

INSTRUCTIONAL PACKAGE

OTA 200

Introduction to Kinesiology

Effective Term Fall 2022

INSTRUCTIONAL PACKAGE

Part I: Course Information

EFFECTIVE TERM: Fall 2022 COURSE PREFIX: OTA 200 CONTACT HOURS: Lecture: 2hrs; Lab: 3hrs

COURSE TITLE: Introduction to Kinesiology CREDIT HOURS: 3 credit hours

COURSE RATIONALE:

This course introduces the study of human motion and function within the context of occupational performance by connecting function to the underlying components that make movement possible. Students will measure range of motion, test muscle strength and analyze purposeful movement through incorporation of occupational therapy applications.

COURSE DESCRIPTION:

This course is a study of functional movement of the human body. The course provides an introduction to normal and abnormal musculoskeletal and neuromuscular anatomy with an emphasis on goniometry measurement and muscular testing.

PREREQUISITES/CO-REQUISITES:

(Credit level <u>ENG 101</u> Minimum Grade of C or Credit level <u>ENG 101</u> Minimum Grade of TC) and (Credit level <u>BIO 210</u> Minimum Grade of C or Credit level <u>BIO 210</u> Minimum Grade of TC) and (Credit level <u>BIO 211</u> Minimum Grade of C or Credit level <u>BIO 211</u> Minimum Grade of TC) and (Credit level <u>PSY 201</u> Minimum Grade of C or Credit level <u>PSY 201</u> Minimum Grade of TC) and (Credit level <u>MAT 110</u> Minimum Grade of C or Credit level <u>MAT 110</u> Minimum Grade of TC or Credit level <u>MAT 120</u> Minimum Grade of C or Credit level <u>MAT 120</u> Minimum Grade of TC)

Restrictions:

Must be enrolled in one of the following Fields of Study (Major, Minor, or Concentration): Occupational Therapy Assistant

REQUIRED MATERIALS:

Short, N. (2022). Functional anatomy for occupational therapy. Books of Discovery. ISBN 978-0-9987850-1-1

Please visit the <u>BOOKSTORE</u> online site for most current textbook information. Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials. myHGTC and college email access.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Course Learning Outcomes:

1. Relate functional anatomy of the upper extremity within the broader context of occupational therapy theory and practice. [B.1.1. Human Body, Development & Behavior, B.4.2. Clinical Reasoning]

Assessment: Final Comprehensive Written Exam and Final Comprehensive Competency Exam

- Describe the organization of the peripheral nervous system, which supplies innervation for sensorimotor function. [B.1.1. Human Body, Development & Behavior, B.4.2. Clinical Reasoning] Assessment: Final Comprehensive Written Exam and Final Comprehensive Competency Exam
- 3. Describe the primary purposeful movements of upper extremity within the context of occupational performance. [B.3.2. Interaction of Occupational Activity, B.4.2. Clinical Reasoning] Assessment: Final Comprehensive Written Exam and Final Comprehensive Competency Exam
- Perform appropriate technique for accurate goniometry measurements of the upper extremity. [B.4.4. Screening & Assessment Tools] Assessment: Final Comprehensive Written Exam and Final Comprehensive Competency Exam
- Perform appropriate techniques for accurate manual muscle testing of the upper extremity. [B.4.4. Screening & Assessment Tools] Assessment: Final Comprehensive Written Exam and Final Comprehensive Competency Exam
- 6. Analyze and demonstrate appropriate exercises for the upper extremity based on manual muscle testing findings. [B.4.2. Clinical Reasoning, B.4.10. Provide Interventions & Procedures] Assessment: Final Comprehensive Written Exam and Final Comprehensive Competency Exam
- 7. Complete accurate documentation of functional performance, goniometry measurements, manual muscle testing and strengthening for the upper extremity.

