Terms and Definitions

**Acute Injury**: A traumatic and intense injury that occurs all at once.

**Aerobic**: Requiring the presence of air or free oxygen to sustain life.

**Aerobic Metabolism**: Chemical process that the body uses to generate ATP.

**Aging**: Is the process occurring with the passage of time, leading to loss of adaptability or full function and eventually to death.

**Anaerobic**: Pertaining to or caused by the absence of oxygen.

**Anaerobic Metabolism**: Chemical process that the body used to generate ATP and it makes lactic acid.

**Biomechanics**: The study of the action of external and internal forces on the living body.

**Biotechnical**: The use of living organisms or other biological systems in the manufacture of drugs or for environmental management.

**Blood Doping**: A procedure in which an athlete is injected with his or her own previously drawn and stored red blood cells to increase the body's oxygen-carrying capacity before a competition.

**Body Morphology**: All of the parts that make up the human body physiologically.

**Central Nervous System**: Brain and spinal cord.

**Chronic Injury**: An injury that occurs over time.

**Correlation Study**: Independent variable and dependent variable.

**Dietitian**: A person who is an expert in nutrition or dietetics.

**Exercise Adherence**: Sticking to the exercise treatment program that was prescribed.

**Exercise Metabolism**: All of the chemical processes the body goes through during exercise.

**Exercise Prescription**: A prescription for the best exercise for an individual.

**Exercise Psychology**: The scientific study of people and their behaviors in sports and exercise contexts and the practical applications of that knowledge.

**Exercise Response**: The body’s response to exercise.

**Exercise Science**: The study of human movement from anatomical or mechanical perspective or both.

**Feedback**: The return of part of the output of a circuit, system, or device to the input, either purposely or unintentionally.

**Homeric**: Pertaining to or suggestive of Homer or his poetry.

**Kinesiology**: The study of the anatomy and physiology of body movement.

**Lactic Acid**: A syrupy liquid \((C_3H_6O_3)\) produced by anaerobic metabolism.

**Maturation**: Is the qualitative advance in biological makeup and may refer to cell, organ, or system advancement in biomechanical composition rather than to size alone.

**Metabolism**: The sum of the physical and chemical processes in an organism, by which its substance is produced, maintained and destroyed, and by which energy is made available.
**Motor Control:** Is the study of the neural, physical and behavioral aspects of movement.

**Motor Development:** Is the sequential, continuous age-related process whereby movement behavior changes.

**Motor Learning:** Refers to the relatively permanent gains in motor skill capability associated with practice or experience.

**Overload:** Level of exercise within the body that is above what it experiences on a daily level.

**Pedagogy:** The art or method of teaching.

**Peripheral Nervous System:** All neural tissue outside the central nervous system.

**Physical Growth:** Is an increase in size or body mass resulting from an increase in complete, already formed body parts.

**Progressive Overload:** It gives the system enough stimuli to create a gradual change.

**Recall Memory:** A memory test that requires subjects to reproduce information on their own without any cues.

**Recognition Memory:** A memory test that requires subjects to select previously learned information from an array of options.

**Sports Pedagogy:** Promotes the educational research in physical education and youth sports and related fields such as teaching and coach education.
Professional Associations

Action for Healthy Kids (AHK): a national nonprofit organization dedicated to addressing the epidemic of overweight, undernourished and sedentary youth by focusing on changes in schools. We work in all 50 states and the District of Columbia to improve children’s nutrition and increase physical activity, which will in turn improve their readiness to learn. www.actionforhealthykids.org

American Academy of Kinesiology and Physical Education (AAKPE): to encourage and promote the study and educational applications of the art and science of human movement and physical activity and to honor by election to its membership persons who have directly or indirectly contributed significantly to the study of and/or application of the art and science of human movement and physical activity. www.aakpe.org

American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD): an alliance of five national associations, six district associations, and a research consortium which support healthy lifestyles through high quality programs. www.aaahperd.org/

American Association for Health Education (AAHE): serves health educators and other professionals who promote the health of all people. AAHE encourages, supports, and assists health professionals concerned with health promotion through education and other systematic strategies. www.aaahperd.org/AAHE/

American Association for Physical Activity and Recreation (AAPAR): is dedicated to enhancing quality of life by promoting creative and active lifestyles through meaningful physical activity, recreation and fitness experiences across the lifespan with particular focus on community-based programs. www.aaahperd.org/aapar

American Board of Sport Psychology (ABSP): To provide Doctoral level psychologists with a credential recognizing advanced training, education, experience and competence in Sport Psychology. www.americanboardofsportpsychology.org/

American College of Sports Medicine (ACSM): promotes and integrates scientific research, education, and practical applications of sports medicine and exercise science to maintain and enhance physical performance, fitness, health and quality of life. www.acsm.org/

American Council on Exercise (ACE): is a nonprofit organization committed to enriching quality of life through safe and effective exercise and physical activity. As America’s Authority on Fitness, ACE protects all segments of society against ineffective fitness products, programs and trends through its ongoing public education, outreach and research. ACE further protects the public by setting certification and continuing education standards for fitness professionals. www.acefitness.org

American Educational Research Association (AERA): strives to advance knowledge about education, to encourage scholarly inquiry related to education, and to promote the use of research to improve education and serve the public good. www.aera.net

American Health and Fitness Alliance (AHFA): is driven to ensure that everyone is able to get the best physical opportunities possible. www.health-fitness.org/

American Society of Biomechanics (ASB): To encourage and foster the exchange of information and ideas among biomechanists working in different disciplines and fields of application, biological
sciences, exercise and sports science, health sciences, ergonomics and human factors, and engineering and applied science, and to facilitate the development of biomechanics as a basic and applied science. www.asbweb.org

