

BIKING LESSON PLAN

“Nothing compares to the simple pleasure of riding a bike.” — John F. Kennedy

Biking is important in Minnesota!

- Students have learned the skills necessary to participate in a variety of physical activities.
- Students know the implications and the benefits of involvement in various types of physical activities.
- Students participate regularly in physical activity.
- Students are physically fit.
- Students value physical activity and its contributions to a healthy lifestyle.



STANDARDS & UNIT OBJECTIVES

The student objectives below are followed by specific reference to SHAPE America National Physical Education Standards and Grade-Level Outcomes .



Students will be able to...

- **Standard 1**

Objective 9.1.1.1 Demonstrate competency and refine activity-specific movement skills in two of the following lifetime activity categories: individual performance activities, outdoor pursuits.

- **Standard 2**

Objective 9.2.1.1 Apply terminology associated with exercise and participation in selected individual performance activities.

- **Standard 3**

Objective 9.3.1.5 Evaluate physical activities that can be pursued in the local environment for their benefits, social support network, and participation requirements.

- **Standard 4**

Objective 9.4.4.1 Apply best practices for safe participation in physical activity, exercise or dance. For example: injury prevention, proper alignment, hydration, use of equipment, implementation of rules, sun protection.

- **Standard 5**

Objective 9.5.3.1 Select and participate in physical activities that meet the need for self expression and enjoyment.



Special Considerations

It is important to give students an opportunity to choose appropriate games, sports and events. However, the health and safety of all students is paramount. Games, sports and events must provide safe, meaningful and challenging opportunities for all students.

Equipment Considerations

- Staff will prepare a bike fleet that includes adapted bikes (see below)
 - Consider bike and helmet sizes
 - Traffic Signs and cones
 - Bike Journal
 - Bike safety videos from [Walk!Bike!Fun!](#)
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Safety Considerations

- Students will demonstrate traffic signs and signals.
 - Students will complete bike safety checks prior to biking.
 - Students will wear a helmet while biking.
 - Students will bike on an adapted or appropriate sized bike.
 - Students will pedal, brake, and steer safely.
 - Students will demonstrate turning hand signals and safe steering.
 - Students will bike safely with a peer.
 - Handout parent letter and inform teachers, nurses, and paraprofessionals in safety information.
 - Review Level of Support information
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Types of Bikes and Adapted Bikes

Lee, David. **Adaptive Cycling Instructor's Manual**. Durham: Northeast Passage, 2015.

- Bikes, Trikes, Tandoms
- Hand Bikes
- Stider

UNIT SCHEDULE

This unit is segmented into 8 sessions, however instructors can decide to extend or shorten skill instruction time-frames based on what best serves their students. As with many activities/games, skills and understanding of the game only get better with practice, therefore the more students practice playing games, the better they will become.

SESSION 1: BIKE SAFETY, BIKE FLEET PREPARATION & PEDAL/BRAKE/STEER

Objectives

Students will be able to...

- Choose and fit an appropriate helmet and a bike/ adapted bike
- Identify and follow traffic signs and signals
- Identify the five key rules for bicycling related to traffic laws
- Review "Bike Safe, Bike Smart" video from bikeMN.org
- Listen and discuss bike safety with peers and Bike Safety Guest speaker
- ABC Quick Check
- Practice Pedal/Brake/Steer with peer
- Students will take home the parental bike agreement form.

Materials

- Bike and helmet for each student
- Cones
- Stop signs
- Open space for biking course
- Ropes (if needed)

Vocabulary

- **History of bicycles/adapted bicycles**
- **Bicycle Clubs in Minneapolis**
 - [Hiawatha Bicycling Club](#)
 - [More Kids on Bikes](#)
- **Bike Anatomy:** Frame, Pedals, Cranks, Seat, Chain, Tires, Spikes, Rim, Handlebars, Brake Cables, Shift Levers
- **Dominant Hand:** Your throwing hand
- **Opposite Foot:** The foot farthest away from your throwing hand.
- **Bike Safety Terms:** ABC Quick Check & Adjustment, Review Traffic Signs, Scanning, and Rules of the Road

