hand controls.

Have them practice closing the throttle and squeezing the front brake lever, while keeping the throttle closed. Coach individuals on how to squeeze the brake and keep the throttle shut, as appropriate. Then add in the clutch having them hold the brake while squeezing the clutch, then releasing the brake followed by easing the clutch. Mention that this sequence is common for riders and they should be able to feel the difference in controls.

Exercise 1.2 – Practice looking well ahead, using the front brake, and holding on:

This exercise requires the student move the motorcycle while walking beside it and while straddle walking with the engine off. The student must be able to touch the ground with both feet, and in addition, they should complete the straddle walk by propelling the motorcycle with his/her own feet while sitting on the machine.

The instructor may assist by pushing on the saddle of appropriate students to help reduce the chance of student fatigue. A remedial technique if there are many students without strength to push the motorcycle on their own is to pair up the students, and have one student give a gentle push while the other student straddle walks, then switch positions after confidence is gained.

The first instructor position is about 30 feet directly in front of his/her group, then carefully walk backwards.

Check that all the motorcycles are in neutral and that student are not covering their clutch (this allows better control while pushing for the first time). Signal them to walk forward about 3 feet and stop. Note that for the very first push the students will often drop their head. Expect and allow this looking down while they get the “feel” of the exercise. After they get the “feel” of the push, command them to start with their head up and be looking forward before they begin moving. Now have the students move forward a minimum of 20 feet before you give the stop signal. Next have the students turn toward the staging area (don’t call it that as they do not know what it is yet) creating a single file and assign them to a cone where they should stop with their front tire next to it. Tell them to put their sidestand down (this allows you time to get all students lined up).

During this exercise, watch for students who grab the front brake. (Now is the time to establish the feeling of the progressive squeeze on the front brake.) To do this, begin by instructing them to keep their fingers curled around the throttle without squeezing the grip. When it is time to brake, they should reach for and lightly squeeze the lever, then increase pressure on the lever to increase braking force. When finished braking, their hand should return to the throttle, it should not be covering the front brake lever.

For the straddle walk portion, have them make 4 passes (2 Round Trips).

1st pass: Stop at midrange. Straddle walk speed should be slow.

2nd pass: No stop required.. Straddle walk speed typically is faster.

After 2nd pass turn-around, have students shake out arms and catch their breath.

3rd pass: No stop required. Encourage a faster straddle walk than before.

Conduct the “Centering yourself on the motorcycle” practice by holding on with the knees.

4th pass: Encourage the students to straddle walk as quickly as they can while maintaining good control.

To turn the students around, after all the students have stopped, with their front tires within approximately 6 inches of their target cone, command them to turn the handlebars right and straddle walk the motorcycle 90 degrees to the right (until parallel with the perimeter). Command them to look over their left shoulder, turn the handlebars to the left, and complete the turn by straddle walking forward and to the left until they come full circle, lining up the front tires within 6 inches of the target cone.

If necessary, gently coach them to place their front tire next to the cone. Many times if they miss greatly they did not go far enough to the right before turning, be sure to show them exactly where if necessary. If a student asks which side?, tell them to the right of the cone, however, what really matters is that they are near the cone, on either side. The student being able to stop the front tire near the cone is a measure of their directional control.

Exercise 1.3 – The starting controls and shifting with the engine off:

See Card. Note that exercise 1.3 and 1.4 require greater preparation as the directions are not read directly from the cards, they are instead integrated with the demo.

Exercise 1.4 – Patient throttle control, and practice shifting with the engine on while stationary:

See Card.

Exercise 1.5 – Adding more power, rocking and power-walking:

Exercise 1.5 has two parts, rocking and straddle walking under power.

The students are learning how to coordinate throttle roll-on and clutch-release, with emphasis on controlling the clutch.

Instruct the students to mount, start engines and warm the engines for about a minute.

Have them practice patient throttle control in neutral.

Rocking Step (take plenty of time here):

Stand about thirty feet in front of your group. Command them to start engines and warm them using patient throttle control. Do not have them place motorcycle in gear until the engine can run smoothly with the choke off.

When ready to start the rocking practice, command them to squeeze the clutch, place motorcycle in 1st gear, and put both feet down. The students should practice the rocking with no throttle until they gain some confidence with their clutch control.

When individually coaching a student, direct the student through the steps until you are satisfied that they have sufficient control to practice on their own. Position yourself in front of the motorcycle and slightly to the student's left to avoid intimidating the student. Be sure to maintain visual range control, monitoring the students who have started.

