

Class #1: Movement, Essential for Life

Student Objectives

- Define kinesiology.
- Describe the differences between statics and dynamics.
- Describe the differences between kinetics and kinematics.
- Replicate key concepts of statics vs. dynamics, mobility, stability, balance, and coordination during a movement exercise.
- List and define the four elements of human movement: mobility, stability, balance and movement.
- Describe movement patterns and kinetic chains.
- Name the four key structures of the body essential for movement and their purpose: connective tissue, joints, muscles, and nerves.
- Assign daily movement patterns to concepts such as balance, stability, and simultaneous and sequential movement.

Class Equipment

- *Trail Guide to Movement*
- PowerPoint: Chapters 1 and 2
- *Trail Guide to the Body*, Fifth Edition

Readings

Required

- *Trail Guide to Movement*. Pages: 2-3, 6-11, 12-13, 16-21.

Homework

- Prep for quiz next week.
- Bring foam roller or a long sock.
- Read: Chapter 3 Connective Tissue, Part 1 (pages 23-34).

Reference/Resources

- Slow Walking: adapted from <http://www.lionsroar.com/walking-meditation-in-motion/>

Lead-In Board Quote

Have these quotes written on the board or on a projection slide prior to students entering the class:

“A single, visible ‘movement’ is actually a series of smaller, sequential actions in the body. The coordination required is an ensemble effort of nerves, bones, muscles, joints, and fasciae spanning from head to toe.” TGM, page 10.

“Human movement encompasses balance, posture, mobility, gait (walking style), and stability.” TGM, page 7.

Activities

- Attendance: 5 minutes
- Distribute and review your syllabus: 10 minutes
- Introduction to class: 5 minutes.

This first class is a basic introduction to the principles of movement, which will be laid out in more depth in further classes. The objective of the first class is to start students thinking about all the components of human movement.

Lecture: What is Kinesiology and the Essentials of Movement? 20 minutes

- Define kinesiology (page 16)
- Introduction to the principles of statics and dynamics (page 17)
- Static examples
 - Sitting meditation posture
 - Mountain pose in yoga
- Dynamics examples
 - Long jump or pole vault
 - Skate boarding
- Dynamics being divided into kinetics and kinematics (page 18)
- Mobility, Stability, balance and coordination (page 18)

Whole Group Experience: Slow Walking: 15 minutes

Preparation

Clear a path in the room where students will be able to walk in a full circle. Have students form a circle facing to their right, with one student behind the other with about an arm’s length of distance between. The movement is slow and deliberate. Ask students while they are walking to pay attention to the concepts discussed:

- Statics vs. dynamics movement
- Mobility, stability, balance, and coordination

First Round: A complete circle two times around.

In the first round of your slow walking, allow your awareness to focus on the sense of stepping on the ground. If you would like to bring more energy into your system, lift your knees a little bit higher and decrease the stride, so that you are taking shorter steps. Notice the sense of stepping on the earth: stepping, stepping, stepping.
Second Round: A complete circle two times around.

In the next portion, slow down enough so that you notice the lifting of the foot and then the stepping of the foot on the ground. Lifting, stepping—lifting, stepping—lifting, stepping. You will notice that your mind will wander many times. No problem. Just keep bringing it back to the sensations of lifting and stepping.

Once everyone has completed two times around, have students return to their seats. Discuss what they noticed in their bodies while doing this slow movement.

- Was it hard to take an everyday action, such as walking, and do it at such a slow pace?
- Were you able to lift your knee a little higher without losing balance?
- How did it feel to go from static movement to dynamic movement?
- Did you feel any tension in parts of your body while performing the slow walking?

Break: 10 minutes

Lecture: What is Kinesiology and the Essentials of Movement, Continued: 15 minutes

- Discussion and demonstration (page 19)
- Simultaneous and sequential movement
- Ask students to demonstrate actions that fall into each category
- Example: simultaneous movement
 - Squat with weight
- Example: Sequential movement
 - Pitcher throwing a baseball

Lecture

- Movement patterns and kinetic chains (page 20)
- Proportion, symmetry, and compensation (page 21)

Small Group Activity: A Day in the Life of Movement: 10 minutes Pages 6-11

- Break students up into groups.
- Have each group present an example of daily movement representing the concepts below:
 - Statics
 - Dynamics
 - Stability
 - Balance
 - Coordination

- Movement pattern

Whole Group Discussion: What Does the Understanding of Human Movement Have to Do with Massage Therapy? 10 minutes

Pages 12-13

- Comprehend your own movement patterns.
- Create awareness in your clients of how their habits and body usage impacts healthy form.

Lecture: Building the Body: 10 minutes

Pages 2-3

- Four key structures essential for movement
 - Connective tissue framework for compression and tension
 - Joints articulation to allow movement
 - Muscles motion motors
 - Nerves electrical system
- Biomechanical principles, laws of motion, gravity, levers
- Checking to see that it all works
 - Posture
 - Gait

Closing Connection: Final conversation where students and instructors can share their closing thoughts about what they learned that day and how to prepare for the next class. 5 minutes.