Task Analysis: Hand Signals, Helmet Fit Test, ABC Quick Check, Pedal/Brake/Steer

Movement Sequence	Verbal Cues
Demonstrate hand signals for left turn, right turn, and stopping without being on a bicycle/ adapted bike.	<ul style="list-style-type: none"> • Stop - left arm down • Left Turn - Left straight arm • Right Turn - Left arm up • Adapt the hand signals
Helmet fit test	<ul style="list-style-type: none"> • Level on your head - covering your forehead • Sliders position in a V or Y under earlobes • Able to talk
ABC Quick Check	<ul style="list-style-type: none"> • Air Pressure Check • Brake Check - hand and foot • Chain and crank review
Pedal/Brake/Steer	<ul style="list-style-type: none"> • Power Pedal Position - get started Right pedal is at the 2 o'clock position and left pedal is at the 10 o'clock position. • Rear brake is the right hand brake. • Review Adapted Bikes brake systems • Steer - handle bar(s) hold and drive like a car

Session 1 & 2 Content

- Overview & vocabulary Introduction (computer and projection of videos)
- Hand Signals Skill Instruction and Review of Traffic Signals/Signs
 - Practice the hand signal with a peer. Practice the hand signals on a walking course while following traffic signs/signals. Practice the hand signals while riding a bike through course while following traffic signs/signals.
- Helmet Skill Instruction
 - Select a helmet and complete a helmet fit test with a partner
- ABC Bike Check
 - Check: Air Tire pressure, Brake Check, and Chain and Crank Set Check before getting on your bike
- Select a Bike and Pedal/Brake/Steer on a course set up in the gym
- Bike Anatomy Worksheet - Students fill in quiz sheet with partner or individually
- Students complete bike journal entry on the topic of My Strengths and Weaknesses

Assessment

- [Helmet Fit Test with a peer](#)
- [Bike Safety Check: Air, Brakes, Chain and Crank Set](#)
- [Bike Anatomy Worksheet](#)
- [Self Assessment in bike journal - My Strengths and Weaknesses](#)
- [Peer Review of hand signals](#)

Student Demonstrated...	Attempt #1	Attempt #2	Attempt #3	Attempt #4
Skill 1 Helmet Fit Test with a peer	Eyes - helmet must be level covering forehead	Ears - sliders should be positioned in a V or Y under your earlobes	Mouth - Open your mouth wide and talk normally and open you mouth	
Skill 2 Peer review of hand signals	Stop	Left Turn	Right Turn	Adapted hand signals
Skill 3 ABC Bike Safety Check	A - stands for air in the tires	B - stands for brakes	C - stands for chain and crank set	
Skill 4 Self Assessment in Bike Journal	Writes strengths	Writes weaknesses	Writes weaknesses	

SESSION 3 & 4: INDOOR BIKING/ADAPTED BIKING & PUTTING ON A CHAIN

Objectives

Students will be able to...

- Students will try and choose a bike/adapted bike and pedal safely around the gym.
- Students will complete or participate in a Name the Bike Quiz.
- Students will replace a slipped chain ([Put On a Chain Link](#))
- Review MN Statues: 169.222 Operation of bicycle

Materials

- Bikes and Adapted Bikes
- Bike Course set up in the gym
- Bike Part Diagram

Vocabulary

- **Frame**
- **Drive Train**
- **Tire**
- **Spokes**
- **Rim**
- **Seat Post**
- **Handlebars**
- **Brake Cables**
- **Brake Levers**
- **Shift Levers**

Session 3 & 4 Content

Divide students into 3 groups and explain tasks of each group. Rotate after 20 minutes

Group 1 will complete Bike Part Quiz as a class or individually

Group 2 will choose a bike and helmet and practice biking safely through the course

Group 3 will practice replacing a slipped chain on a bike

Assessment

Student Demonstrated...	Attempt #1	Attempt #2	Attempt #3	Attempt #4
Skill 1 Students will complete Bike Part Quiz	Small group working together	Quiz format with questions	Individuals working alone to complete the quiz	
Skill 2 Students will replaced a slipped chain	Students in pairs replacing the chain	Individual replacing of the chain	Student giving verbal directions to another student on replacing the chain	

SESSION 5: FIXING A TIRE - PREP FOR OUTDOOR BIKING

Objectives

Students will be able to...