[B.4.6. Reporting Data, B.4.24. Effective Intraprofessional Collaboration] Assessment: Final Comprehensive Written Exam and Final Comprehensive Competency Exam

Student Learning Outcomes Per Module:

Lecture & Lab Learning Objectives:

After successful completion of the classroom and laboratory activities, the student will be able to meet the following instructional objectives:

Unit I: Tuesday, August 23rd to Tuesday, September 6th, 2022

Student Learning Outcomes	ACOTE	Assossment
	Standard	Assessmen
Lecture – Introduction to Occupation Based Anatomy		
1. Relate functional anatomy within the broader		
context of occupational therapy theory and		
practice.		
clear communication to optimize patient care		
3. Identify the biomechanical properties of body		
tissues.		
4. Describe the effect neuromuscular control has on		
muscles at rest.		
5. Describe the way muscles supply the forces of		
purposetul movement		
Lab – Introduction to Functional Anatomy, Goni & MMT		
1. Demonstrate the planes and axes of motion of the		
body.		
2. Identity osteokinematic motions of the upper &		
3 Identify contraindications & precautions related to		
goniometry (goni) & manual muscle testing		
(MMT).		
4. Demonstrate active (AROM), active assisted		
(AAROM) & passive (PROM) range of motion.		
Lecture – The Essential Nervous System		
1. Demonstrate a foundational understanding of the		
nervous system as it relates to functional anatomy.		
2. Describe the organization of the peripheral		
sensorimator function		
3. Explain the importance of sensorimotor function to		
purposeful movement and the motor performance		
skills that contribute to occupational performance.		
Lab – The Essential Nervous System, ROM & MMT		
1. Construct a diagram of the brachial plexus.		
2. Construct a diagram of the UE terminal nerves &		
their sensory patterns.		
3. Demonstrate the general concepts of patient		
positioning tor upper extremity goniometry &		
1 NVVII.		
5. Recognize the numeric letter and descriptive		
gradings of MMT.		
6. Identify basic aspects of documenting goniometry		
measurements & MMT grading.		

Unit II: Thursday, September 8th to Tuesday, October 4th, 2022

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	Lab – T	The Scapula		
	1.	Demonstrate all motions of the scapula.		
	2.	Identify major boney landmarks of the scapula.		
	3	Identify the location of muscles responsible for		
	0.	movement of the scapula		
	٨	Identify the specific motions performed by the		
	4.	identify the specific motions performed by the		
	~	muscles of the scapula.		
	5.	Identity the innervation of the muscles of the		
		scapula.		
	lecture	e – The Shoulder		
	1	Describe the impact of scapular immobility on		
		upper extremity movements		
	2	Describe the muscular interactions involved with		
	Ζ.			
	0	active shoulder motion.		
	3.	Describe the scapulohumeral rhythm.		
	4.	Explain the torce-couple that occurs to produce		
		upward rotation of the scapula.		
	5.	Identify the primary muscles involved with		
		dynamic stabilization of the glenohumeral joint.		
	6.	Identify muscles of the shoulder (on classmate,		
		model or picture).		
	7.	Describe and demonstrate techniques to		
		strengthen the shoulder girdle muscles.		
	8.	Discuss the importance of rotator cuff muscle		
		integrity		
	9	Discuss the incidences signs symptoms causes		
		and complications of shoulder conditions and		
		nathologies and how they might impair		
	10	Company and contrast stability (modelility)		
	10.			
		movements with common activities of daily living		
		tasks.		
	Lab – T	The Shoulder		
	1	Demonstrate all motions of the shoulder		
	2	Identify major boney landmarks of the humerus		
	<u>ح</u> .	Identify the location of muscles responsible for		
	5.	movement of the shoulder		
	٨	Identify the specific motions performed by the		
	4.	muchan of the chevilder		
	~	muscles of the shoulder.		
	5.	identity the innervations of the muscles of the		
	-	shoulder.		
	6.	Complete an activity analysis tocusing on the		
		shoulder.		