If the students are too short to rock back with their heels on the ground, it is sufficient if they can reach the ground with both feet to move the motorcycle slightly to the rear.

When students are demonstrating good clutch control without the throttle, tell them to “now, practice while adding power with the throttle”.

Power Walking:

The students should not start the power walking until they have confidence with their throttle roll-on and clutch-release coordination. If a student attempts the straddle walk and is having difficulty, have that student practice the rocking step again. The goal is that the students do not stall (or “wheelie”) the motorcycle.

The straddle walk is done a minimum of two trips across the range (two round trips). On the first round trip, have the students stop about center of the range. Then either end the exercise, or direct the students to straddle walk from the start cone to the target cone, without stopping in the middle. Remember that the beginning of the next exercise the students will continue to practice the power walking.

As they power walk listen for abrupt throttle roll on or uncontrolled use of the clutch, coach as appropriate. Failure to accomplish this skill is the most common reason students require remediation prior to session 2.

Exercise 6 - Getting Underway Smoothly:

Repeat the straddle walk until you can confidently begin moving. This is where coordination of throttle roll-on and clutch release is established and deserves extra emphasis. The students should be straddle walking quickly on the last trip across.

Do not over coach the first two tries. Remember students learn by "doing".

If an individual student has difficulty maintaining a straight path when starting out, go back to straddle walking. Command them to not lift their feet to the pegs. After their speed and performance is increased, encourage them to lift their knees higher and higher, until they can put their feet on the pegs.

However, if a student can smoothly get underway in a straight line while bringing his/her knees to the tank as they accelerate without straddle walking, that is to be encouraged.

If it is time to end to exercise 1.6, and a student needs more straddle walk practice, command that student to continue to straddle walk in exercise 1.6 until you direct otherwise. Command them not to lift their feet to the pegs. These students, if they decide to continue to session 2, will be offered a repeat of session 1, at half price.

Occasionally, riders ride with greater skill than the average beginner, ask only them “how is the pace of the course for you” if they say it is about right then have them continue, if they seem or say they are bored ask them to try using both brakes. If they can stop with control while using both brakes they may be encouraged to try session 3 next.

Session 1 is where the instructor will decide if a rider needs more practice before session 2, is an average student learning at the proper pace or rate, or needs more challenge.

To end the exercise, after the final pass across the range, have the students shut off the engines after they turn the motorcycles around, ensuring that their key is off. Have them dismount, put their gear away and meet at the table for the Session 1 wrap up.

Conducting Session 2:

Exercise 2.1 - Practice, Session 1 review:

Be sure each student is proficient at each skill reviewed. This is practice time to make these skills second nature. Congratulate the students on their progress.

1a. Be sure that each student can confidently lean the motorcycle under them. Practice this until the students agree the motorcycle “feels much smaller than the last time.

1b. The students must have confidence in shifting the motorcycle before proceeding to starting the engine. Warm the engines with patient throttle control practice so that they are idling smoothly with the choke “off”. Be sure each student can easily find neutral with the engine on before finishing this exercise.

Exercise 2.2: - Practice looking well ahead and holding on:

See card.

Exercise 2.3 – Building confidence with clutch control:

In your coaching, use the idea, “We know you can ride the motorcycle, we saw you do that last time. The purpose of this exercise is to practice your clutch control which is a

skill you will use all the time!”

Exercise 2.4 – Practice Braking:

(If there are two instructors, set up two sets of brake chutes. One start gate in corner #2 and one in corner #1.)

Have students walk the motorcycles to the start cones at corner #2. To end the exercise: Stop signaling student toward the braking area(chute) you are standing beside, instead signal the lead rider to kill their engine. After all students are “stacked” in line, have them dismount and walk their bikes in single file to the staging area.

The coaching position is about behind the last cones of the brake chute, and between the brake chute and the starting gate of the “return” brake chute.

Use the evaluation technique, "head, shoulders, hands, knees, feet." By the end of this exercise students should be stable, and be using both brakes to stop. However, if a student has trouble when using both brakes, coach the student to continue to practice using the front brake and use the rear brake lightly when they are comfortable.

Be careful not to lose visual range control while coaching the stopped rider. Position yourself so you are facing the rider while speaking, keeping your back to the short side of the perimeter. After you have signaled the stopped rider to return to the end of the line, be sure to scan the range.

