

- A. <u>Academic Division</u>: Health Sciences
- B. <u>Discipline</u>: Occupational Therapy Assistant
- C. <u>Course Number and Title</u>: OTAP1022 OTA Kinesiology
- D. <u>Course Coordinator</u>: John Stewart, MBA, BA, COTA/L <u>Assistant Dean</u>: Melinda Roepke, MSN, RN

Instructor Information:

- Name: Click here to enter text.
- Office Location: Click here to enter text.
- Office Hours: Click here to enter text.
- Phone Number: Click here to enter text.
- E-Mail Address: Click here to enter text.
- E. <u>Credit Hours</u>: 3 Lecture: 2 hours Laboratory: 3 hours
- F. <u>Prerequisites</u>: BIOL 2751, OTAP 1015, OTAP 1020, OTAP 1021 <u>Co-requisites</u>: OTAP 1030m, OTAP 1031m
- G. <u>Syllabus Effective Date</u>: Fall, 2020
- H. <u>Textbook(s)</u>:

#### **REQUIRED**:

Trail Guide to the Body

- Author: Andrew Biel
- Edition: 5<sup>th</sup>
- ISBN: 9780982978658
- Copyright Year: 2014

### Trail Guide to Movement

- Author: Andrew Biel
- Edition: 1<sup>st</sup>
- ISBN: 9780991466627
- Copyright Year: 2015

#### Kinesiology for the Occupational Therapy Assistant

- Author: Keough, Sain, Roller
- Edition: 2<sup>nd</sup>
- Copyright Year: 2018
- ISBN: 9781630912741

Quick Reference Dictionary for Occupational Therapy (Purchased in OTAP-1015)

- Author: Karen Jacobs and Laela Simon
- Edition: 6<sup>th</sup>
- Copyright Year: 2014
- ISBN: 9781617116469

## I. Workbook(s) and/or Lab Manual:

Student Workbook Trail Guide to the Body

- Author: Biel
- Edition: 5<sup>th</sup>
- ISBN: 9780982978665
- J. <u>Course Description</u>: Kinesiology incorporates the study of many areas including anatomy, physiology, physics and biomechanics. Students will learn about qualitative and quantitative methods to gather information about client's movements. Students are introduced to range of motion and manual muscle testing and learn to apply them within activity analysis. They will work on developing a greater understanding of how to use this information to develop effective interventions to effect change within their clients. Relationship to Curriculum Design: This course addresses the Occupational Performance, Clinical Reasoning, Professional, and Ethical Behavior threads of the curriculum design.
- K. <u>College-Wide Learning Outcomes</u>:

| College-Wide Learning Outcome          | Assessments How it is met & When it is met |
|--|--|
| Communication: Written                 |  |
| Communication: Speech                  |  |
| Intercultural Knowledge and Competence |  |
| Critical Thinking                      |  |
| Information Literacy                   |  |
| Quantitative Literacy                  |  |

ACOTE Standards (2018), Accreditation Council for Occupational Therapy Education https://www.aota.org/-/media/Corporate/Files/EducationCareers/Accredit/StandardsReview/guide/2018-Standards-and-Interpretive-Guide.ashx

### L. <u>Course Outcomes and Assessment Methods</u>:

Upon successful completion of this course, the student shall:

| Outcomes   | Assessments – How it is met<br>& When it is met |
|--|---|
| 1. Compare and contrast OTPF and ICF and how each system           | Lecture test (week 2)                           |
| classifies motions   |   |
| ACOTE Standards: B.3.1   |   |
| 2. Apply the use of axes and the planes of joint motions in the    | Lecture test (week 2)                           |
| analysis of movement.  |   |
| ACOTE Standards: B.1.1, B.1.4                                      |   |
| 3. Utilize appropriate kinesiology related terminology to          | Lecture tests (all), written assignment         |
| describe motion  | weeks 12-13                                     |
| ACOTE Standards: B.1.1   |   |
| 4. Identifies kinematic principles related to joint structures and | Lecture test (week 2)                           |
| components.  |   |
| ACOTE Standards: B.1.1   |   |
| 5. Identifies the principles of human joint motion.                | Lecture test (week 2)                           |
| ACOTE Standards: B.1.1   |   |

