Bicycling Unit

PE Curriculum

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Central Washington University
P.E.T.E. Program 2005

Bicycling unit

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Resource Section

Resourcelist.doc

1. Resource list and websites
2. Equipment list

(School)
Physical Education
Bicycling

Meeting Place:
Instructor(s):
Office hours
Office Room #

Required Materials:
School PE shirt and shorts. Other items to bring that would be desirable for this course:

- Bicycle Helmet
- Sweat pants that are tight around the lower leg for cool days (baggy sweats get caught in chains).
- Water bottle(s)
- Bike gloves

Purpose of this Course:

The purpose of this course is to develop the basic skills and knowledge necessary to safely ride bicycles in a variety of situations.

Course Objectives:

1. To Learn the basic parts of a bicycle
2. Learn how to wear and fit oneself with the appropriate safety equipment.
3. Learn riding etiquette in town, learn to use appropriate arm signals
4. Improve riding skills including the ability to bunny hop and negotiate obstacles, brake and corner safely, descend varying grades of up to a steep gradient slope, shift gears and ascend effectively.
5. Learn basic maintenance skills such as fixing a puncture, oiling a chain, adjusting a cable, etc.

Course Requirements:

1. Attending class and participation in the activities. Be at class on time and ready to participate in the activities for that day.
2. Complete any outside assignments on time. Assignments must turned in prior to the beginning of the class period in which it is due.
3. Ride courteously and treat others with respect.

Learning Activities, Assessments and Expectations

Assignments: There may be outside assignments that could be in the form of Web searches, readings, and short essays.

Journal: Students are to keep a daily journal of activities performed in class and any bicycling activities out of class.

Written Quizzes: There will be four written quizzes worth 25 points each. They will be administered at the beginning of class.

Grading: Grading for this course is described below:

Quizzes	100 points
Participation/Attendance	150 points
Journal	50 points
Outside assignments	50 points
Total	350 points

Attendance: Students are expected to show up on time. Five points per day are awarded to those who are on time and ready to go. Three points will be deducted for unexcused tardiness each day that it occurs.

Make-ups Students are allowed to make up missed days only in case of excused absence, school related trip or event, or *extreme* emergency.

Grading Scale:

A	329 points or more
A-	315-328 points
B+	308-314 points
B	294-307 points
B-	280-293 points
C+	273-279 points
C	259-272 points
C-	245-258 points
D+	238-244 points
D	224-237 points
D-	210-223 points
F	209 or less points

Dishonesty: Students who commit academic dishonesty will not receive credit for the assignment and possibly for the class. Other actions may be taken by the school principal and administration.

Bicycling Unit Block Plan

Day 1 Bicycle anatomy Helmet fitting Course objectives Equipment protocols Lesson 1.doc	**Day 2** Fitting of bike Changing a flat tire Lesson 2.doc	**Day 3** Traffic laws Riding strategy around town Safety issues Lesson 3.doc	**Day 4** Mounting, Dismounting, Falling safely Lesson 4.doc	**Day 5** Track stands and balancing Lesson 5.doc **Assignment #1 Due**
Day 6 Braking Lesson 6.doc	**Day 7** Braking Lesson 7.doc	**Day 8** **RIDE** (Braking, Stop, and Go exercise) Lesson 8.doc Quiz#1	**Day 9** Jumping, bunny hops. Lesson 9.doc	**Day 10** Jumping, bunny hops Lesson 10.doc **Assignment #2 Due**
Day 11 **RIDE** (Jumping, bunny hops exercise) Lesson 11.doc	**Day 12** Riding over Obstacles Lesson 12.doc	**Day 13** Riding over Obstacles Lesson 13.doc	**Day 14** **Ride** (Obstacles exercise) Lesson 14.doc Quiz #2	**Day 15** Cornering Lesson 15.doc
Day 16 Cornering Lesson 16.doc	**Day 17** **RIDE** (Cornering situations exercise) Lesson 17.doc **Assignment #3 Due**	**Day 18** Shifting Lesson 18.doc	**Day 19** Shifting Lesson 19.doc	**Day 20** **RIDE** (Shifting situations exercise) Lesson 20.doc Quiz#3
Day 21 Descending light grade Lesson 21.doc	**Day 22** Descending moderate/light grade Lesson 22.doc **Assignment #4 Due**	**Day 23** Descending moderate grade Lesson 23.doc	**Day 24** Descending moderate/steep grade Lesson 24.doc	**Day 25** Descending steep grade Lesson 25.doc
Day 26 Mountain bike field day Lesson 26.doc	**Day 27** Bike Rodeo Skills tests Lesson 27.doc	**Day 28** Bike Rodeo Skills tests Lesson 28.doc **Assignment #5 Due**	**Day 29** Bicycle maintenance, and repairs Lesson 29.doc	**Day 30** Final Quiz (#4) Collect Journals Movie day Lesson 30.doc

Central Washington University
Physical Education Teacher Education Program
Course Introduction: Bicycle Anatomy and How to Fit a Helmet
Lesson #1

Objectives: Course introduction.

1. By the end of the class, students will cover course outline and know what will be covered during the following lessons. **(NASPE 2, EALR 1.3)**
2. Students will also be able to demonstrate knowledge concerning the following bicycling information
   - **a.** Know the names and functions of the different parts of a bicycle. **(NASPE 2, EALR 1.3)**
   - **b.** Demonstrate how to properly fit and adjust a bicycle helmet. **(NASPE 2, EALR 1.3)**
   - **c.** Learn protocols for retrieving and storing equipment. **(NASPE 5, EALR 3.3)**

Teacher Objectives:

Equipment:

- Handouts for each student
  - **a.** Syllabus
  - **b.** Course objectives, schedule
  - **c.** Helmet Fitting task sheet
  - **d.** Bicycle anatomy sheet
  - **e.** Bicycle terminology sheet
- Pencils
- Helmet for each student
- Bicycle for bike anatomy lesson

Set Induction: Welcome to Bicycling class. Bicycling is an activity that can be enjoyed throughout a person's lifespan. We are going to learn riding in traffic and on the streets, but we are going spend most of the class concentrating on and learning skills for mountain bikes and riding trails.			
MAF/ Instructional Techniques	**Extensions**	**Refinements**	**Application**
• You will need a copy of the syllabus for each student in class • Each student needs a helmet (school issued or personal). Encourage your students to bring their own helmets and pads (if desired). If they do bring their own equipment, make sure that they have clearly marked their name on what they have brought. • While not necessary for this lesson but for preparation for this unit, the bicycles should be checked for mechanical soundness. All brakes need to be checked and adjusted, rims straightened if needed, and shifting mechanisms are sound and adjusted correctly. Also check tire pressures, grips and saddle condition.	• During the next few weeks we will be covering skills needed to safely and fully enjoy bicycling on trails and safety skills for riding around town. • We will cover how to size a frame and fit you to a bike, how to mount and dismount and the art of falling off a bike. We will practice balancing skills such as track standing and slow riding. We get to practice braking, cornering, and riding over obstacles. We will learn to bunny hop and J-hop. • We will have opportunities to learn the different gears and how to shift efficiently. We will then be able to use those skills on a field day on nearby trails. • Lastly, we will have the opportunity to learn some bike mechanics and maintenance skills. Today we are going to learn some		

• Replace any worn or defective components. Usually there are students in the school who are proficient at bike mechanics, try to enlist their services to save you time. • Bicycles that students bring to class need to pass a safety check. Refer to the above criteria that the school's bicycles must meet. • A task sheet for each student on how to fit a bike helmet. • A copy of the bicycle anatomy sheet for each student. • Have a bike out on display for pointing out the various parts.	of the different parts of the bike and their function. We then will learn to fit a bike helmet. • For pictures on how to fit a bicycle helmet refer to skill chart #1		
Informing Task: Every part of a bicycle has a purpose important to the function of the bike**.** On this bike we are going to point out the different parts of the bike and the function of each part.			
• Distribute a bicycle anatomy sheet to each student in the class. (attached) • Use the bike for pointing out its various parts. • Explain what each part is for and how it works.	• Everybody should have a sheet in front of you showing a bike with all the different parts unlabeled. Fill in the names of the parts as we discuss them. • The most basic part of the bike is what we call the		

• It is easier to show how some bike mechanisms work if you have the bike mounted on a bike stand that allows the wheels to spin as you demonstrate. • Start at the front of the bike and work back. It is easier to be thorough in covering all areas of the bike if you don't jump around the bike's different areas. • Have the students fill the names of the parts of the bike on their handouts for bike anatomy.	**frame**. The frame is to what all the components are mounted. • Starting at the front of the bike we have **handlebars**, **stem** and **front fork**. These are the parts of the steering mechanism of the bike. • Mounted on the handlebars are the controls for braking, called **brake levers** and shifting gears, called **shifters**. • The wheels consist of a hub, to which are connected **spokes** and a **rim**. Most braking systems on bikes currently use pressure applied on the outer surface of the rim to slow and stop the bike. Some braking systems now use a disc brake system. The disc is mounted to the hub of the wheel and pressure is applied to the surfaces of the disc to slow the bike. • The seat is referred to as the **saddle**. • The **pedals** are what you push down on to give the bike forward movement.		

	The pedals are connected to what are called **crankarms**. • Connected to crankarms are the **chainrings**. Notice that there are various sized chainrings. Each chainring corresponds with how many revolutions of the crankarms it takes to make the rear wheel turn. The large chainring will make the rear wheel turn many times per revolution while the small chainring will make the rear wheel spin few. • How does this apply in terms of speed and effort on the bike? Riding when the chain is on the large chainring means you can go faster, but it takes more effort. Riding with the chain on the small chainring is easy, but you don't go very fast. • The mechanism that moves the chain from one chainring to another is called the **front derailleur**. • Connected to the rear hub is the **cassette**. The		

	cassette is comprised of different sized **cogs**. The size of the cog corresponds to how many times the wheel rotates for every revolution of the chain. The larger cog spins the wheel less than the small cog. This is opposite of the chainrings. Where would you want the put your chain if you want to ride fast? If you want to climb a hill? How would you combine chainring and cog for riding fast? For riding uphill? The part that controls on which cog the chain is placed is called the rear derailleur.		
Informing task: We are now going to learn how to fit a bike helmet. Get your helmet out and get a handout on how it is done.			
• Students need to have their helmets nearby. • Distribute a Helmet fitting task sheet to each student (attached) • After handing out the task sheet and giving the instructions, teacher can go around helping students to complete the tasks. • Students who have	• We are now going to learn how to fit a bike helmet. I am passing out task sheets that have the instructions on how to properly adjust the pads and straps to your head, giving your helmet a snug fit. • When you think that you have properly fitted your helmet, come see me to get checked off. • If your helmet is school	• Keep the Helmet level on your head; it shouldn't tilt toward the rear of your head. • Remember three things **1.** Adjust the Pads **2.** Adjust the Straps **3.** Shake it up (check for looseness)	

properly fitted their helmet can help the other students get theirs fitted. • Check the helmets for snugness.	issued, make sure you place your name on a piece of tape and stick it on the outer shell. This will identify the helmet as being issued to you for this class and prevent someone else from taking it from the storage area and using it.		
Informing task: Okay, everybody follow me to the storage area. We are going to discuss protocols in how the bikes and equipment is stored			
• Show how all the equipment is stored in the storage area. • Explain that they will be issued a bike and that it is their responsibility to make sure that it is returned to its appropriate place.	• Everyone take notice as to how the bikes are put away. At the end of each session the bikes are to be returned to their appropriate, numbered spot in just this manner. You are responsible for your issued equipment. • Helmets are hung on pegs in this area. This area is reserved for helmets in use specifically for this class. • Those of you who bring your own helmets can store them here as well as long as they are well marked with your name. • This class starts at X:XX. You will need to get your bikes out five minutes prior		

	to that. Please be early. We can't have 30 people getting their equipment out all at the same time.		

Closure: Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment.

Today in class we learned some bike anatomy, helmet fitting, and equipment protocols. Let's see how much we remember.

Everybody gather around and sit down. Today in class we learned some bike anatomy, helmet fitting, and equipment protocols. Let's see how much we remember.

- Who is responsible for getting your bike out and making sure it is put away in its appropriate place. (you the student)
- What part of the bike changes which chainring the chain is positioned on? (The front derailleur)
- What three main parts comprise the steering mechanism of the bike? (The handlebar, the stem, and the fork)
- According to the information printed on the bottom of your task sheet on fitting your helmet, what percentage does wearing your helmet reduce your chance of a head injury and of brain damage in a accident? (85% and 90%)
- Starting from the center of the wheel, what are the three main parts? (the hub, the spokes, and the rim)
- When you turn the pedals what part of the bicycle turns and moves the chain? (the crankarms and chainrings)
- How many minutes early should you arrive before class to get your equipment out? (Five minutes)

I am really looking forward to this class and I think that you will learn a great deal and develop some really important skills that you will be able to use for your entire life. Don't be afraid to practice the things we learn out of class. If you have bikes at home, use them and practice and be safe.

How to Fit a Helmet Checklist

Follow the directions, check off each item as you complete it

1. Adjust the pads or rings	Adjust foam fitting to customize fit	Insert or remove top pads 1. Thin pads to lower helmet height 2. Thick pads to raise helmet height	
		Insert or remove the side pads 1. Use thin pads for thinner head 2. Use thinner pads for rounder head	
	One size fits all	Adjust the fit by tightening the rear ring if applicable	
2. Adjust the Straps		1. Put helmet on, level on your head	
		2. Adjust the rear straps	
		3. Adjust the front straps accordingly, locating the "Y" fitting where the straps come together under the ears	
		4. Line strap across the top, getting them even on both sides	
		5. Adjust chin strap to a comfortable snug.	
		6. If necessary, adjust the rear stabilizer	
3. Shake head with helmet on		Check for looseness.	
		Check for movement of helmet.	

Facts:

- Worldwide helmet use, ages 4-15 would prevent an astonishing 155 annual deaths.
- Studies show helmets reduce the risk of head injury 85%, and brain damage 90%.
- Nationwide, only an approximated 15% of children wear bicycle helmets.

http://www.ci.phoenix.az.us/FIRE/bkhelmet.html

Basic Anatomy of a Bicycle

1.) Chain - Circular link set transferring power from chains to cogs

2.) Handlebar - Horizontal bar attached to stem with handles, attached are brake levers and shifters.

3.) Pedal - Platform for the foot to press on, attached to crank.

4.) Saddle - Seat, the part you sit on.

5.) Tire - Where rubber meets road.

6.) Spokes - Thick wires joining the hub to the rim, with tension adjusted via a nipple on the rim side.

7.) Derailleur - Mechanism that moves chain from one cog to another.

8.) Brakes - Controls speed of bike from handlebars, located on both wheels.

1._____
2._____
3._____
4._____

5._____
6._____
7._____
8._____

Central Washington University
Physical Education Teacher Education Program
Proper Fit of the Bicycle Lesson Plan, Fixing a Flat Tire
Lesson #2

Student Objectives:

1. The students by the end of the class, will be able to verbally explain how fit a bicycle. **(NASPE 2, EALR 1.3)**
2. The students by the end of the class will be able to demonstrate proper fit of the bicycle and do adjustments. **(NASPE 2, EALR 1.3)**
3. The students by the end of the class, will be able show how to fix a flat tire. **(NASPE 2, EALR 1.3)**
   - **a.** Removing one side of the tire off the rim
   - **b.** Removing the tube
   - **c.** Removing the puncturing item from the tire
   - **d.** Replacing the tube
   - **e.** Getting the tire back on the rim
   - **f.** Inflating to proper pressure

Teacher Objectives:

Equipment:

- A helmet for each student (they provide this or the school)
- A bicycle for each student if possible
- A positive attitude.
- Indoor area on cold or rainy day or anywhere outside in the sun.
- Extra bike wheels with tires mounted for flat fixing practice.
- Patch kits, and rubber cement
- Tire irons
- Necessary wrenches for loosening and tightening of seat post clamps and saddles
- Tennis balls for instant activity
- Bicycle proper fit task sheet handout

Instant Activity: Instant Activity: "how quick are you"
Equipment One tennis balls for each pair of students.
Set up: Students are put into pairs and find a space where they can work safely.
Playing the game: one student holds out the tennis ball to the side of the body. The other student stands five to ten feet away. The student holding the tennis ball drops it to let the ball bounce. The other player quickly attempts to catch the ball before it hits the ground a second time. If the students are successful then they may move back a step. When they miss, they move in a step.

Set Induction:
How many of you went to the bike shop with your parents to pick out a bike? How many of you were able to test ride your bike? Did any of you get fitted for your bike while you were there? Today we will be talking about proper fitting of your bike. We are going to start off buy talking about frame size, saddle position, and stem length. How many of you have had a flat tire? Who fixed it? Where were you when it happened? Did any of you have to walk very far to get home or find help? Today we are also going to learn and practice fixing flat tires.

MAF/ Instructional technique	Extensions	Refinements	Applications
• A helmet for every student, either personal or school issue.	• For pictures of how to change a tire refer to skill chart #12		

Informing Task: Okay let's start by everyone going to your bike and stand beside it. Now let's pick up your bike and point the bicycles front tire towards me.

Informing Task: Now what we are going to be talking about is vertical frame size or stand over height of the bike.

• Hand out proper fit sheets • Have the students retrieve a bicycle from the storage area. Each student should have a bicycle or have them paired up according to height. This is important; avoid pairing up taller kids with shorter kids.	• Have students stand straddling the bike but not on the saddle. • Feet should be flat on the ground straddling the top tube. • There should be one inch of clearance between the tope tube and the child if the child has a road bike style, and three inches if they have a mountain bike style.	• Stand over bike • Feet flat on the ground • Look and see how much space there is between you and the top tube	

• Show examples of what you want them to do. • Stand over your bike and explain the tasks as you demonstrate the space required for proper sizing of the bike to the rider.	• Do you have 1 to 3 inches of space between you and the top tube? (crotch) • Have students help others in pairs if this makes it easier. • If the child has a slanted top tube or step through frame then measure from bottom bracket tube center (where the cranks are) to the top of the seat tube (the place where the seat tube and saddle slide into the frame) The proper size should be 10 to 12 inches shorter than the inseam of the student to the floor with out shoes.	• Pull the bike up on the handlebars • Check clearance between the ground and the tire	
	• Also have the students lift the front tire off the ground till it touches them and this space on the ground will be about the same 1 to 3 inches.		

Informing Task: Now let's talk about the saddle or seat. The seat should first be parallel to the ground. Once you are on the saddle, place your heel on the bottom pedal (R or L) and push the pedal to the 12 and 6 o'clock position. If the leg is in a straight line without bending this is correct. If you are reaching by shifting to one side, the seat must be lowered. If the leg is bent then the saddle must be raised. Ensure that the heel is on the pedal not the toes for this measurement! Proper fit of the saddle will reduce stress on knee and increase power stroke while pedaling.			
• Demonstrate proper adjustment on one student or use your own bicycle. • Have the students group up for this exercise into twos or threes. One will sit on the bike, the others will hold bike and look to see proper fit • Do a visual and physical check of each student, before anyone does anything to a bike.	• Set saddle level with the ground • Sit on saddle, check knee bend • Lower if bent, raise if reaching • Loosen seat post clamp and slide seat post up or down to make adjustment. • Tighten seat-post clamp. • Help others fit there bikes once you have completed your own.		
• Some bikes have quick release levers for raising and lowering of the saddle and seat post. • Have some wrenches (usually metric allen wrenches) for those bikes that do not have quick releases.	• Once the adjustments have been done, do a circle ride to see how everyone fits the bike. No teeter- totters on the saddle. This will cause chafing. • Check to make sure that if the seat stem is raised that it is not raised passed the 3 inch warning line. This could result in an injury		.

	if it is.		
On children, the saddle check should happen once every month to two months, they grow fast.			
Informing Task: Now the final step in fitting your bike and that is horizontal bike fitting. This has to do with upper body potion when leaning over on the bike and touching the handle bars or the reach. This is very important because this has to do with control of the bike and most of your comfort.			
• Use another student or yourself for demonstration. • Swapping of stems works only if the stem is easily removable. Many stems have two bolts on front to tighten the handlebar down. Many only have one. Swapping the stem when there is only one bolt is best not performed as it requires the removal of grips, shifter, brake lever, and possibly cables. If there is a student who has unusually long arms, a swapping of the stem may be necessary, but look for a bike that has a long stem already in place. The vast majority of the time swapping of a stem to improve rider position is not going to be necessary. • Have the students group up for this exercise into 2 or	• Have student one on bike and leaning forward for measurements for his/ her road bike. • If the position is too long then the stem will need to be replaced, if the stem is too short the stem will need to be replaced.		

threes. One will sit on the bike, the others will hold bike and look to see proper fit			
	• Have the students place elbow at the front of saddle with forearm pointing towards the stem and handle bars. If the finger tips are more than two to four fingers width away from the center of the handle bars then the stem should be replaced for a shorter one. This measurement works for mountain bike styles. • Have students stand off their bike doing the elbow check for his/ her mountain bike. • If the stem is a little off the seat can be moved forward or backwards for micro adjustments on the rails under the saddle. There also should be measure lines that tell you how far not to go		

	on the rails.		
	• For drop bar/ road bike styles use the in saddle method. This requires the hands and arms to be at a relaxed bend when the hands are on the break drops/ hoods. If the length is too long this will cause stiffness in the arms and shoulders, plus put unwanted pressure to the saddle area of the body. • Ideally you will want a 45 degree bend at the waist, check your partners to see if they do.		
Informing Task: Now we are going to learn the important skills of being able to change a bike tire tube and learn to patch a tube.			
• With wrench remove the tire off the bike so it is workable. • **Tools for a flat:** Patch kit, tire levers, pump, and wrenches if wheel has nuts on the axel.	• The flat, or puncture, is probably the most frequently encountered bike problem. It really is a very simple repair if the rider has the equipment available.		

• Try to acquire bicycles that are equipped with quick release levers. These allow the removal of the wheel from the bicycle without wrenches. • While it is nice to know how to patch a tube, the last place that anyone wants to patch a tube is on a ride. Try to have each bicycle equipped with a small saddle bag that contains a extra tube and a set of tire irons, then the student who gets a puncture can change a tube without having to patch the tube. When the student gets back to the school, there he/she can then repair the tube in about five minutes and the tube will be ready for the next day's ride. On a ride it may be best for you to have a responsible student to bring up the rear. This student would carry a bike tire pump and a patch kit (just in case someone gets more than one puncture) • You may want to acquire spare wheels that the students can practice with without having to remove the wheels from the bicycles. Ideas for	• Remove the wheel from the bike. • Remove the valve cap and the locknut; unscrew the round nut on the tube. • Push the valve body in and work one side of the tire into a deeper center of the rim • Put tire lever under the bead on the side that has been freed, at some distance from the valve, and then use it to lift the bead over the rim edge and hook it on a spoke. • **Never** use a screwdriver in place of a tire iron • When enough of the tire sidewall is lifted over the rim, you can remove the rest of the tire by hand. • Remove the tube, saving the valve until last. Push the valve out through the valve hole in the rim, while holding back the tire. • Try to inflate the tube		

getting spare wheels are thrift shop stores, and bike shops may have wheels that are to be disposed of. Check around, you may be able to find these for free.	with your pump to try and see where the air is leaking from. Hold tube up close to face and feel the air escaping. • Make sure the area around the hole is dry and clean, then roughen it with the sandpaper or the scraper from the patch kit, and remove the resulting dust. Treat an area slightly larger than the patch you want to use. • Quickly and evenly spread a thin film of rubber cement on the treated area. Let dry about three minutes in hot, dry weather, or longer in colder weather. • Apply patch with sticky side down, and apply pressure. • Sprinkle talc powder on the patch to prevent sticking to the tire. • Look around the inside of the tire to remove		

	any objects that could have caused the puncture. • Put tire back on rim and inflate to manufacturers specifications.		

Closure/Assessment

Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also may also need to keep one bike and helmet available for the assessment.

Everyone gather around and sit down. I want you to show me what you have learned in today's class. I am going to ask you a few questions about the things that we have covered today.

- In what position is the saddle to be placed? Hint "parallel to what?" (the ground)
- What is the easiest way to check for horizontal fit on a mountain bike? Hint "Elbow to handlebar plus four fingers." (elbow at the front of saddle and reach fingers out front)
- Do you want your knee bent while holding the pedals at 12 and 6 o'clock positions? (no)
- What angle do you want your body at while riding? (45 degrees)
- What tool do you use to pull the tire bead off the rim (tire iron)
- Where is the tire iron hooked while holding off the bead? (to the spokes)
- When patching a tube, how long does the rubber cement have to dry before applying the patch? (three minutes)

Proper fit of a bicycle task sheet

#	Task	X
1.	Stand straddling the bike. Both feet should be flat on the ground	
	• If you are fitting for a road bike there should be one inch of space between the top tube and your crotch • If you are fitting for a mountain bike there should be around three inches of space between the top tube and your crotch	
2.	Lift the front of the bike off the ground until it touches you. The space between the tire and the ground should be the same.	
	• One inch of space for a road bike • Three inches of clearance for a mountain bike	
3.	Make sure that saddle is level with the ground	
4	Position crankarms so they are in the 6:00 and 12:00 positions	
5.	You will need at least two partners for this exercise. Sit on the saddle, place your feet on the pedals and have your partners support you from the side to keep you from toppling over, Place your heels on the pedals	
	• If your leg that is on the pedal at the 6:00 position is bent, then you need to raise the saddle • If you can't reach the pedal with your heel without rocking yourself on the saddle, then the saddle must be lowered	
6.	Loosen seatpost clamp by flipping quick release lever on seatpost binder bolt. • Raise or lower seatpost in small increments until you have it positioned correctly • Tighten the binder bolt and make sure that the saddle points straight ahead.	
7.	While seated on saddle, lean over and grab the grips on the handlebars • Your waist should be bent forward at about a 45 degree angle • If you feel that you are "reaching" then you will need a bike with a shorter stem. o Try to find a bike with the same frame size with a shorter stem • If you feel that you are crowded then you will need a bike with a longer stem o Try to find a bike with the same size frame but with a longer stem	

Central Washington University
Physical Education Teacher Education Program
Traffic Laws, Safety Issues
Lesson #3

Student Objectives:

1. By the end of class the students will be able to demonstrate the proper stop signal. **(NASPE 5, EALR 3.3)**
2. By the end of class the students will be able to demonstrate the proper left turn signal. **(NASPE 5, EALR 3.3)**
3. By the end of class the students will be able to demonstrate the proper right turn signal. **(NASPE 5, EALR 3.3)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- Every cone available
- 30 handouts for students (attached)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Ask the students if anybody rides bikes around town. Ask the students if they know that there are particular rules that bikers must abide by. Tell them that they can receive tickets if they don't abide by certain rules. Then inform them that you will teach them these rules.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles laid out ready to ride. • Cones spread out to designate boundary lines (see attach.) • Have them wear their helmets.	• Introduce the hand signals to students before they start riding, and then have the practice these while riding around in a circle. • Left hand straight out (Left Turn) **(see attach)** • Left hand straight out and up 90 degrees (Right Turn) **(see attach)** • Left hand out and down 90 degrees (Stop) **(see attach)**		

Informing Task: When I say **GO,** I would like for you to retrieve your bike and start riding the bike slowly in a counterclockwise direction on the track/gym/outdoors. **GO!**			
• Watch for safety • First have the students ride in a circle while practicing the certain hand signals. • For the reason that riding with one hand and keeping control of the bike can be tricky • Do this for awhile and then have them stop gather around while you go over the traffic laws that apply to bikers. **(see attach)** • Go over the basic riding strategies after you cover the rules of the road. • Finish up by having the students maneuver through the street course, using stop signals, left turns, and right turns.	• Start with the left turn signal • Next, right turn signal • Finally, stop signal		• Have the students perform the safety course. • (Start by having all the students going the same general way. Once you think they have a good handle on it tell them to explore and go whatever way they want inside the cones. Making sure they are using all the proper safety signals.)

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- Who can demonstrate the proper stop hand signal? (choose a student, left hand down)
- Who can demonstrate the proper right turn hand signal? (choose a student, left hand up)
- Who can demonstrate the proper left turn hand signal? (choose a student, left hand straight)

Bicycle Safety:

Hand Signals (left hand)

Left Turn Signal

Right Turn Signal

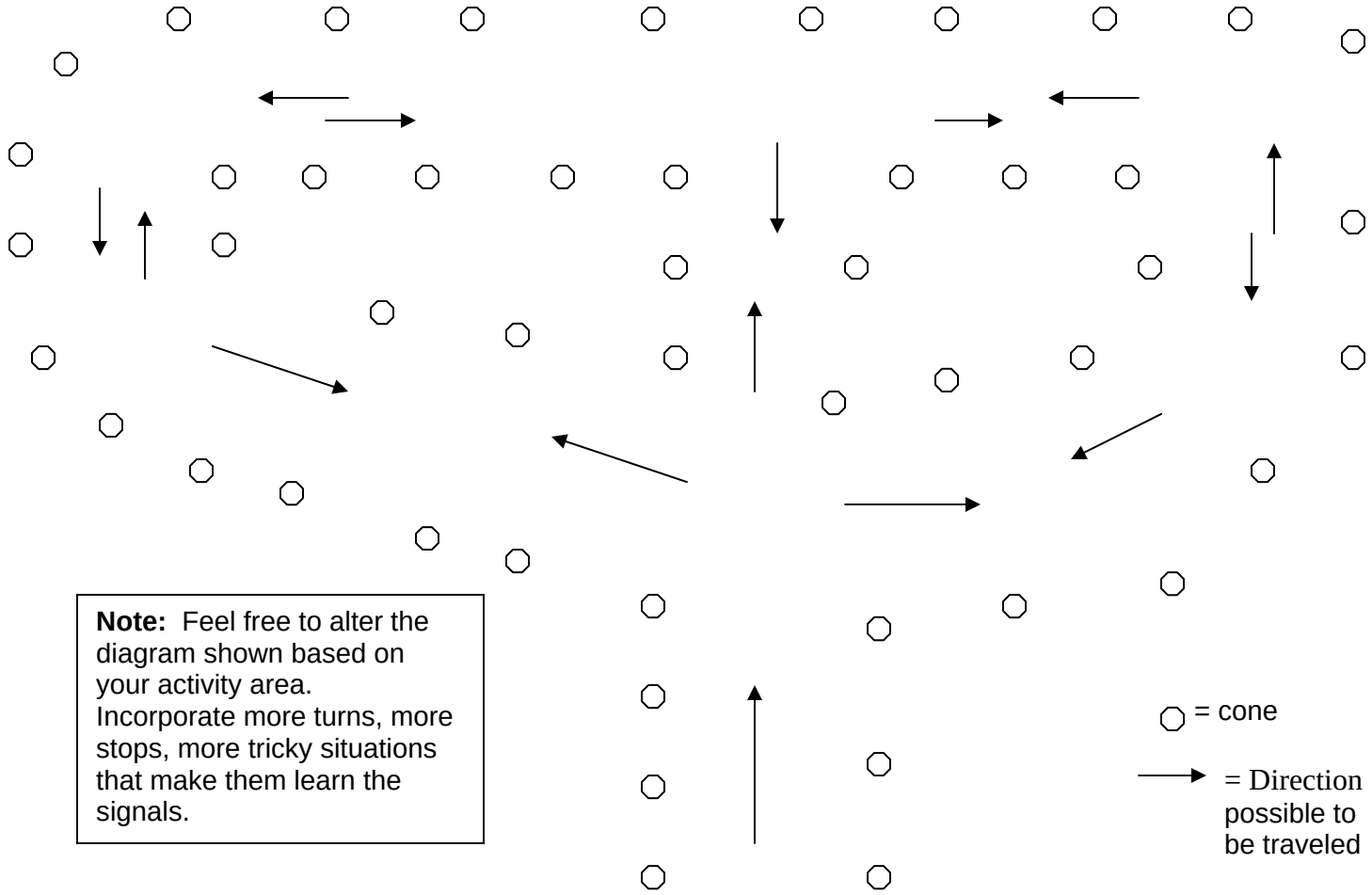
Stop Signal

Bicycle Strategies:

- Always drive on the right side of the road, going with traffic
- You are permitted to move to the center lane if moving the same speed as traffic
- It is appropriate to avoid hazards by moving to the left side of the right lane. (Even with cars behind you)
- Car laws apply to bike laws
- Riding in Dark requires a headlight by law
- It's good to always let people or cars go first
- Never pass on right side of a vehicle
- Always try and make eye contact with drivers of automobiles

Traffic Laws:

- **Riding at Night** - For night bicycle riding, a white front light (not a reflector) visible for 500 feet and a red rear reflector are required. A red rear light may be used in addition to the required reflector (RCW 46.61.780).
- **Riding on the Road** - When riding on a roadway, a cyclist has all the rights and responsibilities of a vehicle driver (RCW 46.61.755). Cyclists who violate traffic laws may be ticketed (RCW 46.61.750).
- For more bicycle traffic laws visit **http://www.wsdot.wa.gov/bike/Laws.htm**



Note: Feel free to alter the diagram shown based on your activity area. Incorporate more turns, more stops, more tricky situations that make them learn the signals.

Central Washington University
Physical Education Teacher Education Program
Mounting and Dismounting, Falling Safely
Lesson #4

Objectives:

1. By the end of class the students will be able to verbally explain how mount and dismount a bicycle. **(NASPE 2, EALR 1.3)**
2. By the end of class the students will be able to demonstrate proper mounting and dismounting of the bike. **(NASPE 1, EALR 1.2)**
3. By the end of class the students will be able to verbally explain how fall safely off their bicycle. **(NASPE 2, EALR 1.3)**
4. By the end of class the students will be able to demonstrate proper how to fall safely off their bicycle. **(NASPE 1, EALR 1.2)**

Teacher Objectives:

Equipment:

- Helmets for the whole class (they provide this or the school)
- A bicycle for each student if possible
- A positive attitude.
- Indoor area on cold or rainy day or anywhere outside in the sun.
- Gym mats
- Grassy area
- 20 cones

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction:
Raise your hand if you know the proper way to get on your bike and go? How many of you know how to stop and get off your bike? What foot you start off with when pedaling? These are a few things we will be practicing today.

