

PE30.8

Physiology and Biomechanics – Analyze physiological and biomechanical principles of movement.

Indicators for this outcome

- (a) Analyze the physiological benefits of short- and long-term training programs.
- (b) Identify, through participation, how to execute self-selected movement patterns and complex skills.
- (c) Critique, for self and others, various movement patterns and complex skills for proper biomechanical (e.g., rotation of a wrist, flexion of a joint and body position) execution.
- (d) Identify, through participation, the movement patterns required to execute self-selected weight training exercises (e.g., proper form for bench press) and fitness activities (e.g., proper foot plant for long distance running).
- (e) Critique, for self and others, various weight training exercises and fitness activities for proper biomechanical execution.
- (f) Discuss the potential long-term effects of using improper movement patterns in a specific activity.
- (g) Investigate the importance of rest and active recovery as part of a fitness or training plan.
- (h) Discuss the possible short- and long-term effects (e.g., lack of muscle growth and degeneration of joints) of over-training on an individual's physiology.
- (i) Explore the importance of participating in multiple activities to support physical development.