Do not end this exercise until all students can control the speed (and throttle) and stop with confidence. It is an unnecessary risk to proceed to the next exercise if all students are not confident with these skills (this skill is required before acceptance to Session 3).

Note that the first cones of the brake chute are the “roll-off the throttle cones”, not the begin your braking cones.

Note: If a student is able to get underway smoothly, and with control, they may start with a foot on the peg. If not remind them to take a few straddle steps before lifting their feet and that they will need some speed before doing so.

As exercise 2.4 is ending, evaluate the students speed and confidence. The first three riders that you place in the staging area should be the three fastest riders. The slowest and least confident riders should be placed at the rear of staging.

Exercise 2.5 - Practice Straight-line stability

The rudimentary skill of straight-line stability is practiced to build confidence in the new rider. Beginner riders cannot know that the many discontinuities they see are inconsequential for riders with straight-line stability skill.

The board is a finished 1 x 6 by 5 to 6 feet long, and is placed at the center of the space between the start cones and the beginning of the brake chute.

Exercise 2.6 – Practice looking well ahead

Using tack and not being too obvious, place the fastest riders on the front staging tees and the slowest riders on the rear staging tees.

Emphasize visual directional control in this exercise. To do this, emphasize to the students to look well ahead, where they are going.

The students start from the staging area. Make the path to the outside of the corners if run-out room is sufficient. If there is not sufficient run-out room then cut the corners, but be sure the students ride to the outside of the perimeter boundaries (outside the weave cones). The path of travel should look more like a large oval than a rectangle.

If a student is unable to start when signaled or stalls the engine, have the student straddle walk the motorcycle out of the path of travel. When that student is clear of the path, signal the next student to go.

After coaching the stalled student, if you are going to let the student rejoin the exercise, assist the student as follows. Rejoin them. Direct the student to begin riding to the outside of the perimeter and the corners, and merge when there is enough space to merge. State that it is OK for them to take a complete lap outside the perimeter. Direct traffic as appropriate. (Note: Do not have the student merge into the exercise from where you had stopped the student.)

After all students have started for the first time, stay near the staging area. Position yourself in front of the staging area with your body positioned so you can see the entire range. The purpose of this exercise is to get the students to use smooth throttle control and accelerate to a speed that is stable, and to have them practice looking well ahead. Do not over coach the first two laps. Simply start the exercise, refrain from over-coaching, and stage the students after two to three laps. After staging, direct the students to place their hands to their sides and take a deep breath. Briefly remind them of the objective and restart the exercise.

After you have re-started the ride, move to the outside of corner #4 facing the students as they approach you from the short side. Coach the students to look by pointing down the long side and command, “Look well ahead!”.

After the students can confidently ride to the left, stage them and explain that they will now practice riding to the right. For the next series of laps, move beyond the end of the range slightly outside their path of travel so you may slow students who have obtained sufficient speed. Coach the students to obtain sufficient speed to stabilize the motorcycles. To coach this, you may have to move more to the outside of the student’s path of travel to coach a particular student. Since several students may be looking at you, be sure to point to the student you are signaling to prevent confusing the others. Point at the student just as they round the corner and start to approach you. Then give them the speed up signal in an animated fashion.

In the directions, "uses both brakes to slow" assumes a student speed of above 12 mph. Important: If the student is riding at 8 mph or less, do not give the slow down signal.

Once the students are accelerating to stable speeds, slow students down as they approach the corners of the long sides. Coach them early enough such that they may release the brakes and make an easy turn in a sweeping arc at the end of the long side of the perimeter. If a particular student is not using the front brake, instructors should simulate braking with the right hand and command "both brakes". Watch for students using the clutch and coach them appropriately not to use the clutch.

Stage the students a second time and briefly coach by correction. Again, remind them of the objectives (look ahead, speed for stability, use brakes lightly at end of long sides) and restart the exercise. Stage and reverse path of travel. To reverse, give explicit directions to the lead rider, the other students should follow the lead rider. To return them to riding to the left, stand at the top of the perimeter between corner #1 and #2 have the lead rider slow down and direct them down the middle of the range and take a left, then stage.

