STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK

MASTER SYLLABUS

COURSE NUMBER – COURSE NAME
PHTA 102 - ~~Kinesiology~~
Clinical Kinesiology

Created by: Jennifer McDonald

Updated by: Jennifer McDonald

School of Science, Health, and Criminal Justice

Department: Physical Therapist Assistant

Semester/Year: Fall 2019

A. **TITLE**: Clinical Kinesiology

B. **COURSE NUMBER:** PHTA 102

C. **CREDIT HOURS: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)**

 # Credit Hours: 3
 # Lecture Hours: 2 **per week**
 # Lab Hours: 2 **per week**
Other: **per week**

Course Length: 15 **Weeks**

D. **WRITING INTENSIVE COURSE**: Yes ☐ No ☒

E. **GER CATEGORY: None:** ☒ **Yes:** GER
***If course satisfies more than one*:** GER

F. **SEMESTER(S) OFFERED: Fall** ☐ **Spring** ☒ **Fall & Spring** ☐

G. **COURSE DESCRIPTION:**

In this course, students study aspects of human motion beginning with the structure and functions of the skeletal, muscular, articular, and nervous systems, as well as concepts of arthrokinematics and biomechanics. The course focuses on application of knowledge of origins, insertions, actions and innervations of extremity and trunk musculature and palpable surfaces of the same as they relate to functional human movement. Students will apply this knowledge to analysis of the gait cycle and posture.

H. **PRE-REQUISITES: None** ☐ **Yes** ☒ **If yes, list below:**

Grade of C or better in BIOL 217

CO-REQUISITES: None ☒ **Yes** ☐ **If yes, list below:**

I. STUDENT LEARNING OUTCOMES: (*see key below*)

By the end of this course, the student will be able to:

Course Student Learning Outcome [SLO]	***Program Student Learning Outcome [PSLO]***	***GER** [If Applicable]*	***ISLO & SUBSETS***	
1. Describe kinesiological prinicples as they apply to the each of the following: a. Skeletal system b. Articular system c. Arthrokinematics d. Muscular System e. Nervous System f. Biomechanics	6,7		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
Identify the origins, insertions, innervations, and actions of extremity and trunk musculature	6,7		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
Correlate gross anatomical muscle and bony structures to surface anatomy	6,7		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
Describe functional movement patterns throughout the body as related to joint motion and muscle activity.	6,7		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
Describe components of the gait cycle including joint motions and muscle actions.	6,7		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
Describe kinesiological concepts of normal posture in a variety of positions.	6,7		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets
			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets
			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets

			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets

KEY	Institutional Student Learning Outcomes [ISLO 1 – 5]
ISLO #	ISLO & Subsets
1	**Communication Skills** Oral [O], Written [W]
2	**Critical Thinking** *Critical Analysis [CA] , Inquiry & Analysis [IA] , Problem Solving [PS]*
3	**Foundational Skills** *Information Management [IM], Quantitative Lit,/Reasoning [QTR]*
4	**Social Responsibility** *Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]*
5	**Industry, Professional, Discipline Specific Knowledge and Skills**

*Include program objectives if applicable. Please consult with Program Coordinator

J. APPLIED LEARNING COMPONENT: Yes ☒ No ☐

If YES, select one or more of the following categories:

- ☒ Classroom/Lab
- ☐ Internship
- ☐ Clinical Placement
- ☐ Practicum
- ☐ Service Learning
- ☐ Community Service
- ☐ Civic Engagement
- ☐ Creative Works/Senior Project
- ☐ Research
- ☐ Entrepreneurship (program, class, project)

K. TEXTS:

Lippert, L. (2017). Clinical Kinesiology and Anatomy. Philadelphia, PA: F.A. Davis.
Lippert, L. (2017). Laboratory Manual for Clinical Kinesiology and Anatomy. Philadelphia, PA: F.A. Davis.

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L. REFERENCES:

M. EQUIPMENT: None ☐ **Needed:** Physical Therapy Lab Equipment & Supplies

N. GRADING METHOD: A-F as per PTA program standards
The grading scale for the Physical Therapist Assistant program is as follows:

A	= 90-100	C	= 70-74
B+	= 85-89	D+	= 65-69
B	= 80-84	D	= 60-64
C+	= 75-79	F	= below 60

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

Quizzes, Assignments, Unit Exams, Final Exam

P. DETAILED COURSE OUTLINE:

Introduction to Kinesiology
a. Basic Information
b. Skeletal System
c. Articular System
d. Arthrokinematics
e. Muscular System
f. Nervous System
g. Circulatory System
h. Biomechanics

II. Lower Extremity Functional Anatomy and Movement

a. Hip
b. Knee
c. Ankle/Foot

III. Upper Extremity Functional Anatomy and Movement
a. Shoulder Girdle
b. Shoulder Joint
c. Elbow/Forearm
d. Wrist/Hand

IV. Neck and Trunk Functional Anatomy and Movement
a Neck and Trunk
b. Respiration
c. TMJ

V. Gait
VI. Posture

Q. LABORATORY OUTLINE: None ☐ Yes ☒

I. Basic Kinesiological Concepts
a. Linear, translatory, angular motion
b. Open/closed kinematic chains
c. Planes of motion
d. Introduction to palpation/visual observation of the human body
II. Muscular System
a. Muscle shapes/fiber direction
b. Terminology associated with muscles and muscle contractions
c. Active/Passive insufficiency
d. Levers
III. Nervous System
a. Divisions of CNS/PNS
IV. Hip and Pelvis
a. Observe and palpate bony landmarks
b. Palpate muscular origins and insertions
c. Analysis of functional movements, active/passive insuffiency, forces/levers
V. Knee
a. Observe and palpate bony landmarks
b. Palpate muscular origins and insertions
c. Analysis of functional movements, active/passive insuffiency, forces/levers d.
VI. Ankle/Foot
a. Observe and palpate bony landmarks
b. Palpate muscular origins and insertions
c. Analysis of functional movements, active/passive insuffiency, forces/levers
VII. Shoulder Girdle
a. Observe and palpate bony landmarks
b. Palpate muscular origins and insertions

c. Analysis of functional movements, active/passive insuffiency, forces/levers

VIII. Shoulder Joint

a. Observe and palpate bony landmarks

b. Palpate muscular origins and insertions

c. Analysis of functional movements, active/passive insufficiency, forces/levers

IX. Elbow/Forearm

a. Observe and palpate bony landmarks

b. Palpate muscular origins and insertions

c. Analysis of functional movements, active/passive insufficiency, forces/levers

X. Wrist/Hand

a. Observe and palpate bony landmarks

b. Palpate muscular origins and insertions

c. Analysis of functional movements, active/passive insufficiency, forces/levers

XI. Neck/Trunk

a. Observe and palpate bony landmarks

b. Palpate muscular origins and insertions

c. Analysis of functional movements, active/passive insufficiency, forces/levers

XII. Gait Cycle

a. Observe and describe components of the gait cycle utilizing traditional and Rancho Los Amigos terminology

b. Calculation of cadence, velocity, step and stride length

XIII Posture

a. Observation and description of normal posture in sitting and standing positions