Lecture – Shoulder Goniometry	
1. Recall the 3 types of range of motion and why	
identification is important in determining the	
patients function.	
2. Identify the appropriate alignment of the	
stationary arm, axis and movable arm for the 7	
motions of the shoulder.	
3. Identity normal ranges of motion for the	
osteokinematic movements of the shoulder.	
4. Recall the information necessary to provide	
accurate documentation of range of motion.	
Lab – Shoulder Goniometry	
1. Demonstrate proper patient positioning for	
obtaining the goniometric measurements for each	
motion of the shoulder.	
2. Demonstrate appropriate alignment of the	
stationary arm, axis and movable arms of the	
goniometer when measuring osteokinematic	
2 Obtain accurate measurements when reading the	
3. Obtain accurate measurements when reading the goniometer $(\frac{1}{2}, \frac{5}{2})$	
4 Provide accurate documentation of range of	
motion and goniometric measurements of the	
shoulder.	
Lastura Shoulder MMAT	
Lecture - Shoulder MiMi	
stabilizing and resistance when assessing MMT of	
the shoulder	
2 Identify changes in the patients position to	
differentiate normal, good & fair strength from fair	
and poor strength.	
3. Recall the information necessary to provide	
accurate documentation of range of motion.	
lab – Shoulder MMT	
1. Demonstrate proper patient positioning for	
obtaining measurements for aravity vs aravity	
eliminated MMT.	
2. Demonstrate appropriate hand placement for	
stabilization and resistance when assessing MMT	
of the shoulder.	
3. Identify and correct substitution or compensation	
by the patient during MMT.	
4. Recall the information necessary to provide	
accurate documentation of MMI.	

Unit III: Tuesday, October 11th to Tuesday, October 25th, 2022

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Unit III: The Elbow & Forearm		
Lecture – The Elbow & Forearm		
1. Identify the bones, joints and muscles contributing		
to purposeful movement of the elbow & forearm		
2 Identify the primary purposeful movement of the		
2. Idening the printing purpose of movement of the		
occupational performance.		
3. Recall the process of performing goniometry and		
MMT to apply to the elbow & torearm.		
Recognize pathologies of the elbow & forearm		
that may affect occupational performance.		
Lab - The Elbow & Foregrm		
1 Demonstrate all estackinematic motions of the		
2. Identify major boney landmarks of the humerus.		
3. Identity the location of muscles responsible for		
movement of the shoulder.		
Identify the specific motions performed by the		
muscles of the shoulder.		
5. Identify the innervation of the muscles of the		
shoulder.		
6. Complete an activity analysis focusing on the		
elbow & forearm.		
Lecture – Elbow & Forearm ROM, Goniometry & MMI		
1. Recall proper patient positioning tor pertorming		
range of motion and goniometric measurements of		
the elbow & forearm.		
2. Recall general principles for performing AROM,		
AAROM & PROM.		
3. Identify the appropriate alignment of the		
stationary arm, axis and movable arm for the 2		
motions of the elbow & the 2 motions of the		
forearm		
1 Identify normal and functional ranges of motion		
for the osteokinematic movements of the elbow &		
foregrm		
5 Identify annuariate band algeoment for		
5. Identity appropriate hand placement for		
stabilizing and resistance when assessing MWVI of		
the elbow & torearm.		
o. Identity changes in the patient position to		
ditterentiate normal, good & tair strength from tair		
and poor strength.		
7. Recall the information necessary to provide clear		
& accurate documentation for ROM, goniometry		
& MMT for the elbow & forearm.		
	1	

Lab – Elbow & Forearm ROM, Goniometry & MMT	
Learning Objectives:	
1. Demonstrate proper patient positioning for	
performing AROM/AAROM/PROM, goniometry,	
& MMT for the elbow & forearm.	
2. Demonstrate general principles for performing	
AROM, AAROM & PROM.	
3. Demonstrate appropriate alignment of the	
stationary arm, axis and movable arms of the	
goniometer when measuring osteokinematic	
motions of the elbow & forearm.	
4. Obtain accurate measurements when reading the	
goniometer (*/- 5°).	
5. Demonstrate appropriate hand placement for	
stabilization and resistance when assessing MMI	
of the elbow & forearm.	
6. Identity and correct substitution or compensation	
by the patient during goniometry & MMI of the	
elbow & torearm.	
7. Provide clear & accurate documentation of	
goniometry & MMI tor the elbow & torearm.	

