

Mobility 2

The Second Level of Four Levels of Mobility Classes

Department: Mobility and Fitness

Priority:

High priority for students who are walking but only with the assistance of devices or other people. At the Center, these students wear a “yellow ribbon” to signal that they require someone to assist or shadow them when they move from class to class or activity to activity. Some students may not be “yellow ribboned”, but they lack the endurance to move from class to class in a timely manner.

Overall purpose of class:

- To improve balance.
- To increase awareness of body position in space.
- To improve mobility and fluidity of movement.
- To practice and improve safe and functional transfers
- To improve endurance

Number of classes held per week:

Daily

Optimum class time:

Morning

Instructor requirements:

Instructor plus 2 trained assistants plus volunteers or personal aides to accommodate group

Number of students:

10 is ideal

Student ability range and limitations:

This class is designed for students who require some assistance in walking. They may be in wheelchairs. Generally fairly slow in movements.

Space and Equipment requirements:

Adapted bikes, parallel bars, optional foot placement ladders, balance rocker boards, steps, captain’s chairs with arms and customized seat risers, balance beam made with a 2 by 6 approximately 8 feet long.

Student Needs to be met from the perspective of the instructor:

Students are recommended for this class if they can benefit from:

- Learning proper techniques for transfers
- Learning individual adaptations for walking incorporating their weak extremity to improve balance and gait.

- Learning proper use of equipment.
- Improving their gate pattern

Typical Student Goals that lead to placement in the class:

Family comments that student “hates” his cane or walker. “He carries it around instead of using it!” They are concerned about safety in activities of daily living and request that our therapists help convince the student to properly use cane/walker.

Student states that he wants to improve his balance.

Other common goals are to stop dragging a foot, learn how not to fall and to learn to walk comfortably outside again.

Mobility 2 Sample Activities

Warm Up: Set up on bicycles for 10-15 minutes depending on endurance and level of function of each student.

NOTE: USE TRANSFER BELTS ON ALL STUDENTS FOR ALL ACTIVITIES

- Either foot prints or number pads can be used for visual guidance when deemed necessary throughout any of the suggested activities.
- Each class is customized for the students in the class. Each week format may be changed to meet the needs and goals of both the students and the class.
- Students may vary in different classes as well as in each class day to day. Monitor closely and adjust where needed.
- Make it fun, challenging but not too overwhelming to the level of frustration.

Exercises At Parallel Bars:

Stand Ups- may be done from wheelchairs or other chairs

Use of upper extremity (ies) is encouraged to provide a safe and as independent transfer as possible.

Assistance should be provided from the affected side/or weaker side.

NOTE: Stand Ups may also be incorporated with movement from chair to chair- set up close to each other or short distances apart- allowing for transfers and ambulation combined.

Starting position- have student slide forward in chair with feet hip width apart. With weight forward over feet and trunk flexed forward and use of UE, push up to standing.

Use equipment (walker or cane) to assist standing balance when up. Encourage use of mirror to correct posture, and equal bilateral weight bearing on lower extremities.

Reaching for armrest, have student return to sitting with equal weight on lower extremities and trunk flexed forward. (If wheelchair is used have student practice safety in locking chair, removing feet from footrests etc.)

Repeat stand Ups 5X-10x or more.

Warm Ups Standing At Bars- repeat each 5X

1. Weight shifting side to side
2. One foot standing, alternate
3. Arms length from bar, bending at waist, flat back, knees straight- stretch calves and hamstrings maintaining equal weight on lower extremities.
4. One foot forward, back leg straight, (stride position) bend front leg, both feet flat on floor, stretch heel cord and calf on back leg. Reverse feet and repeat.
5. Squats, straight back, slowly bend knees, small range of motion, hold. Equal weight on both legs throughout movement.
6. Marching in place. Maintain good body alignment. Knee stays in alignment with hip. Repeat on same leg or alternate.
7. Hip flexion, knee extension, heel strike. Raise hip up, extend knee, place heel on floor. Return to starting position. Repeat on other leg.
8. Forward leg swing- swing one leg forward, action at hip- maintain knee extension, ankle flexion. Swing back to starting position. Repeat on other leg.
9. Full leg swing- same as above but continue swing into hip extension then back to starting position. Repeat on other leg.
10. Side leg swing- swing leg out to side about 12" bring back to start. Repeat on other leg or alternate right then left.
11. Combination swing- combine forward, backward, and sideways- verbal direction to change directions throughout. After each direction leg goes back to starting position (parallel to weight bearing leg)

Dynamic Activities With Use Of Parallel Bars

1. Exercises done in the bars or outside using stronger arm to assist as needed
2. Marching steps
3. Heel- toe walking
4. Walking backwards Sidestepping - both directions

Incorporate combination movements. Incorporate two and three task directions. For example, standing in place feet hip width apart- swing right leg out to side and in, repeat on left. Step forward repeating pattern for 1/2 length of bar. When at the middle area of bar with feet parallel due three squats. Last 1/2 of bar start again with feet parallel then swing one leg forward and back repeat on other leg. (good set of exercises for sequencing, memory, verbal directions etc.)

Use Of Other Equipment For Exercises

- Foot Ladders
- Balance Beams Balance/ Rocker Boards Steps (Various Sizes)
- *(use above 4 inside bars)
- Stairs/Ramp
- Obstacle Courses

Foot Ladders (use inside parallel bars)

- Foot placement in outside corner of each square, transfer weight sideways over foot, hip to bar, repeat to other side.
- Same as above but walk backwards in each square.
- Both feet in square, stretch out stride and skip a square, place both feet in next

square.

- Walk through ladders, place foot in center of each square, raise knees up between each step
- Both feet in each square, small squat check posture in mirror, step to diagonal square, continue pattern in each square.
- Staying on one side of ladder, place one foot in square, next square in front place opposite foot. Change next set to staying on opposite side of ladder.

Balance Beam (use inside parallel bars)

- Wide base walking- use beam to encourage increasing base of support- walk wide on floor- not touching beam,
- Tandem walking- heel toe along beam, making sure entire foot is squarely on board each step. Same as above but with knee up between steps- marching step.
- Tandem walking backwards- heel to toe on beam
- Curb walk- one foot on board, other foot on ground. Hip hike as foot on floor is brought forward, maintaining extended leg- feet should be parallel with each other height of board. Repeat with reversing which foot on board and floor.
- Walk along beam swinging non-weight bearing leg forward, backwards forwards between each step smooth and controlled.

Balance/Rocker Boards (use in parallel bars)

- Side to side balance- feet hip width apart on board, shift weight side to side slowly, controlled touching sides of board to floor. Balance in middle for equal weight bearing.
- Front to back balance- same as above but feet in stride position on board- shift weight front to back.
- Also can be done with round balance "dyna disc" or "tuning board"

Steps (use inside parallel bars)

- Use various size steps to practice stepping up, over, and down in various patterns.
- Individual steps are good to use for practicing hip and knee flexion on weaker side to prevent substitution as seen with hip circumduction, vaulting etc.
- Steps can be combined for series of stairs.

Stairs/Ramp

- Use of stairs and ramp with equipment or railing.
- Stairs with one step at a time or alternating steps as able.

Obstacle Course

Set up obstacle course with use of various equipment which may provide a series of turns, small areas to negotiate, sit to stand activities from chairs with and without armrests etc.