Commission on Accreditation of Allied Health Education Programs

Standards and Guidelines for the Accreditation for Educational Programs in Kinesiotherapy

Standards initially adopted in 1998; Revised in 2005, 2012, 20xx

Adopted by the
American Kinesiotherapy Association
American Council on Exercise
Committee on Accreditation of Educational Programs for Kinesiotherapy
Commission on Accreditation of Allied Health Education Programs

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits programs upon the recommendation of the Committee on Accreditation of Education Programs for Kinesiotherapy (CoA-KT).

These accreditation Standards are the minimum standards of quality used in accrediting programs that prepare individuals to enter the kinesiotherapy profession. Standards are the minimum requirements to which an accredited program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required but can assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. Guidelines are printed in italic typeface in narrative form.

Preamble
The Commission on Accreditation of Allied Health Education Programs (CAAHEP), Committee on Accreditation of Educational Programs for Kinesiotherapy, the American Kinesiotherapy Association, and the American Council on Exercise cooperate to establish, maintain and promote appropriate standards of quality for educational programs in Kinesiotherapy and to provide recognition for educational programs that meet or exceed the minimum standards outlined in these accreditation Standards and Guidelines. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These Standards and Guidelines are to be used for the development, evaluation, and self-analysis of kinesiotherapy programs. On-site review teams assist in the evaluation of a program's relative compliance with the accreditation Standards.

Description of the Profession
Kinesiotherapy is the application of scientifically based exercise principles adapted to enhance the strength, endurance, and mobility of individuals with functional limitations or those requiring extended physical conditioning. The kinesiotherapist is a health care professional competent in the administration of musculoskeletal, neurological, ergonomic, biomechanical, psychological, and task-specific functional tests and measures. The kinesiotherapist determines the appropriate evaluation tools and interventions necessary to establish, in collaboration with the
client, a goal-specific treatment plan. Kinesiotherapists administer treatment upon receipt of a prescription from physicians, nurse practitioners, or physician assistants whose scope of practice allows them to make such referrals.

I. Sponsorship

A. Sponsoring Educational Institution
   A sponsoring institution must be a post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education, and must be authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of a baccalaureate degree at the completion of the program.

B. Consortium Sponsor
   1. A consortium sponsor is an entity consisting of two or more members that exists for the purpose of operating an educational program. In such instances, at least one of the members of the consortium must meet the requirements of a sponsoring educational institution as described in I.A.

   2. The responsibilities of each member of the consortium must be clearly documented as a formal affiliation agreement or memorandum of understanding, which includes governance and lines of authority.

C. Responsibilities of Sponsor
   The Sponsor must assure that the provisions of these Standards and Guidelines are met.

II. Program Goals

A. Program Goals and Outcomes
   There must be a written statement of the program’s goals and learning domains consistent with and responsive to the demonstrated needs and expectations of the various communities of interest served by the educational program. The communities of interest that are served by the program must include, but are not limited to, students, graduates, faculty, sponsor administration, employers, physicians, health care practitioners and the public.

   Program-specific statements of goals and learning domains provide the basis for program planning, implementation, and evaluation. Such goals and learning domains must be compatible with both the mission of the sponsoring institution(s) and the expectations of the communities of interest, and nationally accepted standards of roles and functions. Goals and learning domains are based upon the substantiated needs of health care providers and employers, and the educational needs of the students served by the educational program.
B. Appropriateness of Goals and Learning Domains

The program must regularly assess its goals and learning domains. Program personnel must identify and respond to changes in the needs and/or expectations of its communities of interest.

An advisory committee, which is representative of these communities of interest named in these Standards, must be designated and charged with the responsibility of meeting at least annually, to assist program and sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change.

C. Minimum Expectations

The program must have the following goal defining minimum expectations: “To prepare competent entry-level kinesiotherapists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.”

Programs adopting educational goals beyond entry-level competence must clearly delineate this intent and provide evidence that all students have achieved the basic competencies prior to entry into the field.

Nothing in this Standard restricts programs from formulating goals beyond entry-level competence.

III. Resources

A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program’s goals and outcomes. Resources must include, but are not limited to: faculty; clerical and support staff; curriculum; finances; offices; classroom, laboratory, and ancillary student facilities; clinical affiliates; equipment; supplies; computer resources; instructional reference materials, and faculty/staff continuing education.

