Exercise and Sport Science

Objectives
(taken from SACs, and in the departmental review)
The following are standards (learning goals) for beginning teachers as adopted by the National Association for Sport and Physical Education (NASPE):

Standard 1: Content Knowledge
The teacher understands physical education content, disciplinary concepts, and tools of inquiry related to the development of a physically educated person.

The preservice teacher (PST) will:

1.1 identify critical elements for basic motor skills and develop appropriate sequences.

1.2 demonstrate with competence basic motor skills, rhythms, and physical activities (sport and games, lifelong leisure activities, and dance).

1.3 describe and demonstrate concepts and strategies related to skillful movement and physical activity.

1.4 incorporate interdisciplinary learning experiences that allow learners to integrate knowledge and skills from multiple subject areas.

1.5 describe and apply disciplinary concepts and principles to skillful movement, physical activity, and fitness.

1.6 analyze current physical activity issues based on historical, philosophical, sociological, and psychological perspectives.

1.7 describe the organic, skeletal, and neuromuscular structures of the human body identify how these systems adapt to skillful movement, physical activity, and fitness, and analyze their contributions to motor performance.

1.8 employ concepts, assumptions, and debates central to the process of inquiry in the study of physical activity.

1.9 create and use appropriate instructional cues and prompts for basic motor skills, rhythms, and physical activity.

1.10 Support and encourage learner expression through movement.

Standard 2: Growth and Development
The teacher understands how individuals learn and develop, and can provide opportunities that support their physical, cognitive, social and emotional development.
The preservice teacher (PST) will:

2.1 assess individual and group performance in order to design safe instruction that meets learner developmental needs in the physical, cognitive, social, and emotional domains.

2.2 identify, select, and implement appropriate learning/practice opportunities based on expected progressions and related to ranges of individual variations and levels of readiness.

2.3 stimulate learner reflection on prior knowledge, experiences, and skills and based on this reflection encourage them to assume responsibility for their own learning.

Standard 3: Diverse learners
The teacher understands how individuals differ in their approaches to learning and creates appropriate instruction adapted to diverse learners.

The preservice teacher (PST) will:

3.1 identify, select, and implement appropriate instruction that is sensitive to the strengths/weaknesses, multiple needs, learning styles, and experiences of learners.

3.2 use appropriate strategies, services, and resources to meet special and diverse learning needs.

3.3 create a learning environment which respects and incorporates learners' personal, family, cultural, and community experiences.

Standard 4: Management and Motivation
The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

The preservice teacher (PST) will:

4.1 use a variety of developmentally appropriate practices to motivate learners to participate in physical activity inside and outside of the school.

4.2 use strategies to help learners demonstrate responsible personal and social behaviors that promote positive relationships and a productive environment.

4.3 use strategies to promote mutual respect, support, safety, and cooperative participation.

4.4 use managerial and instructional routines which create smoothly functioning learning experiences.
4.5 organize, allocate, and manage resources (time, space, equipment, activities, and teacher attention) to provide active and equitable learning experiences.

4.6 use strategies to help learners become self motivated in their learning.

4.7 describe strategies to teach learners various behavioral change techniques.

Standard 5: Communication
The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster inquiry, collaboration, and engagement in physical activity settings.

The preservice teacher (PST) will:

5.1 Communicate in ways that demonstrate sensitivity to all learners.

5.2 communicate managerial and instructional information in a variety of ways (bulletin boards, music, task cards, posters, and video).

5.3 describe and model various communication strategies for use with learners, school, colleagues, parents/guardians, and the community.

5.4 use computers and other technologies to communicate, network, and foster inquiry.

5.5 describe and implement strategies for building a community of learners within a physical activity setting.

Standard 6: Planning and Instruction
The teacher plans and implements a variety of developmentally appropriate strategies to develop physically educated individuals.

The preservice teacher (PST) will:

6.1 identify, develop, and implement instructional and program goals.

6.2 select and implement instructional strategies based on developmental levels, learning styles, and safety issues.

6.3 apply disciplinary and pedagogical knowledge in developing and implementing safe learning environments and experiences.

6.4 select and implement teaching resources and curriculum materials based on their comprehensiveness, accuracy, usefulness, and safety.