MAF/ Instructional technique	Extensions	Refinements	Applications
• A helmet for every student, either personal or school issue. • Start by having everyone going to their bike and standing beside it.			
Informing Task: From which side of the bike you get on or off is a personal preference. For this exercise we will all get on and off the bike's left side. This means holding the bike on your right side.			
• Each student should have a bicycle or have them paired up according to size (as was done in lesson 2).	• Have students stand with the bike on their right hand side before straddling the bike. • Once the child has this figured out, do this as an exercise to see how many of them actually do this before they start off. • Have all of then move away from their bikes and then tell them to go and get to their bikes."		
• Show examples of what you want them to do. • Have students help others in pairs if this makes it easier	• Swing your right leg over the saddle and straddle your bike		

to get on the bikes. • If the child has a slanted top tube this will be a lot easier.			
• While it is not important from which side the student prefers to mount the bicycle, for this lesson, have all the students do it the same way.	• Now place your right foot onto the right pedal at the 2 to 3 o'clock position. This is called the power position. If your crank arm is not at the 2 to 3 o'clock position then you need to spin the crank backwards to the position where the pedal needs to be.		
Informing Task: Next we are going to do the push off. You will use your left leg for this.			
• Demonstrate proper way to push off using one student or yourself. • Instruct the students to help others once they have been successful.	• With the right foot in the power position, push up and off with your left foot.		
• This is a good time to check saddle height. If they can sit on the saddle while standing it is not tall enough.	• At the same time as you push off; seat yourself down on the saddle all in one motion.	• Try to do this in a fluid manner, the faster the better.	• Repeat 10 times
• Use another student or yourself for demonstration.	• Now come to a rolling stop.	• Squeeze the brakes softly to slow you down to a stop.	
• This is important in traffic riding at stop lights and stop signs. • Show them how to bring that right foot pedal back up to 2 o'clock using the backward free wheel or moving forward with the foot on the pedal.	• Once you have come to an almost complete stop slide off the saddle and stand on the ground with your left foot and position your right foot in the 2 to 3 o'clock position.	• Stop, put your left foot down on ground	

	• This time when you come to a stop, step down and stand on your right foot. Move your crankarm and position your left foot at the 9 to 10 o'clock position	• This time put your right foot down on the ground • Left foot in 10 o'clock position	
Set Induction: As a rule of thumb you will want to watch out for other vehicles, persons, horses with persons on them, or just about anything that can get in your way while riding. Sometimes things happen that don't allow a safe stop. A branch or root can pull the bike out from under you. Things sometimes just happen and the rider falls. We are going to learn and practice the art of falling off safely from the bike.			
MAF/ Instructional technique	**Extensions**	**Refinements**	**Applications**
• cones to mark an activity area			
Informing Task: We are first going to be working on the mats then we will gradually move towards using the bikes. So practice falling on the mats from a standing position.			
• Each student should have a bicycle or have them paired up according to size.	• Fall on a mat using the right shoulder roll.	• Get into a ball and roll on the mat	• See who can fall using the least amount of space
• Show examples of what you want them to do.	• Fall on a mat using the left shoulder roll.	• Bring your chin to your chest	
	• Roll without touching your head or helmet	• You can use hands to cushion blow (bent elbow push up position)	• Try not to touch your helmet on the ground.
Informing Task: Now we are going to jump into a tuck and roll using our shoulders			
• Demonstrate proper way to fall using the jump technique	• Jump to a roll on the mat using right shoulder Increase force of jump to gain distance of falling sideways and to get sense of momentum needed to get away from bike when falling.		

	• Jump to a roll using the left shoulder	• Start using the mat. • When you are comfortable using the mat, then try to do the same on the grass	• Who can fall the softest
	• Jump to a roll using your helmet without touching your helmet on the mat.	• Use the ball position to roll, bring your chin in or you will hit your knees.	
Informing Task: Now let's try incorporating the bikes outside with the mats. What I want you to do is to straddle your bike and fall to the left or right on to the mats with enough force to clear your bikes. You will not be moving during this exercise.			
• Use another student or yourself for demonstration.	• Jump to your right side off the bike using the mats.	• Increase force of jump to gain distance of falling sideways and to get sense of momentum needed to get away from bike when falling.	• Who can fall the softest?
	• Jump using your left side off the bike using the mats.	• When you are comfortable using the mat, then try to do the same on the grass	• Who can push their bike further away when they fall off the bike?
	• Try jumping at a slow roll. • Push off the pedals to do this not the ground, at the same time push the bike the other way you are falling	• Use the ball position to roll, bring your chin in or you will hit your knees.	• Who can clear their bike the best with the most finesse?

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the

assessment.

I want you to show me what you have learned in today's class. I will ask you a few questions about the things we have practiced in class today.

- What time is it when you have your right foot in the power position? **(2 o'clock to 3 o'clock)**
- The left foot? **(nine o'clock to ten o'clock)**
- What do you do when you leave your bike before you fall? **(Push off)**
- What do you do next? **(stay clear of your bike)**
- Where do you want to put your chin? **(at your chest)**
- What kind of stance do you want to be in when you fall? **(crouched)**
- What should you try not to do? **(Not Fall)**

Central Washington University
Physical Education Teacher Education Program
Balance and Track Stands
Lesson #5

Student Objectives:

1. By the end of class the student will be able to verbally explain how to balance and track stand on a bicycle. **(NASPE 2, EALR 1.3)**
2. By the end of class the student will be able to demonstrate on a bicycle the proper balance and track stand procedure with or without using the wall. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- A gymnasium with walls
- Every cone available
- Laptop/TV (depending on your method of projection)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many good pictures and videos on bike riding that show proper track stands and balancing techniques. http://www.oldskooltrack.com/files/home.frame.html This web site has some excellent pictures that allow you to pinpoint some of the cues of a quality trackstand. Some focus on more extreme stunts than others. Show the clips or pictures and then briefly discuss the day's topic of trackstands.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Collect out of class assignment #1 • Bicycles laid out ready to ride. • Have them wear their helmets.	• First things first, turn in out of class assignment #1. • Students received assignment due dates on day one of class and were reminded about today's assignment in the last lesson. • For pictures on balancing and track stands refer to skill charts #3 and #7		

Informing Task: When I say **GO** I would like for you to find your bike and helmet, find a place on the wall a good distance from anybody else, and mount your bike. With one hand on the wall and one hand on the wheel, and try and keep your balance. **GO**

• Either yourself demonstrate or have a student demonstrate the wall balance drill • Check for understanding after every other extension or so. (Ask the students if they understand or if they have any questions • Pinpoint the students who are doing exceptional. • Watch for safety • Really pay close attention to the students form • Either the teacher or an extremely capable student will quickly demonstrate each task. • All of the cues/refinements can be utilized throughout every extension	• Start with your dominant hand on the handlebar and your non-dominant hand on the wall. Try and keep your balance • Return to starting hand placement. This time stand up on the pedals while maintaining balance against the wall. • Switch hands non-dominant/handle, dominant hand/wall) while sitting on the seat • Stand up and repeat • I want you to, with the hand you are most comfortable, maintain balance and when you are ready remove your hand from the wall trying to maintain balance • I want you to remove your hand from the	• **Look ahead** of you and focus on an eye level object • Keep your **torso straight** • Focus on **Center of gravity**. Try not to be really shaky and wobbly • Slightly **lean forward** • Slightly turn your handlebars to a **45degree angle**. This helps maintain balance by transferring weight throughout the handlebars.	• See how long you are able to balance on the wall without your feet touching the ground • Do this for as long as you can

• Since trackstands can be extremely difficult at first the applications are set to “as long as you can” instead as a set time amount	wall, return your hand to the handlebar, and balance as long as you can, then ride out of it. • I want you to slowly approach the wall, reach out and come to a complete stop. • When I say GO, slowly approach the wall, brake slowly, reach out to wall while coming to a complete stop, take your hand off while maintaining balance as long as you can, then ride out of it. • When I say GO begin slowly riding around in general space while trying a correct trackstand without using the wall.		
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own. **1.** If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.			

2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- With a show of hands who can tell me one aspect of a proper trackstand verbally explain how to balance and track stand on a bicycle. Pick one person for each answer. (Answer: Look ahead, torso straight, center of gravity, lean forward, handlebars 45degree angle.
- With a show of hands who would like to demonstrate a proper trackstand with the wall. **(pick a student)**
- With a show of hands who would like to demonstrate a proper trackstand without the wall. **(pick a student)**

Central Washington University
Physical Education Teacher Education Program
Braking: Stopping on a Spot and Feathering of the Brakes
Lesson #6

Objectives:

1. By the end of class the students will be able to demonstrate basic braking techniques, stopping on a line, application of front and rear brakes, feathering of brakes down a slope, and stopping quickly. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- Large grassy area
- Moderate or less steep grassy slope of short distance
- Proper fitting bicycle for each student
- Proper fitting helmet for each student
- Cones, other marker devices
- Measuring tape.

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: One of the most critical safety skills associated with bicycles is the ability to come to a rapid and safe stop. Today we will learn some braking skills on the bike that will help you to become safer cyclists. One interesting and important thing to know is that braking power comes from the effective use of both the rear **and** front brakes and most of a bike's stopping power comes from the front brake. Generally, at least 70% of braking force comes from the front brake. As we complete the exercises, we want to learn to use the front brake effectively for minimum braking distance.

MAF/Instructional Techniques	Extensions	Refinements	Application
• Bicycles laid out, ready to ride. • Large, Flat grassy area • Cones for exercises • Helmet for each child • Measuring tape			

Informing task: What I would like everyone to do is stand over their bicycle and place their fingers on the brake levers. The left hand generally controls the front brake, and generally the right hand controls the rear brake. What we are going to do is "stop and go".

• In grassy area have students ride in circle. You determine the direction. The Idea is to permit the students the opportunity to get used to the brakes on	• Slowly ride around the field in ___ direction. As you ride practice slowing down rapidly trying to use both your front and rear brakes. As you do this, avoid	• Smooth slow-down, don't pull on the brake levers too hard. • Do not skid the tires.	

the school's bicycles.	permitting the tires to lock up. You will have more traction and stop faster if your tires are still moving. Additionally if you lock up the front tire you could lose control of the bicycle. • Start slow, practice coming to a complete stop as rapidly as possible from a slow speed.		
• Have the students increase the speed at which they are traveling prior to making a rapid stop. Check for tire skidding	• Now pick up your speed a little bit. As you apply the brakes, you will have to shift your weight back on you saddle a bit more	• Shift your weight back	
• The emphasis on this activity is to let children practice stopping their bike on a designated spot. • Set up pair of cones around the warm up course at random distances apart. The students will accelerate between the sets and	• The first time you go through the course, use only the rear brake. Stop with the front tire on each line you come to, without skidding the tires.	• Smooth slow-down, don't pull too hard. • No skidding tires.	• Try and stop with the front tire right on top of the line, hold for a second before accelerating for the next line.

stop their bike with their front tire right between the cones.			
	• Repeat the course five times using the rear brake only.		
	• Now complete the course five times using both brakes.	• Shift your body weight back, towards rear of bicycle. • Fingertips on the brake levers. • Smooth slowdown, don't pull too hard. • Don't skid tires.	• Gradually increase the speed of your approach. Stopping with the front tire right on the line, without skidding the tires.
	• Now do the course five times using the **front** brake only. The critical points here are to keep your weight toward rear of bike and stay seated on saddle.	• Stay seated on saddle • Shift weight back, towards rear of bicycle. • Fingertips on the brake levers. • Smooth slowdown, don't pull too hard. • Don't skid tires.	• Each time you complete the course, try to increase the speed from which you can comfortably stop, using only the front brake lever.
Informing task: Now we are going to practice braking while traveling down a slope.			
• Desired: Grassy sloped area, medium grade or less. • See diagram for			

activity details			
• Find a grassy, sloped area that the students can safely ride down. This exercise is for the students to practice controlling their speed while gravity is pulling them downhill.			
	• Ride down slope while feathering brakes to keep speed slow. Feathering is lightly applying the brakes to slow down slightly or to maintain a slower speed while traveling down a slope.	• Remember to use front and rear brakes. • Shift weight back. • Fingertips on the levers • Don't skid the tires	• See how slow you can get down the hill without skidding the tires and maintaining balance.
	• Repeat five times		

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

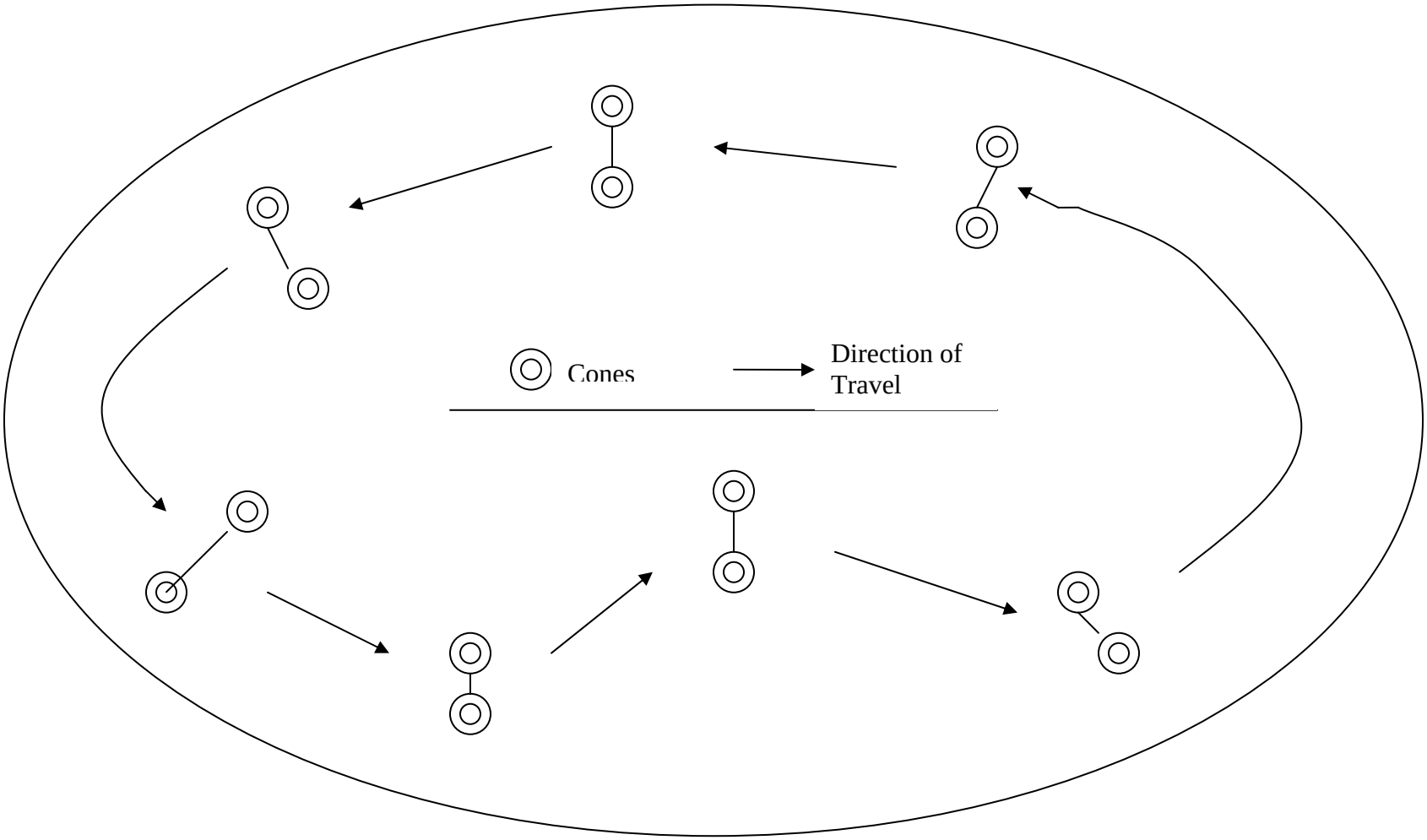
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment. Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment.

Ask the students the following and check their understanding:

- Where does most of your braking power come from? (the front brake)
- What are the ratios for front to back braking force that we are aiming for? (70% front and 30% rear)

- Think, in what kind of situations would we use the rear brake only? (very rough terrain, situations where you cannot **remain seated on saddle)**



Students travel around the course practicing stopping. Every time they encounter a set of cones, they try to stop with their front tire right between the cones.

Central Washington University
Physical Education Teacher Education Program
Braking: Quick Stops and Corners
Lesson #7

Objectives:

1. Students will learn skills for stopping quickly and safely. **(NASPE 1, EALR 1.1)**
2. Students will learn braking skills for slowing and entering a turn. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- Proper fitting bicycle for each student
- Proper fitting Helmet for each student
- Cones for marking courses
- Stopwatch
- Measuring tape

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

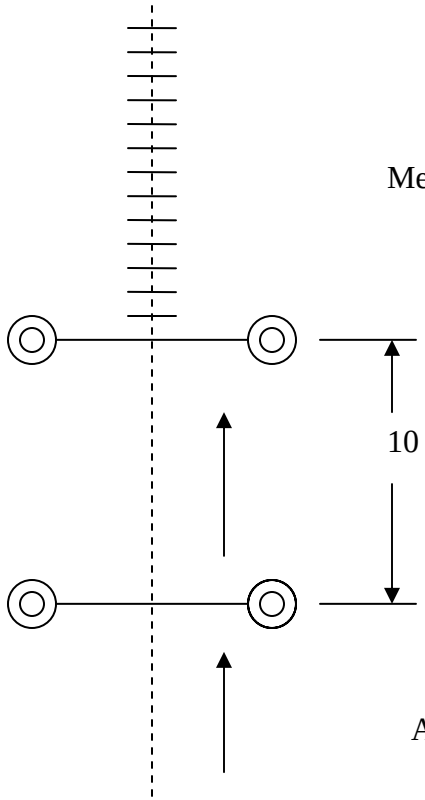
Set Induction: The last time we met we practiced braking and stopping on a particular spot. We also practiced feathering the brakes to control our speed. But what do we do when we have to stop in an emergency, or need to slow down to take a corner? Today we will learn and practice some skills that well help you all to accomplish those objectives.

MAF/Instructional Techniques	Tasks	Refinements	Application
Informing Task: The last time we met we went over using both brakes to stop. We are going to see how fast we can stop. There are two sets of cones set up ten meters apart. When you pass the first set of cones I will start timing you. When you pass the second set, stop as fast as you can. We will calculate speed and stopping distance.			
• Diagram of Activity: See attachment • Distribute playing cards of the number of students in the class with have the cards red and half black. • Have half of the students at this station (fast stop) and the other half at the second station (slow-turn).	• Try to approach the timed area at about 15 miles per hour. Use your best judgment. When you hit the second set of cones, stop as fast as you can	• Use both front and rear brakes • No skidding the tires • Stay seated on saddle • Shift your weight back	
	• Repeat this exercise 6 times		• Try each time you do this exercise to

			increase your speed, but maintain the same stopping distance. You may also maintain your speed while shortening your stopping distance.
Informing Task: This time we are going to pass through two sets of cones. The first set of cones is the beginning of the slow-down zone. Don't begin braking before it. After you pass the first set of cones, slow down and be ready to turn. No braking after second set of cones, you must turn right or left and make the turn without pulling on the brake levers.			
• See attached diagram	• Try to approach the timed area at about 15 miles per hour. First three times through course slow, and turn to the right. Don't skid the tires as will most likely result in failure in being able to turn the bike.	• Slow down quick for turn, then make the turn without pulling the brake levers. • Stay seated • No Skidding the tires (Critical)	
	• Complete course three times, turning to the right after slowing		• Each time you complete the course, try to do the next one with a faster entry and quicker slow-down before the turn.
	• Now complete the course another three times, this time turning left after slowing.		• Each time you complete the course, try to do the next one with a faster entry and quicker slow-down before the turn.

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own. **1.** If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away. **2.** If you are wearing a (color) shirt you may put your equipment away. **3.** If you have (color) hair you may put your bike and equipment away Again feel free to be creative in your methods to putting away equipment. Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment. • What are the keys to stopping quickly? (Use both brakes, Keep weight back, don't let tires skid) • When do we brake for a turn? (Before the turn but not during the turn)			

Students bring their bikes up to speed and carry that speed through the timed area. Start the time when their front wheel hits the first line and stop when their tire hits the second. When their front tire hits the second line, they then stop their bike as fast as possible. Measure distance from second set of cones to their front tires contact with the ground. 1.5 seconds between the cones is about 15 mph



Measure Distance

10 meters

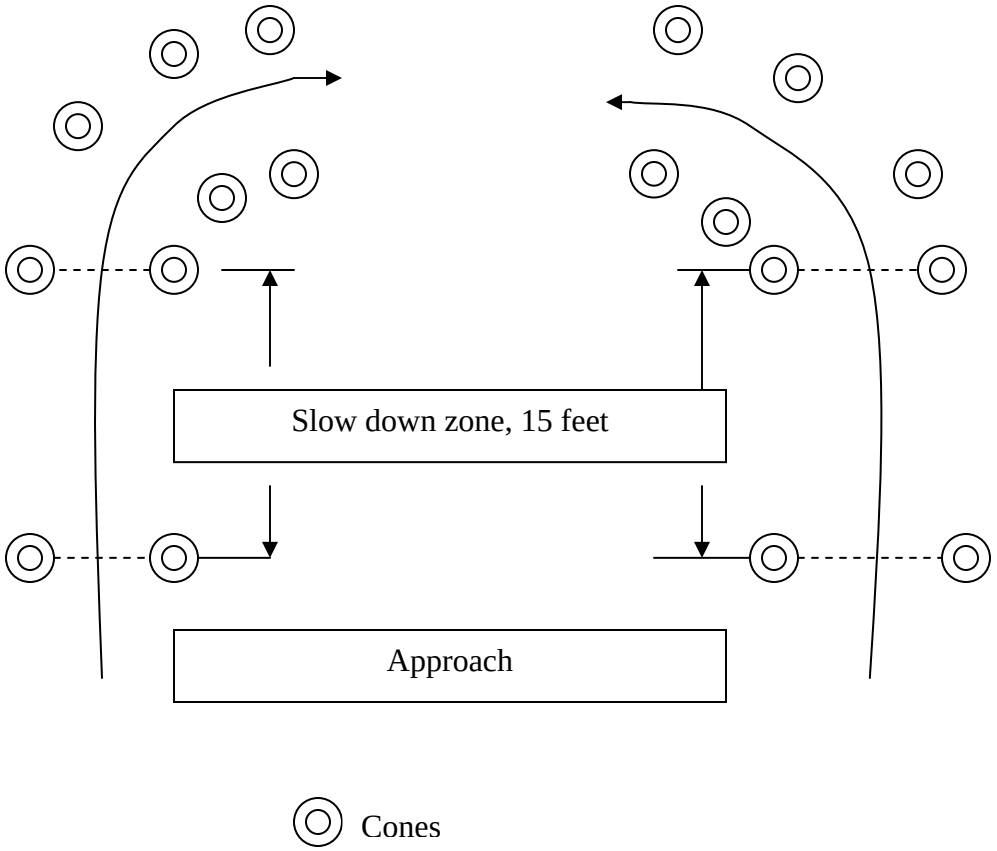
Timed Area

Approach

Direction of Travel

Cones

Brake and Turn Exercise



Students approach the first set of cones at speed. When their tires cross the first line they then slow down so that they are able to make the turn, staying within the turn

Central Washington University
Physical Education Teacher Education Program
Braking and Track Stand Ride Day
Lesson #8

Student Objectives:

1. By the end of class the student will have completed their task sheet. (see attached)**(NASPE 1, 5, EALR 1.1, 3.3)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- Every cone available
- Stop watch
- 30 skill sheets for students (attached)
- 30 Quizzes (Quiz #1 assessment6.doc)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Explain to the students that it is a Ride Day so minimize the initial instruction and get the students active right away.

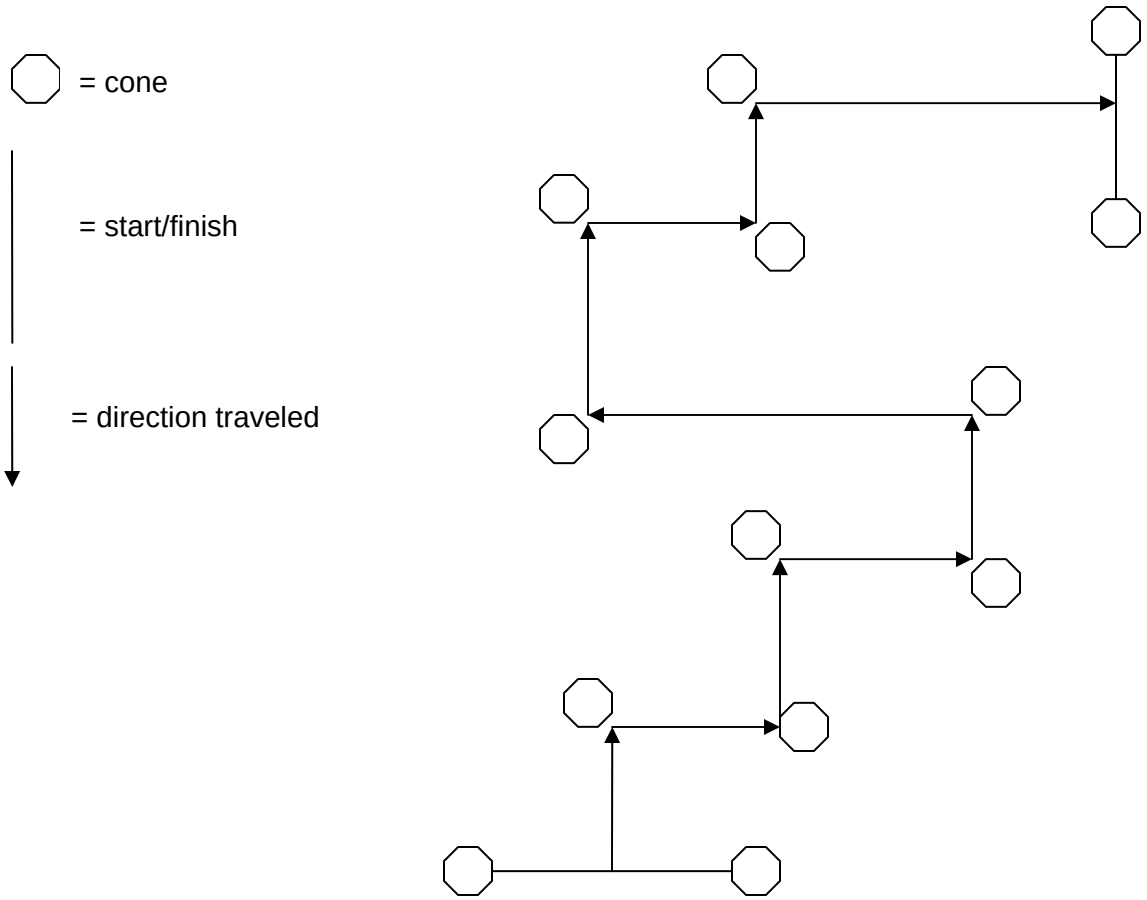
MAF/Instructional Techniques	Extensions	Refinements	Applications
• Administer Quiz #1 • Bicycles laid out ready to ride. • Have them wear their helmets. • Have activity courses set up before students arrive (attach) • Hand out the skill sheets (attach) and explain to the students that while they are waiting for a course to open up they should be performing their task	• First things first, we will take quiz #1. • There are no extensions because it is a ride day. Therefore minimizing instruction and maximizing activity time. • Once students have finished their skill sheet, tell them to continue working at the stations they want.		

<table>
<tr><td>sheet skills.</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Informing Task: When I say GO I would like for you to begin working on your task sheet. GO!</td></tr>
<tr><td>Watch for safety
With all the activities going on it will be difficult to keep an eye on every students but do your best.
Once again try and minimize instruction due to it being a RIDE day. If necessary use the cues as reminders.
Leave a bike and a helmet out for the assessment/closure</td><td>There are no new skills. If you want to check the skills being performed look at the skill sheet (attach)</td><td>Track stand cues
Look ahead of you and focus on an eye level object
Keep your torso straight
Focus on Center of gravity. Try not to be really shaky and wobbly
Slightly lean forward
Slightly turn your handlebars to a 45degree angle.</td><td>Applications are on task sheet (see attach)</td></tr>
<tr><td colspan="4">Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away
Again feel free to be creative in your methods to putting away equipment

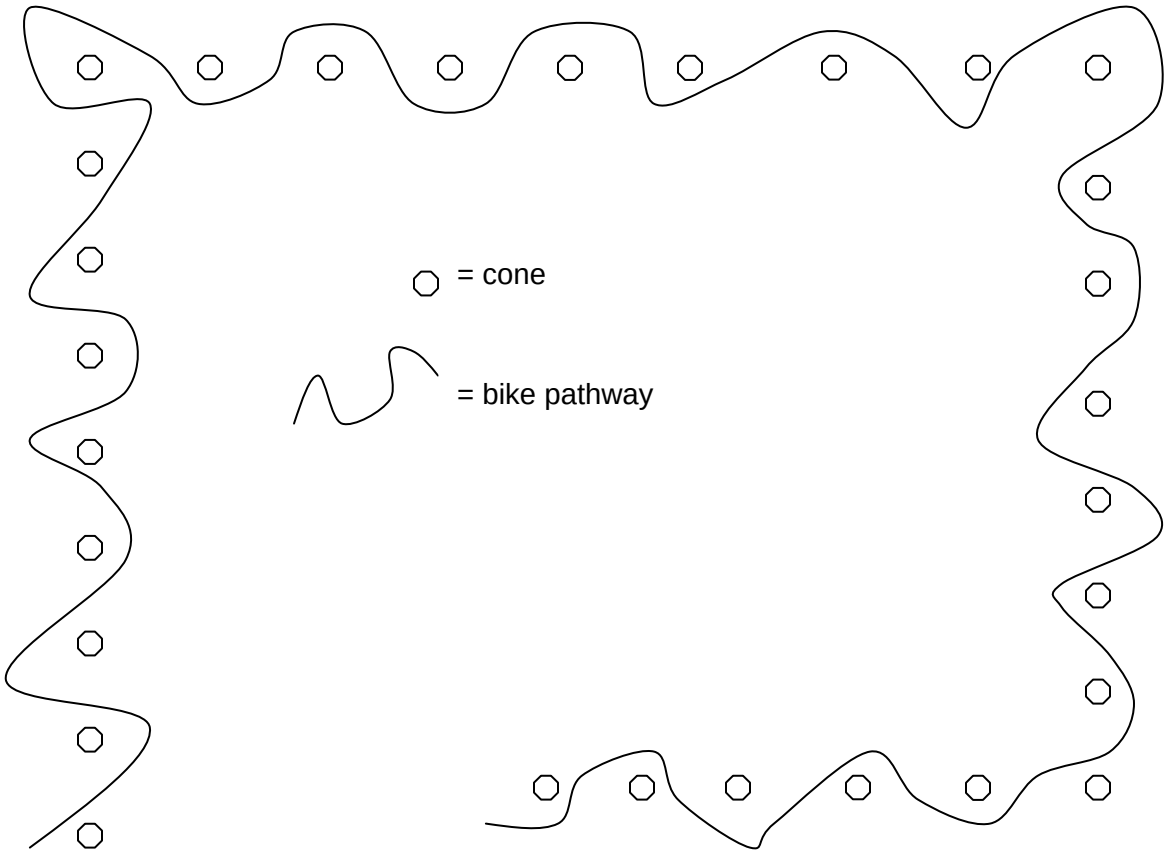
Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.</td></tr>
</table>

- Who would like to demonstrate the proper execution of the slow speed course? (choose a student)
- Who would like to demonstrate the proper execution of the snake course? (choose a student)

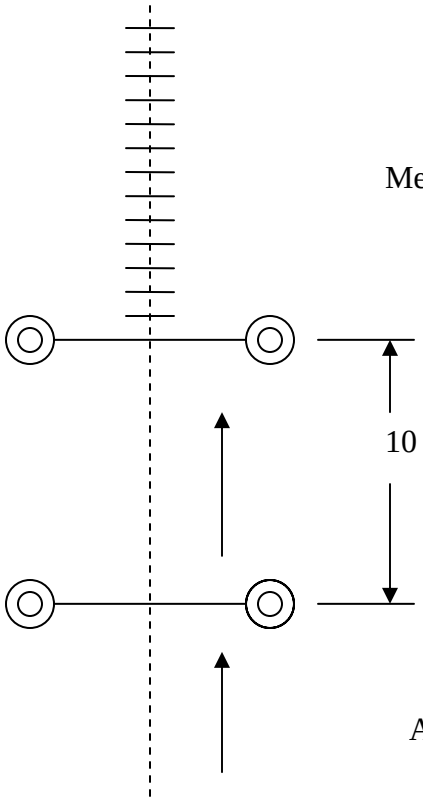
Slow Speed Balance Course



Snake Course



Students gain and bring their bikes up to speed and carry that speed through the timed area. Start the time when their front wheel hits the first line and stop when their tire hits the second. When t heir tire hits the second line, they then stop their bike as fast as possible. Measure distance from second set of cones to their front tires contact with the ground. 1.5 seconds between the cones



Measure Distance

10 meters

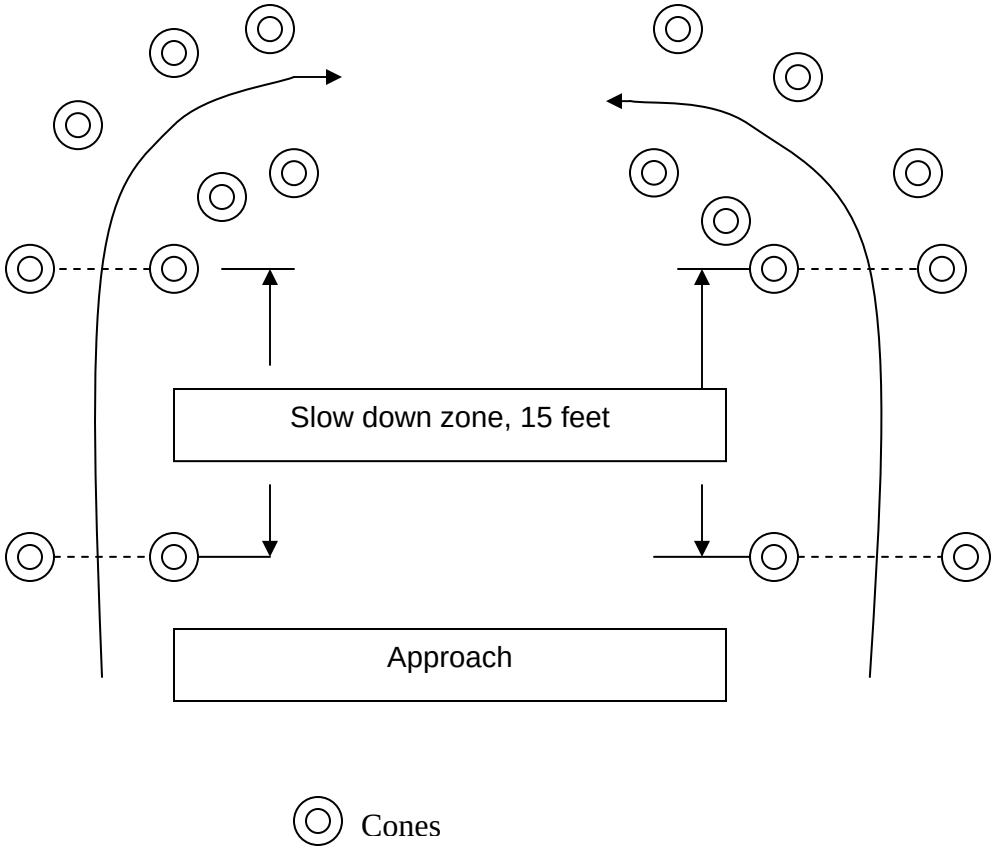
Timed Area

Approach

Direction of Travel

Cones

Brake and Turn Exercise



Cones

Students approach the first set of cones at speed. When their tires cross the first line they then slow down so that they are able to make the turn, staying within the turn

Lesson 8 Assessment Sheet

Directions:

By yourself or with a partner, complete the skill sheet. You may begin on any skill or activity that you want. Please be courteous of others in your same testing area. If there is a long wait at a certain activity then move to another. Turn your worksheet in to the teacher when finished.

