



STEM Day Lesson Plan

Lesson Plan Author(s) Names and Affiliation: Patrick J Mason, Lecturer Exercise and Sports Science

Title: Fitness Assessment

Subject Area: Fitness Assessment (Exercise and Sports Science)

Learning Activity Description: Hands-on learning for various fitness assessments. Including flexibility testing, sub-maximal cardiovascular testing, muscular endurance testing, maximal grip strength testing, and body composition measurements

Lesson Activity Objective: To educate students who participate in STEM Day regarding fitness testing and their own personal health status.

Lesson Activity Outcomes: Provide students a greater knowledge of how fitness testing is conducted.

Materials/Supplies Listed: Aerobic steps and risers, hand grip dynamometers, skin-fold calipers, exercise mats, bio-electric impedance analyzer, stop watch and metronome

Teacher Procedures:

- Introduce students to the exercise testing procedures
- Break group into smaller groups and assign them to specific fitness tests
- Rotate each student until each group has completed all fitness tests
- Explain how these test can be used to goal set for better fitness as well as give participants an idea of their current fitness status

Preparation Time for Learning Activity: 30-40min

Room set-up: Have all tests set-up the day before

Group Strategies (example, group size, expected time for groups, etc.): You can have multiple testing stations for each fitness test in order to keep all students busy with testing.

Student Products/Artifacts/work pages: Normative testing charts for each testing

Assessment Criteria/Rubric: none

Closing/Transition to next activity: Discuss the benefits of knowing your fitness status and how you may be able to improve each fitness area.