- Students will review how to communicate and be courteous to drivers while riding a bike.
- Students will practice fixing a tire. BikeMN - Fixing Flats Guide
- Students will practice braking on the indoor bike course.

Materials

- Bikes
- Helmets
- Air Pump
- Extra Bike Tubes
- Tire Levers

Vocabulary

- **Bike Tube**
- **Tire Levers**
- **Schrader Valve**
- **Presta Valve**
- **Frame**
- **Drive Train**
- **Tire**
- **Spokes**
- **Rim**
- **Seat Post**
- **Handlebars**
- **Brake Cables**
- **Brake Levers**
- **Shift Levers**

Session 5 Content

How to fix a flat tire:

1. Remove wheel
2. Deflate tire
3. Remove one side of tire from the rim
4. Remove tube
5. Inspect inside of tire
6. Install new or patched tube
7. Re-seat tire bead
8. Inflate tire
9. Install on bike

Assessment

Student Demonstrated...	Attempt #1	Attempt #2	Attempt #3	Attempt #4
Skill 1 Students will work in pairs to fix a flat tire				
Skill 2 If time allows, students will take turns biking on indoor course.				

SESSION 6: OUTDOOR BIKING ON AN OBSTACLE COURSE OR BIKING/ADAPTED BIKING ON THE TRACK

Objectives

Students will be able to...

- Students will practice courtesy and communication while riding a bike.
- Students will bike outdoors on a confirmed bike route/path.
- Students will return parent agreement form.
- Students will complete a bike journal entry.

Materials

- Bikes/Adapted Bikes
- Helmets

Safety Flashcards

1. What should you always check before riding your bike?

Answer: Air, Chain, Brakes

2. What should you always check for when you enter the street?

Answer: Traffic

3. On which side of the road should you always ride your bike?

Answer: Right

4. What color traffic light does it have to be to go?

Answer: Green

5. What should you always do before entering a road

Answer: Stop, listen for traffic, look left-right and then left again

Session 6 Content

Topic: Outdoor biking on an obstacle course for safety or practice biking on a track

Assessment

Student Demonstrated...	Attempt #1	Attempt #2	Attempt #3	Attempt #4
Skill 1 Students will bike on a high school track for 40 minutes.				
Skill 2 Students will bike around an obstacle course to demonstrate bike safety, communication, and inclusion.				

SESSION 7 & 8: SCHOOL AND COMMUNITY BIKING

Objectives

Students will be able to...

- Students will bike on a tracker or out in the community.
- Students will transfer knowledge and bike skills to biking community.
- Students will review riding on the road.
- Students will review bike path rules and etiquette.
- Students will review route.
- Students will review group riding rules.

Materials

- Bikes/Adapted Bikes
- Helmets
- First Aid Kit
- Safety Vests
- Bike Route

Vocabulary

- **Community Biking**
- **Bike Paths**
- **Group Riding**

Session 7 & 8 Content

1. Group riding in community, bike path, or high school track area
Organize into groups of 5-8 students. Complete ABC check, helmet check, safety vest check
2. Students complete bike journal entry on community biking.

Student Demonstrated...	Attempt #1	Attempt #2	Attempt #3	Attempt #4
Skill 1 Group riding skills	Permission slip or bike parental agreement	Follow adults	Stay with the group and follow	Student leader on the bike route
Skill 2 Students map community bike ride	How many blocks	Surfaces	Safety kit (cell phone, first aid kit, bike fix-it kit)	Communicating as you bike

Activity Protocol & Etiquette

- Communicate with all bicyclists about safety, turning, surfaces, and speed.
 - Group biking
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