B. Personnel

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program’s stated goals and outcomes.

1. Program Director

a. Responsibilities - The program director must be responsible for the organization, administration, and continuous review, planning, development, and general effectiveness of the program.

b. Qualifications - The program director must:
   1) possess at least a Master’s degree with an emphasis in kinesiology or a related area.
   2) possess appropriate post-secondary teaching experience teaching experience.
emphasis in a related area may include exercise science or exercise physiology.

2. Medical Advisor
   a. Responsibilities - The Medical Advisor must provide the input necessary to ensure that the medical components of the curriculum, both didactic and supervised clinical practice, meet current standards of medical practice.
   
b. Qualifications - The medical advisor must be a licensed physician, physician's assistant, or advanced practice registered nurse experienced and proficient in the use of therapeutic exercise and education.

3. Clinical Site Instructor
   a. Responsibilities – The clinical site instructor must be responsible for the mentoring, instruction, and implementation of the student’s clinical internship experience.
   
b. Qualifications – the clinical site instructor must:
      1) be a Registered Kinesiotherapist in good standing
      2) possess appropriate experience as a kinesiotherapist

4. Faculty and/or Instructional Staff
   a. Responsibilities - In all assigned curricular courses, there must be qualified faculty to assure supervision, instruction, and assessment of student's progress to assure achievement of program goals.

   Faculty members at all levels of participation should be familiar with the goals of the program and capable of developing an organized plan of instruction and evaluation.
   
b. Qualifications
   Program faculty must be knowledgeable in course content and effective in teaching their assigned subjects.

   If the Program Director does not hold the appropriate credential to teach a required course, the sponsor must designate adjunct faculty with the appropriate credential specific to the course content.

   Kinesiotherapists who provide instruction in the clinical setting must be Registered Kinesiotherapists in good standing.

C. Curriculum
   The curriculum must ensure the achievement of program goals and learning domains. Instruction must be an appropriate sequence of classroom, laboratory, and clinical activities. Instruction must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline, and competencies required for graduation.

   The program must demonstrate by comparison that the curriculum offered meets or exceeds the content and competencies specified in Appendix B.
D. Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these Standards. The results of resource assessment must be the basis for ongoing planning and appropriate change. An action plan must be developed when deficiencies are identified in the program resources. Implementation of the action plan must be documented, and results measured by ongoing resource assessment.

IV. Student and Graduate Evaluation/Assessment

A. Student Evaluation

1. Frequency and Purpose

Evaluation of students must be conducted on a recurrent basis and with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students’ progress toward and achievement of the competencies and learning domains stated in the curriculum.

2. Documentation

Records of student evaluations must be maintained in sufficient detail to document learning progress and achievements.

B. Outcomes

1. Outcomes Assessment

The program must periodically assess its effectiveness in achieving its stated goals and learning domains. The results of this evaluation must be reflected in the review and timely revision of the program.

Outcomes assessments include but are not limited to: national credentialing examination(s), programmatic retention/attrition, graduate satisfaction, employer satisfaction, positive placement, and program summative measures. The program must meet the outcomes assessment thresholds.

“Positive placement” means that the graduate is employed full or part-time in the profession or in a related field; or continuing his/her education; or serving in the military. A related field is one in which the individual is using cognitive, psychomotor, and affective competencies acquired in the educational program.

Participation and pass rates on national credentialing examination(s) performance may be considered in determining whether or not a program meets the designated threshold, provided the credentialing examination(s), or alternative examination(s) offered by the same credentialing organization, is/are available to be administered prior to graduation from the program.

2. Outcomes Reporting

The program must periodically submit to the CoA-KT the program goal(s), learning domains, evaluation systems (including type, cut score, and appropriateness), outcomes, its analysis of the outcomes and an appropriate action plan based on the analysis.
Programs not meeting the established thresholds must begin a dialogue with the CoA-KT to develop an appropriate plan of action to respond to the identified shortcomings.

V. Fair Practices

A. Publications and Disclosure

1. Announcements, catalogs, publications, and advertising must accurately reflect the program offered.

2. At least the following must be made known to all applicants and students: the sponsor’s institutional and programmatic accreditation status as well as the name, mailing address, web site address, and phone number of the accrediting agencies; admissions policies and practices; including technical standards (when used) policies on advanced placement, transfer of credits, and credits for experiential learning; number of credits required for completion of the program; tuition/fees and other costs required to complete the program; policies and processes for withdrawal and for refunds of tuition/fees.