Unit IV: Thursday, November 11th to Tuesday, November 22nd, 2022

Unit IV: The Wrist & Hand	
Lecture – The Wrist & Hand	
1. Identify the bones, joints and muscles contributing	
to purposeful movement of the wrist & hand.	
2. Identify the primary purposeful movement of the	
wrist & hand withing the context of occupational performance.	
3. Recall the process of performing goniometry and	
MMT for application to the wrist & hand.	
4. Recognize pathologies of the wrist & hand that	
may affect occupational performance.	
Lab – The Wrist & Hand	
1. Demonstrate all osteokinematic motions of the	
wrist & hand.	
2. Identify major boney landmarks of the wrist &	
hand.	
3. Identify the location of muscles responsible for	
movement of the wrist & hand.	
4. Identity the specific motions performed by the	
muscles of the wrist & hand.	
 Identity the innervation of the muscles of the wrist Identity the innervation of the muscles of the wrist 	
a nana. 6 Complete an activity analysis feausing on the write	
 Complete an activity analysis locusing on the wrist & hand 	
a nunu.	

Lecture – Wrist & Hand ROM, Goni & MMT	
1 Recall proper patient positioning for POM, goni &	
AMAT of the wrist & hand	
2 Recell general principles for performing APOAA	
AAROM & FROM.	
3. Identify the appropriate alignment of the	
stationary arm, axis and movable arm for the	
4. Identity normal and functional ranges of motion	
for the osteokinematic movements of the wrist &	
hand.	
5. Identity appropriate hand placement for	
stabilizing and resistance when assessing MMI of	
the wrist & hand.	
6. Identity changes in the patient position to	
differentiate normal, good & fair strength from fair	
and poor strength.	
7. Recall the information necessary to provide clear	
for the wrist & hand.	
<u>Lab – Wrist & Hand ROM, Goni & MMT</u>	
1. Demonstrate proper patient positioning for	
performing AROM/AAROM/PROM, goniometry,	
& MMT for the wrist & hand.	
2. Demonstrate general principles for performing	
AROM, AAROM & PROM.	
3. Demonstrate appropriate alignment of the	
stationary arm, axis and movable arms of the	
goniometer when measuring osteokinematic	
motions of the wrist & hand.	
4. Obtain accurate measurements when reading the	
goniometer (*/- 5°).	
5. Demonstrate appropriate hand placement for	
stabilization and resistance when assessing MMT	
of the wrist & hand.	
6. Identify and correct substitution or compensation	
by the patient during goniometry & MMT of the	
wrist & hand.	
7. Provide clear & accurate documentation of ROM,	
goniometry & MMT for the wrist & hand.	

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE ASSIGNMENTS

Students' performance will be assessed, and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Unit Exams	50%
Practical Exams	4%
Movement Analysis	6%
Lab Assignments	4%
Class/Lab Participation	2%
Final Exam	30%
Comprehensive Practical Exam	<u>4%</u>
-	100%

*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:

A = 90% - 100% B = 80% - 89% C = 75% - 79% D = 69% - 74% F = below 68%

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the <u>academic calendar</u> for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Occupational Therapy Assistant Program Classroom Attendance Policy:

An absence is defined as missing greater than 10 minutes of classroom time or leaving class early with more than 10 minutes remaining.

For a 15-week course (Fall and Spring) the allowed number of misses is as follows: For MWF classes: 9 absences are allowed for lecture and 9 absences from lab, regardless of the reason.

For MW classes: 6 absences are allowed for lecture and 6 absences from lab, regardless of the reason For TTh classes: 6 absences are allowed for lecture and 6 absences from lab, regardless of the reason

Tardy Policy:

Students are expected to be on time for class and to stay for the entire session. A tardy is defined as missing up to 10 minutes of classroom time. Three tardies will be counted as one class absence.

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course.

2022 - 2023

Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:

- 1. Academic tutors for most subject areas, Writing Center support, and college success skills.
- 2. Online **tutoring** and academic support resources.
- 3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the <u>Student Success & Tutoring Center</u> website for more information. To schedule tutoring, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at <u>www.penjiapp.com</u>. Email <u>sstc@hgtc.edu</u> or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the <u>Online Resource Center</u> to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following <u>free</u> resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment, financial aid, registration, and payment plan support!
- 2. Use the <u>Online Resource Center (ORC</u>) including Office 365 support, password resets, and username information.
- 3. In-person workshops, online tutorials and more services are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
- 4. Chat with our staff on TECH Talk, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the <u>Tech Central</u> website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's <u>Accessibility and Disability Service webpage</u>. The Accessibility and Disability

staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs Title IX Coordinator Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources EEO and Title IX Coordinator Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu