Bachelor of Science of Applied Physiology and Sport Management

Annette Caldwell Simmons

School of Education and Human Development

Conceptual Framework for the APSM Program

Preamble to the APSM Program’s Conceptual Framework

The Applied Physiology and Sport Management program offers a contemporary program of study that is foundational for ongoing educational and professional success. The curriculum integrates science, management and business, and professional content to provide the academic training necessary for lifelong learning, and the workplace knowledge and experience necessary for professional success. This hybrid academic-professional training was developed to provide students with an academically rigorous and professionally pragmatic undergraduate education.

Students concentrating in Applied Physiology and Health Management will gain a better understanding of the scientific and management concepts and principles in the allied health and human performance professions. Students concentrating in Sport Management will better understand the business and management principles of the sport industries. Students concentrating in Sport Performance Leadership will better understand how to effectively lead and instruct in the context of sport. Emphasis will be placed on the development of critical thinking and analytic skills through both science and management content.

To this end, the faculty will actively maintain a rigorous, evidence-based curriculum with extensive industry links. Program effectiveness in achieving academic and professional outcomes will be reviewed formally on an annual basis and informally throughout each academic year. Elected student representatives will serve as members of any review process. Their feedback will be solicited on the quality and effectiveness of individual class assignments, lessons, experiences, classes in general, and overall program content.

The APSM faculty and staff pledge to serve the students by providing an atmosphere of professionalism, mutual respect and openness. The faculty will actively seek mentoring opportunities
while programmatic efforts will nurture and promote student independence. Ultimately, the program will enable the faculty to help students realize their greatest potential as confident individuals who are well-read, well-written, well-spoken, curious explorers of the truth, and practitioners of sound and ethical professional practices.

I. The Vision and Mission

The mission of Southern Methodist University is to be a leading private institution of higher learning that expands knowledge through research and teaching. Among its faculty, students, and staff, the University develops skills and cultivates principled thought and wisdom.

The Annette Caldwell Simmons School of Education and Human Development promotes excellence by engaging in and disseminating scientifically-based research, preparing exemplary professionals in education and human development, collaborating with other schools and institutions in the development of model programs and furthering positive learning experiences in all stages of life. The mission of the school is to integrate theory, research, and practice of education and human development; to promote academic rigor and interdisciplinary collaboration; to educate students for initial certification and professional practice; and to nurture collaboration across the academic community.

The mission of the Department of Applied Physiology and Wellness is to advance knowledge and practice in the fields of applied physiology, sport management, sport performance leadership and wellness.

The mission of the APSM program is aligned with those of the university, school, and department by emphasizing evidence-based training and approaches in the fitness, health and sport industries.

II. The Philosophy
The Applied Physiology and Sport Management program will provide a rigorous curriculum for understanding the scientific basis of health, fitness and performance, and the management training necessary for professional success in the sport, health and fitness industries.

Broad goals and outcomes of the APSM major will lead to a Bachelor of Science with an emphasis in Applied Physiology and Health Management, Sport Management, or Sport Performance Leadership. All three concentrations will require coursework in the physiological sciences and management. In addition, four minors will be offered: Applied Physiology, Applied Physiology and Health Management, Sport Management, and Sport Performance Leadership.

Academic coursework in applied physiology, management and business, and coaching, as well as experiential learning opportunities, will prepare students for a broad array of career paths that include the allied health professions such as medicine, physical and occupational therapy, nursing, commercial health and fitness (including facility ownership and management); corporate fitness and wellness; nutrition services; sports strength and conditioning; health management; sports marketing, ownership and management of professional, collegiate or amateur sport leagues and teams; representation of professional athletes; sport public relations; sport facility and event management; and coaching roles.

The core curriculum introduces the discipline; establishes the scientific basis of health, fitness and human performance; introduces the business management principles and skills necessary to establish and maintain a health, sports or fitness-related business; and familiarizes students with the legal and ethical aspects of contemporary professional practice within the fitness, health and sport industries. The following unique aspects of the APSM major are included throughout the program to ensure that students receive comprehensive academic training and a quality experience:

- Science courses are structured in accordance with evidence-based practices (EBP), with each course consisting of basic science specific to the discipline and an in-depth investigation of the research literature.
Experiential learning opportunities through practicum courses, labs, internship courses, and research projects give students the ability to: 1) apply learned concepts within “real world” settings, 2) observe and experience the essential role of sound management practices in professional success, 3) identify suitable career paths, and 4) establish relationships that will facilitate successful transitions to employment and professional careers.