Staging:

While continuing to maintain visual range control, the instructor coaching near corner #3 moves from his/her position to a position outside the perimeter, near corner #4. From this position signal those students who have sufficient space in front of them (at least thirty feet) to proceed to the staging area. Students who have less than thirty feet in front of them are signaled to continue around the perimeter (take an additional lap). Typically, signaling every other rider to take a lap works well, but not always. It is OK to signal more riders to take a lap to prevent congestion in the staging area. While continuing to maintain visual range control, the instructor coaching near corner #1 moves from his/her position to coach at the staging area.

Reversing:

Stage the students before reversing. Explain to the lead rider how to execute the reversal. Command the other students to follow the lead rider.

Exercise 2.7 – Introduction to controlling lean (5 cone)

Briefly coach the students on the press and lean while their feet are on the ground. Stand in front and command press right and lean right, press left and lean left. Tell them to lean the bike underneath them. Watch for students steering and assist as appropriate.

To start the riding portion, make sure the demonstrator is in the correct coaching position outside of corner #3, then direct the students out of the staging area. When all students are out of the staging area, move to your coaching position outside corner #1.

After all students have started for the first time, stay near the staging area. Position yourself in front of the staging area with your body positioned so you can see the entire range. The purpose of this exercise is to introduce counter-steering. Of course it is

assumed that all the students are riding at a speed that is stable and are able to look well ahead. Do not over coach the first two laps. Simply start the exercise, refrain from over-coaching, and stage the students after two to three laps. After staging, direct the students to place their hands to their sides and take a deep breath. Briefly remind them of the objective and restart the exercise.

Reversing:

Stage the students before reversing. Explain to the lead rider how to execute the reversal. Command the other students to follow the lead rider.

Conducting Session 3: Combination Skills:

Exercise 3.1 – Practice efficient braking:

The set up is similar to exercise 2.4.

Note that for efficient braking the clutch can be squeezed anytime, from the application of the brake to as the left foot goes to the ground.

Exercise 3.2 – Practice adjusting speed:

Using tack and not being too obvious, place the fastest riders on the front staging tees and the slowest riders on the rear staging tees.

Emphasize speed adjustment with control in this exercise. To do this, emphasize as they enter the long side, to quickly speed up, then stabilize at 15 mph. As the exercise progresses, the students should be able to delay their braking until near the end of the long side, then quickly reduce speed to 8 mph, release brakes and round of the end.

The students start from the staging area. Make the path to the outside of the corners if run-out room is sufficient. If there is not sufficient run-out room then cut the corners, but be sure the students ride to the outside of the perimeter boundaries (outside the weave cones).

If a student is unable to start when signaled or stalls the engine, have the student straddle walk the motorcycle out of the path of travel. Ask that student to stand-by and you will help him in a moment. When that student is clear of the path, signal the next student to go.

After coaching the stalled student, if you are going to let the student rejoin the exercise, assist the student as follows Rejoin them. Direct the student to begin riding to the outside of the perimeter and the corners, and merge when there is enough space to merge. State that it is OK for them to take a complete lap outside the perimeter. Direct traffic as appropriate. (Note: Do not have the student merge into the exercise from where you had stopped the student.)

After all students have started for the first time, stay near the staging area. Position yourself in front of the staging area with your body positioned so you can see the entire

range. The purpose of this exercise is to get the students to use smooth throttle control and accelerate to a speed that is stable, and to have them practice using their brakes to quickly reduce speed. Do not over coach the first two laps. Simply start the exercise, refrain from over-coaching, and stage the students after two to three laps. After staging, direct the students to place their hands to their sides and take a deep breath. Briefly remind them of the objective and restart the exercise as appropriate.

For the next series of laps, move beyond the end of the range slightly outside their path of travel so you may slow students who have obtained sufficient speed. Coach the students to obtain sufficient speed. To coach this, you may have to move more to the outside of the student's path of travel to coach a particular student. Since several students may be looking at you, be sure to point to the student you are signaling to prevent confusing the others. Point at the student just as they round the corner and start to approach you. Then give them the speed up signal in an animated fashion.

In the directions, "uses both brakes to slow" assumes a student speed of above 12 mph. Important: If the student is riding at 8 mph or less, do not give the slow down signal.

Once the students are accelerating to stable speeds, slow students down as they approach the corners of the long sides. Coach them early enough such that they may release the brakes and make an easy turn in a sweeping arc at the end of the long side of the perimeter. If a particular student is not using the front brake, instructors should simulate braking with the right hand and command " both brakes".

There is no reversal of exercise 3.2; students only practice adjusting speed to the left. They will practice controlling lean to the right in exercise 3.3.