Initial when complete:

1.) _____ With the teacher present perform a 3 sec. track stand

2.) _____ Perform a 5 sec. track stand (with or without using the wall)

3.) _____ Demonstrate for the instructor how to check a properly fitting helmet.

4.) _____ Proceed to the slow speed course. Once there you must maneuver through the cones course as slowly a possible without touching your feet on the ground, and without touching a cone.

5.) _____ Proceed to the slow speed balance course. Make 1 full pass through while riding as slowly as you possibly can. Once done, quickly exit the area.

6.) _____ Proceed to the snake path. Maneuver in and out of the intended path

7.) _____ Proceed to the brake and turn exercise complete one pass and then move on

Central Washington University
Physical Education Teacher Education Program
Wheelies, Bunny Hops, & J-hops
Lesson #9

Student Objectives:

1. By the end of class the students will be able to demonstrate the proper execution of a wheelie. **(NASPE 2, EALR 1.3)**
2. By the end of class the students will be able to demonstrate the proper execution of a bunny hop. **(NASPE 2, EALR 1.3)**
3. By the end of class the students will be able to explain how to execute a proper J-Hop. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- Every cone available
- Laptop/VCR/DVD player/TV (depending on your method of projection)
- *Diggin It* movie (if applicable)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many good bunny hop, wheelie, and J-hop clips on the internet. (http://www.bikemag.com/av/) The video I ordered from mountain biking magazine is called *Diggin It* and it includes footage of every skill taught in the entire block schedule. It seemed more practical to buy a video containing all the skills, rather than dig through the video clips looking for a specific skill and possibly not find it.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles laid out ready to ride. • Cones spread out to designate boundary lines (see attach.) • Have them wear their helmets.	• First things first, **remind** students that out of class assignment #2 is due at the start of next lesson. • For pictures of wheelies, bunny hops and J-hops refer to skill charts #4, #5 #6.		

Informing Task: When I say **GO,** I would like for you to retrieve your bike and start riding the bike slowly in a counterclockwise direction on the track/gym/outdoors. **GO!**

• Watch for safety • Some students will forget the tasks and start racing, be on the	• The wheelie can help you maintain control over bumpy terrain. • Start by riding in a low	• Wheelie Cues • **Crouch down** on the bike just before you reach the object you	• See if you can do 10 wheelies • See how high of a wheelie you can do

lookout and stop students immediately. • Really pay close attention to students form • Some students will naturally excel quicker than others, meaning you will have all students doing different variations. It's important to notice this because it's inappropriate to make a student progress to a skill they aren't ready for. • The wheelie is the backbone for the next two skills (bunny hop, J-hop), If the students hasn't achieved utilization of the wheelie hop, make them continue before moving on.	gear at a medium pace • Transfer all the weight you can, without losing control, to the back wheel. • While pulling firmly back on the handlebars, push down on the pedals. This will lift your front wheel off the ground. If you don't pull hard enough the wheel won't rise or will drop immediately. This can take quite amount of practice. • To drop the wheelie, simply transfer your weight back to the front wheel.	are going to wheelie.	• See how long you can hold a wheelie
Informing Task: STOP! Now we will work on bunny hops. When I say **GO** I would like for you to continue cycling in a counterclockwise direction and if you would like, move to the bunny hop. **GO!**			
• If certain students are	• The bunny hop is	• Bunny hop cues	• See if you can do 10

struggling at bunny hops tell them to continue practicing wheelies. • Either the teacher or an extremely capable student will quickly demonstrate the bunny hop with the teacher explaining the process. • The bunny hop will probably take the most of the time so don't be discouraged if the rest of the class period is spent creating competent bunny hoppers.	used for quickly jumping over obstacles in your path. • Start on level ground while riding at medium pace. Stand up on your pedals, making sure to keep your pedals even with each other • With your weight in the center of the bike, push down on the pedals and handlebars and pull both up at the same time. Your bike will rise and quickly return to the ground.	• **Push** your feet **down**, **back**, then **up** in one fluid motion • **Crouch down** on the pedals just before reaching the object • Use the compression in the tires to help you accelerate upward	bunny hops • See how high you can do a bunny hop
Informing Task: STOP! Now we will work on **J-hops (also known as log hops)** When I say **GO** I would like for you to continue cycling in a counterclockwise direction and if you would like, move onto J-hops. **GO!**			
• Many students will find the bunny hop hard enough. Remember to let the students choose to stay with the bunny hop if they would like. • If students are	• Like a wheelie the J-hop can help maintain stability on a rough trail. • Start by getting a little quicker speed than a wheelie, but like the wheelie pull up on the	• J-hop cues • **Pull up** like a wheelie • In mid flight, **push down** and **lean forward** • **Pedal** after landing	• See if you can do 10 J-hops. • See how high of a J-hop you can do.

struggling with the J-hop make sure to keep them working on the bunny hop. • There will probably be a student who knows how to J-hop. Keep your eyes open for these students and use them to demonstrate if necessary. • If the majority of the class is struggling, have the few students who can successfully complete a J-hop help other students. • keep bike and helmet for your assessment	handlebars. • As your front tire reaches the other side of the obstacle, **push down** on the pedals and **lean forward**. • If you've pushed down and leaned forward correctly, your back wheel will naturally rise to clear the obstacle. If you do this correctly neither wheel will actually touch the obstacle. • Once the front wheel touches, begin pedaling to ensure your back wheel clears the obstacle.		

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

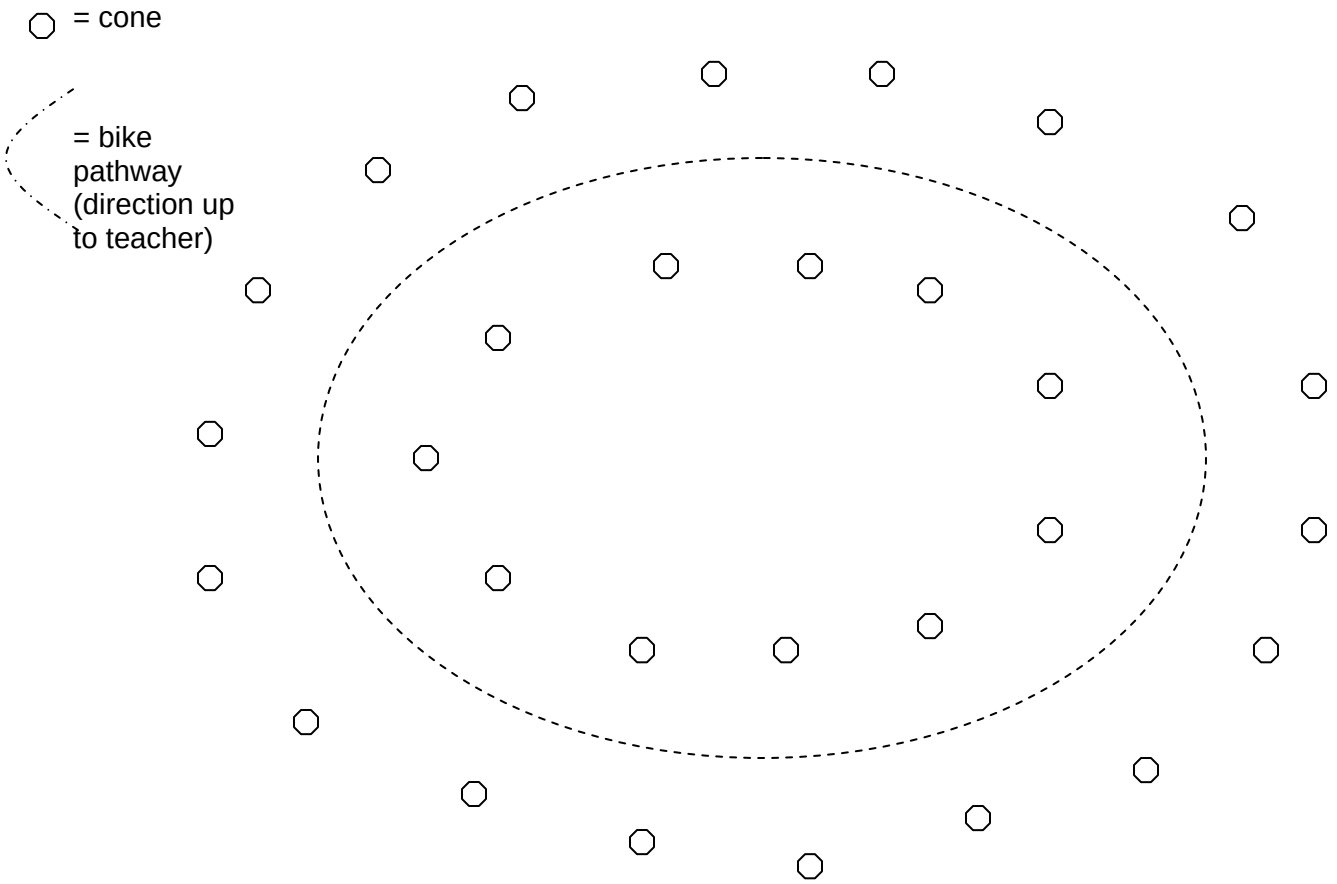
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep

one bike and helmet available for the assessment.

- With a show of hands who can tell me why a bunny hop is important? (to clear small obstacles in your path)
- With a show hands, who can verbally explain how to execute a proper J-hop? (pull up like a wheelie, mid flight push down and lean forward, pedal after landing)
- Who would like to demonstrate a proper bunny hop? (pick a student)


= cone
= bike pathway (direction up to teacher)

Central Washington University
Physical Education Teacher Education Program
Wheelies, Bunny Hops, and J-Hops
Lesson #10

Student Objectives:

1. By the end of class the students will be able to demonstrate the proper execution of a bunny hop. **(NASPE 1, EALR 1.1,)**
2. By the end of class the students will be able to demonstrate the proper execution of a wheelie off of the platform. **(NASPE 1, EALR 1.1)**
3. By the end of class the students will be able to demonstrate how to execute a proper bunny hop onto the platform. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- Pads for those who's parents require it
- Every cone available
- 2 six inch high platforms any distance in length (Or whatever you have that will suffice)
- 4 tumbling pads (Or whatever you have that will suffice)
- *Diggin It* movie (if applicable)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many good bunny hop, wheelie, and J-hop clips on the internet. (http://www.bikemag.com/av/) The video I ordered from mountain biking magazine is called *Diggin It* and it includes footage of every skill taught in the entire block schedule. It seemed more practical to buy a video containing all the skills, rather than dig through the video clips looking for a specific skill and possibly not find it.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Collect Assignment #2 • Bicycles laid out • Cones spread out to designate boundary lines (see attach.) • Have them wear there helmets. Knee and elbow pads are worn if they are required by the parents.	• First things first hand in Out of class assignment #2. • Students received assignment due dates on day one of class and were reminded about today's assignment in the last lesson. • For pictures of wheelies, bunny hops and j-hops refer to skill charts #4, #5, #6		

Informing Task: When I say **GO,** I would like for you to retrieve your bike and start riding the bike slowly in a counterclockwise direction on the track/gym/outdoors. **GO!**

• Since you covered the basics yesterday, today we will have review on the three skills we learned yesterday. The majority of the students will still be struggling with the bunny hop and haven't even begun the J-hop. Therefore it's good to review very briefly and let the students get right into picking up practice where they left off yesterday • For the students who show knowledge and understanding, as well as execution of the skills, speak with them and inform them on maximizing height and distance • Have the students who need to keep practicing, continue practicing in the circle formation. For those	• Have a quick review on the wheelie • low gear at a medium pace • Transfer weight to the back wheel • Pull back on handlebars, push down on pedals. • Transfer weight to front wheel	• Wheelie Cues • **Crouch down** on the bike just before you reach the object you are going to wheelie	• See if you can do 10 wheelies. • See how high of a wheelie you can do. • See how long you can hold a wheelie. • Wheelie off the platform (see attach) • Wheelie onto the platform (see attach)

who are advanced send them to the plat form to perform the skills they prefer • Watch for safety • Some students will forget the tasks and start racing, be on the lookout and stop students immediately • Have two platforms set up. One for riding onto, one for riding off of. • Be sure to encourage the struggling students. They could easily get discouraged when they see other students performing off the platform.			
Informing Task: STOP! Now we will quickly review **bunny hops.** When I say **GO** I would like for you to continue cycling in a counterclockwise direction and if you would like move on to the bunny hop**. GO!**			
• If certain students are struggling at bunny hops tell them to continue practicing wheelies	• Quick review of bunny hops • At a medium pace, stand up on your pedals.	• Bunny hop cues • **push** your feet **down**, **back**, then **up** in one fluid motion	• See if you can do 10 bunny hops. • See how high of a bunny hop you can do.

• Have students who are using the platform form a straight line and take turns. Supervise the platform the first couple of minutes; continue to checking periodically to make sure all is going smoothly, and safely. • Be looking for students who are using the platform who shouldn't be, due to skill progression. • Either the teacher or an extremely capable student will quickly demonstrate the bunny hop with explanation in the process.	• Push down on the pedals and handlebars and then pull both up at the same time.	• **Crouch down** on the pedals just before reaching the object you are going to bunny hop • Use the compression of your tires to help push upward	• Bunny hop off the platform (see attach) • Bunny hop onto the platform (see attach)
Informing Task: STOP! Now we will work on **J-hops also known as log hops.** When I say **GO** I would like for you to continue cycling in a counterclockwise direction and if you would like move on to the J-hop**. GO!**			
• Many of the students by this time will be at the stage of mainly practicing J-hops so really focus on the cues to help them out.	• Start by getting a little quicker speed than the wheelie, but like the wheelie pull up on the handlebars.	• J-hop cues • **Pull up** like a wheelie • In mid flight, **push down** and **lean**	• See if you can do 10 J-hops. • See how high of a J-hop you can do.

• Therefore, unlike the two other tasks no review is needed. This skill will be your primary focus today. Especially if the students didn't get to it yesterday. • If students are struggling with the J-hop make sure you make them stay with the bunny hop. • If the majority of class is struggling, have the few students who can successfully complete a J-hop help other students. • Keep bike and helmet for your assessment	• As your front tire reaches the other side of the obstacle, **push down** on the pedals and **lean forward**. • If you've pushed down and leaned forward correctly your back wheel will naturally rise to clear the obstacle. If you do this correctly, neither wheel will actually touch the obstacle • Once the front wheel touches the ground, begin pedaling to ensure your back tire clears the obstacle.	**forward** • **Pedal** after landing	• See if you can J-hop off the platform (see attach.) • See if you can J-hop onto the platform (see attach)

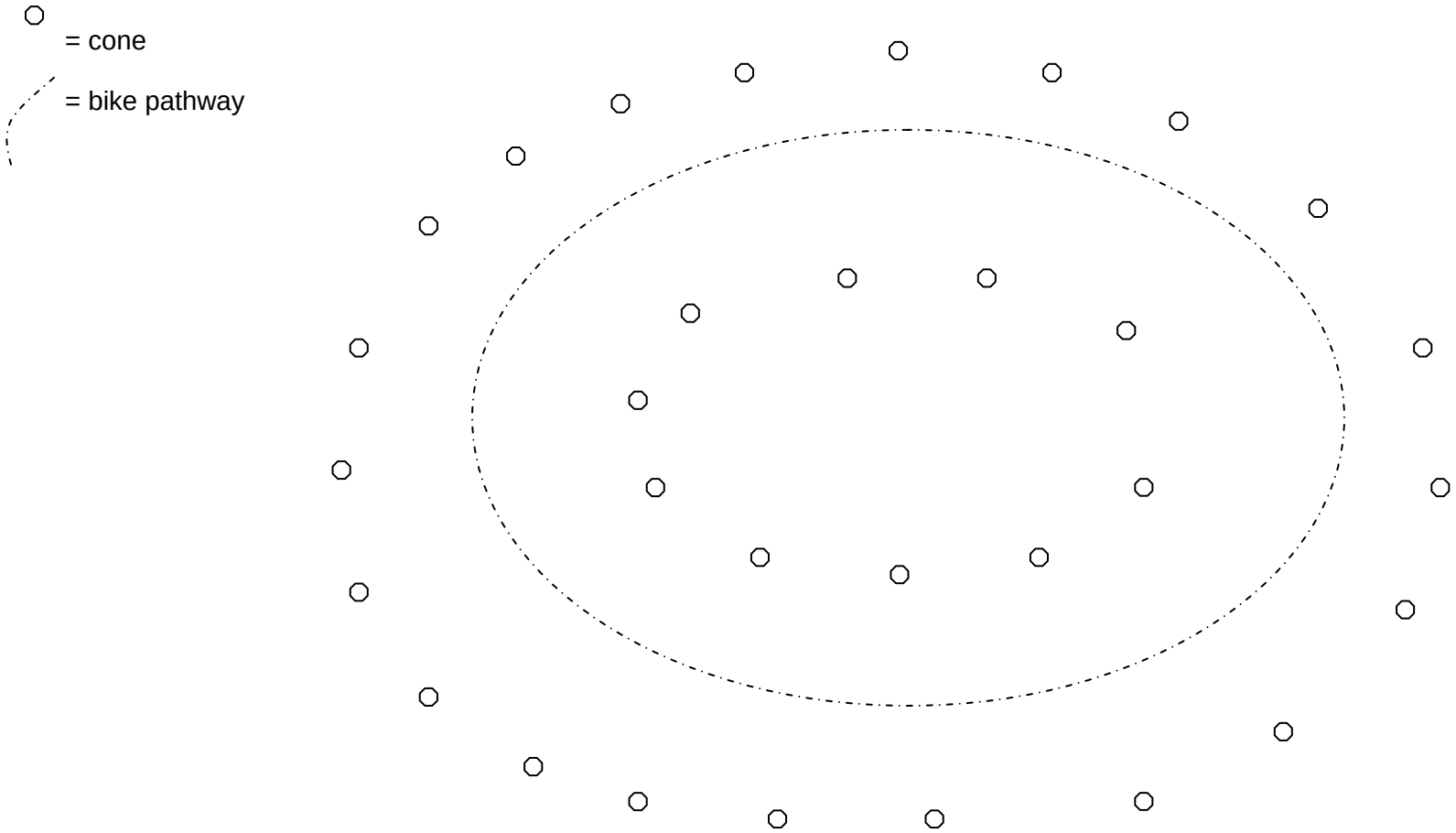
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

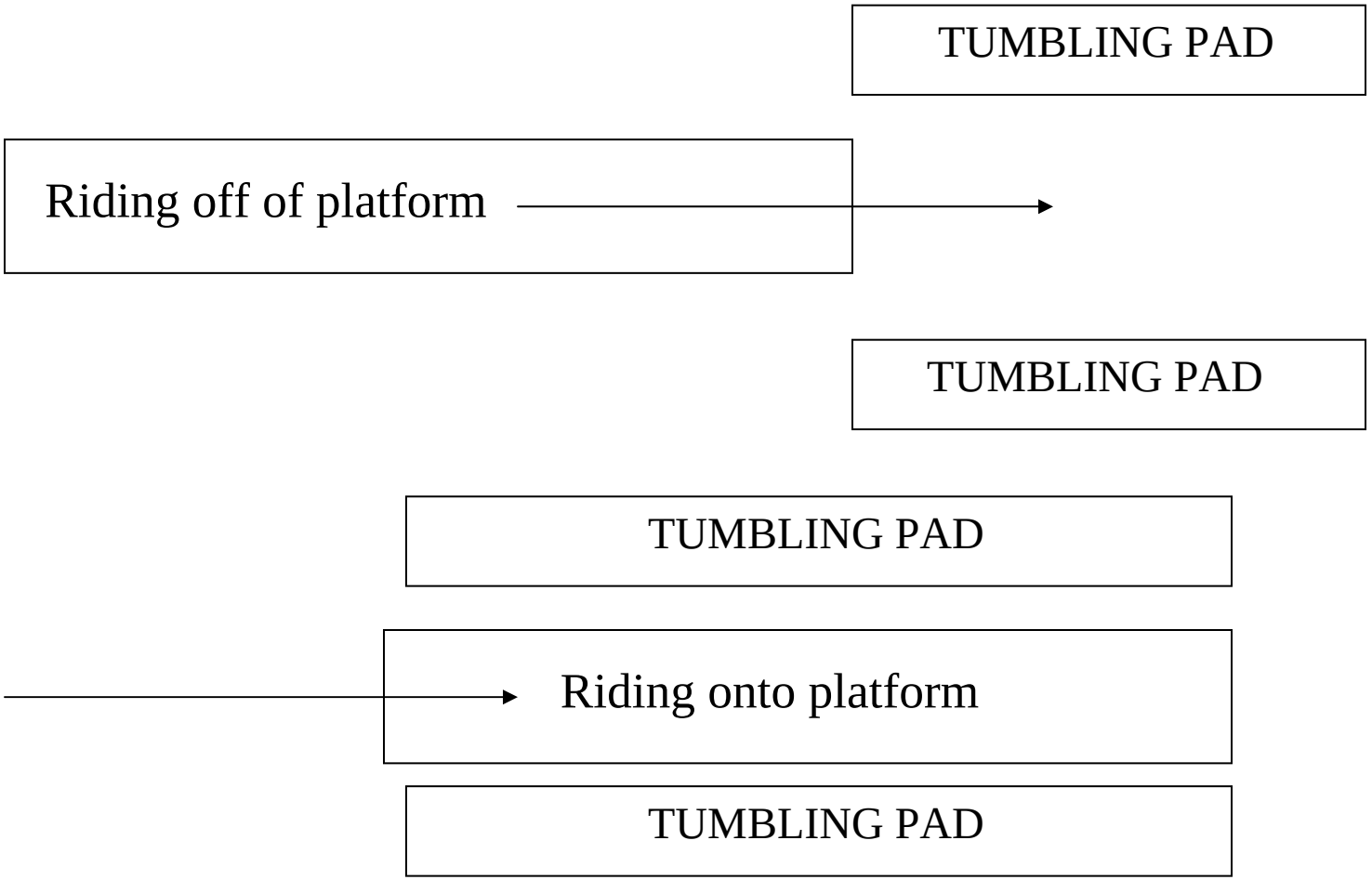
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- Who would like to demonstrate how to perform a proper bunny hop? (choose a student)
- Who would like to demonstrate how to perform a proper wheelie off of the platform? (choose a student)
- Who would like to demonstrate how to perform a proper bunny hop onto the platform? (choose a student)




TUMBLING PAD
Riding off of platform
TUMBLING PAD
TUMBLING PAD
Riding onto platform
TUMBLING PAD

Central Washington University
Physical Education Teacher Education Program
Wheelies, Bunny Hops, and J-Hops Ride Day
Lesson #11

Student Objectives:

1. By the end of class the students will complete their skill sheet. **(NASPE 1, 5, EALR 1.1, 3.3)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- 30 skill sheets (attach)
- Every cone available
- 1 roll of Tape (any width)
- 3 broom sticks approx. 1 inch diameter (or similar objects available)
- 6 floaty foam sticks (or similar objects available)
- 30 copies of Lesson 11 assessment sheet (attached)
- Diagrams of exercises (attached)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Briefly explain the day's agenda. Remind the students that it's a ride day and they are to practice the skills they have recently learned in the skill courses set up, and pass out the skill sheets.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles and helmets laid out • Have all the activity courses all set up before the class arrives (**see all attachments)** • Have them wear there helmets. Knee and elbow pads are to be worn if they are required by the parents. • Today is a ride day that is designed to maximize the student's time to practice the skills that	• There are no extensions on ride days. Like other ride days it is designed for minimal instruction and maximized activity time. The cues are included for this purpose but don't use them unless needed.		

they have learned the past couple of days. • Try and minimize instruction and maximize practice time. Help those that need help, but focus on the cues rather than the in depth analysis of the skill.			
Informing Task: When I say go I would like for you to get your bike and helmet and proceed to the activity course of your choice and begin.			
• With three courses it will be fairly tricky to keep and eye on all of them, so REALLY stress the importance of taking turns and waiting for the other student to be done before he/she begins. • Pay close attention for off task students • Pass out a copy of assessment 11 to all students • Pinpoint the students making noticeable improvements. With	• Try and limit instruction so students have the maximum amount of time to practice. • Inform the students that when they have completed the skill sheet they should continue working on the courses and the individual skills, wheelie, etc.	• Wheelie Cues • **Crouch down** on the bike just before you reach the object you are going to wheelie • Bunny hop cues • **push** your feet **down**, **back**, then **up** in one fluid motion • **Crouch down** on the pedals just before reaching the object you are going to bunny hop • Use the compression	• Wheelie course (see attached) • Bunny hop course (see attached) • J-hop course (see attached)

not a lot of instruction much of the time can be spent giving positive feedback, pinpointing, and touching on the cues. • Make sure to leave a bike and helmet out for the end of class assessment.		of your tires to help push upward • J-hop cues • **Pull up** like a wheelie • In mid flight, **push down** and **lean forward** • **Pedal** after landing	

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

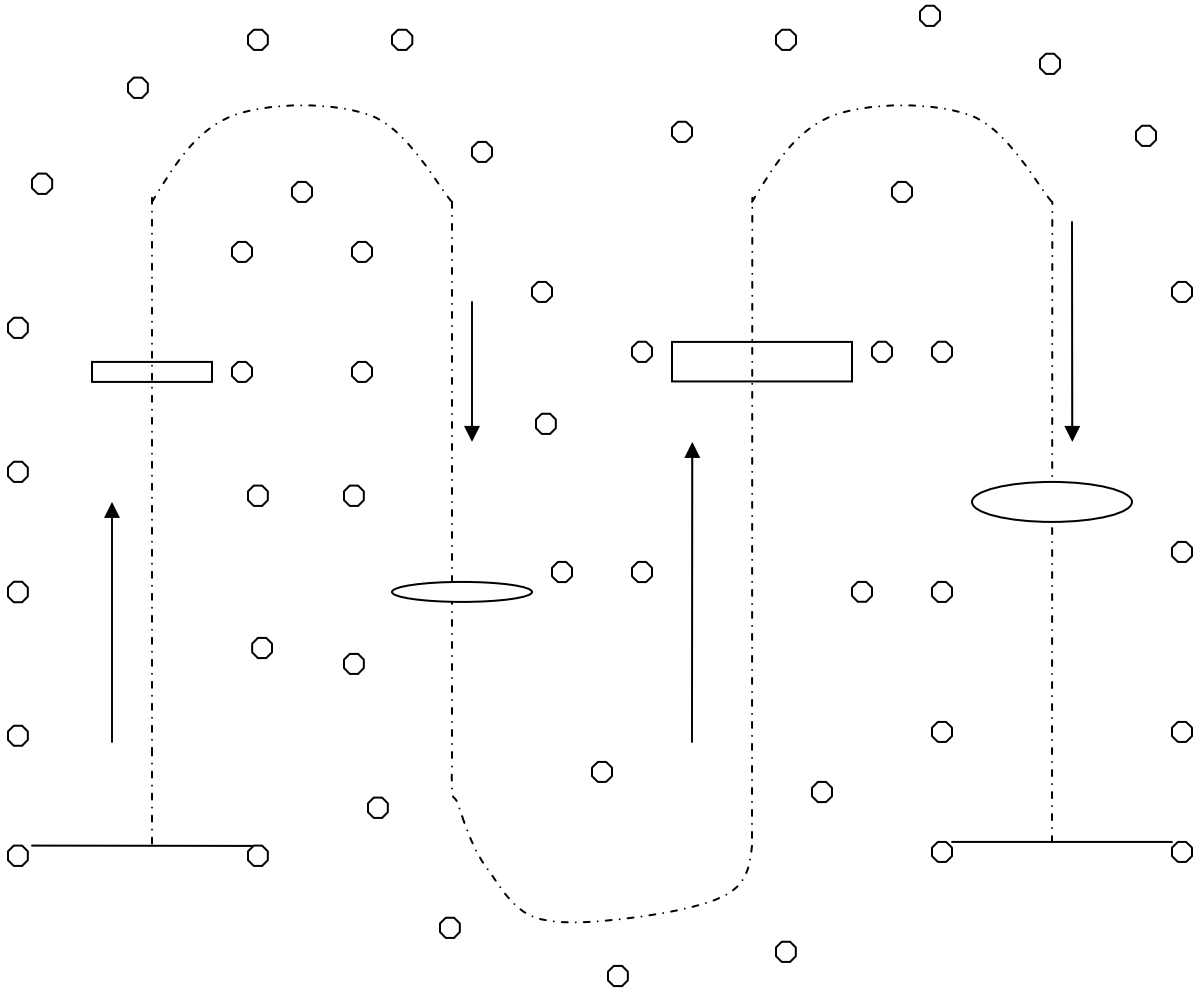
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

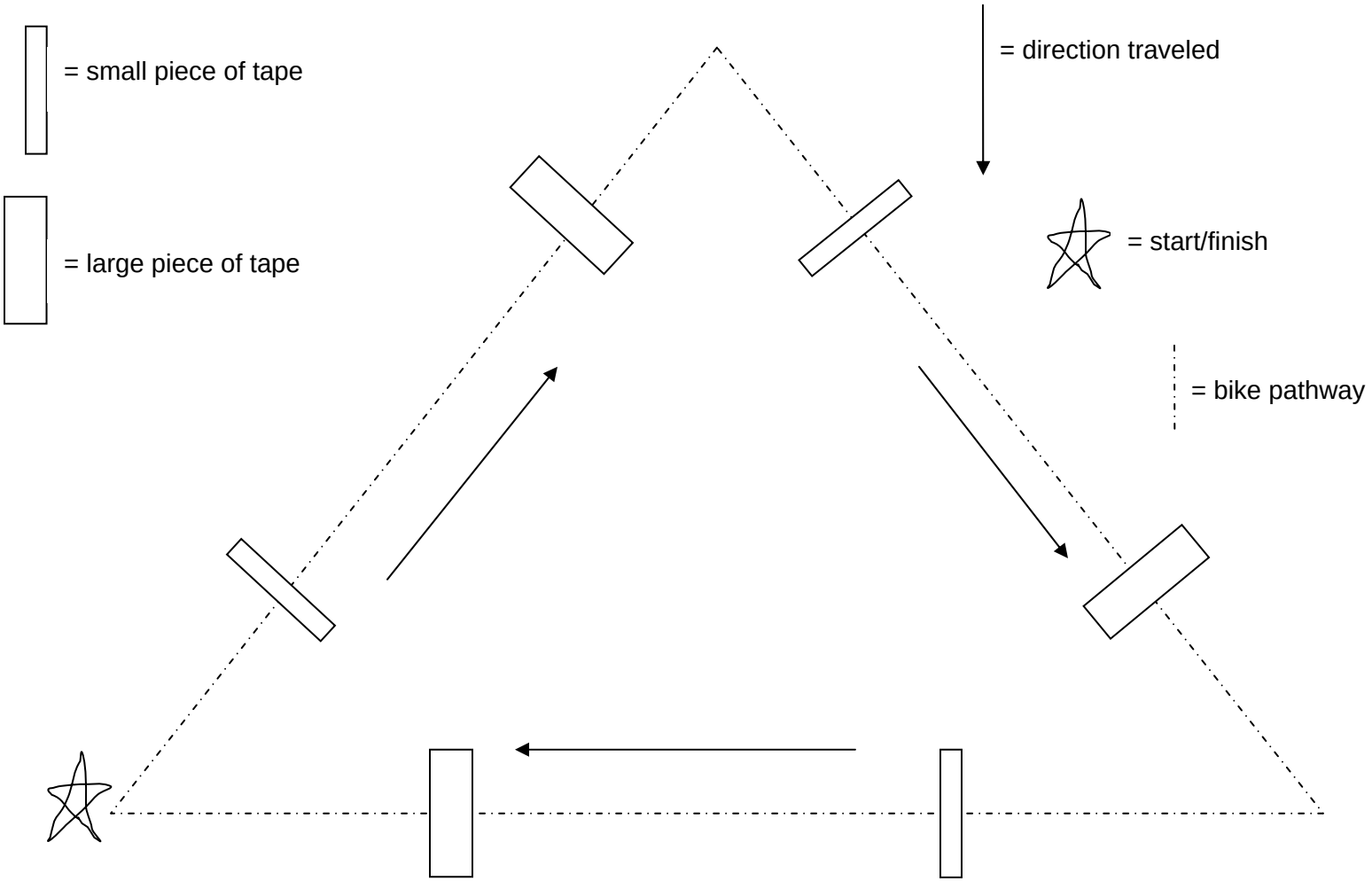
Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- Who would like to demonstrate the proper execution of the wheelie activity course? (choose a student)
- Who would like to demonstrate the proper execution of the bunny hop activity course? (choose a student)
- Who would like to demonstrate the proper execution of the J-hop activity course? (choose a student)