A Senior Project for all three concentrations—Applied Physiology & Health Management, Sport Management and Sport Performance Leadership—provides APSM students the opportunity to select an aspect of health, fitness, sport management or sport performance leadership and hone their skills through a research-based project. The project findings are documented in the form of a summative paper and oral presentation.

III. Knowledge Bases, including Theories, Research, and Wisdom of Practice

The fitness, health, and sports industries comprise an enormous and growing share of the U.S. and global economies. In the United States alone, the commercial fitness and health industry had gross revenues of over $14 billion in 2005; and personal healthcare costs account for sixteen percent of the U.S. gross domestic product ($2.2 trillion.) As quoted in www.forbes.com/sites/darrenheitner/ “the sports industry is to reach 73.5 billion by 2019.” The biggest reason for such growth is projected increases in revenue derived from media rights deals, which is predicted to surpass gate revenues as the sports industry’s largest segment.

Applied Physiology and Health Management Concentration Rationale

Compared to 2015, growth in healthcare spending in the 2.9 trillion dollar US health economy is expected to slow in 2016, but it will still outpace overall economic inflation (PWC, June 2015 Health Research Institute, Medical Cost Trend: Behind the Numbers 2016.) Affordable healthcare remains out of reach for many consumers. Chronic diseases such as diabetes and heart disease are estimated to cost the US more than one trillion dollars annually in direct costs and indirect productivity losses. Eighty-four percent of healthcare expenditures are attributed to people with chronic conditions. Many of these are
preventable and could be managed through behavior modification. As the trailblazer, Dr. Dunn wrote in his position paper *High-Level Wellness for Man and Society, (1959)* “Clearly there is a need for a new health axis rooted in the changing demographic, social, economic and political character of our modern civilization. The preventative path of the future, both for medicine and public health, inevitably lies largely in reorienting a substantial amount of interest and energy toward raising the general levels of wellness among all peoples.”

These health trends alone provide a compelling reason to educate and train professionals in the scientific and professional basis of health and fitness. Health promotion and wellness corporations have grown rapidly over the last decade as corporations strive to contain the spiraling costs of providing health care.

The strength of the association between lack of exercise and heart disease equals that for hypertension, cigarette smoking, and high serum cholesterol. This makes physical inactivity the greater heart disease risk because more people lead sedentary lifestyles than possess any of the other primary risks (Blair & Church, 2004). Today, nearly thirteen percent of the U.S. population, approximately 38 million people, are older than 65. By the year 2030, twenty percent of the population, 70 million people, will be over 65. Assuming consistent mortality rates, the number of Americans over the age of 85 will more than triple over the next four decades, reaching 15 million by 2040 (www.cdc.gov). Physical inactivity causes nearly 30 percent of deaths from heart disease, colon cancer, and diabetes (Hoffman, 2000).

Our APHM students will be able to direct lifestyle changes for their clients that could reduce mortality from these ailments and greatly improve cardiovascular and muscular functional capacities, quality of life, and independent living (Brill, 2000). The Applied Physiology and Health Management concentration will prepare students to develop research-based training methods in order to advise effective lifestyle prescriptions, as well as design and manage fitness and health facilities for a steadily aging population. The graduates from this APHM program will be in high demand as health spending outpaces the gross domestic product and individual consumers and companies struggle to afford services to combat chronic diseases (PWC, June 2015 Health Research Institute, Medical Cost Trend:
Many students entering the health promotion field are trained in biological sub-disciplines in public health schools that focus on medical and health based curricula. However, the Applied Physiology and Health Management concentration offerings are developed around the central theme of evidence-based practice and management. The Applied Physiology and Health Management portion of the APSM relies heavily on research that has been established over the years, as well as that evolving in laboratories today along with leadership and management theory.

Research in human anatomy, physiology, and applied physiology originated with Hippocrates, the father of preventative medicine during the Golden Age of Greece. Later, in the second century, the Greek physician, Galen made significant advances in his studies on the human body. Galen’s copious body of work includes over 500 essays and experiments that have influenced lifestyle choices and their relationships to health and fitness through history. He could be called the father of applied physiology.