American Society of Exercise Physiologist (ASEP): devoted to informative articles and news items about exercise physiology. It is a monthly magazine of news, opinions, professional issues and concerns, and events that shape exercise physiology. While it contains views and opinions of the Editor-In-Chief, Dr. Lonnie Lowery, Assistant Professor, Nutrition and Dietetics, University of Akron, Akron, OH, who oversees the content, visitors can have a voice as well. We welcome interested practitioners, researchers, and academicians to e-mail the Editor their thoughts and ideas. www.asep.org/

American Sport Education Program (ASEP): is committed to improving amateur sport by encouraging coaches, officials, administrators, parents, and athletes to embrace the 'athletes first, winning second' philosophy and by providing the education to put the philosophy to work. www.asep.com

Association for Behavior Analysis International (ABAI): is a nonprofit professional membership organization with the mission to develop, enhance, and support the growth and vitality of behavior analysis through research, education, and practice. www.abainternational.org

Canadian Society for Psychomotor Learning and Sport Psychology (SCAPPS): to promote the study of motor control, motor learning, motor development, and sport psychology in Canada and to encourage the exchange of views and scientific information in the fields related to psychomotor learning and sport psychology. www.scapps.org/

Centers for Disease Control and Prevention (CDC): serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and health education activities designed to improve the health of the people of the United States. www.cdc.gov

Council for Children’s Expanded Physical Education (CCEPE): The Council was organized exclusively for charitable and educational purposes, and for promoting quality physical education through quality presentations. www.ccepe.net

Human Kinetics (HK): is committed to providing quality informational and educational products in the physical activity and health fields that meet the needs of our diverse customers. Within the physical activity field, recreational and organized sports are a major focus. www.humankinetics.com/

International College of Applied Kinesiology (ICAK): is a system that evaluates structural, chemical and mental aspects of health using manual muscle testing with other standard methods of diagnosis. www.icak.com

International Society of Biomechanics (ISB): promotes the study of the biomechanics of movement with special emphasis on human beings; encouraging international contacts among scientists in this field, promoting knowledge of biomechanics on an international level, and cooperating with related organizations. isbweb.org

International Society of Biomechanics in Sports (ISBS): To provide a forum for the exchange of ideas for sports biomechanics researchers, coaches and teachers, to bridge the gap between researchers and practitioners and to gather and disseminate information and materials on biomechanics in sports. www.isbs.org
International Society of Sport Psychology (ISSP): is an organization devoted to promoting research, practice, and development in the discipline of sport psychology throughout the world. www.issponline.org

National Association for Girls & Women in Sport (NAGWS): To develop and deliver equitable and quality sport opportunities for ALL girls and women through relevant research, advocacy, leadership development, educational strategies, and programming in a manner that promotes social justice and change. www.aahperd.org/nagws

National Association for Kinesiology & Physical Education in Higher Education (NAKPEHE): is an organization for professionals in higher education. Its purpose is to foster leadership in teaching, administration, policy, preparation for the professions and scholarship. This mission is facilitated through interdisciplinary ideas, concepts and initiatives related to the role of kinesiology and physical education, while valuing diverse social, cultural and personal perspectives. www.nakpehe.org

National Association for Sport and Physical Education (NASPE): is to enhance knowledge, improve professional practice, and increase support for high quality physical education, sport, and physical activity programs through research, development of standards, and dissemination of information. www.aahperd.org/Naspe

National Strength and Conditioning Association (NSCA): As the worldwide authority on strength and conditioning, we support and disseminate research-based knowledge and its practical application to improve athletic performance and fitness. www.nsca-lift.org/

Ohio Center for Sport Psychology (OCSP): is committed to helping athletes, their families, and coaches enrich their lives through sport by: learning life skills, achieving high levels of performance, and enjoying their sport participation. www.sportpsych.org

Oregon Alliance for Health, Physical Education, Recreation and Dance (OAHPERD): is committed to fulfilling this mission through fostering a climate of mutual respect and cooperation among members and constituent associations in order to realize mutually beneficial outcomes. www.oahperd.com

Physical Education Association for the United Kingdom (PEAUK): is committed to being the UK representative organization of choice for people and agencies delivering or supporting the delivery of physical education in schools and in the wider community. Our purpose is to promote and maintain high standards and safe practice in all aspects and at all levels of physical education, influencing developments in physical education at national and local levels. www.afpe.org.uk

World Health Organization (WHO): is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends. www.who.int
Physical and Health Education Journal associated with the Canadian Associations for Health, Physical Education Recreation and Dance (CAHPERD): www.cahperd.ca/eng/journal/index.cfm
Physical Education and Sport Pedagogy: www.tandf.co.uk/journals/titles/17408989.asp
The Physician and Sportsmedicine: http://www.physportsmed.com
Physiotherapy Theory and Practice: www.tandf.co.uk/journals/titles/09593985.html
President’s Council on Physical Fitness and Sports Research Digest:
  www.fitness.gov/pcpfs_research_digs.htm
Psychology of Sport and Exercise: www elsevier.com/locate/psychsport
Quest: www.humankinetics.com/quest/
Research Quarterly for Exercise & Sport is associated with American Alliance for Health, Physical Education, Recreation and Dance:
  www.aahperd.org/aahperd/template.cfm?template=rqes_main.html
Sportpsyc Unpublished: www.geocities.com/CollegePark/5686/journal.html
Strength and Conditioning Journal is associated with the National Strength and Conditioning Association (SCJ): www.nsca-lift.org/