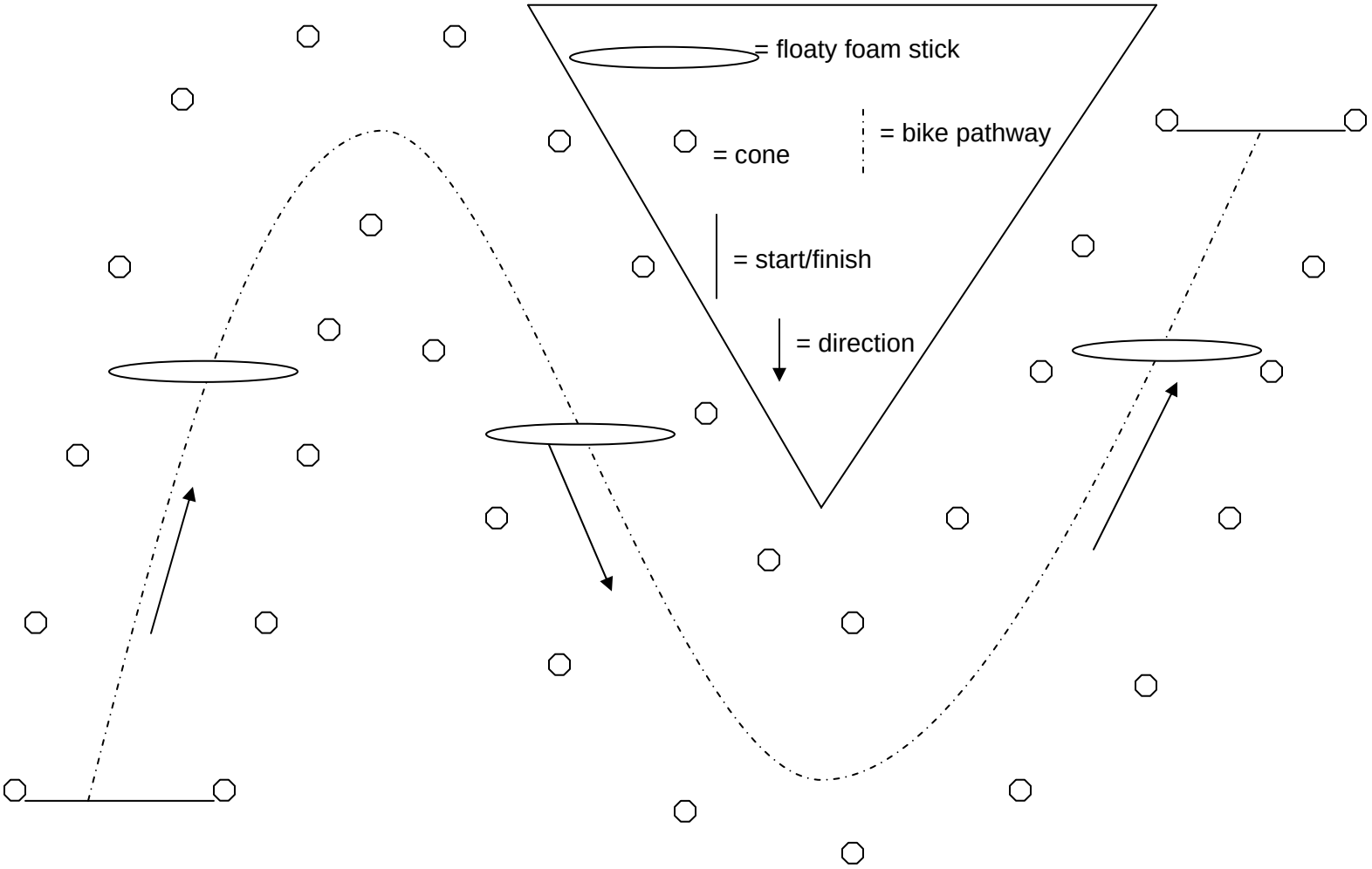
Wheelie course



Bunny hop course



J-Hop course


= floaty foam stick
= cone
= bike pathway
= start/finish
= direction

Lesson 11 Assessment Sheet

Directions:

By yourself or with a partner, complete the skill sheet. You may begin on any skill or activity that you want. Please be courteous of others in your same testing area. If there is a long wait at a certain activity then move to another. Turn your worksheet in to the teacher when finished.

Initial when complete:

1.) _____ Perform 10 wheelies

2.) _____ Complete the wheelie course 3 times

3.) _____ Perform 10 bunny hops

4.) _____ Complete the bunny hop course 3 times

5.) _____ Perform 10 J-hops

6.) _____ Complete the J-hop course 3 times

Central Washington University
Physical Education Teacher Education Program
Riding Over Obstacles
Lesson #12

Objectives:

1. Students will begin to apply lessons on bunny hops and wheelies, learning to ride over and clear obstacles at slow speeds. **(NASPE 1, EALR 1.1)**
2. Students will progress from small obstacles to obstacles six to ten inches high. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- Proper fitting bicycle for each student
- Proper fitting helmet for each student
- Cones
- Various size boards (2x4, 4x6, 6x10 all 4 to 6 feet in length)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Imagine that you are out riding on your favorite trail and you go zooming around a corner and laying over the trail is a big branch of a tree. You have no time to stop before you hit the branch. If you hit the branch you will certainly go flying off the bike over the handlebars (called an ENDO). What do you do? You only have a second to react. With practice you would instinctively pop your front wheel over the log and ride right over the top of it. The ability to ride your bicycle over obstacles is helpful when riding around town. That same ability is crucial when riding in the woods.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Bicycles laid out ready to ride. Helmets are to be worn • 2 x 4 boards spread out in a grassy field	• For pictures on how to ride over obstacles refer to task card # 8		
Informing Task: Remember the lesson on wheelies? In the field, scattered about, there are 2x4 boards. What I want you to do is practice approaching the boards at a slow speed, popping your front tire up on top of, or over the board, and riding right over.			
• Watch and make sure students remember the lesson on wheelies, making sure that they get the front tire off the ground and over the board • Place some larger boards out on field for students who have mastered the proper	• As you approach a board, ride standing up. Immediately before the board, pull up on your handlebars and press down on your pedals to get the front tire up and over the board. After the front wheel has cleared the obstacle, shift your weight back.	• Determine a safe speed. • Pop a short wheelie, clearing the board • Shift your weight back • Legs as shock absorbers • Keep your momentum, ride right over the board.	• Focus on proper technique. • Ride over 20 small boards

skills to ride over them	Use your legs as shock absorbers as the rear wheel makes contact with obstacle. Let the momentum of the bike carry you over the board.		
• The Larger diameter boards should be chamfered so that the tire isn't making contact with a sharp angle. Excessive speed in this activity could lead to a lot of pinched tires and consequently lots of tubes to repair,			
• Watch and identify students that use the correct technique, • Place some larger diameter boards on the field	• Those students, to whom I give permission, can begin to ride over the larger boards.	• Determine a safe speed • Pop front wheel over the obstacle • Shift your weight back • Use legs as shock absorbers • Maintain speed over the obstacles	
	• The larger the obstacle, the higher you will have to pop your wheel into the air. The more your will have to shift your		

	weight back and the more shock you will have to absorb with your legs.		
• Place the largest obstacles out on the course.	• Those students, who are using the proper technique, can start clearing the largest diameter boards when I give them permission to do so.		• Carry your momentum over the largest obstacles and use proper technique.

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment. Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment.

What are the skills that you have to do to ride over obstacles?

- (Determine a safe speed and maintain it)
- (Pop a wheelie over the obstacle)
- (Shift your weight back)
- (Use your legs as shock absorbers)
- (Use the bike's momentum to get over the obstacle)

Central Washington University
Physical Education Teacher Education Program
Negotiating Barriers, Lifting Bike Over Barriers
Lesson #13

Objectives:

1. By the end of class the student will be able to dismount a slow moving bicycle and continue forward without stopping the bike. **(NASPE 1, EALR 1.1)**
2. By the end of class the student will be able to pick up the bike and shoulder it while walking or jogging. **(NASPE 1, EALR 1.1)**
3. By the end of class the student will be able to carry the bike over a 12" high barrier. **(NASPE 1, EALR 1.1)**
4. By the end of class the student will be able to put the bike back on the ground while continuing forward direction. **(NASPE 1, EALR 1.1)**
5. By the end of class the student will be able to remount the bike while walking or jogging. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- Bicycle for each student
- Helmet for each student
- Ten 12" High Barriers

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction:
Sometimes you will encounter obstacles that are too high to clear riding over them. You will have to dismount and carry your bike over them. In a sport called cyclocross, barriers are placed around the course that forces riders to dismount and carry their bikes over them. On trails, occasionally a large branch or a tree will do the same. We are going to learn how to clear barriers that you can't ride over.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Cones spread out to designate boundaries and course markings.	• For pictures on how to dismount and carry a bike an obstacle and remount to skill chart #9, #10, #11		

Informing Task:
Remember the lesson on mounting and dismounting? Now we are going to do it while the bicycle is in motion. While riding slowly lift your right foot off the pedal and swing your leg over the seat. Now both feet are on the same side of the bike. Stop the bike and step with the right foot onto the ground

• Set up 12" barriers on warm up course, set about randomly so that students can ride around in circular pattern. The students can then dismount	• Repeat stopping the bike and stepping off 20 times. Keep doing is until you are completely comfortable raising your leg over and being completely on the left	• While bike is moving slowly, swing right leg over saddle to the bike's left side. • Step down with right foot.	• Repeat 20 times

and negotiate the barriers as they come to them.	side of the bike.		
	• The Left pedal should be at the bottom the stroke from the dismount. While walking place your left foot on the left pedal and push off with your right foot. Your right leg will be extended to the rear. Swing the leg over to the right side of the bike and resume pedaling.	• Step on pedal left, push off right. • Swing right leg over to right side of bike • Continue pedaling	• Try to make the right foot push-off and swing over to right side all in one motion, Make it as smooth as possible. Repeat 20 times.
	• Now this time while the bike is still moving slowly, raise your right leg over the bike and step between your left leg and the bike, release the handlebars with your right hand. Step down off the bike onto your right foot and begin to walk beside the bike. **Be careful not to let the pedal hit the back of your leg.** Repeat this 20 times.	• Right foot swing over to left. • Shoot right foot through between left leg and bicycle. • Release handlebar with right hand • Step off	• Try to make it all one motion. Right swing over, shoot through and step off into a walking motion. Repeat walking off dismount 20 times

	• Try to increase the speed of the motion. Try working up to being able to jog off of the dismount and jog into the remount.		
	• On the dismount as you release the handlebar with your right hand, place the hand on the top tube. Keep your left hand on the handlebar. As you approach the obstacle, maintain your grip on the handlebar and top tube. Pick up the bike and jump over the obstacle. • See how smooth you can get in dismounting, clearing the barrier, and remounting.' • Don't hit the barrier and don't let the bike hit the barrier	• Right hand on top tube after dismount • Left hand on handlebar • Pick up the bike and jump over the hurdle.	• Try to clear 10 barriers in a row without letting the bike touch the barrier
	• After the obstacle had been cleared, use a jogging remount		
	• Now put it all together. Ride around the course and dismount, clear barrier, and remount.		• Try to make the whole sequence happen without breaking forward momentum.

			Use a jogging dismount and remount 20 times

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment.

Clearing barriers that are too tall to ride over takes finesse and practice. It is a good skill to have when on trails when you encounter a tree that has fallen over the trail.

What are the steps needed to dismount smoothly?

- (Swing right leg over saddle.)
- (Shoot right leg between left leg and bike.)
- (Release right hand off handlebar, place on top tube)
- (step off bike in walking or jogging motion)

When clearing the obstacle, what motions do you make?

- (Keep your right hand on the top tube and left hand on the handlebar.)
- (Keep moving toward barrier, as you reach it pick up the bike and hurdle the barrier)
- (After clearing the barrier set the bike back down)

What are the steps to remounting?

- (Place right hand on handlebar)
- (Step on left pedal with left foot)
- (Push off with right)
- (Swing right leg over bike)
- (Pedal away)

Central Washington University
Physical Education Teacher Education Program
Negotiating Obstacles Ride Day
Lesson #14

Student Objectives:

1. By the end of class the students will be able to ride over obstacles and carry their bikes over barriers in an obstacle and barrier course. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- Cones to mark out course.
- Bicycle for each student
- Proper fitting helmet for each student
- Short lengths of board of varying diameters 4x6, 6x10, rail ties
- 12" high barriers
- Place where you can lay out an obstacle course of ¼ to 1/2 mile in length.
- 30 quizzes (quiz #2 assessment8.doc)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Today is an activity day in which we will be using the skills of negotiating obstacles. We have a course laid out in which you will be riding laps. During the last few minutes of class we will ride a lap for time

Informing Task: We have an obstacle course set up. Start out slow and use proper technique for two types of obstacles, those you can ride over, and those in which you have to carry your bike over.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Administer quiz #2 • Bicycles laid out ready to ride. • Helmets must be worn by students • Mark a course using cones to mark the direction of travel. Place obstacles and barriers out on the course. Alternate obstacles that the students can ride over and ones that necessitate dismounting and hurdling the barrier, then remounting.	• First things first, we will take Quiz #2. • Today as you ride the course, you will see that there are barriers that you will have dismount and jump, and other obstacles you will be able to negotiate by riding over them. Use proper technique to negotiate both types of barriers. You will be graded by how well you are able to execute proper technique. • For pictures on how to dismount carry a bike and remount refer to skill charts #9, #10, #11.		• Obstacles you can ride over: try to maintain speed over and show proper form and technique. • Barriers you have to carry the bike over: Try to dismount, carry the bike over, and remount without ever breaking forward momentum.

• For assessment, watch the students at different barriers. Evaluate how well they are able to follow the cues for each type of barrier.		• Be smooth in all you actions • Determine a safe speed • Pop front wheel over the obstacle • Shift your weight back • Use legs as shock absorbers • Maintain speed over the obstacles	
• For those who desire to do so you may want to have a timed segment at the end of class. Start in waves or stagger start them so only a few are at any particular barrier at any time.		• Walking and jogging dismount • Carry bike over obstacle • Walking or jogging remount.	
	• Cool down. Ride easy on warm up course for 5 minutes.		

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment.

Riding over obstacles is a very important skill to have. It is especially important when on trails where branches and root may litter the trail in front of you. Sometimes you won't have time to react and you will have to ride over the branch. Other times you will have to dismount and carry your bike over because the obstacle is too tall to ride over.

- What should you do to absorb shock? (bend your knees)

Central Washington University
Physical Education Teacher Education Program
Cornering pt. 1
Lesson #15

Student Objectives:

1. By the end of class the students will be able to demonstrate the proper technique required when cornering. **(NASPE 1, EALR 1.1)**
2. By the end of class the students will be able to explain when they brake for a corner. **(NASPE 2, EALR 1.3)**
3. By the end of class the students will be able to demonstrate proper pedal position when entering a turn. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- Every cone available
- Large open area preferably outdoors (pavement or grass)
- *Diggin It* video (if applicable)
- Laptop/TV (depends of your method of projection)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many good quality cornering clips on the internet. (http://www.bikemag.com/av/) If possible use a quick clip of some Tour De France highlights of professionals taking corners at 55mph. The video I ordered from mountain biking magazine is called *Diggin It* and it includes footage of every skill taught in the entire block schedule. It seemed more practical to buy a video containing all the skills, rather than dig through the video clips looking for a specific skill and possibly not find it.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles and helmets laid out • Be on the lookout for students who have a tendency to want to race. Stop this behavior immediately • Have cones set up for applications(see attach) • Have students wear their helmets. Knee and elbow pads are to			

be worn if they are required by the parents.			
Informing Task: When I say **GO**, I want you to get your bike and your helmet and begin riding in a counterclockwise direction, **GO!**			
• You will find it easier to give the one informing task of riding in a circle, and then break down the process of cornering using the extensions and cues. This is why there's only 1 informing task • Depending on the amount of students, divide them into groups before you send them to the figure 8 courses. • Depending on how many cones you have you can set up a course for each student, but more than likely you can put students into small groups and allow one student to do the application and have	• Brake before you reach the turn then release the brakes throughout the turn. • Choose the straightest line possible through the turn. Start on the inside of the turn and finish at the outside • Lean the bike into the turn as opposed to steering the bike with your handlebars. • Put the outside pedal low/down and your inside pedal up/high. This prevents the inside pedal from hitting the ground. • Push down hard you on the outside pedal. This puts your center of gravity over the	• If you must brake during the turn **feather tap** your rear brake • The more weight put on the outside pedal, the faster the turn can be taken.	• In teacher designated groups complete the figure 8 course while focusing on the cues and extensions.

the others check for form, technique, as well as cues. • Teacher or student demonstration • Check for understanding • Pay close attention for off task students • Pinpoint the students who are performing skills with near perfect form • Depending on the skill level of the class, you may possibly find yourself only achieving the 2nd or 3rd extension • Make sure to leave a bike and helmet out for the end of class assessment.	tires and in turn increases traction. • Straighten out the bike and resume pedaling.		
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.			

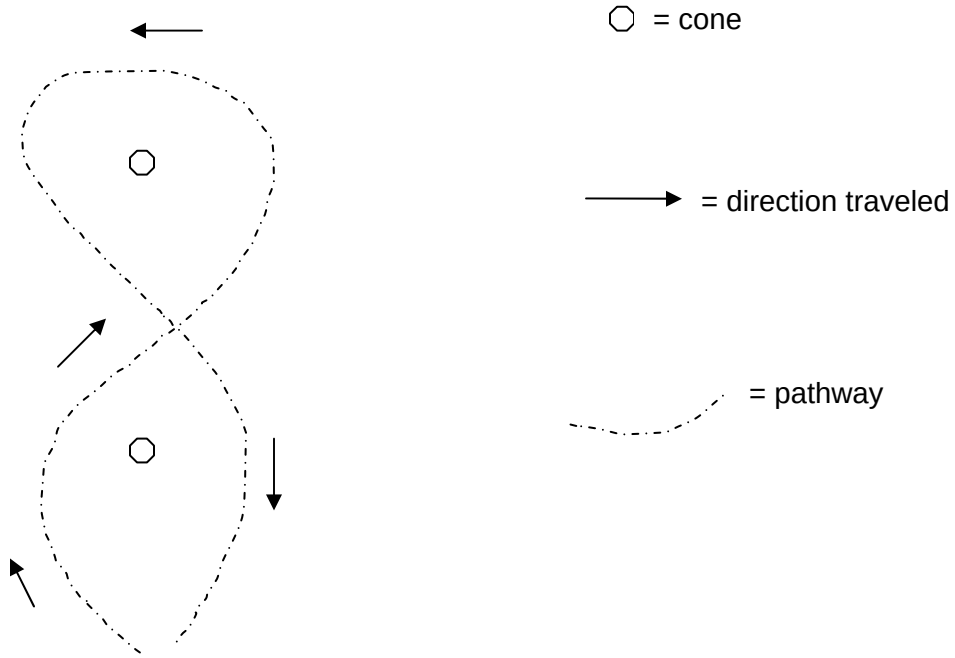
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- Who can demonstrate the proper execution of the figure 8 drill required when cornering? (choose a student)
- Who can explain when to brake for a corner? (before you begin the turn)

Figure 8 course



Central Washington University
Physical Education Teacher Education Program
Cornering pt. 2
Lesson #16

Student Objectives:

1. By the end of class the students will be able to demonstrate the proper execution of the quick corner course. **(NASPE 1, EALR 1.1)**
2. By the end of class the students will be able to explain why it is important to look ahead of you while cornering. **(NASPE 2, EALR 1.3)**
3. By the end of class the students will be able to demonstrate proper execution of the back to back course. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- Proper fitting bicycle for each student
- Proper fitting helmet for each student
- Large open area preferably outdoors (pavement or grass)
- Every cone available
- *Diggin It* video (if applicable)
- TV/Laptop (depends on your method of projection)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many good quality cornering clips on the internet. (http://www.bikemag.com/av/) If possible use a quick clip of some Tour De France highlights of professionals taking corners at 55mph. The video I ordered from mountain biking magazine is called *Diggin It* and it includes footage of every skill taught in the entire block schedule. It seemed more practical to buy a video containing all the skills, rather than dig through the video clips looking for a specific skill and possibly not find it.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles and helmets laid out • Be on the lookout for students who have a tendency to want to race. Stop this behavior immediately • From the previous lesson you should be able to tell where your class is in terms of skill level. Depending on that it may be more appropriate to keep the class in the	• First things first, **remind** students that out of class assignment #3 is due at the start of next lesson.		

counterclockwise formation, while only using the figure eight drill. If you deem it appropriate feel free to include the applications attached that require a sharper turn (see attach). If that is what you decide to do the extensions needed for that are labeled below. If the class still continues to progress feel free to switch the corner from left to right or vice versa. If the students still continue to progress fell free to connect the cornering skills from exiting one corner right into another one in the opposite direction (see attach). • However, if you don't get as far as to use the applications mentioned above, they will be options available for the cornering "ride" day			

which is the next lesson. • Have students wear their helmets. Knee and elbow pads are to be worn if they are required by the parents.			
Informing Task: When I say **GO**, I want you to get your bike and your helmet and begin riding in a counterclockwise direction, **GO!**			
• Of course the applications which require a lot of room depend solely on the amount of space available. As mentioned in the materials needed on the cover page, a large parking lot or grassy field would be the best location. Slightly downhill would be even better but it doesn't have to be. • Depending on the amount of students, divide them up for the different courses accordingly based on	• These are the extensions used for the figure 8 course, and the "opposite side" course. The extensions used for the quick cornering course are listed below these. • Brake before you reach the turn then release the brakes throughout the turn. • Choose the straightest line possible through the turn. Start on the inside of the turn and finish at the outside	• If you must brake during the turn **feather tap** your rear brake	• In teacher designated groups complete the figure 8 course while focusing on the cues and extensions. • Complete the "opposite side" turn course • Complete the Quick speed corner course • Complete the continuous corner course • **Remember:** The tougher courses don't have to be achieved by the end of this lesson. Keep in mind

your observations of their current skill level. Also, if you see students making progress, feel free to use intratask variation on the students who are noticeably progressing. • Depending on how many cones you have you can set up a course for each student, but more than likely you can put students into small groups and allow one student to do the application and have the others check for form, technique, as well as cues. • Teacher or student demonstration • Continually be checking for safety issues which include but are not limited to, speeding, wheelies, bunny hops, improper	• Lean the bike into the turn as opposed to steering the bike with your handlebars. • Put the outside pedal low/down and your inside pedal up/high. This prevents the inside pedal from hitting the ground. • Push down hard you on the outside pedal. This puts your center of gravity over the tires and in turn increases traction. • Straighten out the bike and resume pedaling. • Quick course extensions • Scoot your **bottom back**. Back as flat and parallel as possible • Gently pull up with		that they will still be used in the cornering "ride" day.

use of brakes throughout the turn/corner, etc. • Check for understanding when giving new extensions and when students move from one application course to another. • Pay close attention for off task students • Pinpoint the students who are performing skills with near perfect form • Make sure students aren't traveling too fast on the speed turn. Use your professional judgment and don't be afraid to tell students to slow down. • Make sure to leave a bike and helmet out for the end of class assessment.	your outside hand. This improves control. • Inside knee in. Push your inside knee against the frame. The tighter you push with the knee, the tighter the corner you can take. Let up pressure as you exit the turn • Push your outside pedal down. The **faster** you take the **turn** the **more** you want to **push** • Keep your head up and always be looking for obstacles in your path. The faster you take the turn, the more aware of obstacles you should be.		
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return			

their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

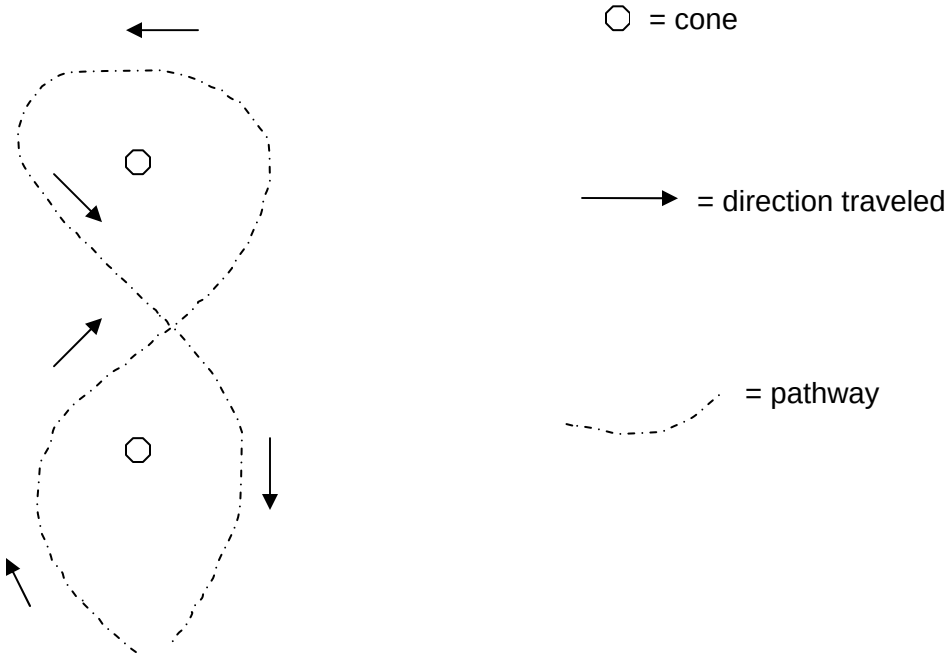
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

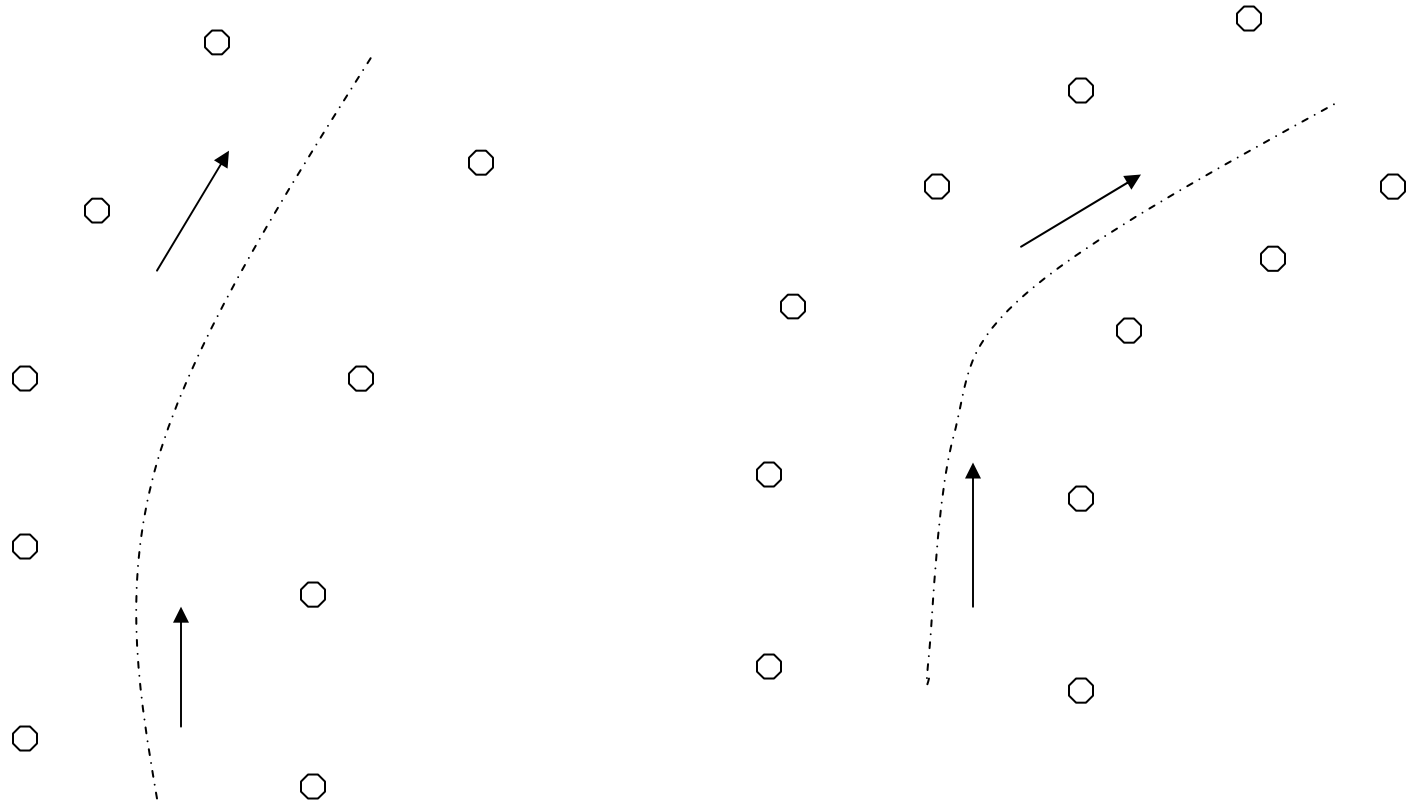
Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- Who can demonstrate the proper execution of the quick corner course? (pick a student or two)
- Who can demonstrate the proper execution of the back to back corner course? (pick a student or two)
- With a show of hands who can tell me why it is important to scan/look ahead of yourself while cornering. (Answer: To make sure no obstacles are in your path of travel)

Figure 8 course

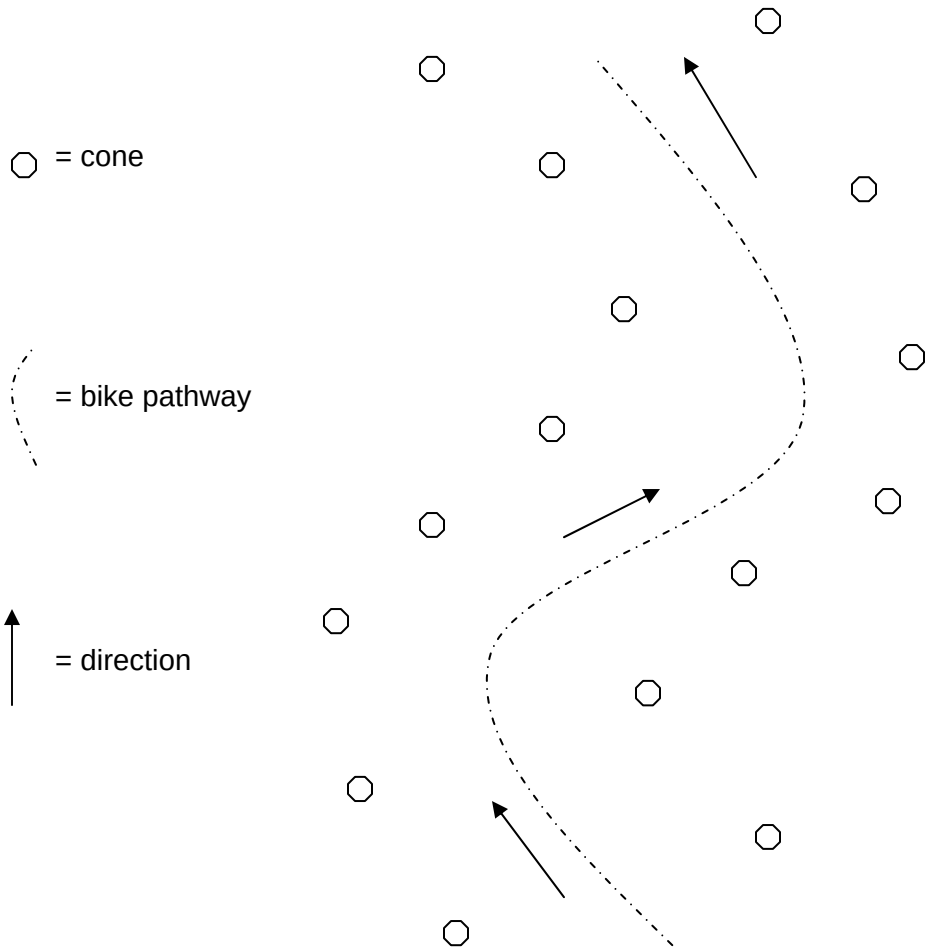


Quick corner course



= direction = cone = bike pathway

Back to back corner course



Central Washington University
Physical Education Teacher Education Program
Cornering Ride Day
Lesson #17

Student Objectives:

1. By the end of class the students will be able to complete their skill sheet. **(NASPE 1, 5, EALR 1.1, 3.3)**

Teacher Objectives:

Equipment:

- Proper fitting bicycle for each student
- Proper fitting helmet for each student
- Large open area preferably outdoors (pavement or grass)
- Every cone available
- 30 skill sheet handouts (see attached)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Inform the students that it is a ride day. On these days no video clips or intros. Are needed. Just get them on their bikes and start the activities.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Collect assignment #3 • Bicycles and helmets laid out • Be on the lookout for students who have a tendency to want to race. Stop this behavior immediately • Today is a ride day that consists of the students performing cornering skills on many different courses • All courses set up before students arrive. (see attach)	• First things first, hand in out of class assignment #3. • Students received assignment due dates on day one of class and were reminded about today's assignment in the last lesson. • Like previous ride days there are no extensions. So minimize the instruction and maximize activity time. The cues are listed below if you need them.		

• All off the previous lesson's courses are attached and a few more are added. Feel free to use any of the courses attached. It just depends on the size of the activity area.	• Inform the students to continue working on the courses after they hand in their skill sheets.		
Informing Task: When I say **GO**, I want you to line up on the baseline as I count you off. Remember your number and go to that station with the appropriate number.			
• Pass out handout to each student • Pay close attention for off task students. • Pinpoint students who are doing well. • With many courses running at the same time it will be fairly tricky keeping an eye on all the students, so REALLY emphasize the importance of taking turns. • Make sure to leave a bike and a helmet out for the assessment.	• Read the handout and when you have completed the activities on the sheet, turn the sheet in. • It is a ride day so minimize the instruction time. The students are practicing the cornering skills they learned the previous two days. Listed below are the skills from the previous day's lessons. As stated earlier, let the students practice as much as possible, and use the refinements if a certain student or two is noticeably struggling.	• If you must brake during the turn **feather tap** your rear brake • The more weight put on the outside pedal, the faster the turn can be taken. • Brake before you reach the turn then release the brakes throughout the turn. • Choose the straightest line possible through the turn. Start on the inside of the turn and finish at the outside • Lean the bike into the	

	• Brake before you reach the turn then release the brakes throughout the turn. • Choose the straightest line possible through the turn. Start on the inside of the turn and finish at the outside • Lean the bike into the turn as opposed to steering the bike with your handlebars. • Put the outside pedal low/down and your inside pedal up/high. This prevents the inside pedal from hitting the ground. • Push down hard you on the outside pedal. This puts your center of gravity over the tires and in turn increases traction. • Straighten out the bike and resume pedaling.	turn as opposed to steering the bike with your handlebars. • Put the outside pedal low/down and your inside pedal up/high. This prevents the inside pedal from hitting the ground. • Push down hard you on the outside pedal. This puts your center of gravity over the tires and in turn increases traction. • Straighten out the bike and resume pedaling.	

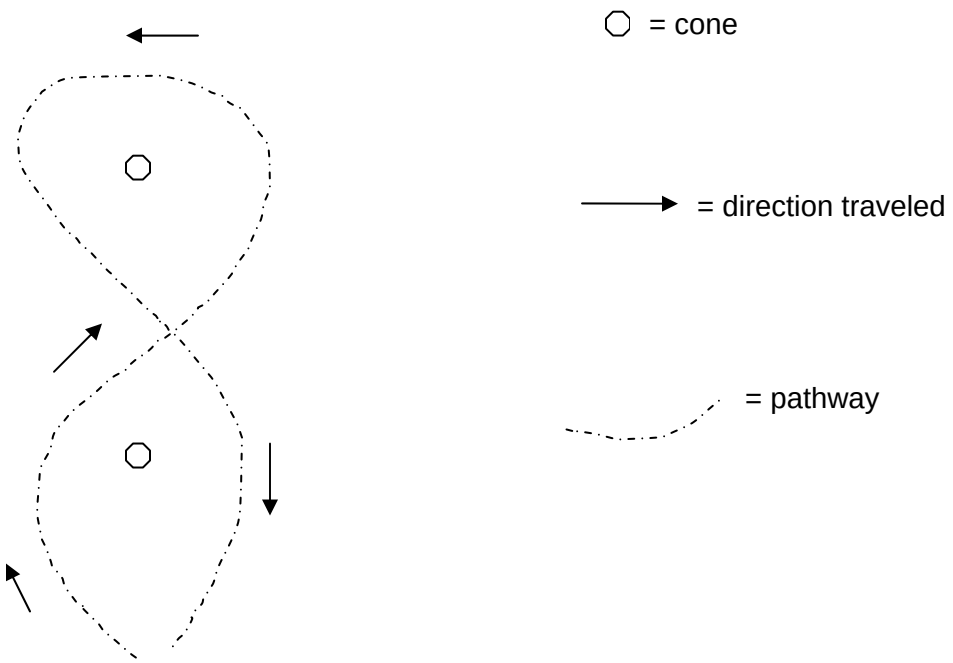
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes do not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

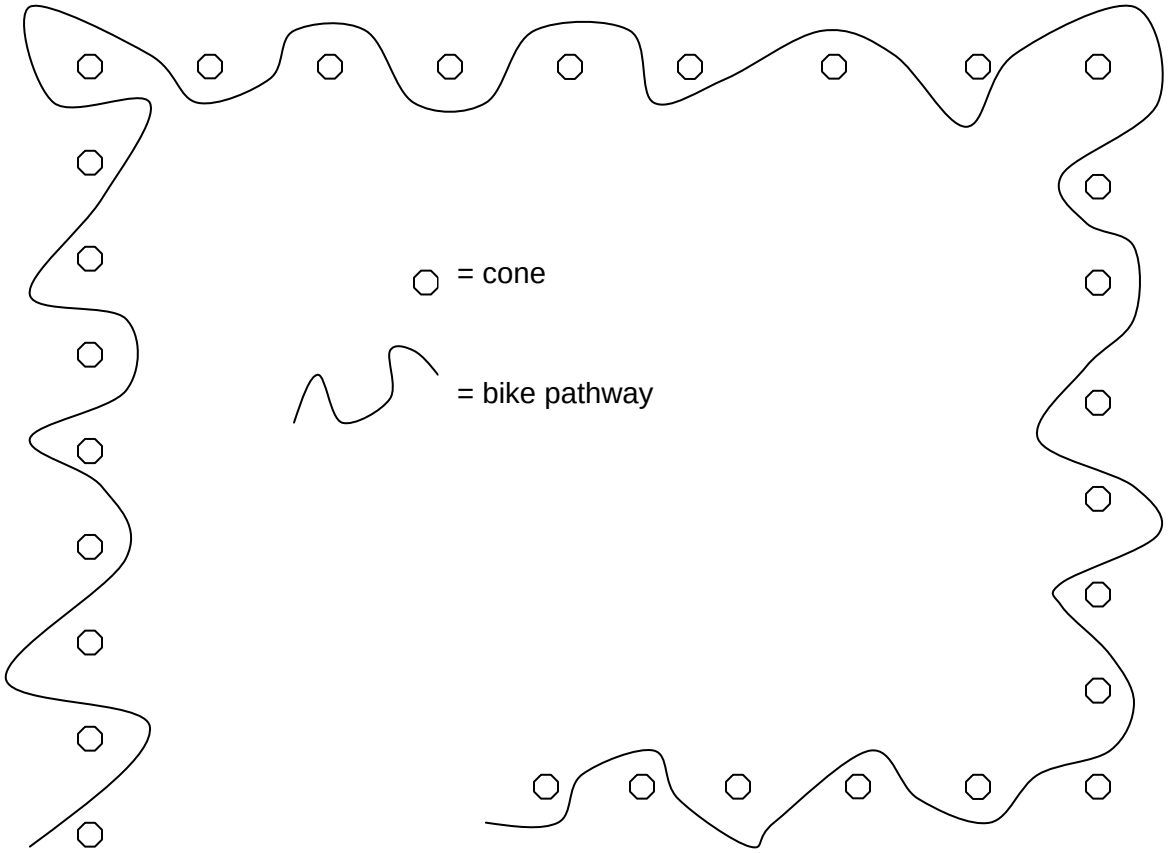
Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- With a show of hands who would like to demonstrate proper execution of the figure 8 course? (pick a student)
- With a show of hands who would like to demonstrate proper execution of the back to back corner course? (pick a student)
- With a show of hands who would like to demonstrate proper execution of the long corners/sharp corners course?(pick a student)

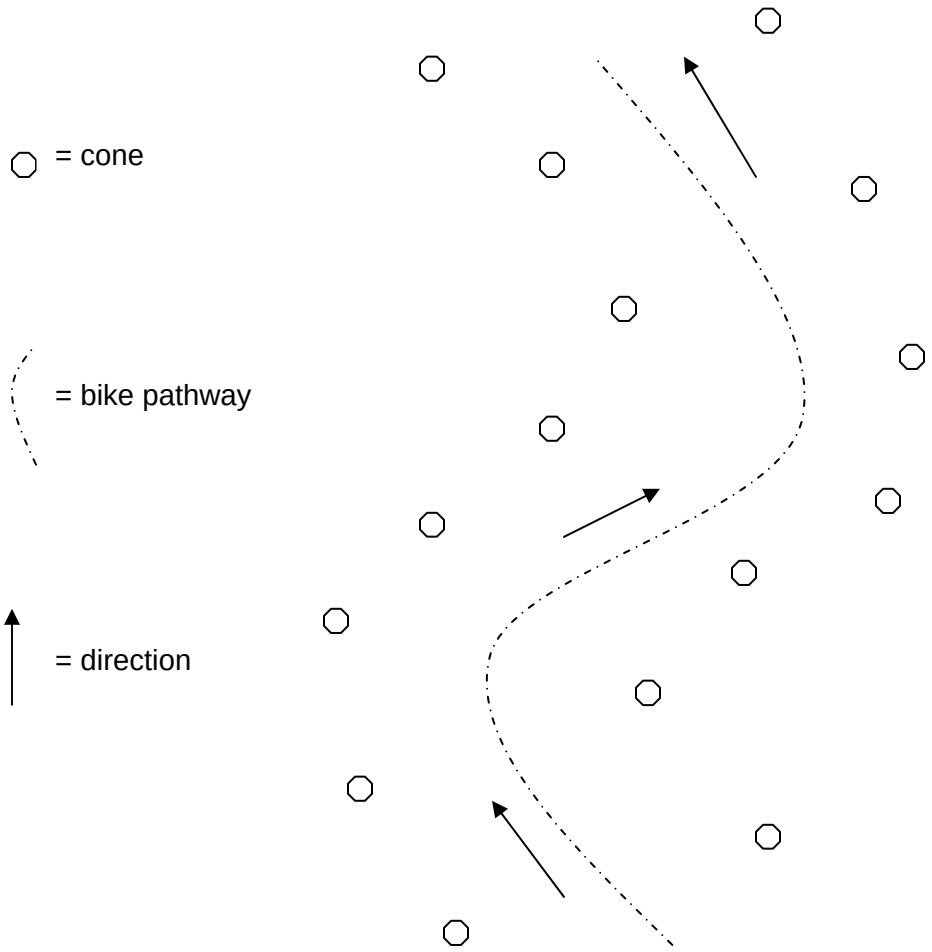
Figure 8 cornering drill



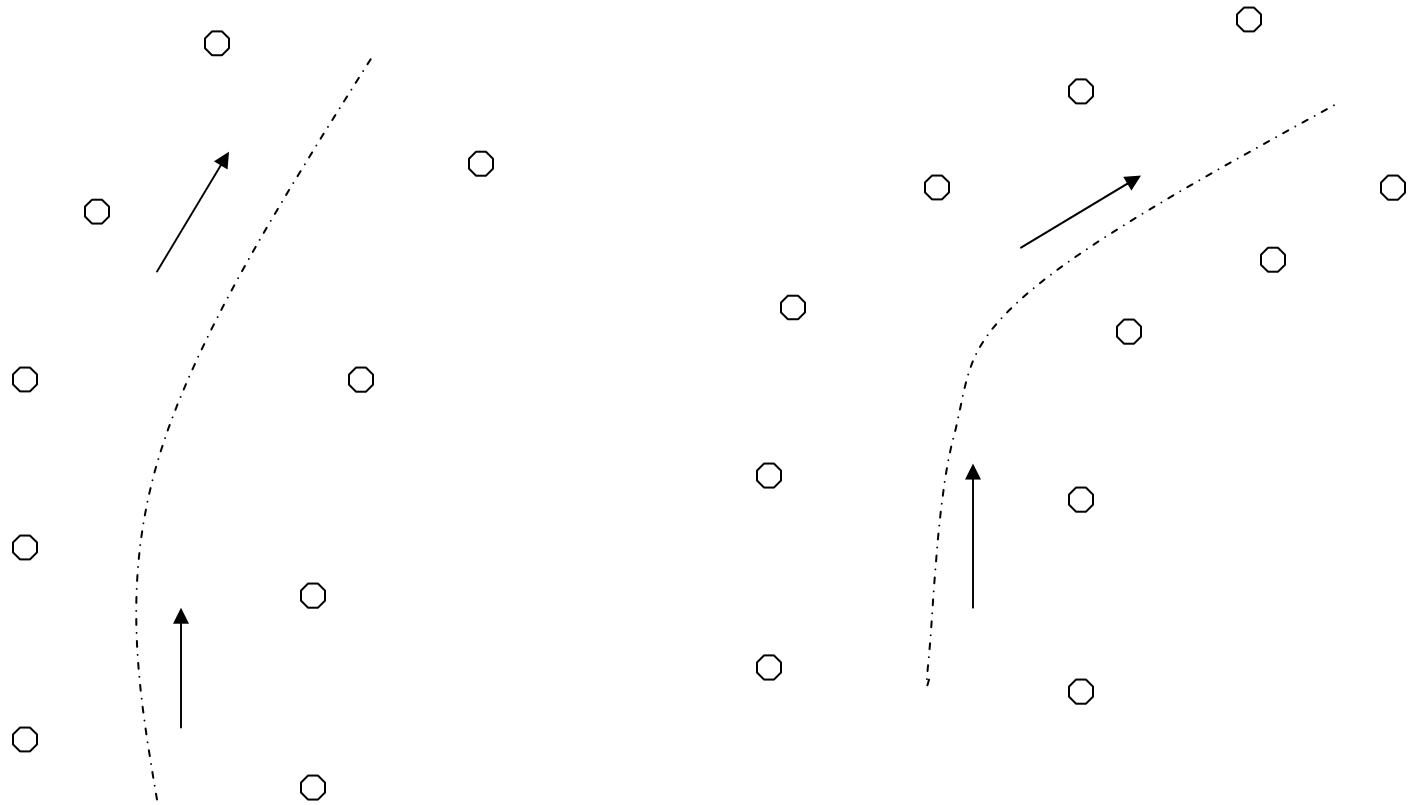
Snake Course



Back to Back corner course

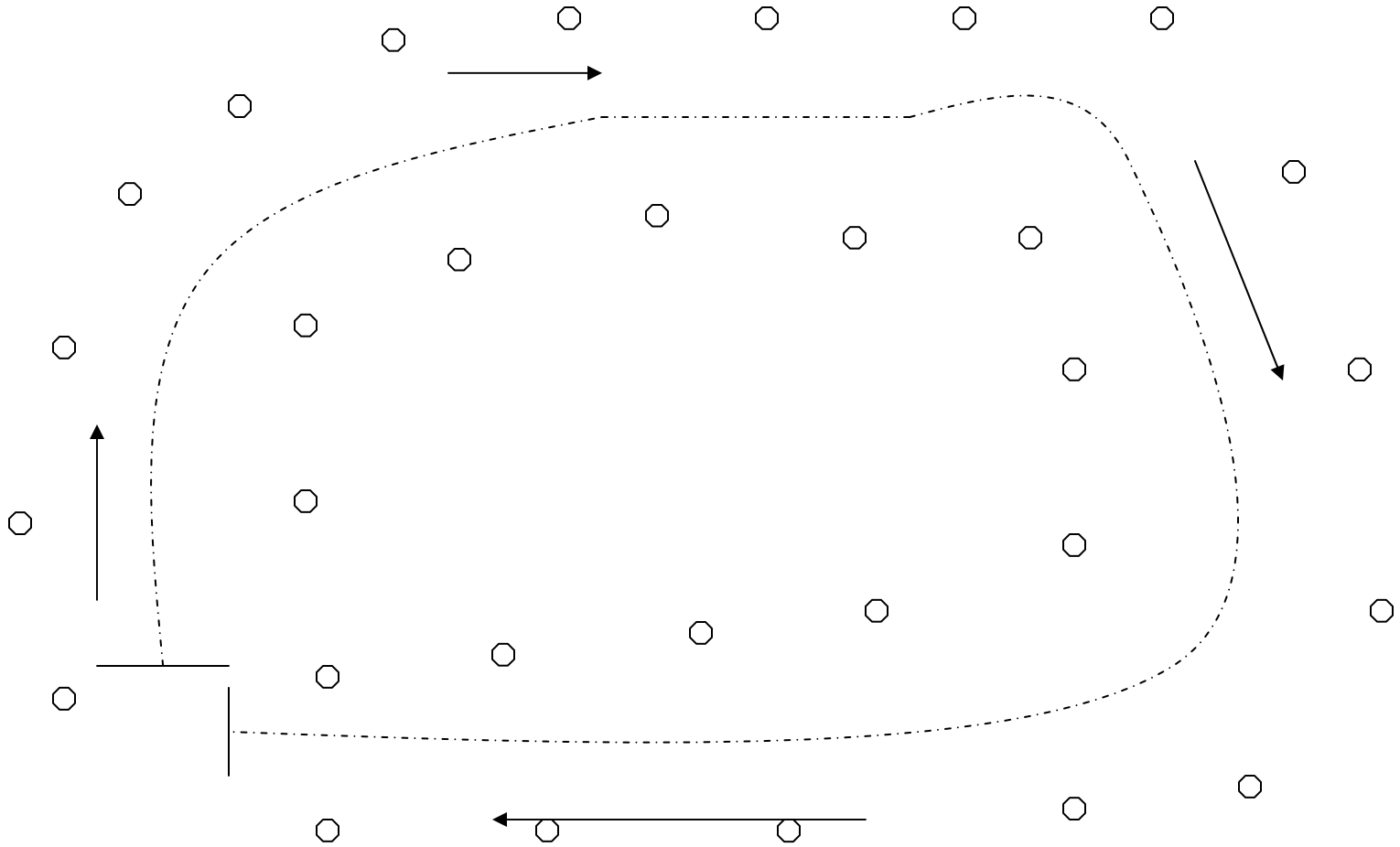


Quick corner course



= direction = cone = bike pathway

Long corners/Sharp corners course



= cone

= bike pathway

= start/finish

= direction traveled

Lesson 17 Assessment Sheet

Directions:

By yourself or with a partner, complete the skill sheet. You may begin on any skill or activity that you want. Please be courteous of others in your same testing area. If there is a long wait at a certain activity then move to another. Turn your worksheet in to the teacher when finished.

Initial when complete:

1.) _____ Complete the snake course 5 times

2.) _____ Complete the long corner/short corner course 5 times

3.) _____ Complete the figure 8 course 10 times

4.) _____ Complete the quick corner course 10 times

5.) _____ Complete the back to back corner course 10 times

Central Washington University
Physical Education Teacher Education Program
Shifting
Lesson #18

Objectives:

1. Shift through rear cogs and develop sense of difficulty relating to numbers on gear indicator. **(NASPE 2 EALR 1.1)**
2. By the end of class the students will be able to shift through front chain rings and develop sense of difficulty relating to number on gear indicator. **(NASPE 2, EALR 1.1)**
3. By the end of class the students will be able to be able to downshift to a stop and shift through the gears while accelerating to desired speed. **(NASPE 2, EALR 1.1)**
4. By the end of class the students will be able to understand how derailleurs work. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- Bicycle for each student
- Helmet for each student
- Cones for marking boundaries
- Handout on gearing and shifting (League of American Bicyclists) download at http://www.bikeleague.org/educenter/factsheets/shiftingandgears.htm Print 30 copies.
- Bike stand for displaying a bike and showing the workings of a derailleur

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: If we were to be able to ride our bikes on perfectly level ground, then maybe bicycle would not need multiple sprockets and gears. Since rarely do we ride on perfectly level ground, bicycles are equipped with different gears to allow hill climbing with more efficiency and being able to ride with more speed in other situations.

MAF/ Instructional Techniques	Tasks	Refinements(cues)	Application
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Cones spread out to designate boundaries and course markings. • Hand out for shifting and gearing	• Bikes are sometimes called by how many gears (or speeds) that they have. During the 1980,s bikes typically had ten speeds, hence the ten speed bike. Now road bicycles will have between 16 to 20 speeds and mountain bikes will typically have 21 to 27 speeds. • The bikes we have are (for example) 21 speeds. Look at the chainrings (connected to crankarms). You will see that there are three chainrings. One large on the outside, one smaller in the middle, and one very small on the	• Quick cadence, about 80 turns per minute.	

	inside. • On the rear hub there are seven cogs. The largest cog is on the inside next to the spokes. The cogs get smaller as you progress to the outside. • Since there are three up front and seven in back; 3x7=21 speeds. • On your shifters, your left shifter is numbered 1 to 3 and your right is numbered 1 to 7. They are numbered 1 being the easiest to pedal and the higher numbers harder to pedal. • Most people will ride in a gear that is too slow. The pedal rate, in terms of revolutions per minute, is call cadence. A slow cadence can result in sore or injured knees and other problems because pushing hard gears is inefficient and energy costly. • We want to keep the cadence fairly quick. Use easier gears. This may feel a bit funny at first, but		

	it is the better way to learn. Lance Armstrong trained to use a faster cadence and became the best cyclist in the world. He would ride with a cadence of up to an incredible 120 revolutions per minute.		
• Have students gather around a bike mounted on a stand	• Derailleurs work by directing the chain over the spot where the rider wants the chain to be. The front derailleur directs the chain over the front chainrings. In this case the outside chainring, also the largest chainring. The middle chainring is the one most used for most people, and t hen the inside gear, or granny gear as it is sometimes called. • The rear derailleur directs the chain over the cog the rider wants. The larger cogs near the spokes result in easier spinning of the pedals than the ones near the frame. Derailleurs work by a cable pulling them to the		

	spot where the rider wants them to be.		
Informing Task: I want you to ride around the warm-up course. Place the left gear shifter on two and ride around shifting through the gears one through seven. Start with one and progress to seven.			
	• Note how one is easy to pedal and how it gets easier to pedal as you move up. The cogs get smaller in the back as you shift up in number. The smaller cogs will turn the wheel more revolutions per crankstroke. That is why it is more difficult to pedal with the higher number	• Pedal while shifting. Don't shift when not pedaling.	
	• Place the right shifter on 4. Ride around on warm up course, shift left hand shifter from one to three. You will see that it is easy to pedal when the setting is at one and harder when the setting is at two and hardest at three.		
	• Now as you ride, occasionally come to a complete stop. As you come to the stop, downshift gears so that you are pedaling very easy. As you start pedaling, shift from the		

	easy gears to the harder gears. Try to find a comfortable gear to cruise in. Then downshift and stop and repeat the process.		
Informing Task: Now we are going to ride the XYZ route. Whenever we come to a stopping point, shift gears into easier gears before stopping. When you start again, shift from easiest gears to hardest gears until you find a comfortable gear for the speed at which you want to travel. Keep the left shifter on the number two setting for this ride.			
		• Shift only when pedaling • Shift only one gear at a time for this exercise.	
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own. **1.** If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away. **2.** If you are wearing a (color) shirt you may put your equipment away. **3.** If you have (color) hair you may put your bike and equipment away Again feel free to be creative in your methods to putting away equipment**.** Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment. Today we learned gears and shifting and started to practice some shifting skills. Lets see what we have learned today • What set of gears does the left shifter control? (The front derailleur, controlling which chainring the chain is engaged on) • What set of gears does the right shifter control? (The rear derailleur, controlling which cog the chain is engaged on) • What strategy for shifting can one employ while coming to a stop? (Shift to easier, larger cogs. This is called downshifting while spinning crank. Now you will be ready to start again) • What strategy for shifting can one employ while accelerating? (Shift to smaller cog when you start to spin the crank fast.) • Why does it get harder to pedal when the chain is positioned on the small cogs? (Every rotation of the chain results in more revolutions of the wheel when the chain is placed on the small cogs. When the chain is placed on the large cogs the wheel spins less per chain revolution and thus it is easier.) • Why do we want to pedal at a quicker cadence? (Grinding big chainrings and small cogs is harder to do than spinning easier settings. It is harder on the knees and energy inefficient.)			

- About how many times per minute should our crank turn? (Try to ride with a cadence of about 80 revolutions per minute)

Central Washington University
Physical Education Teacher Education Program
Shifting: Ascending and Descending
Lesson #19

Student Objectives:

1. By the end of class the students will be able to correctly select front chainring for hill ascension. **(NASPE 2, EALR 1.3)**
2. By the end of class the students will be able to correctly select front chainring for hill descending. **(NASPE 2, EALR 1.3)**
3. By the end of class the students will be able to be able to select appropriate rear cog for desired speed and effort while ascending and descending. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- Bicycle for each student
- Helmet for each student
- Course outlined with uphill and downhill sections

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Yesterday with started to practice shifting skills while riding on flat ground. What happens when the ground ahead points up or down? Yesterday we only used the front middle gear. Today we are going to learn to use the inside granny gear (1) and the outside gear (3). Using the gears is a huge advantage when tackling the hills. In the early days of bicycling, the racers did not believe in bikes with more than one gear. A man named Velocio, who invented the derailleur, thought of a test to prove the racers wrong. He put forth a challenge to a champion racer to a race in the mountains with a young woman. The champion was equipped with a single speed bike; the woman was equipped with a three speed bike. The champion lost. Trying to go up and down hills without learning to properly use the gears is similar to having a single speed bike. Why have it if you aren't going to use it? On the same token proper use of the gears will make the effort of getting up the hills much less.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Use a park or area with a gentle uphill and downhill section. • You may wish to use cones to mark turn around points or course markings.	• Yesterday we practiced front shifting. We know that #1 on the left hand gear indicator is very easy to pedal. When you about go up a hill you need to select which front chainring you are going to use because it can be difficult to change to a small chainring while going uphill.		

Informing Task: As you approach the hill shift into the small chainring (#1 on left hand) and pedal up the hill. Use the rear shifter (right hand) to make it easier or harder as you go up.			
		• Shift left hand at base of hill • Left hand at bottom • Right hand while going up	
	• Normally you will only try to make the effort easier as you will go up. Progress through the gears from larger numbers to smaller numbers on right gear indicator.	• Look at the gear indicator on right hand • 1 is easier • 7 is hardest	
	• Sometimes the hill will lesson in degree of slope. In that case you will have to shift to a harder gear.		
Informing Task: When we are going to descend a hill, we will want to shift into harder gears so we can continue to spin efficiently. As you are about to come down the slope shift into large chainring on front (#3 on left shifter) and use right hand to control how fast you want to spin your pedals on the way down.			
		• Shift into large chainring at top of hill (left hand #3). Use right hand to control how fast you spin coming down. • Left hand shift #3 • Right hand control spin	

• If park has an area of greater slope, allow students to practice there. Watch for shifting at bottom and top of the hill.			

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment. Today we practiced shifting for going up a hill and shifting for descending a hill. Let's see what we have learned today.

- When should you shift the chainrings for an uphill section? (Shift at the bottom of the hill.) It gets difficult to switch chainrings when riding up a hill.
- Why? (It gets difficult to switch chainrings when riding up a hill.)
- Which chainring should you shift into for a steep uphill section? (The inside gear, the one closest to the frame tubing. It is referred to as the granny gear)
- When should you shift for a downhill section? (Shift into the big chainring as you start your descent, then you can shift into smaller cogs as you go down and get faster.)
- Which Shifter controls the chainrings? (The shifter that you operate with your left hand)
- Which Shifter controls the cogs? (The shifter that you operate with your right hand)

Physical Education Teacher Education Program
Central Washington University
Shifting Ride Day
Lesson #20

Objectives:

1. By the end of class the students will be able to demonstrate proficiency in shifting gears on flat ground while accelerating. **(NASPE 2, EALR 1.3)**
2. By the end of class the students will be able to demonstrate proficiency in shifting gears while slowing down and stopping. **(NASPE 2, EALR 1.3)**
3. By the end of class the students will be able to demonstrate appropriate shifting patterns for negotiating an uphill grade. **(NASPE 2, EALR 1.3)**
4. By the end of class the students will be able to demonstrate appropriate shifting patterns for negotiating a downhill section. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- Bicycle for each student
- Helmet for each student
- Cones to lay out course
- Assessment sheet (assessment 17.doc)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Today is your opportunity to put all the things you've practiced regarding shifting to use. There is a course laid out that has uphill sections, downhill sections, and flat sections with stops. Today you will put all of the elements of shifting into play.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Cones spread out to designate boundaries and course markings.			

Informing Task: The course today features uphill sections, downhill sections and level ground. There are stops along the way and the distance of the course is about ____. Try to complete the course as many times as you feel comfortable, but you must keep riding the entire 45 minutes. You will be tested on your ability to shift correctly during acceleration, on uphill sections and downhill sections.

• Try to find a park or area that has a lot of sections of different grades. By laying out the course with the stopping and ending points in the same spot, you will have equal uphill and downhill sections. Try to lay it out so that	• Remember to shift at the bottom of the hill into the correct chainring for going uphill. While descending you shift into the large chainring at the top of the hill, and then select a cog that permits you to spin comfortably	• Shift into small chainring at bottom of hill before going up. • Use rear cogs to adjust while going up. • Shift into large chainring at top of hill as you start to come down. • Use rear cogs to adjust	• Try to be smooth in your timing of the shifts. • Try to maintain the same cadence regardless of whether you are going uphill or downhill.

you can position yourself to assess student's ability to shift for ascending and then also be able to have a spot to assess descending shifts. You also will want a spot to assess their ability to shift through the gears accelerating. Use Lesson 20 assessment sheet to record student progress.	on the way down. • Remember to shift to easier gears while stopping so that you are ready to take off again. Only shift while pedaling.	pedaling speed while going down. • Shift into easier gears as you brake. • Shift only while you pedal.	

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment**.** Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment. Today we practiced shifting on all of the shifting situations we covered over the last few days. In the next few lessons we will be putting all the skills we have been learning to practice. Let's see how much we understand from shifting.

- When should you shift for going up a hill? [Shift the chainring (left hand) at the bottom of the hill, shift the cogs (right hand) as you go up.]
- What are the gears in the back called? (They are called the cogs)
- Which chainring would be best for going up a steep uphill? (The smallest one, the one that is nearest to the frame. It is referred to as the inside gear or the granny gear)
- What is downshifting? (Shifting to easier gears as you get ready to stop.)
- What is cadence? (The number of revolutions per minute you pedal)
- How does the front derailleur work? (It works by pushing or pulling the chain on and off chainrings and guiding the chain to engage on the chainring the rider desires.)

- How do you determine how many gears a bicycle has? [Multiply the number of chainrings (Front) by the number of cogs (rear). This will give you the total number of possible chainring to cog combinations, hence the number gears.]

Central Washington University
Physical Education Teacher Education Program
Descending Light Grade
Lesson #21

Objectives:

1. By the end of class the students will be able to negotiate a light downhill section marked by cones. **(NASPE 2, EALR 1.3)**
2. By the end of class the students will be able to negotiate small obstacles while descending. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- A bicycle for each student
- Properly fitting helmet for each student
- Cones for marking course
- 4 X 6 boards

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: World class mountain bikers can be often classified by what they are strong at. There are those who can climb up hills like a goat and those who are great at descending the hills. Descending on a mountain bike takes a lot of skill in lots of different areas. We have covered many of those skills throughout the unit. One has to be able to effectively brake, corner, negotiate obstacles, sometimes jump and shift. We are going to start to put all the things that we have been learning together.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Cones spread out to designate boundaries and course markings. • A park or large area that has a gentle, sloped spot. • Set cones out in a switchback pattern on the downhill section and place a couple of 4x6 boards out so the students will have to ride over them.	• First things first, **remind** students that out of class assignment #4 is due at the of next lesson.		

Informing Task: The courses that we are riding are now going to get longer and more difficult. Today we are going to ride on a course that features a downhill section that is marked with cones. The cones represent where you are supposed to turn. The downhill section also will have a couple of small boards that you will need to ride over. Remember that the next few days will put all the skills you have worked into play as we get ready for the field day. Another thing, whenever you have a loop course with downhill sections, there will be uphill sections also. Be prepared. Be careful, there is probably enough time to complete the course 3 or 4 times, but it only takes a second of inattention to get yourself hurt. **No Racing**

• Watch for students who want to race. Make sure that the students stay safe during this exercise.		• Remember all the cues we covered for all the different things we practiced.	
• Measure course so that you can estimate how much time it will take the students to complete a lap and how many laps they can perform in the time you have. Assume that the average speed will be no more than 10 mph.			

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment**.** Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment. We are now starting to put all the things we learned and practiced over the last few weeks together on one ride. Let me ask you what your impressions are of what we did today.