In the modern era the first exercise physiology laboratory began in 1891 at Harvard University. Since its inception numerous programs have been established nationally and internationally for the ongoing study of human growth, development and performance; and hundreds of field pioneers, including Hill, Astand, Asmussen, Saltin, Behnke have greatly contributed to our knowledge of physiology. Applied physiology, as it is understood today, emphasizes the mechanics, and the short and long term effects of physical activity on the human body.

APHM students will complete a curriculum that incorporates classroom-based instruction with practical application of scientifically examined wellness program development and assessment models. This program strategy will provide the graduates with the skills to understand and apply empirical research findings to current and evolving health issues within their professional careers.
Before discussing the rationale of the discipline of sport management, it is important to define the scope of sport management. DeSensi, Kelley, Blanton, and Beitel (1990, p.33) defined sport management in a broad sense as “any combination of skills related to planning, organizing, directing, controlling, budgeting, leading, and evaluating within the context of an organization or department whose primary product or service is related to sport and/or physical activity.”

Vander Zwaag (1998) identified other areas of sport to be included within the professional realm: recreational sport programs, industrial and military sport programs, corporate sponsored sporting events, sporting goods, developmental sport programs, sport news media, and sport management academic programs.

In 1957 sport management as an industry specific discipline became evident when Walter O’Malley, owner of the Los Angeles Dodgers, wrote, “I ask the question, where would one go to find a person who by virtue of education has been trained to administer a marina, race track, ski resort, auditorium, stadium, theatre, convention or exhibit hall, a public camp complex, or a person to fill an executive position at a team or league level in junior athletics such as Little League baseball, football, scouting, CYO, and youth activities, etc.?" (Mason, Higgins, & Wilkinson, 1981, p. 44.)

Dr. Clifford Brownell, a professor at Columbia University, furthered O’Malley’s pioneering sport management concepts and later mentored a doctoral student, Dr. James Mason, who led the development of one of the first sport management programs in the United States at Ohio University in 1966. (There is also evidence of an earlier program at Florida Southern University that existed from 1949 to 1959.) Mason is widely recognized as the founder of academic sport management programs. Since 1966, when he and his colleagues established a master’s degree in sport management at Ohio University, hundreds of universities around the world have instituted similar programs. About 20 years later, the North American Society for Sport Management was formed during the 1985–1986 academic year. The research and literature of sport management as an academic discipline was further developed and enhanced through the Journal of Sport Management.
In the first issue of the Journal of Sport Management, Zeigler (1987) addressed the past, present, and future of sport management as a field of study. He believed the field had an opportunity to relate significantly to the developing social science of management.

Due to the explosion of interest in sport as a business, curricula designed to prepare management professionals are growing in number and prevalence. As the business of sport becomes more complex, the preparation of industry professionals has become increasingly sophisticated, relying heavily on successful business theories and principles.

Other important developments since the 1960’s include the founding of SMARTS (Sport, Management, Arts and Science Society) in the 1970’s, the establishment of the NASSM (North American Society for Sport Management) in 1985, the initiation of the Journal of Sport Management in 1987, and the adoption of a professional code of ethics. The academic discipline of sport management relies heavily on valid research and practices from organization and information management systems, including budgeting, accounting, managing events, managing personnel and facilities, controlling, directing, evaluating, leading, writing, selling, working with media, developing publications, keeping game notes and statistics, interviewing, promoting, advertising, fundraising and the role of social media in sport.

Today there are more than 350 sport management programs internationally. (Masteralexis, et al., 2015) The study of sport management incorporates a lot of sub disciplines and is studied in multiple contexts (Abeza, G., 2015; Doherty, 2013; Pitts, 2001).

It’s estimated that the size of the sports industry in the U.S. will be $73.5 billion by 2019 and the Global Sports Industry is estimated at $1.5 trillion (Plunkett Research, 2015). Centrally located in Dallas, Southern Methodist University provides students with unique and multiple opportunities to engage with professional major and minor league teams, collegiate athletic programs, numerous sports facilities and sport venues, and global, national and local sports marketing agencies to support sponsorship of these teams. Dallas is home to the most valuable sports franchise in the world, The Dallas Cowboys—valued at $4 billion (Rovell, 2015-2016). Dallas is also the fifth largest sports market and the fifth largest media market (“Television Bureau of Advertising, Inc.,2015”). Dallas is ranked second (to New York) in the U.S. for the most Fortune 500 Companies in the U.S. (Hackett, 2015).
Sport Performance Leadership Concentration Rationale

While our society suffers from a lack of successful educational outcomes and leadership development for youth, it is vital that we educate and train our youth through outstanding academic and sports programs. Sport Performance Leadership (SPL) students receive academic and experiential training pertinent to the leadership and instruction of sport.