6.5 use curricula that encourage learners to see, question, and interpret physical activity from diverse perspectives.
6.6 design and implement learning experiences that are safe, appropriate, realistic, and relevant based on principles of effective instruction (that activate learners prior knowledge, anticipate preconceptions, encourage exploration and problem solving, and build on skills and experiences).

6.7 use demonstrations and explanations to link physical activity concepts to appropriate learning experiences.

6.8 select and utilize varied roles in the instructional process based on the content, purpose of instruction, and the needs of learners (model, assessor, monitor, facilitator).

6.9 develop short and long term plans that are linked to learner needs and performance, instructional and program goals, and adapt them to ensure learner progress, motivation, and safety.

6.10 select and model instructional tasks that facilitate learning in the physical activity setting.

6.11 ask questions and pose scenarios to stimulate inter-active learning opportunities (help learners articulate ideas/thinking, promote risk taking/problem solving, facilitate factual recall, encourage convergent/divergent thinking, stimulate curiosity) which aid in becoming physically educated.

Standard 7: Learner Assessment
The teacher understands and uses formal and informal assessment strategies to foster physical, cognitive, social and emotional development of learners in physical activity.

The preservice teacher (PST) will:

7.1 use a variety of formal and informal assessment techniques to assess learner performance, provide feedback, and communicate learner progress.

7.2 use assessment strategies to involve learners in self-assessment.

7.3 select and use developmentally appropriate assessment strategies and instruments congruent with physical activity learning goals.

7.4 identify key components of various types of assessment, describe their appropriate and inappropriate use, and address Issues of validity, reliability, and bias.

7.5 use and interpret performance data to inform instructional decisions.

Standard 8: Reflection
The teacher is a reflective practitioner who evaluates the effects of his/her actions on others (e.g., learners, parents/guardians, and other professionals in the learning community) and seeks opportunities to grow professionally.
The preservice teacher (PST) will:

8.1 reflect upon and revise practice based on observation of learners, self-assessment, and problem solving strategies.

8.2 consult professional literature, colleagues, and other resources to develop professionally.

8.3 participate in the professional physical education community (local, state, district, and national) and within the broader education field.

8.4 reflect on the appropriateness of program design on the development of physically educated individuals.

Standard 9: Collaboration
The teacher fosters relationships with colleagues, parents/guardians, and community agencies to support learners' growth and well being.

The preservice teacher (PST) will:

9.1 identify strategies to become an advocate in the school and community to promote a variety of physical activity opportunities.

9.2 identify and use community resources to enhance physical activity opportunities.

9.3 establish productive partnerships with parents/guardians and counselors/colleagues to support learner growth and wellbeing.

9.4 identify signs of learner distress and seek help as appropriate.

9.5 participate in collegial activities designed to make the school a more productive learning environment.

9.6 examine and comply with laws related to learner rights and teacher responsibilities (equity, inclusion, confidentiality, privacy, safety, emergency care, child abuse).

Given to us by department:
Program learning outcome:
Understand physical education content, disciplinary concepts, and tools of inquiry related to how individuals learn and develop movement skills.
Demonstrate effective verbal, nonverbal, and media communication techniques.
Plan and implement a variety of developmentally appropriate instructional strategies and use both formal and informal assessment strategies.
Become a reflective practitioner who collaborates with others and seeks opportunities for professional growth.

Course Learning outcome:
Understand the nature of administrative responsibilities, qualities, and skills associated with leadership positions in physical education and sport.
Demonstrate the ability to exercise sound judgment of legal considerations when planning for physical education and sport programs.
Utilize proper procedures for effective scheduling and budgeting of physical education and sport programs.
Demonstrate competency in professional writing skills.
Relate the evaluative process to the program, administrators, teachers, and coaches.
Be able to implement effective approaches to group decision-making.

Sports Medicine

Appreciate the multifaceted complexities of the human engaging in physical activity: i.e. the sociohistorical, behavioral and biophysical aspects of exercise and sport.
Understand the basic scientific theories and principles that serve as a foundation for the allied health and medical professions.
Understand the structure and function of the human body, particularly while under the stresses associated with the movement, exercise and the demands of various sports.
Demonstrate knowledge and skills in the prevention, care and treatment of injuries and illnesses that commonly occur in physical activity.