Exercise 3.3 – Practice controlling lean:

This exercise is conducted with students riding to the right. Instruct the students to ride around corner #1, the turn up the middle, ride to the end and turn right. They should begin on the far side of the range.

After all students have started for the first time, stay near the staging area. Position yourself in front of the staging area with your body positioned so you can see the entire range. The purpose of this exercise is to practice counter-steering and leaning at constant or "steady" speed. Of course it is assumed that all the students are riding at a speed that is stable and are able to look well ahead. Do not over coach the first two laps as long as no safety issues are present. Simply start the exercise, refrain from over-coaching, and stage the students after two to three laps if necessary. After staging, direct the students to place their hands to their sides and take a deep breath. Briefly remind them of the objective and restart the exercise.

Exercise 3.4 - Basic Cornering Technique:

Basic Cornering Technique is a combination of some basic component skills. By this

exercise the students should have the skills from earlier exercises such as getting underway and stopping smoothly, riding at a speed that is stable, good braking to adjust speed, adequate throttle control, visual directional control, and leaning (counter-steering) control.

Divide the class into two groups of six students or less. Put one group on the oval with a single instructor while the other group and instructor watch from the staging area while mounted with their engines off. Complete the oval to the left then stage the first group and start second group. The instructor remaining in the staging area coaches the staging students. Typically, the instructors trade positions when the groups switch.

Direct the riders out of the staging area for a partial perimeter lap, then wedge them onto the ovals. Coach at least five laps to the outside of the oval. Additional laps can be conducted if students need more time to grasp the concept. Then wedge riders for a perimeter lap and stage.

While using the brakes and looking through the turn are the first two elements of basic cornering, the first element to be coached is to gently accelerate throughout the turn. To coach this stand outside the oval and back toward the apex, coach (do not yell) “roll a little, now a little more, now some more, and now some more...” This helps students understand that they should roll gently continue rolling on the throttle throughout the turn, it also helps to get their speed up as they exit the turn so the braking or setting entry speed, portion can be accomplished.

For setting entry speed, students must learn how to time the proper braking. Once they have the timing, then they add speed to develop confidence in braking to adjust speed for cornering. Proper timing of the braking in this exercise means rolling off the throttle and touching both brakes at the appropriate time before the turn, then releasing both brakes prior to the entry cone. Once they have developed their speed, they, of course, will have to apply the brakes with more intensity.

Lastly, coach the look portion, and coach students appropriately (which includes no coaching at times). Use your right hand to simulate braking for both the left and the right turns. Use your right hand to point for the left turns, and use your left hand to point for the right turns.

If a student continues to start the braking “late”, before the student is approaching, move your coaching position forward even beyond the entry cones and into the approach area. As the student approaches, simulate and command “brake!”, then return to your original position.

Once the second group is finished practicing to the left, direct the first group out of staging, around corner #1 and up the center to reverse. Repeat the practice riding to the right the same way as riding to the left. Be prepared to command the students to take an additional perimeter lap if time and space are needed.

Note: In terms of meeting the objectives, there is no difference between riding to the right and riding to the left. In other words, meet the objective in both directions. If students feel a difference between the left and the right, then coach them to loosen the grip on the handle bars by “snugging” in their knees, and let the bike lean more under them.

Exercise 3.5 – Smooth Shifting While Moving:

For 3.5a See Card.

For 3.5b

It is important that the students do not feel “rushed” at the beginning of this exercise. Tell them that they can stay in first gear and practice squeezing and easing the clutch at the cue cones for as many laps as they need to get comfortable.

For the first portion, the cue cones are placed with the two upshift cones at mid-range near the staging area. The single downshift cone is placed symmetrically on the other side.

Be sure the students understand that they should accelerate prior to up-shifting to above 10 mph. Then maintain speed after up-shifting of about 12 mph, without exceeding 15 MPH. After some time, they should be able to shift without looking down.

After all students have started for the first time, stay near the staging area. Position yourself in front of the staging area with your body positioned so you can see the entire range. The main purpose of this exercise is for students to learn smooth clutch release. Do not over coach the first two laps. Position yourself inside the range near the upshift cones, and coach the lift and hold. Simply start the exercise, refrain from over-coaching, and stage the students after two to three laps. After staging, direct the students to place their hands to their sides and take a deep breath. Briefly remind them of the objective and restart the exercise.