Coaches undertake responsibilities and duties that include instructing, motivating, setting goals, identifying talent, managing behavior and teams, and organizing and planning (Barnson, 2014). The best coaches are great teachers and approach their craft in a holistic manner, balancing proficiencies in sport pedagogy, positive psychology, and athlete development. Coaches should align beliefs and actions, striving for authentic coaching. This idea is further explored in the widely accepted framework of sports leadership, the Multidimensional Model of Leadership (Chelladurai, 1990).

Effective coaches strive to develop athletes’ competence, confidence, connection to others, and character in response to the athlete’s needs. Coaches must know how to create an environment conducive to autonomous decision making by the athlete, ultimately leading to opportunities for character building. The SPL curriculum provides coaching education to address the physical and psychological, as well as the communicative and leadership oriented aspects of the position. Traditionally, coaching education programs focused only on professional knowledge, but the teaching and coaching literature points to the importance of interpersonal and intrapersonal knowledge. As a result, a Communication in Sport course is a requirement tailored to address these areas. The coach-athlete relationship is one of the most important influences on athletes’ motivation and performance (Mageau & Vallerand, 2003).

Other theories and psychological (general, performance, and positive) perspectives include Self-Efficacy Theory (Bandura, Self-Determination Theory (Deci & Ryan), Inverted U Theory (Yerkes & Dobson), Drive Theory (Hull), Achievement Goal Theory & Growth Mindset (Dweck), The Coach-Athlete Relationship: Motivational Model (Mageau & Vallerand), Flow (Csikszentmihalyi), Stages of Group
Development (Tuckman), Development of Standards (Krzyzewski), Social Interdependence Theory (Deutsch), and Kohn's Case Against Competition, And True Competition (Shields & Bredemeier). Beyond merely studying the physical preparation necessary for coaching success, students will have an understanding of the psychological preparation and application for performance.

A successful coach’s objectives are a balance between developing the athlete, having fun, and winning. Controlling, autocratic motivational styles are being replaced by cooperative style coaches who embody servant leadership. Cooperative coaches share decision making with their athletes (Martens, 1996).

IV. Student Proficiencies Aligned with Professional and Institutional Standards

The department identifies student proficiencies as the expectations of candidate performance as a result of student learning outcomes. Students’ proficiencies should align with institutional standards. The following table demonstrates that all student objectives and outcomes align with the APSM mission. As stated on pages one and two of this paper, the APSM’s mission is directly aligned with the missions of both the Simmons School and SMU.

A table is often used to illustrate the relationships between proficiencies and standards (state and institutional standards).
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Intended Outcomes/ Objectives</th>
<th>Assessment Procedures</th>
<th>Assessment Results</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission Statement: The mission of the Applied Physiology &amp; Sport Management (APSM) program is to provide students with industry-specific academic training and experiential learning opportunities in order to prepare them for successful careers within the fitness or sports industries upon graduation.</td>
<td></td>
<td>Direct Program Assessments:</td>
<td>Assessment results can be found in SACS assessment summaries—including programmatic goals, course goals and also University Curriculum (UC) SLOs</td>
<td>In addition these results being used in SACS reporting, we use some of this data in our departmental and program meetings with faculty and staff.</td>
</tr>
<tr>
<td></td>
<td>Part One – Upon completion of the APSM major, all graduates will:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IA. read, interpret, explain and apply area-specific knowledge to professional practice.</td>
<td>Final exam knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IB. know the empirical basis of practice within one’s profession and be able to effectively modify practice as new evidence is introduced.</td>
<td>Student programmatic focus groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC. translate knowledge to practice in real life settings through experiential learning opportunities including practica, laboratory experiences, internships and research projects.</td>
<td>Faculty evaluations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ID. effectively implement evidence-based practices.</td>
<td>Internship coordinator evaluations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IE. relate the functional areas of business as they relate to industries associated with health, physical fitness, and sport; these areas include marketing, management, public relations, accounting, operations, information technology, risk management, and human resources.</td>
<td>Program Chair and Dean review</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IF. state a code of ethics regarding business practices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IG. communicate appropriately, professionally and effectively in both written and oral forms.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- with individuals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- in groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- in formal and informal settings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HH. identify possible career paths in health, fitness and sport industries, which include: exercise physiology; corporate fitness; nutrition and fitness services and products; sports strength and conditioning; physical and occupational therapy; fitness facility ownership and management; marketing, ownership and management of professional, collegiate or amateur sport leagues and teams; representation of professional athletes; sports marketing; sports public relations; and sport facility event management.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Part Two - Upon completion of the Applied Physiology and Health Management Concentration, APSM majors will:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIA. demonstrate a solid knowledge of physiological and biomechanical principles fundamental to careers in health, physical fitness, and human performance.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIB. demonstrate knowledge of integrated managerial skills with scientific and clinical knowledge of exercise physiology, human physiological chemistry, behavioral psychology, and nutrition in order to be able to successfully function as managers or facility owners of fitness or health facilities and organizations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIC. identify the relationships between the anatomy and physiology of the human body.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IID. recognize and practice scientific methodology, laboratory techniques, data collection, statistical analysis, and reporting of scientific data.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIE. demonstrate advanced knowledge in applied physiology that will serve as an excellent springboard for further study of the human body at the graduate level.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIF. prescribe scientifically-based nutritional practices.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IIG. state the psychological elements of health.