Fitness Leadership

Demonstrate a basic knowledge of anatomy, biomechanics, exercise physiology, sociohistorical foundations of sport and exercise and human development over the lifespan, as it relates to pathophysiology, health appraisal, exercise program prescription and fitness testing.
Develop, manage, and administer exercise programs for a range of diverse populations.

Aquatics Leadership:

Demonstrate knowledge of basic anatomical structures and hydrodynamic principles pertaining to aquatic skill performance, as well as the sociohistorical, behavioral and biophysical aspects of exercise and sport.
Demonstrate knowledge and skills of swimming technique, and basic water safety as well as appropriate health and safety practices for aquatic facilities.

Teacher Education

Understand physical education content, disciplinary concepts, and tools of inquiry related to how individuals learn and develop movement skills.
Demonstrate effective verbal, nonverbal, and media communication techniques.
Plan and implement a variety of developmentally appropriate instructional strategies and use both formal and informal assessment strategies.
Become a reflective practitioner who collaborates with others and seeks opportunities for professional growth.

Community Youth Sport Development

Understand basic theories and concepts relevant to non-profit organizational and educational settings.
Demonstrate competencies in teaching, program design, implementation, evaluation, funds development, community collaboration, volunteer and staff management, and supervision.
Apply foundations in biophysical, behavioral, and sociohistorical studies to an understanding of the role of social issues and promoting lifelong physical activity within communities of diverse social needs.

From a national institution, (KSA matching) examples:
Knowledge of common orthopedic and cardiovascular considerations for older participants and the ability to describe modifications in exercise prescription that are indicated.
Knowledge of cardiovascular, respiratory, metabolic, and musculoskeletal risk factors that may require further evaluation by medical or allied health professionals before participation in physical activity.
Knowledge to define the following terms: total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), TC/HDL-C ratio, low-density lipoprotein cholesterol (LDL-C), triglycerides, hypertension, and atherosclerosis.
Knowledge of plasma cholesterol levels for adults as recommended by the National Cholesterol Education Program (NCEP II).
Skill in instructing participants in the use of equipment and test procedures.
Skill in accurately measuring heart rate, blood pressure, and obtaining rating of perceived exertion (RPE) at rest and during exercise according to established guidelines.
Skill in various techniques of assessing body composition.
Skill in techniques for calibration of a cycle ergometer and a motor-driven treadmill.
Ability to identify the major bones and muscles. Major muscles include, but are not limited to, the following: trapezius, pectoralis major, latissimus dorsi, biceps, triceps, rectus abdominis, internal and external obliques, erector spinae, gluteus maximus, quadriceps, hamstrings, adductors, abductors, and gastrocnemius.
Ability to identify the joints of the body.
Ability to describe the following curvatures of the spine: lordosis, scoliosis, and kyphosis.
Ability to locate the anatomic landmarks for palpation of peripheral pulses.
Ability to locate the brachial artery and correctly place the cuff and stethoscope in position for blood pressure measurement.

From NCATE report for Teacher Education:::
PETE Conceptual Framework: Developing Caring, Collaborative, Competence Professionals who exhibit Courageous Leadership and Advocate for Quality Programs

Caring professionals…
- understand and promote the development of healthy social relationships and interactions among students, faculty, staff, and families (NASPE 5, 7)
- act with integrity, fairness, and in an ethical manner (NASPE 5, 6)
- respect and care about their students and maintain a consistent belief in students’ value and potential for positive contribution (NASPE 5)
- understand how students differ in their approaches, create instructional opportunities that are adapted to diverse learners, provide opportunities for students to contribute diverse talents, and encourage the celebration of diversity within the instructional setting (NASPE 6, 7)
- are reflective practitioners who continually evaluate the impact of their choices and actions on students, parents, and other professionals (NASPE 5, 6)
- are committed to students and their learning (NASPE 6)
- demonstrate moral behavior and a commitment to enhance their and their students’ level of moral intelligence (NASPE 6)

Collaborative professionals…
- initiate positive relationships with other professionals in the school and community (NASPE 10).
- conduct special events for students/faculty/staff such as field days, jump rope clubs, faculty wellness programs, and after school wellness classes for students (NASPE 10.1, 10.4).
- share innovative ideas with other teachers (NASPE 10.1).
- welcome the ideas of other professionals.
- invite experts into class (NASPE 10.3)
- explore school and community resources to enhance physical activity opportunities (NASPE 10.3).
- actively participate in the professional physical education community (e.g., active membership in NCAAPHERD (NASPE 10.2).
- pursue supportive relationships with parents/guardians who oversee the well being of the student (e.g., develop a volunteer base of parents; maintain an up-to-date web page to communicate about their programs) (NASPE 10).