After several laps of coaching at the upshift cones, subsequent practice laps, stand inside the perimeter at the downshift cue cone. Time your coaching by watching the students’ left hands. Immediately after they squeeze their clutch for the downshift, simulate the easing out of the clutch by extending your left arm while gradually opening your left hand until the fingers are extended, and command "Eeeeeeease!".

Note: The amount of power being delivered to the rear wheel is related to, but not linearly proportionate to how far the lever is released. Emphasize the “ease” at the end of the clutch release. Of course each motorcycle’s amount of clutch lever release and percent of power delivery are slightly different and can be adjusted. Typically, on the downshift, one can release the clutch quickly to 90% out, then hold it there with the fingertips, with the final 10% of release happening after the engine speed and road speed have “matched”.

The principle of clutch release is the same. For the sake of discussion, let us define 0% clutch release as when the lever is touching the grip and 100% clutch release when the lever is to the outmost position with no fingers touching it. One can imagine that from

0% to 50% lever release, almost no power is delivered and this part of the release can be done quickly. From 50% to about 90% some power is being delivered and clutch release must be done with more care. It is to be emphasized that from 90% to fully release the ease is most important for controlled power delivery.

If a student is having difficulty with smooth clutch release, coach by correction. Tell the student to release the lever past the 50% point and to hold or hesitate at that point, then ease the lever out the remainder of the lever travel. Also tell the student they do not have to shift on every lap. If they miss the shift, they should stay in first gear for a lap or two.

Normally engine braking slows the bike sufficiently for the corner. If braking is necessary, coach the student to not accelerate as much next time. The clutch should be fully released before the corner is rounded off. A common student error is to downshift too late and not have enough time to ease the clutch out before making the turn at the end of the range. The student is to lift or press on the shift lever as the leading edge of the front tire arrives at the cue cone. If students do not understand this, stop the exercise and explain.

Do not over-coach the first couple of laps. Maintain safety. Stage the students after two or so laps. Direct them to place their arms to their sides and take a deep breath. Then briefly remind them of the objectives and restart the exercise.

After the group has demonstrated understanding of the exercise and they are consistently shifting smoothly, Stage them, and adjust the cones so they can shift twice per lap, upshifting on the turns and downshifting on the long sides. Remind them not to accelerate after upshifting and not to exceed 15 mph.

Notice that adjusting the throttle during the downshift is not used during this exercise. The throttle is to remain closed until the clutch is fully released. If a student asks about it, acknowledge that it is normal to adjust the throttle while shifting, but for instructional reasons it is not part of this exercise. Emphasize that smooth clutch release (without throttle adjustment) is our main objective. By the end of the exercise, students may be using the throttle during the shift. As long as they have good clutch control, this is acceptable.

Exercise 3.6 - Practice skills in combination

Similar to exercise 2.5, with the addition of upshifting to 2nd gear before the board.

The sequence for stopping is written on page 6 of the student booklet. The students should roll off the throttle at the cue cones, then apply the brakes. After the brakes are applied, they should squeeze the clutch and downshift. The downshift can be timed anywhere between the application of the brakes and before putting the feet down.

Optional Session 3 Exercise 3.7 – Basic skills practice:

No demo. Start weaving in 1st or 2nd gear (student choice) using the 5 cone weave (30

feet). May go to 7 cone weave (20 foot).

Appendix A: Range Layout (12.26.08)

The basic building block unit is a 100 foot lane per student with 20 feet of spacing and run out room. All of session 1 exercises can be conducted with this basic block.

Example: Assuming a rectangular area, with one dimension of 140 (20+100+20) feet, the other dimension will be:

Number of students	Width of entire range (feet)
1	40
2	60
3	80
4	100
5	120
6	140
7	160
8	180
9	200
10	220
11	240
12	260

The brake chutes' start, entrance, and stop cones are spaced five feet wide. The start and entrance cones are 100 feet apart. The entrance and stop cones are 30 feet apart. The braking exercises require two chutes, separated by 20 feet. The total block of space needed for the brake chute exercises is 70 feet by 170 feet.

For the perimeter exercises, which include practice looking well ahead, practice adjusting speed, controlling lean (weaving), and shifting while moving, the minimum size is the size of area used for the basic cornering exercise:

The entrance and exit cones are placed on the corners of a 50 foot by 100 foot box. This box is centered inside the total minimum area of 130 feet by 180 feet.