3. At least the following must be made known to all students: academic calendar, student grievance procedure, criteria for successful completion of each segment of the curriculum and graduation, and policies and processes by which students may perform clinical work while enrolled in the program.

4. The sponsor must maintain, and make available to the public, current and consistent summary information about student/graduate achievement that includes the results of one or more of the outcomes assessments required in these Standards.

The sponsor should develop a suitable means of communicating to the communities of interest the achievement of students/graduates (e.g. through a website or electronic or printed documents).

B. Lawful and Non-discriminatory Practices

All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be non-discriminatory and in accord with federal and state statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty.

C. Safeguards

The health and safety of patients, students, faculty, and other participants associated with the educational activities of the students must be adequately safeguarded.

All activities required in the program must be educational and students must not be substituted for staff.

D. Student Records

Satisfactory records must be maintained for student admission, advisement, counseling, and evaluation. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the sponsor in a safe and accessible location.
E. **Substantive Change**

The sponsor must report substantive change(s) as described in Appendix A to CAAHEP/CoA-KT in a timely manner.

F. **Agreements**

There must be a formal affiliation agreement or memorandum of understanding between the sponsor and all other entities that participate in the education of the students describing the relationship, roles, and responsibilities between the sponsor and that entity.
APPENDIX B

CURRICULUM COMPETENCY REQUIREMENTS FOR EDUCATIONAL PROGRAMS IN KINESIOThERAPY

Upon successful completion of the program, the student must be able to demonstrate learning over time.

Final assessment of the student’s clinical training in relation to direct patient care must be under the supervision of a Registered Kinesiotherapist.

1. Biological Sciences
   a. Anatomy and Physiology
      1) Identify the basic structure-function relationships of the human body.
         a) List anatomical planes, surfaces, positions, and directions used to describe the human body and its parts.
         b) Describe the types, features, and functions of connective tissue.
         c) Describe the development and function of the skeletal system.
         d) Classify and identify the bones of the skeletal system.
         e) Describe the types, features, and functions of muscle tissue.
         f) Identify the origin and insertion of the major muscles of the body.
         g) Discuss the fundamental movements of the body caused by skeletal muscle contraction.
         h) Identify the components of the nervous system.
         i) Identify the major blood vessels of the circulatory system.
         j) Discuss the structures and mechanisms of systemic circulation.
         k) Describe the major functions of the respiratory system.
   2) Distinguish the systems of the body and the basic relationships among systems.

   b. Exercise Physiology
      1) Identify the molecular basis of muscle contraction.
         a) Discuss the physiologic characteristics of skeletal muscle.
         b) Identify the mechanisms of energy production for muscular contraction.
      2) Evaluate the physiologic basis of exercise.
         a) Analyze the physiologic changes resulting from exercise.
         b) Analyze the circulatory adjustments to exercise.
         c) Analyze respiratory adjustments to exercise.
         d) Analyze the metabolic changes that occur due to exercise.
         e) Analyze the neuro-musculoskeletal adjustments to exercise.
         f) Identify the criteria used in physical fitness testing.
         g) Discuss the health-related aspects of fitness.
         h) Discuss the skill-related aspects of fitness.
   3) Classify types of physical fitness tests.
   4) List fundamental physical fitness training techniques.

   c. Kinesiology and Biomechanics
      1) Evaluate human movement.
         a) Describe the relationships between the skeletal system and movement.
            i) Define center of gravity, line of gravity, planes of motion, and axes of motion.
            ii) Discuss the arrangement and components of simple machines found in the body.
         b) Describe the relationships between the muscular system and movement.
            i) Explain the term aggregate muscle action.
ii) Compare the roles of prime movers, antagonists, and synergists.

2) Analyze the motion of the lower limbs, upper limbs, and spine.

3) Analyze the antigravity musculature.

4) Discuss the application of forces generated by the body.

5) Relate the function of receptors to movement.

6) Discuss reflexive movements.

7) Describe the relationships between the nervous system and movement.
   a) Describe the involvement of the anatomical structures involved with volitional movement.
   b) Contrast voluntary contraction and involuntary contraction.

d. Neurology
   1) Discuss the organization and function of the nervous system.
      a) Discuss the function of the parts of the central nervous system.
      b) Discuss the function of the parts of the peripheral nervous system.
      c) Identify the nerves that enervate the major muscles of the body.
      d) Discuss sensory and motor neural pathways.
      e) Discuss the functions of the autonomic nervous system.
      f) Discuss the functions of receptors and reflexes.
      g) Discuss the functions of the senses.

   2) Discuss neurological lesions and implications for motor functioning.

   3) Analyze neurological deficits and resultant physiologic musculoskeletal impairments

   4) Identify principles neurological evaluations.
      a) Discuss principles and techniques of neurological examination
      b) Identify reflex testing methods.

   5) Identify perceptual motor and sensory integration assessment mechanisms.

e. Pathology
   1) Discuss the structure and functional changes in tissue and organs of the body, which cause or are caused by disease processes and mechanisms.
      a) Describe how the body adapts to pathogens.
      b) Discuss the principles of immunological defense.

   2) Identify the manifestations of disorders of the nervous, musculoskeletal, respiratory, cardiovascular, and endocrine systems.
      a) Discuss disorders of development.
      b) Discuss disorders of the nervous system.
      c) Discuss nutritional diseases.
      d) Discuss disorders of the vascular and lymphatic circulatory systems.
      e) Discuss problems associated with deconditioning.
      f) Discuss problems associated with aging.

f. Growth and Development
   1) Describe normal processes of growth and development across the life span.
a) Describe the normal processes of cognitive growth and development.

b) Identify processes of sensori-motor growth and development.

c) Identify processes of emotional and social growth and development.

2) Identify the age-specific abilities of an individual relevant to developmental status/functional capacity.

3) Identify the normal physical and mental abilities characteristic of any developmental age throughout the life cycle.

a) Relate the development of perceptual-motor ability, gross motor control, fine motor control, and body awareness.

b) Develop the individual’s body awareness.

### 2. Behavioral Sciences

#### a. General Psychology

1) Identify the principles of human behavior.

a) Discuss the effects of cognitive, perceptual and social development on human behavior.

b) Relate motivation and conflict to behavior.

c) Describe the processes of psychological adjustment.

2) Identify the physiologic considerations affecting behavioral processes.

a) Discuss information flow and processing in the nervous system.

b) Identify the major neurotransmitters and their modes of action.

c) Describe the effects of biogenic amines on behavior.

3) Discuss the pathologies of abnormal functioning.

a) Discuss the conditions of psychopathology.

i) Describe the characteristics of developmental delay.

ii) Describe the characteristic of mental retardation.

b) Discuss psychiatric disorders.

i) Describe the characteristics of personality disorders

ii) Describe the characteristics of neuroses, and psychoses,

iii) Describe the characteristics of organic degenerative syndromes.

c) Discuss drug and alcohol dependency.

i) Describe the characteristics of dependence on opiate and synthetic analgesics, barbiturates, marijuana, cocaine and amphetamines.

ii) Describe the characteristics of dependence on alcohol.

#### b. Behavioral Modification

1) Discuss operant and respondent behavior and positive and negative reinforcers related to behavior.

2) Identify various methods of systematic behavior modification techniques.

3) Discuss organic, environmental, and psychological factors relative to modification of behavior.

4) Utilize the stages of change model can be used to facilitate change in health behaviors.
3. **Educational Foundations**

   a. **Learning Theories**
      1) Analyze how individuals learn.
         a) Discuss the acquisition of affective, cognitive, and psychomotor behaviors.
         b) Discuss the differences in learning styles between children and adults.

   b. **Teaching Strategies**
      1) Evaluate various teaching approaches.
         a) Discuss strengths and weaknesses of the following teaching strategies:
            i) Lecture
            ii) Demonstration
            iii) Laboratory
            iv) Independent study
            v) Practicum/internship
            vi) Active problem solving
         b) Discuss changes in teaching strategies when taking into consideration cultural norms.
      2) Evaluate the strengths and weaknesses of various educational technologies and assisted learning techniques for individual learning.

   c. **Assessment:** The following must be assessed by an appropriately qualified instructor when performed or demonstrated on patients at a clinical affiliate site.
      1) Select and use appropriate instruments needed to measure the patient's attitudes, knowledge, psychosocial status, goals, quality of life, and satisfaction with treatment.
      2) Select and use appropriate instruments needed to measure the patient’s health, function, skill, exercise tolerance, fitness, and physiologic and perceptual response to postural change, activity, and exercise.
      3) Measure the cognitive, psychomotor, and affective abilities of the learners.
      4) Demonstrate the skill of implementing instructional methods.
      5) Demonstrate the ability to teach individual, dual, and team physical activities.
      6) Demonstrate the abilities to teach functional motor skills, games, and sports.

   d. **Evaluation of Learning Outcomes**
      1) Formulate a plan to evaluate learning.
      2) Analyze the results of tests of students’ accomplishments and make decisions regarding future learning activities.