| Outcomes  | Assessments – How it is met<br>& When it is met |  |
|---|---|--|
| 6. Identifies the major motor and sensory pathways for human        | Lecture test (weeks 2,4)                        |  |
| movement.   |   |  |
| ACOTE Standards: B.1.1  |   |  |
| 7. Identifies the difference between an upper motor neuron and      | Lecture test (weeks 2,4)                        |  |
| lower motor neuron.   |   |  |
| ACOTE Standards: B.1.1  |   |  |
| 8. Identifies major functions of the components of the central      | Lecture test (weeks 2,4)                        |  |
| nervous system.   |   |  |
| ACOTE Standards: B.1.1  |   |  |
| 9. Identifies the spinal cord levels for major nerve plexus.        | Lecture test (weeks 2,4)                        |  |
| ACOTE Standards: B.1.1  |   |  |
| 10. Identifies the functional characteristics of muscle tissue.     | Lecture test (weeks 2,4)                        |  |
| ACOTE Standards: B.1.1  |   |  |
| 11. Analyzes the roles of muscles during joint motion.              | Lecture test (week 4)                           |  |
| ACOTE Standards: B.1.1  |   |  |
| 12. Examines the types of muscle contractions and the role of       | Lecture test (week 4)                           |  |
| each in movement.   |   |  |
| ACOTE Standards: B.1.1  |   |  |
| 13. Identifies origin, insertion, innervations and action for major | Lecture tests (weeks 6,7, 8,10,12,16)           |  |
| muscles of the human body.  |   |  |
| ACOTE Standards: B.1.1  |   |  |
| 14. Identifies common problems related to structures impacting      | Lecture tests (weeks 6,8,10,12,16)              |  |
| motion.   |   |  |
| ACOTE Standards: B.1.1., B.3.5                                      |   |  |
| 15. Analyzes normal postural alignment.                             | Lecture test (week 6)                           |  |
| ACOTE Standards: B.1.1., B.3.5                                      |   |  |
| 16. Analyzes deviations from normal postural alignment.             | Lecture test (week 6)                           |  |
| ACOTE Standards: B.1.1., B.3.5                                      |   |  |
| 17. Identifies normal gait pattern.                                 | Lecture test (week 8)                           |  |
| ACOTE Standards: B.1.1., B.3.5                                      |   |  |
| 18. Identifies components of gait cycle.                            | Lecture test (week 8)                           |  |
| ACOTE Standards: B.1.1., B.3.5                                      |   |  |
| 19. Tests active range of motion utilizing standardized             | Lab (weeks-4-16)                                |  |
| procedures.   |   |  |
| ACOTE Standards: B.1.4., B.4.4., B.4.5                              |   |  |
| 20. Tests strength of muscles utilizing standardized manual         | Lab (weeks-4-16)                                |  |
| muscle testing procedures.  |   |  |
| ACOTE Standards: B.1.1., B.1.4, B.4.4., B.4.5                       |   |  |

# M. <u>Topical Timeline (Subject to Change)</u>:

- 1. Introduction
  - a. Review of syllabus and various handouts
- 2. Kinesiology: A Foundation of Occupational Therapy
  - a. Human occupation-the OTPF-3
  - b. Health & disability-the ICF
- 3. Factors Influencing Movement
  - a. Body functions
  - b. Body structures
    - 1) Nervous system
    - 2) Muscles
    - 3) Skeleton
  - c. Movement terms

- 1) Terminology
- 2) Planes of movement
- 4. Movement Demands
  - a. Motor behavior
  - b. Movement characteristics
  - c. Posture
  - d. Quantifying movement
    - 1) Range of motion
    - 2) Strength
- 5. Function and movement of trunk and neck
  - a. Motions (and measurement)
  - b. Articulation and landmarks
  - c. Ligament and soft tissue
  - d. Muscles
  - e. Actions
  - f. Strength patterns (and measurement)
  - g. Common problems-overview
- 6. Function and movement of lower extremity
  - a. Motions (and measurement)
  - b. Articulation and landmarks
  - c. Ligament and soft tissue
  - d. Muscles
  - e. Actions
  - f. Strength patterns (and measurement)
  - g. Common problems-overview
- 7. Function and movement of shoulder and scapulae
  - a. Motions (and measurement)
  - b. Articulation and landmarks
  - c. Ligament and soft tissue
  - d. Muscles
  - e. Actions
  - f. Strength patterns (and measurement)
  - g. Common problems-overview
- 8. Function and movement of the elbow
  - a. Motions (and measurement)
  - b. Articulation and landmarks
  - c. Ligament and soft tissue
  - d. Muscles
  - e. Actions
  - f. Strength patterns (and measurement)
  - g. Common problems-overview
- 9. Function and movement of the hand
  - a. Motions (and measurement)
  - b. Articulation and landmarks
  - c. Ligament and soft tissue
  - d. Muscles
  - e. Actions
  - f. Strength patterns (and measurement)
  - g. Common problems-overview

# N. <u>Course Assignments</u>:

- 1. Lecture tests.
- 2. A written assignment (annotated bibliography or activity analysis)
- 3. Labs

## O. <u>Recommended Grading Scale</u>:

| NUMERIC | GRADE         | POINTS | DEFINITION    |
|---------|---------------|--------|---------------|
| 93–100  | A             | 4.00   | Superior      |
| 90–92   | A-            | 3.67   | Superior      |
| 87–89   | $\mathbf{B}+$ | 3.33   | Above Average |
| 83–86   | В             | 3.00   | Above Average |
| 80-82   | B-            | 2.67   | Above Average |
| 77–79   | C+            | 2.33   | Average       |
| 73–76   | С             | 2.00   | Average       |
| 70-72   | C-            | 1.67   | Below Average |
| 67–69   | D+            | 1.33   | Below Average |
| 63-66   | D             | 1.00   | Below Average |
| 60-62   | D-            | 0.67   | Poor          |
| 00-59   | F             | 0.00   | Failure       |

# P. <u>Grading and Testing Guidelines</u>:

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## Q. <u>Examination Policy</u>:

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## R. <u>Class Attendance and Homework Make-Up Policy</u>:

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## S. <u>Classroom Expectations</u>:

Click here to enter text.

## T. <u>College Procedures/Policies</u>:

Important information regarding College Procedures and Policies can be found on the <u>syllabus</u> <u>supplement</u> located at https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS %20SUPPLEMENT.pdf

The information can also be found Choose an item.