SYLLABUS

DATE OF LAST REVIEW: Fall 2013

CIP CODE: 51.0806

SEMESTER: Departmental Syllabus

COURSE TITLE: Fundamental Treatment Procedures

COURSE NUMBER: PHTR 0170/1170

CREDIT HOURS: 5 credit hours

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: Departmental Syllabus

OFFICE HOURS: Departmental Syllabus

TELEPHONE: Departmental Syllabus

EMAIL: Departmental Syllabus

KCKCC-issued email accounts are the official means for electronically communicating with our students.

PREREQUISITES: Admission to the program
Clinical Skills I is required concurrently

REQUIRED TEXT AND MATERIALS:
Please check the KCKCC bookstore, http://www.kckccbookstore.com/ for the required texts.

COURSE DESCRIPTION:
This course will provide students an overview of the healing process and the physiology and use of physical agents, including thermal agents, ultrasound and electrical stimulation. In addition, exercise physiology and basic therapeutic exercises will be taught.

METHODS OF INSTRUCTION:
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.
COURSE OUTLINE:
I. Anatomy and Physiology Review
   A. Basic anatomy terminology
   B. Cardiovascular
   C. Pulmonary
   D. Integumentary
   E. Musculoskeletal
   F. Neurology

II. Healing Process
   A. Introduction to the healing process
   B. Edema
   C. Pain

III. Physical Agents
   A. Physical laws and principles
   B. Treatment utilizing physical agents
   C. Other physical agents: ultraviolet, laser and diathermy

IV. Basic Treatment Considerations
   A. Anthropometric measurements
   B. General sensory testing
   C. Discharge planning

V. Ultrasound
   A. Physical laws and principles
   B. Physiological effects
   C. Basic application

VI. Electrotherapeutic modalities
   A. Physical laws and principles
   B. Physiological effects
   C. Basic application

VII. Exercise
   A. Overview of exercise
   B. Exercise physiology
   C. Types of exercise and their use
   D. Aerobic and anaerobic exercise

VIII. Professional Behavior
   A. Hygiene
   B. Dress code
   C. Body language
   D. Communication
   E. Cultural diversity
   F. Ethics
EXPECTED LEARNER OUTCOMES
Upon successful completion of this course, on written and/or practical examination:
A. The student will discuss basic anatomy and physiology of the cardiovascular, pulmonary, integumentary, muscular, skeletal and neurologic systems.
B. The student will discuss the principles of the healing process and edema formation.
C. The student will discuss basic data collection techniques completed by the PTA prior to beginning a treatment.
D. The student will demonstrate a general understanding of the concepts and application of a variety of therapeutic modalities, including ultrasound and electrical stimulation.
E. The student will explain exercise physiology and utilize this knowledge to develop a basic exercise program.
F. The student will internalize the importance of professionalism in practice by demonstrating appropriate behavior during lecture and lab sessions.

COURSE COMPETENCIES
The student will discuss basic anatomy and physiology of the cardiovascular, pulmonary, integumentary, muscular, skeletal and neurologic systems.
1. The student will diagram the anatomy of the cardiopulmonary system.
2. The student will discuss basic terminology associated with the integumentary system.
3. The student will discuss the components of and types of muscles in the human body.
4. The student will locate various muscles and bones of the axial and appendicular skeleton.
5. The student will identify the function of various muscles.
6. The student will name the components of various joints of the human body.
7. The student will discuss basic anatomy of the neurologic system.

The student will discuss the principles of the healing process and edema formation.
8. The student will outline what occurs during each phase of the healing process.
9. The student will discuss the role of the PTA during each phase of the healing process.
10. The student will describe common isolation and sterile techniques a PTA may encounter during patient care.
11. The student will identify the pathophysiology of edema and lymphedema.
12. The student will compare and contrast the complications that arise as a result of acute and chronic edema.
13. The student will discuss the physiology of pain and its effect on the patient.
14. The student will discuss basic pathologies that result in alterations of the healing process, pain levels or edema formation.

The student will discuss basic data collection techniques completed by the PTA prior to beginning a treatment.
15. The student will complete the appropriate sensory and/or circulatory assessments prior to application of a therapeutic modality.
16. The student will complete anthropometric measurements.
17. The student will administer a standardized questionnaire or visual analog scale to document a patient’s pain level.
The student will demonstrate a general understanding of the concepts and application of a variety of therapeutic modalities, including ultrasound and electrical stimulation.

18. The student will discuss the categories of physical agents.
19. The student will explain the effects of physical agent use during each phase of the healing process.
20. The student will discuss which modalities are appropriate during each phase of the healing process.
21. The student will justify the use or nonuse of a specific physical agent by demonstrating knowledge of indications, contraindications and precautions.
22. The student will demonstrate the proper application technique for various types of cryotherapy.
23. The student will outline the potential uses of hydrotherapy.
24. The student will demonstrate the proper application technique for various types of superficial and deep thermal agents.
25. The student will discuss the physical principles of ultrasound, including thermal and non-thermal effects.
26. The student will compare the physiological effects of ultrasound on a variety of tissues.
27. The student will compare and contrast the clinical uses of ultrasound for thermal and non-thermal application.
28. The student will discuss characteristics of the different types of electrical current.
29. The student will compare the physiological effects of electrical stimulation on a variety of tissues.
30. The student will analyze the clinical use of selected types of electrical stimulation.
31. The student will apply the principles of ultrasound and electrical stimulation to implement a treatment plan given a simulated clinical situation.
32. The student will internalize the importance of safety with use of electrotherapeutic agents by describing routine preventative maintenance and safe operation of equipment.

The student will explain exercise physiology and utilize this knowledge to develop a basic exercise program.

33. The student will discuss the effects of exercise on a variety of tissues and body systems.
34. The student will apply the principles of muscle flexibility in stretching exercises.
35. The student will apply appropriate strengthening and/or stretching exercises in situations of muscle imbalance.
36. The student will discuss rationale and progression of passive, active assistive, active and resistive exercise.
37. The student will compare and contrast the principles of isotonic, isometric and isokinetic exercise.
38. The student will follow a basic treatment plan based on the appropriate principles, techniques, indications and contraindications of the various types of exercise.
39. The student will discuss the impact of aerobic principles in endurance training.

The student will internalize the importance of professionalism in practice by demonstrating appropriate behavior during lecture and lab sessions.

40. The student will internalize the importance of professional appearance by demonstrating acceptable grooming and personal hygiene.
41. The student will present a professional demeanor in all interactions.
42. The student will respect cultural and personal difference of others by working with a variety of lab partners.
43. The student will communicate with others in a respectful, confident manner.
44. The student will internalize the importance of safe, ethical and legal practice as a physical therapist assistant.
45. The student will demonstrate the ability to adjust interventions within the plan of care created by the PT in response to the patient’s clinical indications.
46. The student will demonstrate the ability to report any changes in the patient’s status to the supervising physical therapist.
47. The student will recognize when the direction to perform an intervention is beyond that which is appropriate for the PTA to do.
48. The student will demonstrate the ability to provide patient-related instruction to patients, family members and caregivers to achieve outcomes based on the plan of care established by the PT.
49. The student will demonstrate appropriate documentation skills that meet the requirements established by the profession, payers, and legal systems.
50. The student will discuss the importance of reading healthcare literature.
51. The student will discuss the requirement for interacting with other members of the health care team in patient-care and non-patient care activities.

ASSESSMENT OF LEARNER OUTCOMES:
Assessment methods include, but may not be limited to: written examinations, lab practicals, homework, and observation of professional behavior.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center, in Rm. 3354 or call at: 288-7670.