4. **Clinical Foundations**

   a. Evaluate the fitness abilities and deficits of the individual
1) Measure physical fitness including cardiovascular fitness, muscular strength, muscular endurance, and flexibility.
2) Measure the skill-related aspects of physical fitness including agility, balance, coordination, power, reaction time, and speed.

b. Determine the functional abilities of the individual

1) Evaluate the individual’s mobility and locomotion skills, including ambulation and wheelchair management.
2) Identify the skills the individual will need for optimal living.
   a) Describe treatment objectives for individuals with various pathologies, impairments, functional limitations, and disabilities.
   b) Develop treatment objectives to meet the needs identified in the individual's evaluation.
3) Write attainable short-and long-range treatment goals based on evaluation and history.
   a) Develop appropriate treatment programs for individuals with various diseases and disabilities.
   b) Evaluate and document progress for short- and long-term goals.
4) Identify methods used in treating individuals who have impaired reflexive movements, basic locomotor skills, perceptual abilities, physical abilities, skilled movements, and/or psychosocial skills.

c. Demonstrate the skill of implementing treatment methods

1) Demonstrate the ability to provide kinesiotherapy treatments for the physical, mental, emotional problems presented by the individual.
2) Describe and apply techniques of therapeutic exercise.
3) Demonstrate the use of passive, assistive, active, resistive, and reflexive exercise/activity.
4) Demonstrate concepts of perceptual-motor learning, including perception, gross motor control, fine motor control, body awareness, and relaxation.

d. Evaluation of Treatment Programs

1) Analyze the functional outcomes and effectiveness of treatment programs in light of stated objectives.
2) Modify treatment programs to meet the needs of the individual.

e. Equipment

1) List the equipment, adaptations, prosthetic and/or orthotic devices needed rehabilitation and functional living for individuals with various disabilities.
2) List the types of equipment needed for a basic Kinesiotherapy clinic.
f. Terminology

1) Understand appropriate medical, pharmacological, and disability-related terminology.

2) Demonstrate use of only approved medical abbreviations.

g. Document the functional abilities of the individual including:

1) Transfers, ambulation, stair climbing, recoveries from the floor and other physical activities.

2) Quality and quantity of physical activity of the individual.

5. Administration

a. Administrative Procedures

1) Discuss the history, philosophy, and principles of kinesiotherapy.

2) Interpret the scope and standards of practice of kinesiotherapy.

3) Discuss the ethical considerations and responsibilities of the kinesiotherapist in health care.

4) Document the ability to work in a multidisciplinary setting to meet the needs of the individual.
   a) Document the compliance/adherence of the individual to treatment programs and recommendations.
   b) Document the patient's progress and performance over time.
   c) Discuss the medical, legal, and economic considerations appropriate to kinesiotherapy.
   d) Maintain a safe work environment.
      i) Recognize changes in the individual’s condition and intervene appropriately.
      ii) React quickly and prudently in emergency and/or life-threatening situations.

b. Resource Management

1) Discuss quality assurance as it relates to kinesiotherapy.
   a) Analyze the significance of professional growth and development.
   b) Discuss policies and procedures relevant to personnel management in kinesiotherapy.

2) Identify the factors involved in managing personnel in kinesiotherapy.

3) List the physical resources necessary to perform kinesiotherapy.

6. Emergency Preparedness & Response Competencies

a. Site Safety

1) Demonstrate knowledge of universal precautions and infection control.
2) Demonstrate knowledge of hazardous waste procedures.

3) Demonstrate the safe transfer and/or transport of individuals in the event of evacuation.

b. Emergency Procedures

1) Recognize and record vital signs.

2) Apply correct techniques of CPR.

3) Respond quickly and accurately in emergency situations.