- What part of the course did you find the most difficult? (pick a student)

- What was easy? (pick a student)

Central Washington University
Physical Education Teacher Education Program
Descending a Moderate/Light Grade
Lesson #22

Student Objectives:

1. By the end of class the students will be able to demonstrate the proper feathering of the breaks technique bringing them to a complete stop at the end of a moderate/light grade of descent. **(NASPE 1, EALR 1.1)**
2. By the end of class the students will be able to demonstrate the proper cornering technique on a moderate/light grade of descent. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- Every cone available
- A moderate to light downhill pathway (preferably long, and wide enough to allow the class mobility but still maintaining safety and control.)
- TV / Laptop (depending on your method of projection)
- *Diggin It* video (if applicable)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many good descending clips on the internet. (http://www.bicyclecam.com/) These clips are cool because a helmet can is used instead of a panoramic shot. The video I ordered from mountain biking magazine is called *Diggin It* and it includes footage of every skill taught in the entire block schedule. It seemed more practical to buy a video containing all the skills, rather than dig through the video clips on the internet looking for a specific skill and possibly not find it.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Collect Assignment #4 • Bicycles laid out ready to ride. • Have them wear their helmets. • Depending on the length of the hill the teacher will constantly be riding through the mass of students paying close attention for safety and assistance on the skills • Also, depending on	• First things first, hand in out of class assignment #4 • Students received assignment due dates on day one of class and were reminded about today's assignment in the last lesson • The idea of this descending lesson is to have the students take the skills they previously learned and incorporate them	• Wheelie Cues • **Crouch down** on the bike just before you reach the object you are going to wheelie. • J-hop cues • **Pull up** like a wheelie • In mid flight, **push down** and **lean forward** • **Pedal** after landing • Bunny hop cues	• Try and perform every previous skill at least once.

the amount of students in the class you can divide them up into groups. Stress the importance of space awareness. Make sure no students are right behind each other but are more side by side. As the students get underway and begin the descent they will more than likely not be side by side, but STRESS to them the importance of using common sense i.e. If someone is getting close to them then they should practice a cornering technique in the opposite direction of the oncoming student etc. • If the students simply can't choose their own skills or don't alternate then quickly make each skill listed below mandatory on each time down i.e. This time down I want each	in a moderate/light descent. Therefore the teacher can take this time to make informal assessment on the students progress and give assistance where needed. So all of the skills and cues are listed below. Once again, it is mainly a ride day so the students can practice the skills they have acquired. • Once again, like the previous lesson it is an opportunity for the students to descend while working on previously acquired skills. That is why there is no new instruction. We are trying to maximize the students' time to develop and become competent bike riders in all aspects of the sport. • If the students can't	• **Push** your feet **down**, **back**, then **up** in one fluid motion • **Crouch down** on the pedals just before reaching the object • Use the compression in the tires to help you accelerate upward • Cornering Cues • Brake before turn, release brakes throughout turn. • Lean bike into turn • Outside pedal low/down and your inside pedal up/high • Push down hard you on the outside pedal • Shifting Cue • Shift only when pedaling	

of you to **only** work on wheelies.	choose and perform the skills in a mannerly way, then choose the skill they will perform on that particular time down.		
Informing Task: When I say **GO,** I would like for you to retrieve your bike and wait for my command, **GO!**			
• Watch for safety • Some students will forget the tasks and start racing, be on the lookout and stop students immediately. • Once students reach the bottom present the feathering technique (Lesson #6) • Make sure to keep one bike and helmet out for your assessment	• Once you get them into their groups have the 1st group go and so forth. Once they do this several times they will get the hang of it and it should run smoothly • Have them work on any of the skills previously worked on. They are listed below. • Bunny hop • Wheelie • J-hop • Cornering • Stopping • Track Stand • Shifting	• Track stand cues • **Look ahead** of you • Keep your **torso straight** • Focus on **Center of gravity**. • Slightly **lean forward** • Slightly turn your handlebars to a **45degree angle**	
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own. **1.** If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away. **2.** If you are wearing a (color) shirt you may put your equipment away. **3.** If you have (color) hair you may put your bike and equipment away			

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

- With a show of hands who would like to demonstrate the proper stopping technique using the feathering of the brakes while descending the hill?(pick a student or two)
- With a show of hands who would like to demonstrate the proper cornering technique while descending the hill?(pick a student or two)
- (**Note: not an objective**) With a show of hands would two of you like to demonstrate all the skills you know while descending the hill? (pick a student)

Central Washington University
Physical Education Teacher Education Program
Descending Steep Grades
Lesson #23

Objectives:

1. By the end of class the students will be able to employ skills learned previously while negotiating a downhill section of a moderately steep grade. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- A bicycle for each student
- Properly fitting helmet for each student
- Cones for marking course
- 4 X 6 boards
- Park or nearby trails with moderately steep grade sections.

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: We have been progressing in our ability to negotiate increasingly more difficult situations. Today we put all of the practice into play. There is a section of the course today that is moderately steep. You will need to be careful in getting down, but you have been practicing all the things necessary to be successful today on the trail.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Cones spread out to designate boundaries and course markings. Lay out cones so that students are forced to negotiate turns on the slope downhill. This will prevent also any of the more daring students from bombing the downhills. • Need a park with a large grassy area or trails with a			

<table>
<tr><td>moderately steep slope
• Place boards as obstacles in various parts of the course.</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Informing Task: Today the hills get steep and the course has more obstacles. We again will be using all the skill that we have been practicing for the last few weeks all at once. Be prepared to be braking, cornering, shifting, negotiating obstacles and riding uphill. You will probably have time to ride the course 3 or 4 times in the class today. Be careful and No Racing.</td></tr>
<tr><td>• Measure course so that you can estimate how much time it will take the students to complete a lap and how many laps they can perform in the time you have. Assume that the average speed will be no more than 10 mph.
• Watch for students who want to race. Make sure that the students stay safe during this exercise.</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away
Again feel free to be creative in your methods to putting away equipment. Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment.</td></tr>
</table>

We are now starting to put all the things we learned and practiced over the last few weeks together on one ride. Let me ask you what your impressions are of what we did today.

- What part of the course did you find the most difficult? (choose a student)
- What was easy? (Pick a student)

Tomorrow and the next day the courses will get more difficult. Be ready with all your skills that you have learned.

Central Washington University
Physical Education Teacher Education Program
Descending a Moderate/Steep Grade
Lesson #24

Student Objectives:

1. By the end of class the students will be able to demonstrate the proper feathering of the breaks technique bringing them to a complete stop at the end of a moderate/light grade of descent. **(NASPE 1, EALR 1.1)**
2. By the end of class the students will be able to demonstrate the proper cornering technique on a moderate/light grade of descent. **(NASPE 1, EALR 1.1)**
3. By the end of the class the students will be able to demonstrate any skills they have acquired throughout the quarter, on the downhill descend. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- Every cone available
- A moderate to steep downhill pathway (preferably long, and wide enough to allow the class mobility but still maintaining safety and control.)
- TV / Laptop (depending on your method of projection)
- *Diggin It* video (if applicable)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many good descending clips on the internet. (http://www.bicyclecam.com/) These clips are cool because a helmet can is used instead of a panoramic shot. The video I ordered from mountain biking magazine is called *Diggin It* and it includes footage of every skill taught in the entire block schedule. It seemed more practical to buy a video containing all the skills, rather than dig through the video clips on the internet looking for a specific skill and possibly not find it.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles laid out ready to ride. • Have them wear their helmets. • Depending on the length of the hill the teacher will constantly be riding through the mass of students paying close attention for safety and assistance on the skills • Also, depending on the amount of	• Like the other descending lessons the idea of this descending lesson is to have the students take the skills they previously learned and incorporate them in a moderate/steep descent. • Therefore the teacher can take this time to make informal assessment on the students progress and give assistance where needed. So all of the	• Wheelie Cues • **Crouch down** on the bike just before you reach the object you are going to wheelie. • J-hop cues • **Pull up** like a wheelie • In mid flight, **push down** and **lean forward** • **Pedal** after landing • Bunny hop cues	• Try and perform every previous skill at least once.

students in the class you can divide them up into groups. Stress the importance of space awareness. Make sure no students are right behind each other but are more side by side. As the students get underway and begin the descent they will more than likely not be side by side, but STRESS to them the importance of using common sense i.e. If someone is getting close to them then they should practice a cornering technique in the opposite direction of the oncoming student etc. • If the students simply can't choose their own skills or don't alternate then quickly make each skill listed below mandatory on each time down i.e. This time down I want each of you to **only** work on	skills and cues are listed below. Once again, it is mainly a ride day so the students can practice the skills they have acquired. • Once again, like the previous lesson it is an opportunity for the students to descend while working on previously acquired skills. • That is why there is no new instruction. We are trying to maximize the students' time to develop and become competent bike riders in all aspects of the sport. • If the students can't choose and perform the skills in a mannerly way, then choose the skill they will perform on that particular time down.	• **Push** your feet **down**, **back**, then **up** in one fluid motion • **Crouch down** on the pedals just before reaching the object • Use the compression in the tires to help you accelerate upward • Cornering Cues • Brake before turn, release brakes throughout turn. • Lean bike into turn • Outside pedal low/down and your inside pedal up/high • Push down hard you on the outside pedal • Shifting Cue • Shift only when pedaling	

<table>
<tr><td>wheelies.</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Informing Task: When I say GO, I would like for you to retrieve your bike and wait for my command, GO!</td></tr>
<tr><td>Watch for safety
Some students will forget the tasks and start racing, be on the lookout and stop students immediately.
Once students reach the bottom present the feathering technique (Lesson #6)
Make sure to keep one bike and helmet out for your assessment</td><td>Once you get them into their groups have the 1st group go and so forth. Once they do this several times they will get the hang of it and it should run smoothly
Have them work on any of the skills previously worked on. They are listed below.
Bunny hop
Wheelie
J-hop
Cornering
Stopping
Track Stand
Shifting</td><td>Track stand cues
Look ahead of you
Keep your torso straight
Focus on Center of gravity.
Slightly lean forward
Slightly turn your handlebars to a 45degree angle</td><td></td></tr>
<tr><td colspan="4">Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.
1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away
Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.
With a show of hands who would like to demonstrate the proper stopping technique using the feathering of the</td></tr>
</table>

brakes while descending the hill? (pick a student)

- With a show of hands who would like to demonstrate the proper cornering technique while descending the hill?(pick a student)
- With a show of hands who would like to demonstrate any skill they have learned while descending the hill?(pick a student)
- (**Note: not an objective**) With a show of hands would two of you like to demonstrate all the skills you know while descending the hill?(pick a student)

Central Washington University
Physical Education Teacher Education Program
Descending Steep Grades
Lesson #25

Objectives:

1. By the end of class the students will be able to employ skills learned previously while negotiating a downhill section of steep grade. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- A bicycle for each student
- Properly fitting helmet for each student
- Cones for marking course
- 4 X 6 boards
- Park or nearby trails with steep gradient sections.

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: We have been progressing in our ability to negotiate increasingly more difficult situations. Today we put all of the practice into play. There is a section of the course today that is fairly steep. You will need to be extra careful in getting down, but you have been practicing all the things necessary to be successful today on the trail.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Cones spread out to designate boundaries and course markings. Lay out cones so that students are forces to negotiate turns on the slope downhill. This will prevent also any of the more daring students from bombing the downhills. • Need a park with a large grassy area or trails with a rideably			

steep slope • Place boards as obstacles in various parts of the course.			
Informing Task: Today the hills get steep and the course has more obstacles. We again will be using all the skill that we have been practicing for the last few weeks all at once. Be prepared to be braking, cornering, shifting, negotiating obstacles and riding uphill. You will probably have time to ride the course 3 or 4 times in the class today. Be careful and **No Racing**.			
• Measure course so that you can estimate how much time it will take the students to complete a lap and how many laps they can perform in the time you have. Assume that the average speed will be no more than 10 mph. • Watch for students who want to race. Make sure that the students stay safe during this exercise. • You may want to have a alternative section for some of the students who don't feel quite comfortable coming down a steep section yet.			
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own. **1.** If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away. **2.** If you are wearing a (color) shirt you may put your equipment away.			

3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment**.** Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

We are now starting to put all the things we learned and practiced over the last few weeks together on one ride. Let me ask you what your impressions are of what we did today.

- What part of the course did you find the most difficult? (pick a student)
- What was easy? (pick a student)

Be ready for the upcoming field day.

Central Washington University
Physical Education Teacher Education Program
Mountain Bike Field Day
Lesson Plan #26

Student Objectives:

1. By the end of class the students will be able to successfully demonstrate one of the techniques they have learned during this bicycle unit on the mountain bike course. **(NASPE 1, EALR 1.1)**
2. By the end of class the students will be able to describe the proper course of action when confronted with hikers, horse riders, and other bicyclists. **(NASPE 5, EALR 3.3)**
3. By the end of class the students will be able to describe the proper course of action for an obstacle, such as a tree, in the bike pathway. **(NASPE 5, EALR 3.3)**

Teacher Objectives:

Equipment:

- 30 helmets
- 30 bicycles
- A nearby dirt mountain bike course (must be dirt)
- *Diggin It* movie (if applicable)
- Laptop/TV (depending on your method of projection)
- Maps of course and trails (if available)

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: There are many clips on the internet of mountain bike riding (http://www.mtbzone.com/video) I highly recommend the video for this lesson because a two minute showing of one of the scenes can show the students the joys of mountain bike riding on actual trails. The video I ordered from mountain biking magazine is called *Diggin It* and it includes footage of every skill taught in the entire block schedule. It seemed more practical to buy a video containing all the skills, rather than dig through the video clips on the internet looking for a specific skill and possibly not find it.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles laid out ready to ride. • Have them wear their helmets. • The teacher will constantly be riding the course as well looking for students goofing off and any safety concerns or issues. • If the students simply can't choose their own skills or don't alternate	• Before you let the students out on the trail you will describe some basic mountain bike riding etiquette. • **Never ride alone** • Reasons we never ride alone include. • possibility of injury. If you ride alone and get hurt nobody knows and can not get help or stay with you to treat injuries.	• These cues are here for reference purposes only. If a student is struggling with a particular skill you can refer to the cues for that particular skill. • Wheelie Cues • **Crouch down** on the bike just before you reach the object you are going to wheelie. • J-hop cues	• Try and perform every previous skill at least once throughout the completion of the mountain course.

then quickly make each skill listed below mandatory on each time down i.e. This time I want each of you to **only** work on wheelies. • Before students head out get them into groups. • Depending on the course, designate certain meeting spots, i.e. bathrooms, drinking fountains, etc. • As you are explaining the course etiquette constantly be checking for understanding. Ask them the questions such as, "Where is the first meeting spot?" "What happens if you go off the designated path?" "What do we do if we encounter other riders?" etc.	• Possibility of getting lost. If you are unfortunately getting lost it is better to be lost with others compared to being lost by yourself. If you stay on the path you should not get lost. • Possibility of bicycle failure. If your bike malfunctions, flat tire, broken chain, bent spoke, etc., it possible to fix with a partner who possibly has a tool, or can help you get off the trail safely. • **Yielding** • As a class there will be many students on the course. More than likely there will be other bikers, hikers, horse riders etc. As a rule of thumb every student will **automatically** yield to any persons on the course at all times. If you are	• **Pull up** like a wheelie • In mid flight, **push down** and **lean forward** • **Pedal** after landing • Bunny hop cues • **Push** your feet **down**, **back**, then **up** in one fluid motion • **Crouch down** on the pedals just before reaching the object • Use the compression in the tires to help you accelerate upward • Cornering Cues • **Brake before turn**, release brakes throughout turn. • **Lean** bike **into turn** • Outside pedal low/down and your	

• Preferably try and create groups that have a student who can keep order in their group while out on the trail. • Throughout the lesson ask certain individuals if anyone has ridden off the track. Not deviously, but a few students who you know are truthful and reliable. Use your professional judgment. • Constantly be checking for safety. • Depending on the course, possibly provide maps that have the marked meeting spots pointed out. If it's a very well developed track there may be maps and guides available. • If you do use maps then they will be	yielding to someone and they tell you to pass then it is okay to proceed, but **only** after you give them the option to proceed first. • **Staying on the trails** • It is imperative that the students understand why we stay on the designated trails. The trails are already cleared, cleaned, and packed down for the safest and smoothest riding possible. Going off the trail damages surrounding vegetation, can cause serious injury to yourself as well as your bicycle, and is very unprofessional. Respect nature and preserve it to the best of your ability. Failure to do so will result in disciplinary action and a reduction in your grade. (Don't Bust	inside pedal up/high • **Push down** hard you on the **outside pedal** • Shifting Cue • Shift only when pedaling • Track stand cues • **Look ahead** of you • Keep your **torso straight** • Focus on **Center of gravity**. • Slightly **lean forward** • Slightly turn your handlebars to a **45degree angle**	

included in the materials section and included as an attachment.	The Crust) • **Assigned meeting points** • Depending on the course there will be designated meeting points. At these times we will group up, check bike mechanics, have a head count, and continue in the same groups. • **Obstacles in the bike path** • If you come across an obstacle in the bike path remember the riding over obstacles lesson. Use good judgment. If it is small enough ride over it, if it is too big to ride over try a bunny hop or J-hop, if it is too big for that get off the bike and carry your bike or assist it over. DO NOT ride off the trail to get around it.		

	• Now is the time where the students will finally see the benefits of everything taught to them. Falling/dismounting, wheelies, cornering, braking etc.		
Informing Task: When I say **GO,** I would like for you to retrieve your bike and wait for my command, **GO!**			
• Watch for safety • Some students will forget the tasks and start racing, be on the lookout and stop students immediately. • Make sure to keep one bike and helmet out for your assessment	• Have the students enter the course in their groups and paying attention to the groups in front of them. Each skill is listed below. • Bunny hop • Wheelie • J-hop • Cornering • Stopping • Track Stand • Shifting	• Track stand cues • **Look ahead** of you • Keep your **torso straight** • Focus on **Center of gravity**. • Slightly **lean forward** • Slightly turn your handlebars to a **45degree angle**	
Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own. **1.** If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away. **2.** If you are wearing a (color) shirt you may put your equipment away. **3.** If you have (color) hair you may put your bike and equipment away Again feel free to be creative in your methods to putting away equipment			

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you may need to keep one bike and helmet available for the assessment.

- With a show of hands who would like to demonstrate any skill they know on the dirt mountain bike course? (pick a student)
- With a show of hands who can describe the proper course of action when confronted with hikers, horse riders, and other bicyclists. (give them the option to proceed first, if they insist you proceed then proceed)
- With a show of hands who can describe the proper course of action for an obstacle, such as a tree, in the bike pathway. (if it's small enough to ride over then ride over, if it's too large then dismount, carry over and continue)
- (**Note: not an objective**) With a show of hands would two of you like to demonstrate all the skills you know while on the dirt mountain bike track? (pick a student)

Central Washington University
Physical Education Teacher Education Program
Bike Rodeo Day 1
Lesson #27

Student Objectives:

1. By the end of class the students will be able to demonstrate ability to make tight turns. **(NASPE 1, EALR 1.1)**
2. By the end of class the students will be able to demonstrate ability to make emergency stop. **(NASPE 1, EALR 1.1)**
3. By the end of class the students will be able to demonstrate ability to maintain balance at a slow speed. **(NASPE 1, EALR 1.1)**
4. By the end of class the students will be able to demonstrate ability to mount, quickly dismount on the move and remount on the move. **(NASPE 1, EALR 1.1)**
5. By the end of class the students will be able to demonstrate ability to ride in a straight line. **(NASPE 1, EALR 1.1)**
6. By the end of class the students will be able to demonstrate ability to make evasive maneuvers. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- A Bicycle for each student
- A helmet for each student
- Volunteer help to run the stations
- A large open area to set up stations
- **See task card section for complete material list for stations (taskcard23.doc)**
- **30 student scorecards (taskcard2.doc)**
- **Station copy of taskcard for each station 1-5 Taskcards 3,5,7,9,11**
- **Judge copy of taskcard for each station 1-5 Taskcards 4,6,8,10,12**

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Today we are going to participate in a bike rodeo. For those of you who have never participated in one of these events before, there are a series of different activities at different stations. Each station is marked with a number and each has a task card with instructions on how to do the task and how you will fill out your scorecard.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Activity courses marked and ready for bike rodeo. • Have a previously notified and agreed upon volunteer at every station to give scores to students.	• First things first, **remind** students that out of class assignment #5 is due at the start of next lesson. • When I say go, I need you to get a scorecard from me and break up into groups of ____. I will assign you to where you start. When you are done proceed to the next station. Those who		

	start at station # 1 will go to station #5 after. Follow the directions on your scorecard and fill out your scores appropriately.		

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

Today we had the opportunity to demonstrate the different skills we have been working on over the course of the last week weeks.

- Which of the activities of the day did you find most challenging? (pick a student)
- Why?(pick a student)
- Which of today's activities did you find the least difficult?(pick a student)
- Why?(pick a student)

Central Washington University
Physical Education Teacher Education Program
Bike Rodeo Day 2
Lesson #28

Student Objectives:

1. By the end of class the students will be able to demonstrate ability to make tight turns. **(NASPE 1, EALR 1.1)**
2. By the end of class the students will be able to demonstrate ability to make emergency stop. **(NASPE 1, EALR 1.1)**
3. By the end of class the students will be able to demonstrate ability to maintain balance at a slow speed. **(NASPE 1, EALR 1.1)**
4. By the end of class the students will be able to demonstrate ability to mount, quickly dismount on the move and remount on the move. **(NASPE 1, EALR 1.1)**
5. By the end of class the students will be able to demonstrate ability to ride in a straight line. **(NASPE 1, EALR 1.1)**
6. By the end of class the students will be able to demonstrate ability to make evasive maneuvers. **(NASPE 1, EALR 1.1)**

Teacher Objectives:

Equipment:

- A Bicycle for each student
- A helmet for each student
- Volunteer help to run the stations
- A large open area to set up stations
- **See task card section for complete material list for stations (taskcard23.doc)**
- **30 student scorecards (taskcard2.doc)**
- **Station copy of taskcard for each station 6-10 Taskcards 13,15,17,19,21**
- **Judge copy of taskcard for each station 6-10 Taskcards 14,16,18,20,22**

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Today we are going to continue with the bike rodeo. Again, like yesterday each station is marked with a number and each has a task card with instructions on how to do the task and how you will fill out your scorecard

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Collect assignment #5 • Bicycles laid out ready to ride. • Helmets and pads (if required by parents) to be worn by students • Activity courses marked and ready for bike rodeo • Have a previously notified and agreed upon volunteer at every station to give scores to students.	• First things first, hand in out of class assignment #5 • Students received assignment due dates on day one of class and were reminded about today's assignment in the last lesson • When I say go, I need you to get a scorecard from me and break up into groups of ____. I will assign you to		

	where you start. When you are done proceed to the next station. Those who start at station # 6 will go to station #10 after. Follow the directions on your scorecard and fill out your scores appropriately.		

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

Today we had the opportunity to demonstrate the different skills we have been working on over the course of the last week weeks.

- Which of the activities of the day did you find most challenging?(pick a student)
- Why?(pick a student)
- Which of today's activities did you find the least difficult?(pick a student)
- Why?(pick a student)

Central Washington University
Physical Education Teacher Education Program
Bicycle Maintenance
Lesson #29

Objectives:

1. By the end of class the students will be able to do the ABC Quick check. **(NASPE 2, EALR 1.3)**
2. By the end of class the students will be able to properly lubricate a chain. **(NASPE 2, EALR 1.3)**
3. By the end of class the students will be able to adjust cables for brakes and shifters. **(NASPE 2, EALR 1.3)**
4. By the end of class the students will be able to fix a broken or seized chain. **(NASPE 2, EALR 1.3)**
5. By the end of class the students will be able to recognize problems needing attention. **(NASPE 2, EALR 1.3)**

Teacher Objectives:

Equipment:

- Bicycle for each student
- Helmet for each student
- Bottles of chain lubricant
- Sets of tools needs for making adjustments to derailleurs, chains, and cables.
- Sections of old bicycle chains
- Cones for warm up course.

Instant Activity: Bike ride warm up
Materials Needed: Bikes, helmets, pads, cones
Description of Activity: Get the students on their bikes and have them ride continuously for the first 2 minutes. An instant activity should last no more than two minutes. It depends on how quickly you get the students riding.
Teaching Suggestions: Watch for safety and make sure students stay on task. This task is done so the students get an elevated heart rate, and warms up their muscles.
Variations: I use it because you only have to introduce it to the class once and every time after that they come to class they are familiar with the activity, they know why they are doing it, and just about everybody enjoys a good bike ride warm up.

Set Induction: Bicycles are not just about riding. Bicycles also happen to be a machine with moving parts. Instead of a motor supplying the horsepower to propel it forward it is you. All machines need maintenance and upkeep for it to last a long time and for it to work properly. Today we are going to cover some of the more basic mechanical things to be done as part of basic upkeep of a bicycle.

MAF/ Instructional Techniques	Tasks	Refinements	Application
• Each student should have his or her bicycle next to them. They can remove their helmets now as they won't need them for the remainder of the class period.	• For picture on how to change a tire and oil a chain refer to skill charts #12 and #13.		
Informing Task: The first thing that we are going to cover is the acronym called the ABC Quick Check. It will give you a quick overview of what to check before you go riding.			
	• The ABC Quick Check stands for the following. • A - Air • B - Brakes • C - Crank and chain • Quick - Quick releases • Check - Check components	• Take your tire pressure gauge and check the tire pressure for both your front and back tires.	
	• Remember the lesson at the beginning of the	• PSI recommendations are found on the sidewall	

	course that covered changing a flat tire. How do we know what the correct inflation pressure is for a bicycle wheel?	of the tire.	
	• **A is for air**, so we need to check the air pressure of the tires before each ride. • If the pressure is not within the range that is found on the side of the tire, then you need to add air or sometimes if the tire has been overinflated some air needs to be let out.		
	• **B is for brakes**. What could be the consequence of riding a bicycle that has brakes that aren't functioning properly? • The brake pads receive wear every time you squeeze the brake lever. Over time the pads wear down and it takes more squeezing on the brake lever to make the bike stop. This is normal wear and tear of the brake pads.	• Look for the adjustment screw found right where the cable housing enters the brake lever.	

	• There are adjustment nuts on the brake levers that allow for the adjustment of the cable. By moving the adjustment screw out you can effectively compensate for the loss of brake pad material and cable stretch. This is an easy way of taking the slack out of the brake levers.		
	• **C is for crank and chain.** Look at the crank. Grab the arms and check for stiffness. They should be firmly attached to the bottom bracket (the axel). If there is any play the bolt needs to be fastened down. • Repeated use of the bike with a loose crankarm will damage the crankarm and it will have to be replaced. • Look at the chain. Is it lubed? A well lubed chain is important for the life span of the chain as it will prevent chain stretch	• Check the crankarms for tightness. • Check the chain for lubrication. Lube the chain with chain lube if the chain is dry.	

	(yes the chains stretch as they wear!) and maintain good shifting performance. • We never use motor oil on bike chains. One reason why is that motor oil attracts dirt and pulls it into the chain. A second reason is that motor oil is not environmentally friendly. One drop of motor oil will pollute 100,000 gallons of water. How much motor oil would it take to oil the chain and where does that oil go when it gets washed off or wears off the chain? We only should use chain lubricant meant for bicycles.		
• Have as many bottles of lubricant as you can make available to your students present. You may have to pair your students up or put them in groups for this activity.	• To lube the chain with chain lubricant, put a drop of lube on each link pin of the chain. Go ahead and lean your bike up against the wall so the chain side is toward you, check to see if you can rotate the crank backwards. Now go	• One drop per pin	

	ahead and gently squeeze the bottle of lube and apply it to the chain. Watch where you start and every so often turn the crank backwards to rotate the chain to where you need to apply.		
• Have a chain tool handy for a demonstration. If you have sections of old chain, those can be used for student practice. • Contact bike shops around the town; they routinely are discarding old chains that they remove from customers bikes. They will more often than not, be happy for free to supply you with old chains for student practice. • Shimano hyperdrive chains require a chain tool that works the same as regular chain tools, but is designed to work with the unique shape of the links on the chain. So if you have standard chain tools pay attention	Chains occasionally break. To reconnect chain links together it requires a special tool called a chain tool. (That is what it is called). The tool can remove a link pin by pushing it out and can relink a chain by pushing a link into place. (Demonstration) When I say go, I need you to break up into groups of ___ and get a chain tool and section of chain. As a group, take turns unlinking and relinking the chain. When unlinking, do not push the pin all the way out of the chain, leave a little bit. Go until you can twist the links and separate. It is difficult to relink a chain where the pin is out of the chain.	• Twist handle of chain tool until you can separate the links. • Don't push the pin out. • Push pin in until flush with the outside of the link	

to the chains that the stores supply you. • Break the students up into groups for as many chain tools you have available and use the sections of chain to link and unlink the chains.			
	• **Quick is for quick release levers.** Most quality bicycles have quick release levers for the wheels and sometimes the seat post. Make sure that all the quick releases are tightened down before you ride. A wheel coming off during a ride can cause a dreadful crash and subsequent injury. • Always check to make sure the quick releases are tight. To tighten, with the lever loosened, turn the ends of the quick release until they touch the bike frame dropouts or fork dropouts. Then flip the lever back to cinch it down. It is best to have the lever pointing to	• Ends touching, then tighten	

	the back, especially on a mountain bike where an errant branch could snag it and cause a crash or loosen the lever. • On your bikes go ahead and loosen the quick releases and then re-tighten.		
	• **Check is for components**. The components such as the shifters and derailleurs must be in good working order for the bike to function properly. Look for bent or broken parts on the shifters, front derailleur, rear derailleur, and brake levers. • To align the rear derailleur to the shifter, there is an adjustment screw where the end of the cable housing meets the derailleur. For this adjustment to be done properly, the chain has to be placed on the middle cog and the gear selector on 4. • Check to make sure that the derailleur pulley is	• Right shifter on 4, chain should be on middle cog in back (seven speed cog) • Check alignment pulley to cog	

	aligned directly underneath the cog. If it is a little high or low then you can adjust the pulley up or down. If it is off by a lot, then it will need more attention than can be taught here.		

Closure/Assessment: Give yourself about 5 minutes for your closure and assessment. First make sure the students return their bikes and equipment to their proper destinations. 30 students trying to put away 30 bikes does not work so well. I suggest using an organization method to make it easier on yourself and a lot safer for your students. Use one of these or one of your own.

1. If your first/last name begins with (choose a specific letter or two) you may put your bike and equipment away.
2. If you are wearing a (color) shirt you may put your equipment away.
3. If you have (color) hair you may put your bike and equipment away

Again feel free to be creative in your methods to putting away equipment

Once students have put all equipment away you could designate a student to check the equipment room to see if it meets their approval. Once they are done you can double check to make sure they put things away properly. Also you will need to keep one bike and helmet available for the assessment.

We have gone over some basic maintenance for a bicycle today. Let's see what we have learned today.

- What does the acronym ABC Quick Check Mean? (Air, Brakes, Crank and chain, Check components and Quick releases)
- How do we determine what the correct tire pressure is? (it says on the side of the tire)
- What is a quick release? (a lever that quickly releases the tires and sometimes the seat)
- Why would it be called a quick release? (because it quickly releases the tires and seat)
- Why is it important to keep the chain lubricated? (so they don't stretch)
- What is the correct type of lubricant for chains? (any chain lubricant not motor oil based)
- Why is that? (it is environmentally friendly)
- Why do brakes start to get loose over time? (because the brake pads wear out over time)
- How can we compensate for that? (moving the adjustment screw out)
- How do we know if the rear derailleur and shifter are adjusted correctly? (the derailleur pulley is directly underneath the cog)

The next class period is the last one of the unit. Be prepared for a quiz and have your journals finished.

Central Washington University
Physical Education Teacher Education Program
Final Quiz, Collect Journals, Movie Day
Lesson #30

Student Objectives:

1. By the end of class the students will be able to demonstrate their knowledge of the course material by completing a final quiz. **(NASPE 2, EALR 1.3)**
2. By the end of class the students will have turned in the final copy of their journal. **(NASPE 2, EALR 1.3)**
3. By the end of class the students will have watched a bike movie.

Teacher Objectives:

Equipment:

- Tennis balls for instant activity
- *Diggin It* video or any other biking video (Ex. *Rad*)
- TV
- DVD/VCR player
- 30 Final Quizzes (assessment12.doc)

Instant Activity: Instant Activity: "how quick are you"
Equipment One tennis balls for each pair of students.
Set up: Students are put into pairs and find a space where they can work safely.
Playing the game: one student holds out the tennis ball to the side of the body. The other student stands five to ten feet away. The student holding the tennis ball drops it to let the ball bounce. The other player quickly attempts to catch the ball before it hits the ground a second time. If the students are successful then they may move back a step. When they miss, they move in a step.

Set Induction: Explain to the class that they will be taking the final Quiz #4 as well as turning in their journals. After that they will be watching an incredibly informative bicycling video.

MAF/Instructional Techniques	Extensions	Refinements	Applications
• Have the Movie ready to go with the DVD/VCR player all set up • Have the quizzes ready to hand out, and administer the quizzes. • Collect the journals from each student	• First things first we will take the Final Quiz. • When done with the quiz, turn in your completed journal, or what parts of it that you have done.		

Informing Task: When I say **GO** I would like for you to find a spot away from anybody else. Once I see you have done that I will come around and give you a copy of the final quiz, and you will give me your completed journal. **GO!**

• Once the journals and the quizzes have been collected then get the students to gather around for the movie.	• Watch the movie		

Closure/Assessment: Give yourself about 5 minutes for your closure. Thank the students for the fun and exciting Cycling

unit. Inform the students on the next unit that they will be covering.