Competent professionals…
- understand physical education content, disciplinary concepts, and tools of inquiry related to the development of a physically educated person, and can create learning experiences that make these aspects of subject matter meaningful for students (NASPE 1).
- understand how individuals learn and develop, and can provide opportunities that support their physical, cognitive, social, and emotional development (NASPE 2).
- Understand how individuals differ in their approaches to learning and creates appropriate instruction adapted to these differences (NASPE 3).
- Use an understanding of individual and group motivation and behavior to create a safe learning environment that encourages positive social interaction, active engagement in learning, and self-motivation (NASPE 4).
- Use knowledge of effective verbal, nonverbal, and media communication techniques to enhance learning, and engagement in physical activity settings (NASPE 5).
- Understand the importance of planning developmentally appropriate instructional units to foster the development a physically educated person (NASPE 6).
- Understand and use the varied types of assessment and their contribution to overall program continuity and the development of the physical, cognitive, social and emotional domains (NASPE 7).
- Understand the importance of being a reflective practitioner and its contribution to overall professional development and actively seeks opportunities to sustain professional growth (NASPE 8).
- Use information technology to enhance learning and personal and professional productivity (NASPE 9).

Courageous Leaders…
- minimize program marginalization and the loss of spirit for professional growth and renewal (NASPE 10).
- take the role of advocate for promoting a variety of physical activity opportunities in the school (NASPE 10).
- persistently advocate for quality physical education and sport programs for children and adolescents (NASPE 10).
- advocate for quality teaching and coaching within the school (NASPE 10).
- take advantage of public relations opportunities to promote their programs (NASPE 10).

Mission
Taken from SACs (not given by department):
Relationship between Learning Objectives and Department's Mission
Since its inception, a mission of the Department of Exercise and Sport Science has been to prepare physical education teachers with K-12 certification. This preparation continues to be an important mission of this department. Training excellent teachers who are able to transmit information regarding the importance of lifelong physical activity and healthy lifestyles to students is central to our mission.

Given to us by Department:
The PETE Program is guided by the Conceptual Framework of the UNCG Teachers Academy. The framework also is informed by the NASPE Standards for Beginning Physical Education Teachers (National Association for Sport and Physical Education, an Association of the American Alliance for Health, Physical Education, Recreation and Dance). The mission of the PETE Program is to develop caring, collaborative, competent professionals who exhibit courageous leadership and advocate for quality physical education for all students (see Conceptual Model below).
Evidence of the conceptual framework in the program
During the 2004-05 year, the ESS Department PETE Conceptual Framework was extensively revised to insure congruency with the UNCG Teachers Academy Conceptual Framework. Teacher Education faculty members met twice each month during the academic year. They began by discussing the Teachers Academy conceptual framework to insure a complete understanding of each element. Next, faculty brainstormed to come up with a list of the highest priority outcomes of the program. Through several discussions, they realized that most of the outcomes fit well into the categories of Caring, Collaboration, and Competence so it was decided to use the same circular model as designed by the Teachers Academy. One element that did not fit as well into the Teachers Academy model was the need to educate future physical educators to become courageous leaders who advocate for quality physical education. After much discussion, it was decided to make that the center of the model since faculty felt that it was central to the preparation of excellent physical educators (see model below).

The following section illustrates how each of the high priority outcomes seen in the model are correlated with the NASPE Standards for Beginning Physical Education Teachers.

Evaluation and continuous revision of the conceptual framework
PETE faculty met at least monthly since the last NCATE/DPI report, to discuss the program’s conceptual framework and to evaluate the effectiveness of the program. The previous conceptual framework put a heavy emphasis on preparing reflective practitioners who are strong in content knowledge and teaching skills. While faculty still believe in the importance of reflection and emphasize reflective decision-making in the program, there has been a recent shift to a greater emphasis on preparing students to be courageous leaders and advocates for quality physical education. The need for this shift came from the gradual erosion in requirements for physical education and the perceived need for beginning teachers to be aware of the need for continuous advocacy for quality physical education.