IIH. design, and manage a business enterprise dedicated to the health and/or fitness industry.

III. be competent and safe prescribers of physical activity.

IIII. have created an extensive network of professional contacts in the health and fitness industry prior to graduation.

Part Three -- Upon completion of the Sport Management Concentration, APSM majors will:

IIIA. demonstrate current knowledge of trends and emerging issues within sports industry segments, sports organizations and businesses, and professional sports teams.

IIIB. know about the functional areas of management within sports enterprises, including organizational structure and behavior, management, sports marketing, public and media relations, finance, economics, sports facility management, and event management.

IIIC. apply concepts learned in order to design, plan, execute, and evaluate a sports-related event.

IIID. demonstrate excellent interpersonal, professional, presentation and general business communication skills.

IIIE. describe the requirements for entry into the sports industry within the fields of professional, amateur, and intercollegiate sports.

Part Four -- Upon completion of the Sport Performance Leadership Concentration, APSM majors will:

IIIA. demonstrate current knowledge of successful coaches and their styles/philosophies, and formulate their own personal philosophy in the context of coaching sport.

IIIB. know about the basic components of all tissues of the body, the characteristics which distinguish particular types, and understand their organization into (organ) systems, and identify the surface and internal anatomy of all structures in the musculoskeletal system.

IIIC. participate in an experiential learning lab to obtain a greater understanding of the structure and management of the coaching environment.

IIID. describe the basic elements of their personality and how psychology plays a role in athletic contests, and analyze, distinguish and apply psychological theories that have been employed to study human behavior in the context of sport.

IIIE. explain the neurological processes underlying efficient movement by examining the literature on motor learning, motor control, and motor performance and its impact on teaching, sports and coaching.

IIIF. demonstrate knowledge of the evolution of technology in sport and its role in various coaching tasks.

IIIG. design safe and effective training programs for a variety of athletic populations.
V. Student assessment

Students are assessed at several critical points. Before admittance to the major they must submit an essay to the APSM faculty stating their purpose, intentions and goals of becoming an APSM major. Upon admittance they must satisfactorily complete introductory courses, with concentration specific to the area they are applying to: Contemporary Issues, Human Anatomy and Physiology I, or Coaching and Leadership for Performance, plus one other required concentration specific course.

Throughout their course of study students are assessed every semester through the core courses as well as those in their specific concentration. The students' evaluations, and projects within their Internship and Senior Project courses will be critical in evaluating the entire completion of the APSM curriculum. Tools used to evaluate students' progress include papers, tests, projects, log summaries, debriefing reports, lab reports, attendance, participation and internship site supervisors' evaluations.

In order to successfully complete the APSM major, students must receive at least a C- in all APSM classes counting toward their major or minor. The APSM faculty will allow a student to repeat a course once if they receive a grade below a C-. If a student appears to be seriously struggling academically in all APSM courses, counseling by the APSM faculty will be required.