Assessment Section

Formal assessments for the bicycling unit include 4 quizzes, a Journal writing assignment, and five out-of-class assignments. Also included is a sheet that outlines on a lesson by lesson basis the formal and informal assessment that takes place. Shown is which assignments are due on what days of the unit and on which days the quizzes take place.

Assessment Section Contents

Bicycling Unit

Day	Lesson Theme	Informal Assessment	Standards	Formal Assessment	Standards
Lesson #1	Bike anatomy, Fitting a helmet	Checking helmet fit Put helmet away in assigned place	NASPE 2 NASPE 5 EALR 1.3 EALR 3.3	Task sheet with cues for adjustment of pads and straps of helmet for getting proper fit of helmet. Student must present him/her self to the teacher to be checked off.	NASPE 2 EALR 1.3
Lesson #2	Fitting a bike, Replacing a inner tube.	Students work together to fit bikes. Students patch a inner tube, remove and install a tire on a rim	NASPE 2 EALR 1.3	Students must present themselves before the teacher to be checked off for bicycle fit.	NASPE 2 EALR 1.3
Lesson #3	Traffic Safety	Student practice using hand signals on a practice course, demonstrating riding with one hand	NASPE 5	Successful completion of the safety course, while using proper hand signals, stop, left and right.	NASPE 5 EALR 3.3
Lesson #4	Mounting and dismounting, falling safely	Students see if they can fall and roll without touching helmet to ground , jump off bike to clear	NASPE 1 NASPE 2 EALR 1.1 EALR 1.3	Proper demonstration of safely falling off a bike, and proper demonstration of mounting and dismounting	NASPE 1 EALR 1.2
Lesson #5	Track stands and balancing	Holding a track stand for a second,	NASPE 2 EALR 1.3	Written assignment #1 due: Find four bicycling related organizations on the internet.	NASPE 6 EALR 3.2
Lesson #6	Braking, stop and go, feathering	Control of speed down a hill, stopping on a point	NASPE 1 EALR 1.1		
Lesson #7	Braking, fast stop, brake and corner	Cornering without brakes applied during	NASPE 1 EALR 1.1		

		turn, watching for how short a distance students can stop, no tire skidding			
Lesson #8	Braking (ride day)	Students demonstrate controlling speed downhill, stopping on a spot, braking for a turn, and making quick stops.	NASPE 1 NASPE 5 EALR 1.1 EALR 1.2	Quiz #1 Bike anatomy, identify different parts and components of a bicycle. Lesson #8 assessment sheet turned in to teacher.	NASPE 6 EALR 3.2
Lesson #9	Jumping, Bunny Hops	Execution of 10 wheelies, 10 bunny hops and 10 J-hops	NASPE 1 NASPE 2 EALR 1.1 EALR 1.3		
Lesson #10	Jumping, J hops	Execution of 10 wheelies, 10 bunny hops and 10 J-hops. Bunny hopping on and off platforms, J-hopping on and off platforms.	NASPE 1 NASPE 2 EALR 1.1 EALR 1.3	Written assignment #2 due: Find information on the internet about two local or nearby riding trails.	NASPE 6 EALR 3.2
Lesson #11	Jumping, Bunny and J-hops	Completion of the wheelie course, bunny hop course, and j-hop course.	NASPE 1 NASPE 5 EALR 1.1	Lesson #11 assessment sheet turned in to teacher.	NASPE 1 EALR 1.2
Lesson #12	Ride over obstacles	Watch for students lifting front wheel over barrier, and shifting weight rearward as bike passes over obstacle.	NASPE 1 EALR 1.1		
Lesson #13	Cyclocross exercise, carry bike over barriers	Watch for students moving dismount, stepping off pedal with right foot. Watch remount, left foot on pedal and swinging right	NASPE 1 EALR 1.1		

		leg to right side of bike			
Lesson #14	Ride, obstacles day	Watch for students who show more ability to clear obstacles, give larger obstacles to them to clear	NASPE 1 EALR 1.1	Quiz #2 Jumping skills, negotiating obstacles, braking	NASPE 6 EALR 3.2
Lesson #15	Cornering	Explaining why you should brake before the corner, demonstrating proper cornering techniques, as well as proper pedal position while cornering	NASPE 1 NASPE 2 EALR 1.1 EALR 1.3	Proper execution of the figure 8 course	NASPE 1 EALR 1.1
Lesson #16	Cornering	Explaining why looking ahead of a turn is important	NASPE 1 NASPE 2 EALR 1.1 EALR 1.3	Proper execution of quick corner course, and back to back corner course	NASPE 1 EALR 1.1
Lesson #17	Ride, cornering	Completion of the figure 8 course, back to back corner course, and sharp corners course.	NASPE 1 EALR 1.1	Written assignment #3 due: Find and print (or copy) a article on any bicycling related subject Write a short 1 page summary and turn it in with the article. Turn in Lesson #17 assessment sheet	NASPE 6 EALR 3.2
Lesson #18	Shifting	Watch for students to shift rear derailleur through entire range of gears. Watch for students to shift through front chainrings. Watch shifting pattern for acceleration and deceleration.	NASPE 1 NASPE 2 EALR 1.1 EALR 1.3		

Lesson #19	Shifting	Watch for student shifts to small chainrings at the bottom of hill, shifting cogs on upward climb. Shifts to large chainring at the top of hill, shifting the cogs on the descent.	NASPE 2 EALR 1.3		
Lesson #20	Shifting	Demonstrating shifting gears on flat ground, uphill grades downhill grades, and while slowing down	NASPE 2 EALR 1.3	Assessment of student ability to shift appropriately during acceleration and deceleration. Assessment of student ability to shift appropriately on ascents and descents. Quiz #3 cornering and shifting	NASPE 1 NASPE 6 EALR 1.1 EALR 3.2
Lesson #21	Descending light grade	Negotiating small obstacles in bike pathway while descending a hill.	NASPE 2 EALR 1.3		
Lesson #22	Descending light/moderate grade	Demonstrating feathering techniques of the brakes, and proper cornering drills	NASPE 1 EALR 1.1	Written assignment #4 due: Find and print (or copy) an article. Subject: Who is Gary Fisher? Write a short 1 page summary and turn it in with a copy of the article.	NASPE 6 EALR 3.2
Lesson #23	Descending moderate grade	Demonstrating previously learned skills	NASPE 2 EALR 1.3		
Lesson #24	Descending	Demonstrating	NASPE 2		

	moderate/steep grade	previously learned skills	EALR 1.3		
Lesson #25	Descending steep grade	Demonstrating previously learned skills	NASPE 2 EALR 1.3		
Lesson #26	Field day	Watch for protocol adherence, performing previous tasks, describing courses of action that include obstacles in the pathway, other riders and hikers.	NASPE 1 EALR 1.1		
Lesson #27	Bike Rodeo	Demonstrating right turn ability, emergency stops, balance, mount, dismount, straight line riding evasive maneuvers.	NASPE 1 EALR 1.1	Turn in day 1 scorecards for bike rodeo	NASPE 1 NASPE 2 EALR 1.1 EALR 1.2
Lesson #28	Bike Rodeo	Demonstrating right turn ability, emergency stops, balance, mount, dismount, straight line riding evasive maneuvers.	NASPE 1 EALR 1.1	Written assignment #5 due: A 2-3 page essay due. Subject chosen from short list on out of class assignment sheet. Turn in day 2 scorecards from bike rodeo.	NASPE 1 NASPE 2 NASPE 6 EALR 1.1 EALR 1.2 EALR 3.2
Lesson #29	Bike maintenance	ABC acronym, determining tire pressure, how to oil a chain, Determining loose brakes.	NASPE 2 EALR 1.3		
Lesson #30	Final test, Journal			Quiz #4, Journal Collection	NASPE 2 EALR 1.3

Journal Assignment

For this class you will be required to keep a journal of all your in-class activities and all cycling related activities out of class. This assignment is worth 50 points.

Your journal will be graded with the following criteria:

- Are all of the entry spaces filled out for each day of the class?
  - One point deduction for each blank space (top four spaces)
  - Ten point deduction for each missing day

- Extra credit can be given to journal for following
  - Journal entries on extra bicycling activities

Total points for this assignment cannot exceed 50.

Write with meaningful content I want to know what you feel you are learning during the length of the class. By assessing what you learn on a day by day basis you will be able to measure your progress. I will award points for journal recordings of meaningful content.

Periodically you will be asked to turn in your journal pages for assessment. You will not be told when. It is in your best interest to write in your journal daily after class or that evening so what you have covered and learned is fresh on your mind.

Bicycling Journal **Name:**

Activities in class today **Date:**

My performance today

What things did I do well today?

What things do I need to practice?

What did I learn today?

What cycling related things did I do outside of class?

Out of Class Assignments

Assignment #1
Webquest search: (Due on day 5)

- Find four bicycling related organizations on the internet.
    1. Print their home website address
    2. Copy and paste the organization's mission statement or write what the organization does.

Assignment #2
Webquest search: (Due on day 10)

- Find information on two local or nearby riding trails.
    1. Include the website address where the information can be found
    2. Include information regarding the trails such as:
        a. Where the trail is
        b. Where it starts and ends
        c. How to get there
        d. How difficult the trail is
        e. How long the trail is

Assignment #3
Reading assignment (Due on day 17)

- Find and print (or copy) an article on any bicycling related subject
    1. This can be found on the internet
    2. This can come from a magazine
    3. This can come from a book
- Write a short 1 page summary of the article and turn it in with the article

Assignment #4
Reading assignment (Due on day 22)

- Find and print (or copy) an article. Subject: Who is Gary Fisher?
    1. Any medium acceptable
        a. Internet
        b. Magazines
- Write a short 1 page summery of the article and turn it in with a copy of the article.

Assignment #5
Essay Assignment: (Due on day 28)

- Write a short essay (2-3 pages) on one of the following subjects:
    1. What are some legal issues that bicyclists face concerning their rights to ride on the roads?
    2. What are some issues that bicyclists face concerning riding on trails? Example: accessibility to trails
    3. What is the Lance Armstrong Foundation?
        a. What does it do?
        b. How is it funded?
        c. How and why did the organization start?

Quiz #1

1._____
2._____
3._____
4._____

5._____
6._____
7._____
8._____

(ANSWER KEY)

Quiz #1

1. Brakes
2. Tire
3. Saddle
4. Pedal
5. Chain
6. Derailleur
7. Spokes
8. Handlebars

Quiz #2

Name: _____ **Date:** _____

True or False: (2 points each)

1. ____The proper hand signal for a right turn is the left hand held straight out.
2. ____Always ride your bike on the right side of the road.
3. ____When attempting a trackstand you want the handlebars turned to a 45 degree angle.
4. ____Most of the bikes braking power comes from the rear break.
5. ____The cues for a bunny hop are **push feet down, back then up, pull up.**
6. ____When riding over obstacles you want to use your arms as shock absorbers.
7. ____When riding over obstacles it is important to maintain your speed.
8. ____Right before you attempt a wheelie is important to **crouch down**.
9. ____When breaking it is okay to skid your tires because it makes a cool sound.
10. ____Wearing a helmet can reduce the chances of brain damage during an accident by 90%.

Short Essay: Write a brief paragraph on what you would do in the following scenario. (5 points)

You are riding your bike in downtown when you come to a stop sign and a car to your left pulls up at the same time as you. He has no turn signal on. You want to turn right. What is your course of action?

(ANSWER KEY)
Quiz #2

1. False
2. True
3. True
4. False
5. True
6. False
7. True
8. True
9. False
10. True

Short Essay:
The first thing you do is perform a left hand turn signal, left arm out and bent up. The next thing you do is give the car the right away, assuming they are going straight due to no turn signal. During all of this try and make eye contact with the driver so they know you are paying attention. Once they turn then you proceed with the right turn staying on the right side of the road.

Quiz #3

Name: _____ **Date:** _____

True or False: (2 point each)

1. ____When cornering you want to brake before the corner and release the brake throughout the turn.
2. ____When using the brakes you want to squeeze them as hard as you can in order to maximize stopping ability.
3. ____When cornering you want your inside pedal low and you outside pedal high.
4. ____When cornering you want to learn your bike into the corner as opposed to turning with your handlebars.
5. ____When cornering it helps to push down as hard as you can on the outside pedal.
6. ____The left set of gears controls the rear derailleur
7. ____You should shift the chainrings for an uphill ascent at the bottom of the hill.
8. ____The left hand shifter controls the chainrings.
9. ____The left hand shifter controls the cogs.
10. ____You want to shift to the big chainring at the beginning of a downhill descent.

Short answer: (5 points)
In one or two complete sentences briefly answer the following question.
What is cadence?

(ANSWER KEY)
Quiz #3

True or False:
1. True
2. False
3. False
4. True
5. True
6. False
7. True
8. True
9. False
10. True

Short answer: (5 points)
A cadence is the number of revolutions per minute that you pedal.

Quiz #4

Name: _____ **Date:** _____

True or False: (2 point each)

1. ____The acronym ABC quick check means air, brakes, crank and chain, check components and quick releases.
2. ____The pressure of the tire is located on the side of the saddle.
3. ____A quick release is a lever that quickly releases the tires and sometimes the seat.
4. ____Leaving your bike out in the rain is good because it cleans it for you.
5. ____It important to keep the chain lubricated because you don't want the chain to stretch
6. ____It is recommended to use motor oil based lubricants for your bike chain.
7. ____Motor oil based lubricants are environmentally friendly
8. ____brakes start to get loose over time because the brake pads wear out over time
9. ____Moving the adjustment screw out prevents the brake pads from wearing out.
10. ____We know if the rear derailleur and shifter are adjusted correctly when the derailleur pulley is directly underneath the cog.

Short Answer: In one or two sentences answer the following question. (5 points)

Why did or didn't you like the bike rodeo and what can we do to make it better?

(ANSWER KEY)

Quiz #4

Name: _____ **Date:** _____

True or False: (2 point each)

1.) True
2.) False
3.) True
4.) False
5.) True
6.) False
7.) False
8.) True
9.) True
10.) True

Short Answer:
(Answers will vary)

Lesson #8 Assessment Sheet

Name:_____ **Date:**_____

Directions:

By yourself or with a partner, complete the skill sheet. You may begin on any skill or activity that you want. Please be courteous of others in your same testing area. If there is a long wait at a certain activity then move to another. Turn your worksheet in to the teacher when finished.

Initial when complete:

1.) _____ With the teacher present perform a 3 sec. track stand

2.) _____ Perform a 5 sec. track stand (with or without using the wall)

3.) _____ Demonstrate for the instructor how to check a properly fitting helmet.

4.) _____ Proceed to the slow speed course. Once there you must maneuver through the cones course as slowly a possible without touching your feet on the ground, and without touching a cone.

5.) _____ Proceed to the slow speed balance course. Make 1 full pass through while riding as slowly as you possibly can. Once done, quickly exit the area.

6.) _____ Proceed to the snake path. Maneuver in and out of the intended path

7.) _____ Proceed to the brake and turn exercise complete one pass and then move on

Lesson #11 Assessment Sheet

Name:_____ **Date:**_____

Directions:

By yourself or with a partner, complete the skill sheet. You may begin on any skill or activity that you want. Please be courteous of others in your same testing area. If there is a long wait at a certain activity then move to another. Turn your worksheet in to the teacher when finished.

Initial when complete:

1.) _____ Perform 10 wheelies

2.) _____ Complete the wheelie course 3 times

3.) _____ Perform 10 bunny hops

4.) _____ Complete the bunny hop course 3 times

5.) _____ Perform 10 J-hops

6.) _____ Complete the J-hop course 3 times

Lesson #17 Assessment

Name:_____ **Date:**_____

Directions:

By yourself or with a partner, complete the skill sheet. You may begin on any skill or activity that you want. Please be courteous of others in your same testing area. If there is a long wait at a certain activity then move to another. Turn your worksheet in to the teacher when finished.

Initial when complete:

1.) _____ Complete the snake course 5 times

2.) _____ Complete the long corner/short corner course 5 times

3.) _____ Complete the figure 8 course 10 times

4.) _____ Complete the quick corner course 10 times

5.) _____ Complete the back to back corner course 10 times

Shifting skills assessments
Lesson #20

Student Name:	Ascending: Chainring shift at bottom of hill (y/n)	Descending: Chainring shift at start of decent (y/n)	Maintaining a steady cadence (y/n)

PERCENT		**0%**	**67%**	**69%**	**71%**			**73%**
GRADES		**F**	**D-**	**D**	**D+**			**C-**
WA EALR				**1.2**	**1.3**	**1.3**	**1.3**	**3.3**
NASPE STANDARD				**2**	**2**	**2**	**2**	**2**
				QUIZ 1	**Quiz 2**	**Quiz 3**	**Quiz 4**	**Journal**
LAST NAM	**FIRST NAI**	**ID#**						
Points possible				25	25	25	25	50
(Effects score when entered)								
				0	#REF!			0
				#DIV/0!	#REF!	#DIV/0!		#DIV/0!

			75%		**77%**		**79%**	**81%**	**84%**	**87%**
			C		**C+**		**B-**	**B**	**B+**	**A-**
		1.1	**1.1**	**1.1**						
		1	**1**							
Web #1	**Web #2**	**Read#3**	**Read #4**	**Essay#5**	**ATTENDANCE**					
10	10	10	10	10	150					
			0		0		0	0	0	0
			#DIV/0!		#DIV/0!		#####	#####	#####	#####

90%				
A				
	Bonus	**TOTAL**	**PERC**	**GRADE**
		POINTS		
		0		
		0	#####	#####
		0	#####	#####
		0	#####	#####
		0	#####	#####
		0	#####	#####
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Task Card Cover Sheet

These task cards are for the bicycle rodeo days. Those lessons include #27 and #28. For the first rodeo day, lesson #27, task cards 1-5 will be used. On the second day, lesson #28, task cards 6-10 will be used. The way the task cards work is like this, for each station there are two copies of each task card, the student copy and the judge copy. Each student copy will be placed at it's corresponding station. (Note: each student will not have a copy of each task card) Each judge will get the task card that corresponds with their station. Each card contains the rules as well as how to score each activity. The scorecards for the bicycle rodeo will be given to the students. Upon the completion of a station the students are responsible for getting their score recorded by the judge at the corresponding station. Each station, except station #7, is worth a possible 10 points, for a total of 90 points. Station #7, "Slow Speed Control," is timed and the time will be recorded on the students' scorecard in the same column as the points. The point deductions, which are explained on each task card, will be totaled in the grey column on the scorecards and subtracted from the total points upon completion of the rodeo. The actual running of the lesson can be found in the MAF/Instructional Techniques section of lessons #28 and #29.

Task Card #1 (Mounting & dismounting)
- Student copy
- Judge copy

Task Card #2 (Circling & changing direction)
- Student copy
- Judge copy

Task Card #3 (Straight line control)
- Student copy
- Judge copy

Task Card #4 (Weaving & maneuvering)
- Student copy
- Judge copy

Task Card #5 (Stopping ability)
- Student copy
- Judge copy

Task Card #6 (Short radius turning)
- Student copy
- Judge copy

Task Card #7 (Slow speed control)
- Student copy
- Judge copy

Task Card #8 (Diminishing clearance)
- Student copy
- Judge copy

Task Card #9 (Shoulder check)
- Student copy
- Judge copy

Task Card #10 (Quick turn)
- Student copy
- Judge copy

Bicycle Rodeo Day 1
Scorecard

Name:_____

Station #	Station name	Scoring		#points/10
1	Mounting and Dismounting	#of fouls, 2 pt deduction per foul		
2	Circling and Changing Direction	#of fouls, 2 pt deduction per foul		
3	Straight Line Control	Distance traveled before foul or finish		
4	Weaving and Maneuvering	#of fouls, 2 pt deduction per foul		
5	Stopping Ability	#of fouls, 2 pt deduction per foul		
			Total points/50	

Bicycle Rodeo Day 2
Scorecard

Name:_____

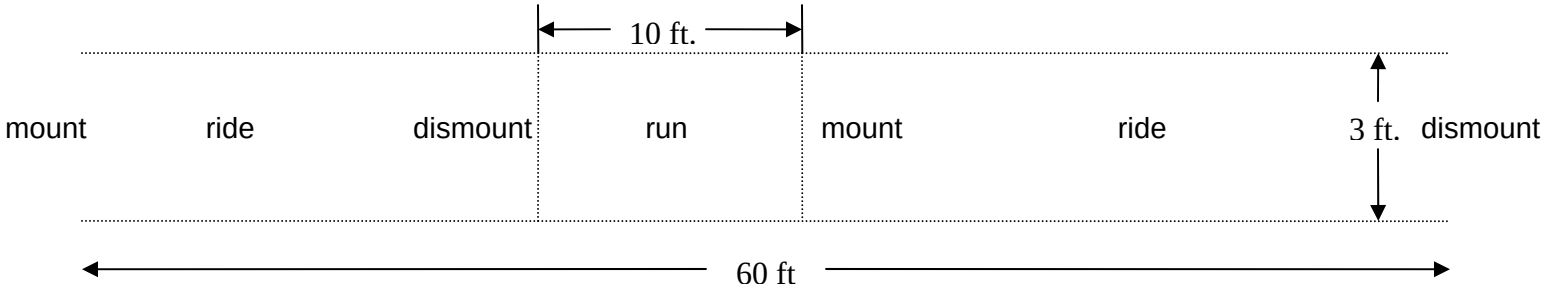
Station #	Station name	Scoring		#points/10
6	Short Radius Turning	#of fouls, 2 pt deduction per foul		
7	Slow Speed Control	Record Time		
8	Diminishing Clearance	#of fouls, 2 pt deduction per foul		
9	Shoulder Check	#of fouls, 2 pt deduction per foul		
10	Quick Turn	Points awarded for entry point		
			Total points/40	
			Time on Station #7	

Task Card #1

Mounting & Dismounting

CUES:

- Squeeze brakes softly
- Stop, put left foot down on ground
- Left foot in 10 o'clock



Rules:
The rider must mount their bike, ride while staying inside the outside chalk lines, dismount at the 1st chalk line, run to the 2nd chalk line, mount at the 2nd chalk line, ride the rest of the track and dismount at the end.

Scoring:
Rider must stay with in the two parallel chalk lines, while using proper mounting and dismounting techniques covered in previous lessons. 2 points will be deducted for each foul. A perfect run is 10 points.
Ex: 2 fouls = - 4 points so 10 – 4 = 6 points.

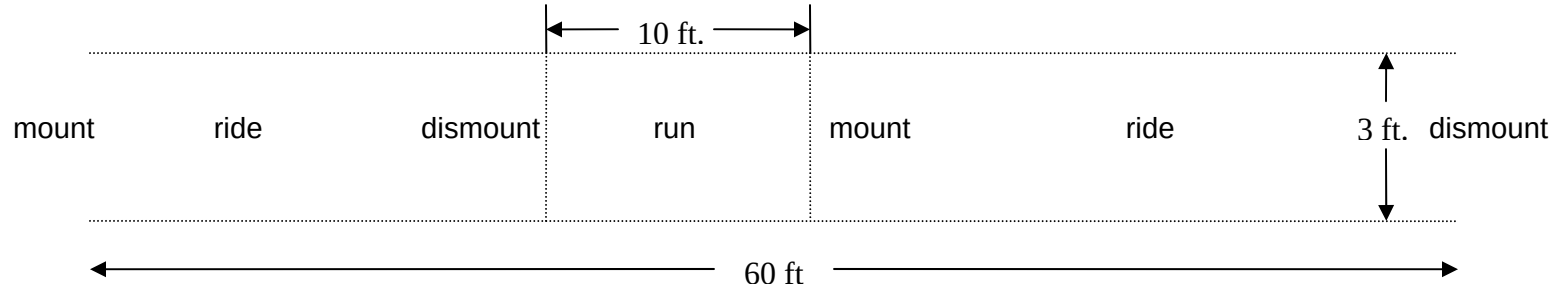
= chalk line

= measurements

JUDGE COPY:

Task Card #1

Mounting & Dismounting



Rules:
The rider must mount their bike, ride while staying inside the outside chalk lines, dismount at the 1st chalk line, run to the 2nd chalk line, mount at the 2nd chalk line, ride the rest of the track and dismount at the end.

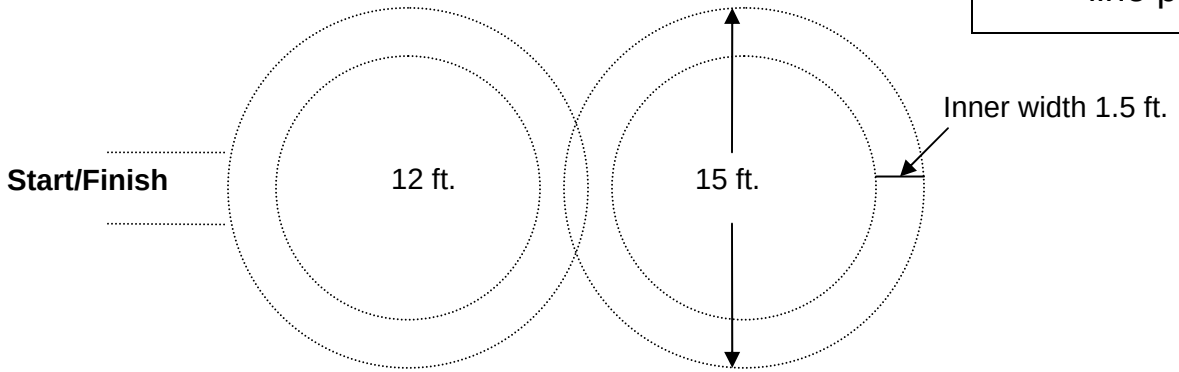
Scoring:
Rider must stay with in the two parallel chalk lines, while using proper mounting and dismounting techniques covered in previous lessons. 2 points will be deducted for each foul. A perfect run is 10 points.
Ex: 2 fouls = - 4 points so 10 – 4 = 6 points.

= chalk line

= measurements

Task Card #2

Circling and Changing direction



CUES:

- Feather tap your rear brake
- Brake before turn
- Choose the straightest line possible through turn

Rules:
The rider must enter the circle and immediately turn right, follow the circle around, continue through the intersection, ride back around, cross through the intersection going the other direction and finishing where they entered the course.

Scoring:
The rider must stay between the designated chalk boundaries and their feet must remain on the pedals. 2 points will be deducted for each foul. A perfect run is 10 points. **Ex:** 1 foul = -2 points so 10 -2 = 8 points.

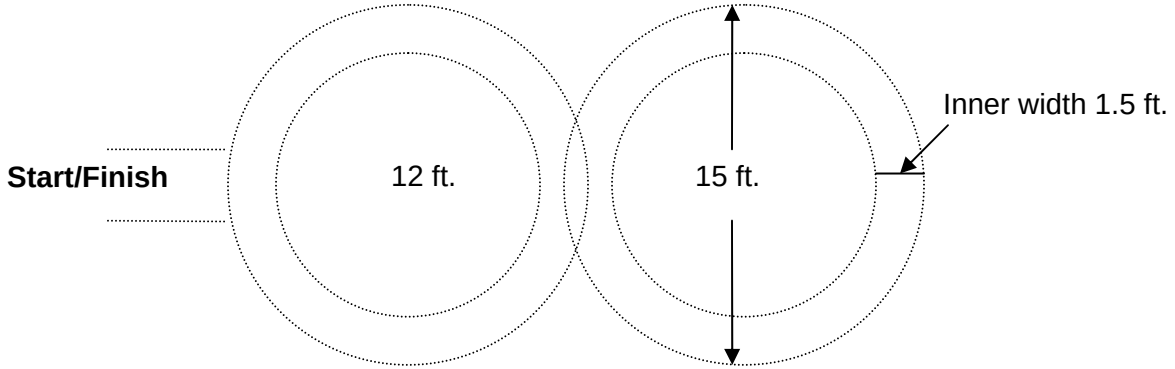
= chalk line

= measurements

JUDGE COPY:

Task Card #2

Circling and Changing direction



Rules:
The rider must enter the circle and immediately turn right, follow the circle around, continue through the intersection, ride back around, cross through the intersection going the other direction and finishing where they entered the course.

Scoring:
The rider must stay between the designated chalk boundaries and their feet must remain on the pedals. 2 points will be deducted for each foul. A perfect run is 10 points. **Ex:** 1 foul = -2 points so 10 -2 = 8 points.

= chalk line

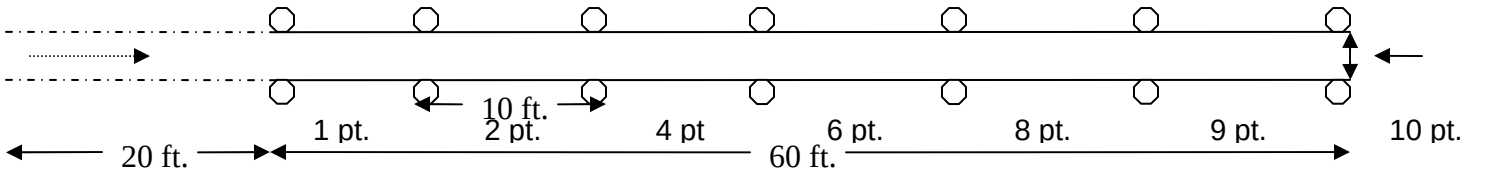
= measurements

Task Card #3

Straight Line Control

CUES:

- Look ahead
- Lean Forward
- Torso straight



Rules:
The rider will use the 20 ft approach to gain speed in order to maintain balance. Once they reach the first set of cones they must try and maintain balance without going outside of the cone boundary line. The rider is done when they cross the boundary or successfully complete the activity.

Scoring:
The further the rider goes without going outside of the boundary the more points they accumulate. There are no point deductions. You simply get the amount of points for the distance traveled. Successful completion is 10 points.

= cone

= approach

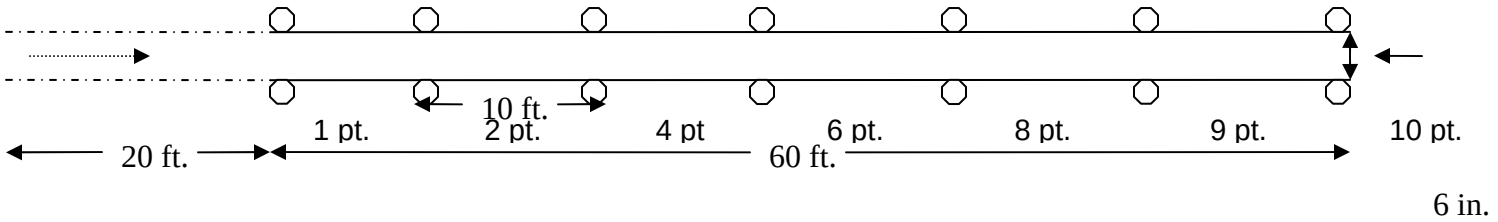
= measurements

= direction traveled

JUDGE COPY:

Task Card #3

Straight Line Control



Rules:
The rider will use the 20 ft approach to gain speed in order to maintain balance. Once they reach the first set of cones they must try and maintain balance without going outside of the cone boundary line. The rider is done when they cross the boundary or successfully complete the activity.

Scoring:
The further the rider goes without going outside of the boundary the more points they accumulate. There are no point deductions. You simply get the amount of points for the distance traveled. Successful completion is 10 points.

= cone

= approach

= measurements

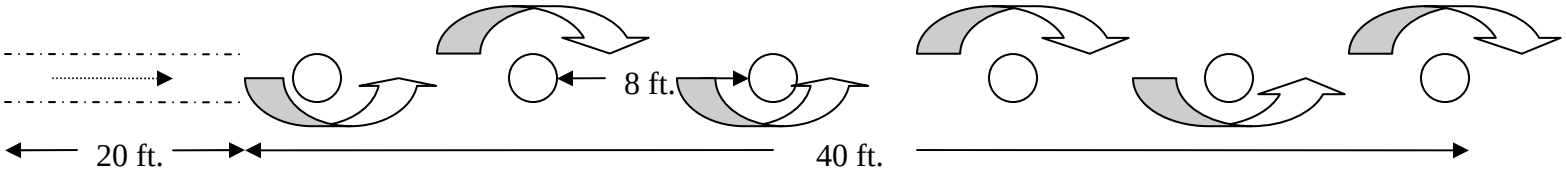
= direction traveled

Task Card #4

Weaving & Maneuvering

CUES:

- Feather tap rear brake
- Brake before turn
- Choose straightest line possible through turn



Rules:
The rider uses the 20 foot approach to gain speed. They then turn right and continue weaving in and out of the cones all the way to the finish.

Scoring:
The rider will be deducted 2 points each time they commit a foul. A foul consists of touching a cone, feet touching the ground, or turning the wrong way. A successful completion is 10 points.
Ex: feet touch ground twice = - 4 points so 10 – 4 = 6 points.

= approach

= direction traveled

= turn direction

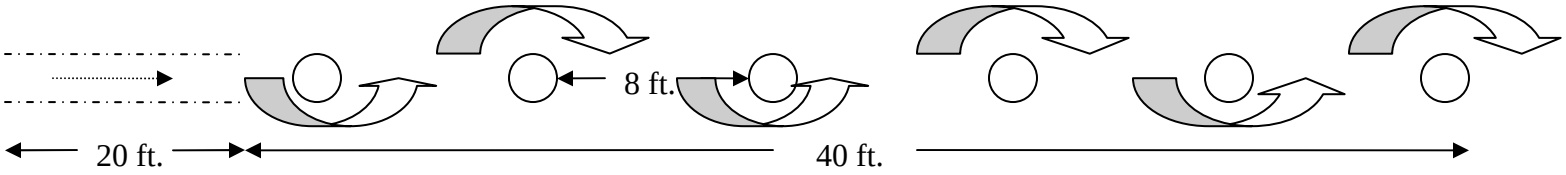
= cone

= measurements

JUDGE COPY:

Task Card #4

Weaving & Maneuvering



Rules:
The rider uses the 20 foot approach to gain speed. They then turn right and continue weaving in and out of the cones all the way to the finish.

