Flexibility
Warm-up/Cool-down

Objectives:
1. Students will recognize important principles of flexibility, i.e. warm-up, cool-down, range of motion, FITT: Frequency, intensity, time, type.
2. Each individual will be able to demonstrate a range of flexibility by performing at least one flexibility test involving the joints.

Flexibility is a component of physical fitness and should be practiced daily as well as with pre and post physical activity. Developing and maintaining flexibility is an important part of a fitness program and will help any individual improve upon daily activities and will help maintain injury free physical tasks. Good flexibility is the ability to move your joints and the attached muscles through a complete and relatively uninhibited range of motion. Flexibility is the muscles resiliency and stretch ability while in motion. It is best developed by slow passive stretching of the large muscle groups of the body. Hold each stretched position for 10-15 seconds. Do not bounce (ballistic stretching) or you may tear the muscle fibers due to over-stretching the muscle.

Exercises that help improve flexibility are best used before and after a physical work-out also referred to as a warm-up and cool-down. Warm-up activities prepare the body for activity, enhance your performance, and reduce the chance of muscle and joint injury as they prepare all of your body systems for activity. The cool-down process following the completion of the activity is just as important as your warm-up and has a three-fold purpose: 1) return the heart rate to near resting levels, (80), 2) prevent the pooling of blood in the lower extremities and 3) to reduce post–exercise muscle soreness and further increase flexibility through stretching exercises. To accomplish these goals, you must remember never to “stop cold” following vigorous exercise. Keep moving around at a progressively slower pace until you feel normal. Walking is probably the easiest way and most natural way to cool down from any type of activity. The muscular action inherent in walking helps the blood circulate and reduces the pooling effect that might occur in the legs. After the heart rate has recovered repeat the warm-up stretching exercises.

Stretching during the warm-up and cool-down helps you maintain overall flexibility. Stretching should not be painful, but it should cause some discomfort because the muscles are being stretched beyond their normal length. Everyone needs flexibility for good health. Spend just 5-10 minutes every day doing stretching exercises and you will be well on your way to improving your muscle flexibility.

**FITT** Factors for stretching:
- **Frequency:** Do flexibility exercises daily and before and after activity.
- **Intensity:** Stretch the muscle beyond its normal length to the point of discomfort, not pain.
- **Time:** Hold stretches for 10-15 seconds for warm-up and cool-down, longer to improve upon flexibility.
- **Type:** Use static stretches, slow and gradual.