Scoring:
The rider will be deducted 2 points each time they commit a foul. A foul consists of touching a cone, feet touching the ground, or turning the wrong way. A successful completion is 10 points.
Ex: feet touch ground twice = - 4 points so 10 – 4 = 6 points.

= approach

= direction traveled

= turn direction

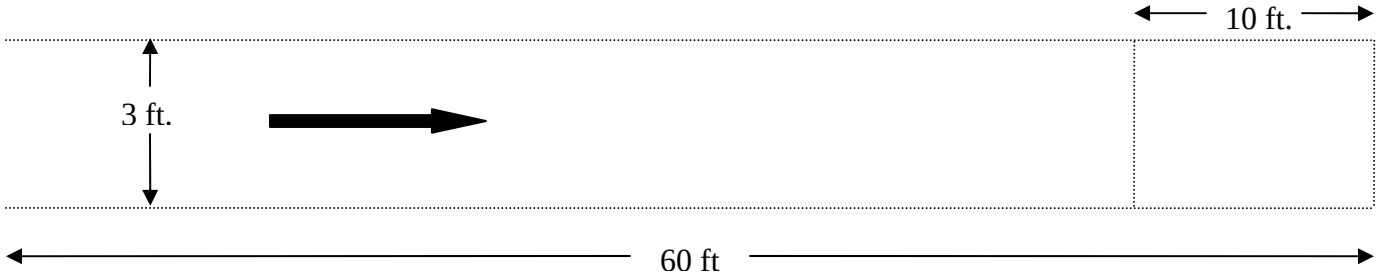
= cone

= measurements

JUDGE COPY:

Task Card #5

Stopping Ability



Rules:
The rider is to get moderate speed (5-6 cranks), while staying between the parallel chalk lines. Once they reach the chalk line at the last 10 feet of the track they are to bring the bike to a complete stop before the last chalk line.

Scoring:
If the rider's feet touch the ground before their bike comes to a complete stop they will be deducted 2 points. If their bike goes beyond the 10 ft. second chalk line they will be deducted 2 points for every foot past 10 ft. they travel. A perfect run is 10 points.
Ex: It takes the rider 11 ft. to stop the bike that is -2 points. 10 – 2 = 8 points.

= direction traveled

= chalk line

= measurements

Task Card #6

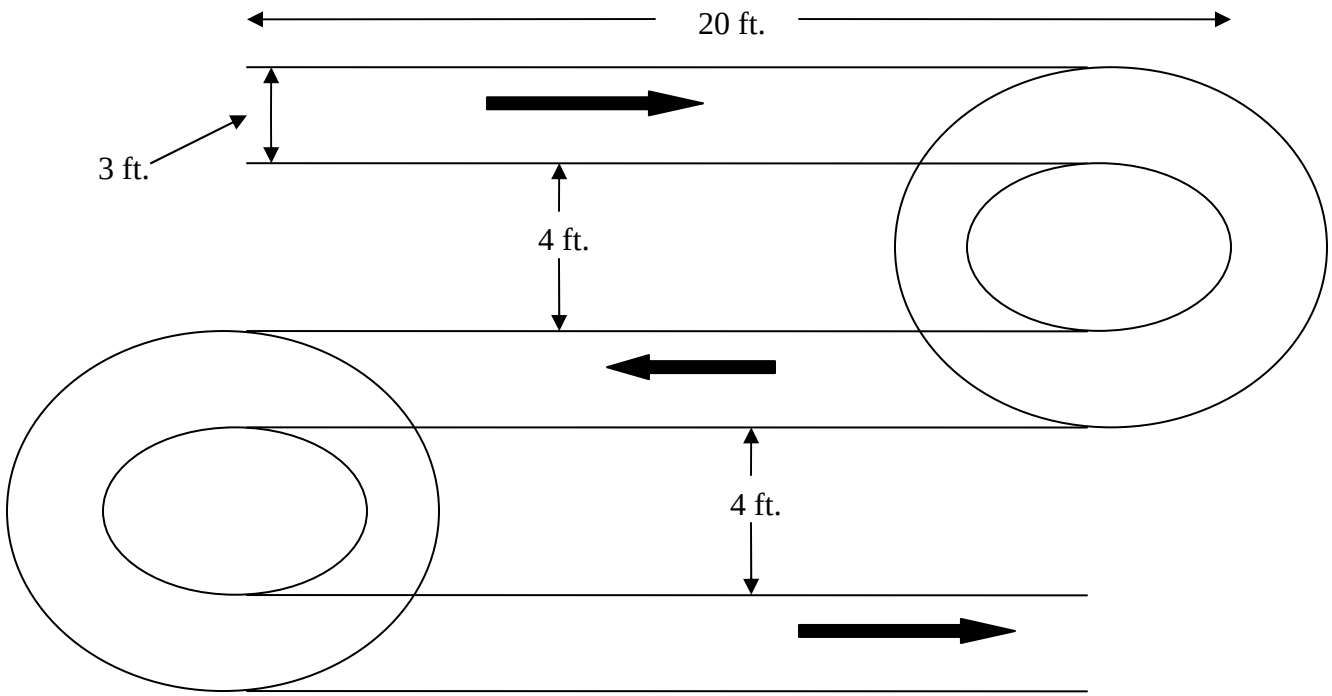
Short Radius Turning

CUES:

- Feather tap rear brake
- Brake before turn
- Choose the straightest line possible through the turn

Rules:
The rider is to maneuver through the course while staying in between the chalk lines.

Scoring:
The rider will be deducted 2 points each time their feet touch the ground, and each time they travel outside of the chalk lines. A perfect run is 10 points.
Ex: The riders feet touch 3 times that is – 6 points so 10 – 6 = 4 points.



= chalk

= measurements

= direction traveled

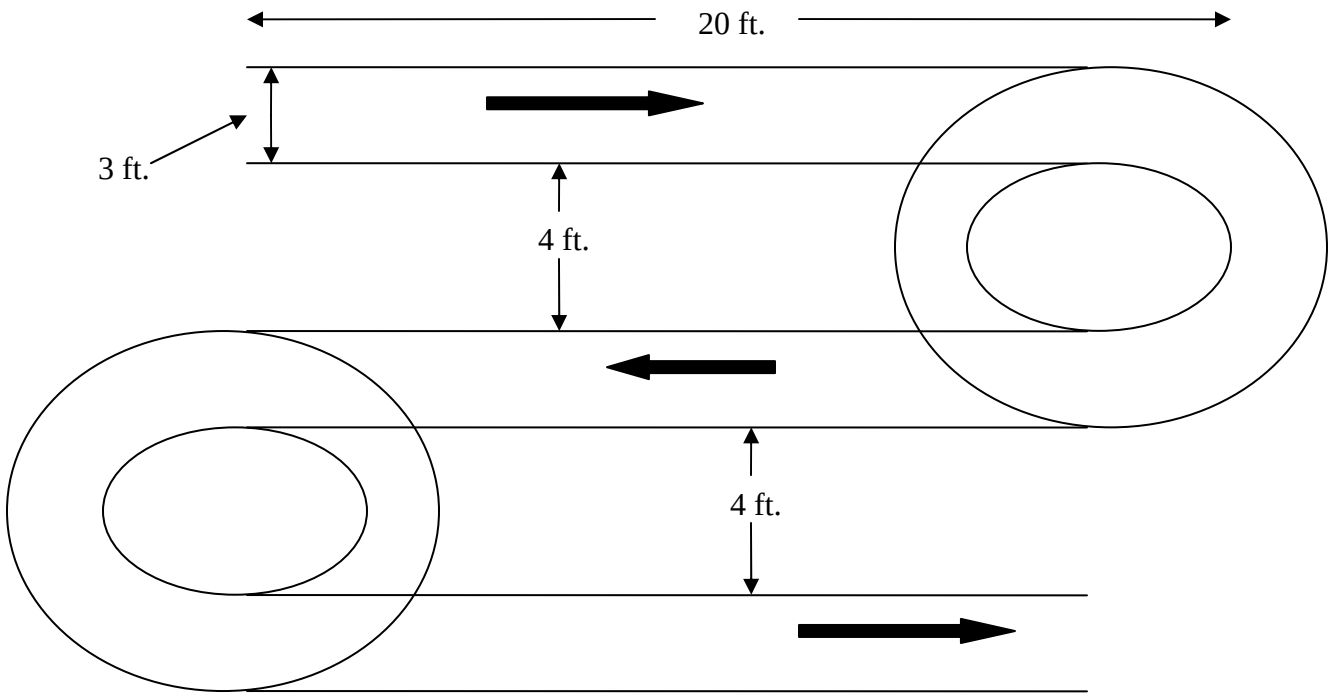
JUDGE COPY:

Task Card #6

Short Radius Turning

Rules:
The rider is to maneuver through the course while staying in between the chalk lines.

Scoring:
The rider will be deducted 2 points each time their feet touch the ground, and each time they travel outside of the chalk lines. A perfect run is 10 points.
Ex: The riders feet touch 3 times that is – 6 points so 10 – 6 = 4 points.



= chalk

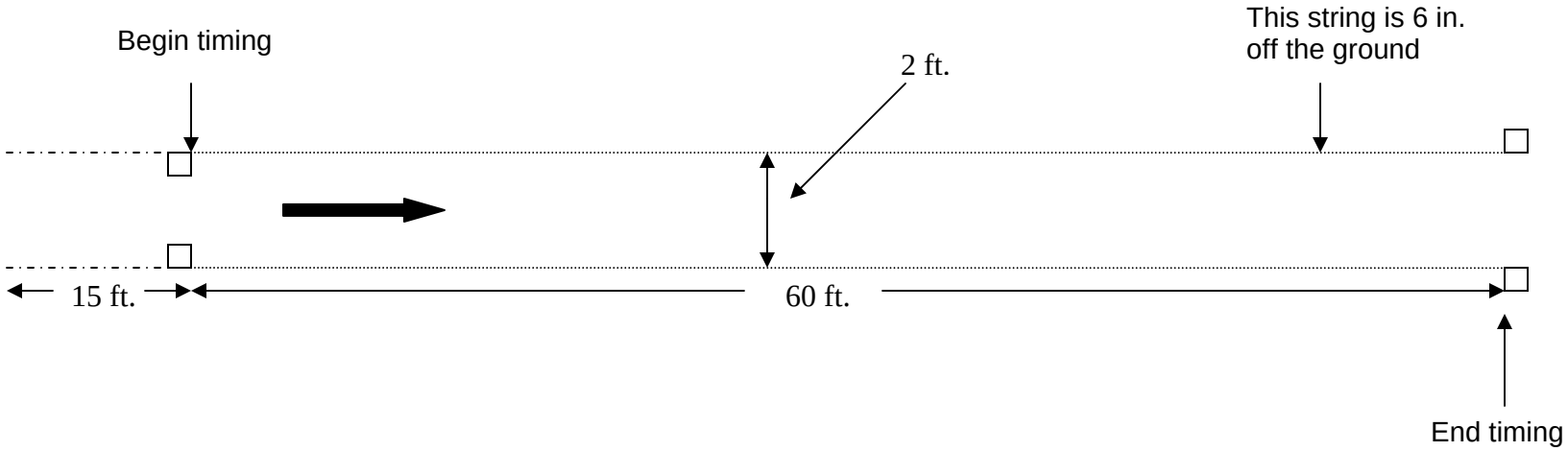
= measurements

= direction traveled

JUDGE COPY:

Task Card #7

Slow Speed Control



Rules:
Riders will use the 15 ft. approach to maintain stability. The stop watch will start when you cross the first wooden stake line. The objective is to ride as slow as you can all the way through to the end without touching your feet to the ground, the slower the score the better.

Scoring:
A 5 sec. Time deduction will occur if the rider commits a foul. Fouls include touching your feet to the ground, and any wheel coming in contact with the string. The slower the time the better.

= direction traveled

= approach

= measurements

= string

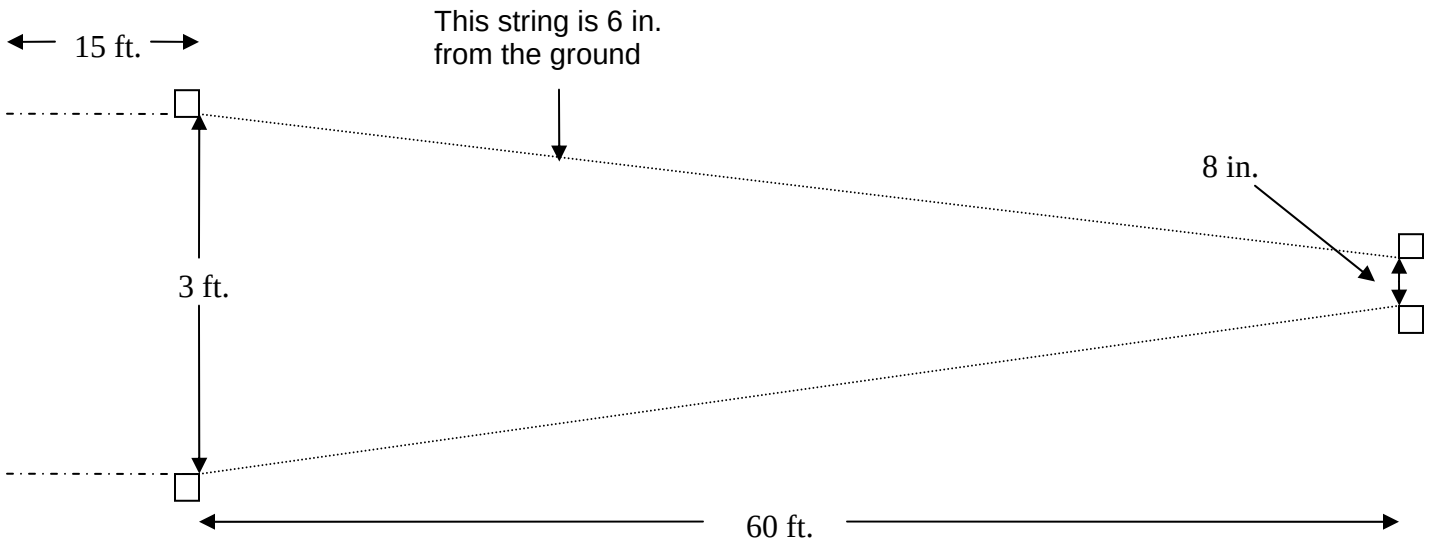
= wooden stakes

Task Card #8

Diminishing Clearance

CUES:

- Look ahead
- Lean forward
- Torso straight



Rules:

The rider will use the approach to gain speed and balance. They will then enter the course with strings on both sides of them. As you get closer to the end the string gradually gets smaller. The idea is to complete the course through without touching the string or touching your feet to the ground.

Scoring:

A 2 point deduction will occur when a foul is committed. A foul consists of any wheel touching the string and if your feet touch the ground. A perfect run is 10 points.
Ex: One foot touch = -2 points so 10 – 2 = 8 points.

= approach

= string

= wooden stakes

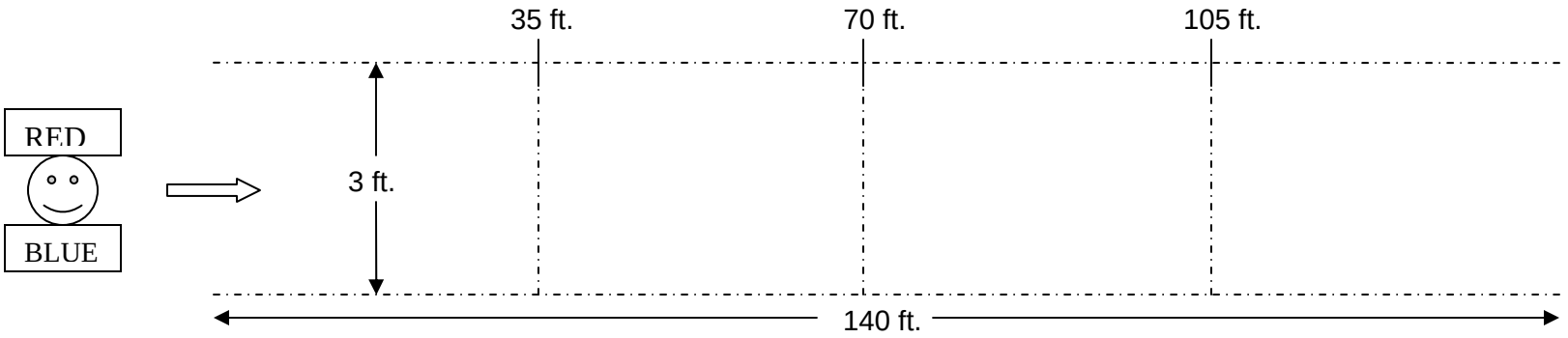
= measurements

Task Card #9

Shoulder Check

CUES:

- Lean forward
- Torso straight



Rules:
The rider will enter the string boundary course. At the chalk lines they are to look over a shoulder and call out the color held up by the adult. If the rider looks over the wrong shoulder, they should quickly look over the other shoulder. The objective is to complete all three shoulder checks without out of bounds.

Scoring: Every time the rider goes outside the boundary line, forgets to shoulder check, or calls the wrong number they get deducted 2 points. A perfect run is 10 points. **Ex**. two fouls = -4 points so 10 – 4 = 6points total.

= adult

= chalk line

= string

= direction traveled

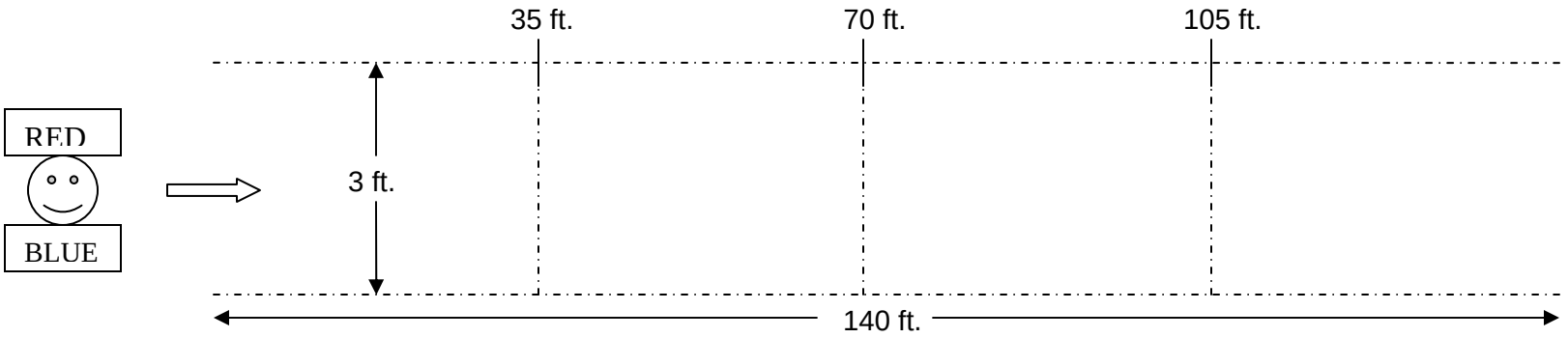
= measurements

Color = color card

JUDGE COPY:

Task Card #9

Shoulder Check



Rules:
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Scoring: Every time the rider goes outside the boundary line, forgets to shoulder check, or calls the wrong number they get deducted 2 points. A perfect run is 10 points. **Ex**. two fouls = -4 points so 10 – 4 = 6points total.

= adult

= chalk line

= string

= direction traveled

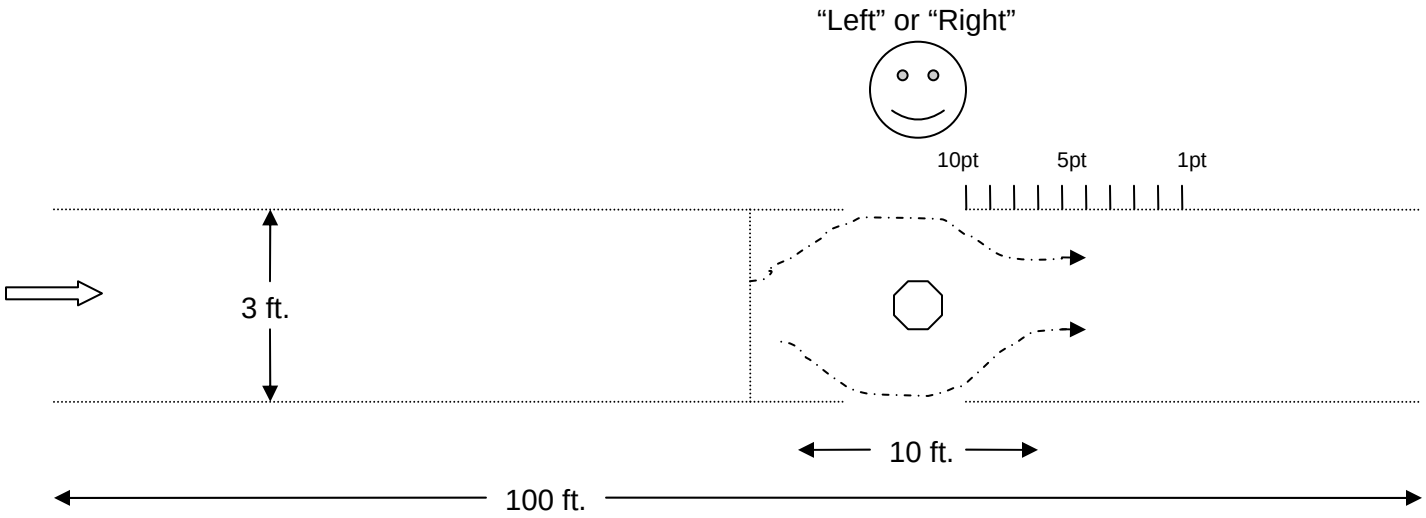
= measurements

Color = color card

JUDGE COPY:

Task Card #10

Quick Turn



Rules:
The rider will ride inside the boundaries. Once they reach the chalk line the adult will say either "left" or "right". The rider will then corner around the cone in the proper direction. The adult will then mark and measure where the back tire re-entered the course.

Scoring:
The quicker the rider gets their bike back into the course the more points they will get. There are no deductions.

= adult
= direction traveled
= cone
= measurements
= bike pathway
= chalk line

Task Card Equipment List

Chalk for marking lines
Chalk line marker
Cones
100 foot measuring tape
25 foot measuring tape
6-10 wooden stakes
String (bright pink, bright yellow, or high visibility orange)
Stopwatch
Pencils
Hammer for placing stakes
11x14 Cards

- Blue color
- Red color

Skill Chart Cover Sheet

These cover sheets contain pictures of skills that are taught throughout the bicycling unit. In the lessons there are references to the specific skill charts that correspond with the skill being taught within that lesson. For convenience purposes they are also referenced below.

1. Skill Chart #1 (Fitting a Helmet)
    - Lesson #1

2. Skill Chart #2 (Mounting a Bike from a Stationary Position)
    - Lesson #12

3. Skill Chart #3 (Balancing)
    - Lesson #3

4. Skill Chart #4 (Wheelie)
    - Lesson #9
    - Lesson #10

5. Skill Chart #5 (Bunny Hop)
    - Lesson #9
    - Lesson #10

6. Skill Chart #6 (J-Hop)
    - Lesson #9
    - Lesson #10

7. Skill Chart #7 (Track Stand)
    - Lesson #5

8. Skill Chart #8 (Riding Over Obstacles)
    - Lesson #12

9. Skill Chart #9 (Mounting the Bike While Moving)
    - Lesson #13
    - Lesson #14

10. Skill Chart #10 (Carrying a Bike Over an Obstacle)
    - Lesson #13
    - Lesson #14

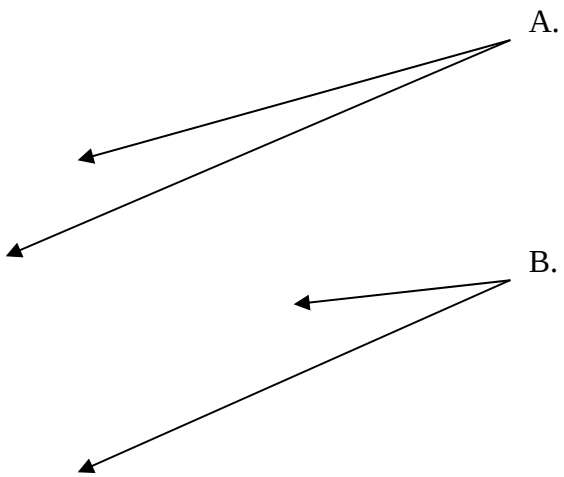
11. Skill Chart #11 (Moving Dismount)
    - Lesson #13
    - Lesson #14

12. Skill Chart #12 (Changing a Tube)
    - Lesson #29

13. Skill Chart # 13 (Oiling a Chain)
    - Lesson #29

Skill Chart #1

Fitting a Helmet



1. Insert or remove top pads (**A**)
   - Thin pads to lower helmet on head
   - Thick pads to raise helmet on head
2. Insert or remove side pads (**B**)
   - Thin pads for thicker head
   - Thick pads for narrower head

Skill Chart #1

A.

B.

C.

1. Put helmet on, level on your head
2. Adjust rear straps (A.)
3. Adjust front straps (B.)
    - Straps should come together just under the ears
4. Adjust chin strap to a comfortable snug fit (C.)
5. Check for Looseness by shaking head with helmet on.

Skill Chart #2

Mounting a bike from Stationary Position

1. **Start by placing the bike on your right hand side (for this exercise).**
2. **Swing your right leg over the saddle**
3. **Place foot on the pedal; bring to 2 to 3 o'clock position.**

Skill Chart #3

Balancing

1. Slightly lean forward,
2. Arms slightly bent,
3. Pedals at the 3 o’clock & 9 o’clock positions,
4. Look straight ahead,
5. Center of gravity

Skill Chart #4

Wheelie

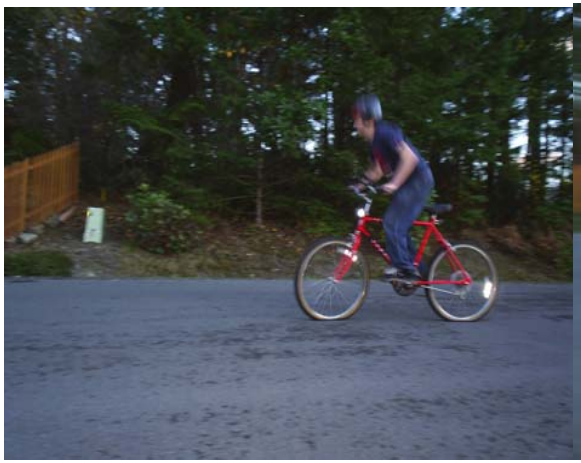
Approach and **transfer weight** to **back** wheel

Firmly **pull back** on handlebars while pushing feet down on pedals

Transfer weight back **to front** wheel and pedal away

Skill Chart #5

Bunny Hop



Approach and **push feet down** on pedals

Pull back then up in one motion

Land and pedal away

Skill Chart #6

J-Hop

Approach

Pull up on handlebars

In mid-flight **push down** and **lean forward**

Land and pedal away

Skill Chart #7

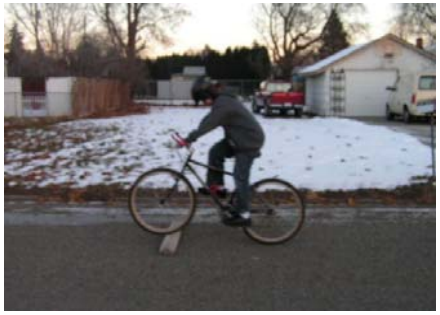
Track Stand

1. **Look Ahead of you and focus on an eye level object.**
2. **Keep your torso straight.**
3. **Focus on center of gravity; try not to be shaky and wobbly.**
4. **Slightly lean forward.**
5. **Slightly turn handlebars to a 45 degree angle.**

Skill Chart #8

Riding over Obstacles

1.  Approach obstacle standing. Determine a safe speed.

2.  Pop a short wheelie, clearing obstacle.

3.  As you pass over obstacle, shift your weight back.

Skill Chart #8

4.  Keep weight back as rear wheel makes contact with obstacles. Use legs as shock absorbers. Keep your momentum, ride over obstacle.

5. 

Resume seated riding position.

Skill Chart #9

Mounting the bike while moving

1. Take right hand off top tube and place it on handlebar

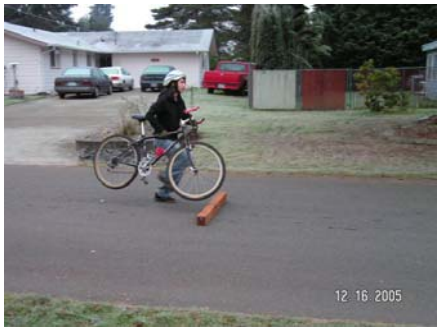
2. Step on the left pedal with your left foot. Push forward with your right foot.

3. After pushing forward with right foot, right leg will be extended rearward. Swing right leg over the saddle to the right side of the bike.

4. Place right foot on right pedal and begin pedaling.

Skill Chart #10

Carrying a bike over an obstacle



1. Place right hand on top tube after dismount and keep left hand on handlebar, pick up bike.

2. While carrying the bike, leap over the barrier.

3. Put bike down on ground, put right hand back on handlebar.

Skill Chart #11

Moving Dismount

1. Swing right foot over the saddle to left side of bike
2. Shoot right foot through between left leg and bicycle
3. Step off bike on right foot

Skill Chart #12

Changing a Tube

Put a tire lever under the bead of the tire at some distance from the valve; use it to lift the bead over the rim edge. Hook the lever on a spoke. Continue to place levers to move more of the bead over the rim.


When enough of the tire sidewall is lifted over the rim, place a tire iron under bead and move it along rim edge to move the tire bead over the rim. When tire is loose, remove the remaining tire bead over the rim by hand.

Skill Chart #12

Remove the tube, saving the valve until last. Push the valve out through the valve hole in the rim while holding back the tire.

Inspect inside of tire for object protruding through tire by running fingers around inside perimeter of tire. Remove any object(s) found. Insert new tire starting by pushing valve through opening in rim. Push tube into place in tire.

Skill Chart #12

Starting at the valve, work tire bead into place over the rim by hand. Make sure that the tube is not pinched between the rim and the tire bead.

With the tire fully installed on the rim, inflate the tire to the pounds per square inch recommendations printed on the sidewall of the tire.

Skill Chart #13

Oiling a chain

1. **Use bicycle chain lubricant only, no motor oil**
2. **Put one or two drops of lubricant on each pin of the chain**
3. **Rotate crank a bit at a time, then lube a few pins to assure all pins get lubed**

Bicycling Unit Resource List

Bicycling Magazine www.bicycling.com

Irishcycling.Com www.irishcycling.com

USAcycling www.usacycling.org

BicycleUniverse.info www.bicycleuniverse.info

Ken Kifer's Bike Pages www.kenkifer.com/bikepages/

Sheldon Brown bike pages www.sheldonbrown.com/articles

Riin's Rants www-personal.umich.edu/~riin/bikes/

Resources

Bicycling Magazine: Articles and information on bike handling skills, nutrition, and fitness. www.bicycling.com

PElinks4u: bicycling unit ideas in curriculum section www.pelinks4u.org

Irish cycling.com information on skill development activity ideas, coaching advice and other bicycling related subjects. www.irishcycling.com

USA Cycling information on training, skill development and competition opportunities. www.usacycling.org

Bicycleuniverse.com Information on bicycle skills, articles on bicycle related topics www.bicycleuniverse.com

Bicycle for Investigations: information on bicycle related skills www.science.uva.nl/research/amstel/bicycle/events/Present2/wrksheet.htm

State of Illinois, Traffic Safety Division Bike rodeo activity ideas

Marin County Schools Bike rodeo ideas www.saferoutetoschools.org

Bicycle Universe.Info articles covering many bicycling topics www.bicycleuniverse.info

League of American Bicyclists Information on bicycle advocacy, bike education, skill development. www.bikeleague.org

About.com Articles on many health related topics including bicycling www.about.com

Sheldon Brown Articles on many bicycling related topics www.sheldonbrown.org/bicycle

The cooperators (Can) Bike rodeo activity ideas www.cooperators.ca/life/wiserider/hom_hom.asp

Roger Marquis' Cycling Page Articles on many bicycle related topics. www.roble.net/marquis

Bicycling Magazine's Complete Guide to Bicycle Maintenance and Repair: Manual containing information on how to perform bike maintenance activities.

Equipment List

30 mountain style bicycles. Frame sizes ranging from 16 to 20 inches

30 bicycle helmets

30 26” 1.5-2.0” extra tubes

20 to 30 cones

Four foot long boards ranging in sizes from 2x4 to 6x10 with chamfered corners

Secure storage area

15-30 bottles of chain lube

30 sets of tire irons (plastic ones pose less risk to tubes)

Pencils

15 to 30 extra wheels

2 or 3 floor air pumps

2 to 3 frame air pumps

15 – 30 inner tube patch kits

AV equipment (tv, vcr)

Diggin’ It video (found at Amazon.com, other online stores)

Stopwatch

100’ Measuring tape

Tape

3 broom sticks

6 floaty foam sticks

10 12” high barriers

5-10 Bike stands

Maintenance tools

1. Metric wrenches
2. crank wrenches
3. metric allen wrenches
4. chain tool
5. cog removal tool, freewheel remover, chain whip
6. bottom bracket removal tool
7. Phillips and flat screwdrivers
8. spoke wrenches
9. cone wrenches
10. fixed cup wrench, lockring spanner
11. bicycle wheel truing stand
12. rubber mallet
13. vice grips
14. scissors
15. torque wrench
16. bench vise
17. cable cutter
18. pliers