

CURRICULUM**Subject Code and Course Number:** KINT 182**Division :** Kinesiology Health and Athletics**Course Title :** ANATOMICAL PRINCIPLES OF KINESIOLOGY AND FITNESS**Summarize the need/purpose/reason for this proposal**

This course will be part of our new yoga teacher trainer certificate program as well as a required core course for future certificates developed in the Kinesiology discipline. This course does not replace the required Anatomy course for Kinesiology majors.

SLOs (Student Learning Outcomes)

1. Describe body part locations, reference positions, and anatomical directions using correct terminology.
2. Apply basic principles of anatomy and function of the muscular and nervous system to fitness and movement.
3. Analyze an exercise to determine the joint movements and the types of contractions occurring in the specific muscles involved in those movements
4. Analyze and research basic biomechanical factors and concepts

SPOs (Student Performance Objectives)

- 1a. Review the anatomy of the skeletal system.
- 1b. Describe the various types of bones and joints in the human body and their functions, features, and characteristics.
- 1c. Describe and demonstrate the joint movements.
- 2a. Demonstrate basic understanding of neuromuscular concepts in relation to how muscles function in joint movement and work together in effecting motion.
- 2b. Demonstrate a basic understanding of the neural control mechanisms for movement.
- 3a. Identify exercises that increase the strength and endurance of individual muscle groups.
- 3b. Analyze and prescribe exercises to strengthen major muscle groups
- 3c. Apply the concept of the kinetic chain to the lower extremity
- 4a. Describe how knowledge of levers can help improve physical performance.
- 4b. Describe the musculoskeletal system functions as a series of simple machines.
- 4c. Evaluate Newton's laws of motion and describe how it can help improve physical performance.
- 4d. Improve physical performance by applying concepts of balance, equilibrium, and stability.
- 4e. Analyze and describe how force and momentum can help improve physical performance.

CCOs (Course Content Outline)

- I. Introduction to anatomy and kinesiology of Fitness
 - A. Terminology
 - B. Anatomical positions
 - C. Planes of motion

D. Human movement system

II. Introduction to the musculoskeletal system

A. Bones --types, structure, function, asanas (poses)

B. Joints -- synovial joints, actions, yoga biomechanics

C. Muscles and tissues-- types and characteristics, anatomy of skeletal muscle, muscle contractions, muscle relationships and functional roles, kinetic chain function

III. Introduction to the nervous system

A. Anatomy of the nervous system

B. Central vs. peripheral

C. Parasympathetic vs. sympathetic

D. Kinetic chain function

E. Nervous system and body connection

IV. Introduction to the respiratory system

A. Anatomy and structure of the respiratory system

B. Respiratory muscles and accessory muscles

C. Dynamics of breathing

D. Physiological responses

E. Introduction to Pranayama

V. Platforms of the body

A. Ankle joint--setting foundation & working upward

B. Knee joint--stacking platforms & changing levels/directions

C. Core--centering & pelvis relation to upper leg/spine

D. Abdominal wall and back muscles--activation & support system

Spine--alignment, core support, and common injuries and structural instabilities

E. Chest and shoulders, arms, and hands--expanding and deepening, and

intricate activities

F. Head and neck--extension of the spine, and how the skull and neck

connect the body

V. Body Reading

A. Whole body concepts--possibilities & precautions

B. Common errors and connections of fitness movements

C. Major injuries and modifications

Methods of Instruction

Lectures and supplemental video, reading assignments, textbook assignments, and discussions will be used. Critical thinking discussion and reflections of readings, in small groups; writing prompts and peer discussion will all be used to identify basic bio mechanical concepts as it pertains to fitness.

Methods of Evaluation of Student Performance

Exams and quizzes are designed to assess the students' understanding of basic anatomy and kinesiology terms. Written assignments, group projects, presentations, case studies and discussions are designed to assess the student's knowledge, understanding and application, and enhance student's critical thinking through a variety of in class observations of fitness movements.

Assignments

1. Prepare a 10-minute oral presentation on an exercise movement and detail the muscles involved.
2. Write a two-page report on one of the following topics: osteology, range of motion, motor units or muscle types. Include basic anatomical diagrams and prepare a 3-minute oral presentation.

TECHNICAL DETAILS

Catalog Description

Designed to introduce the student to the basic principles of kinesiology and functional anatomy as they relate to core principles of fitness. Study of anatomical structures of body movements and teaching techniques for those aspiring to explore career opportunities in Yoga and/or Fitness. Total of 54 hours lecture.

Grade Mode: L,P

Prerequisite(s)

Corequisite(s)



Recommended Preparation

Enrollment Limitations

Instructional Activities associated with TBA

Units : 3.0

CREDIT COURSE OUTLINE

Credit Type : D Credit – Degree Applicable

Maximum Course Units :	3
Minimum Course Units:	3
Computed Total Carnegie Units :	3.00
Course Unit Totals in Agreement? :	No
Course Units Carnegie Compliant by Type and Mode? :	Yes
Course Units Carnegie Compliant in Total?:	Yes

Total Course Hours by Type and Mode

COURSE HOURS	LECTURE	LAB	ACTIVITY
Scheduled Class Meetings	54	0	0
TBA Hours, Determinate Schedule	0	0	0
*Other Arranged Hours, Variable Schedule	0	0	0

(*Student is required to meet the same number of arranged hours each day or each week)

Override Computed Course Units if Necessary

COURSE HOURS	LECTURE	LAB	ACTIVITY
Scheduled Class Meetings	3	0	0
TBA Hours, Determinate Schedule	0	0	0
*Other Arranged Hours, Variable Schedule	0	0	0

Projected Student Registration and Attendance

COURSE ATTENDANCE

Registration Capacity	35
Projected Census Enrollment [Total]	35
Projected Census Enrollment [Resident]	30
Projected Census Enrollment [NonResident]	1
Projected PA Hours [Total]	1423
Projected PA Hours [Resident]	1377
Projected PA Hours [NonResident]	46

COURSE VALUES (TOTAL)

	Scheduled Class Hours			Regular TBA Hours			Variable Arranged Hours			
	LEC	LAB	ACTV	LEC	LAB	ACTV	LEC	LAB	ACTV	TOTALS
Course Hours	54	0	0	0	0	0	0	0	0	54
Course Units	3	0	0	0	0	0	0	0	0	3
Load Factor	1	0.75	0.7143	1	0.75	0.7143	1	0.75	0.7143	
LHE	3	0	0	0	0	0	0	0	0	3
FTEF	0.2	0	0	0	0	0	0	0	0	0.2

STUDENT AND FACULTY WORKLOADS (WEEKLY, FULL-TERM)

Scheduled Class Hours	Regular TBA Hours	Variable Arranged Hours
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STUDENTS	LEC	LAB	ACTV	LEC	LAB	ACTV	LEC	LAB	ACTV	TOTALS
Instructional Hours	3.38	0	0	0	0	0	0	0	0	3.38
Study Hours	6.75	0	0	0	0	0	0	0	0	6.75
Total	10.13	0	0	0	0	0	0	0	0	10.13

FACULTY

Instructional Hours	3.38	0	0	0	0	0	0	0	0	3.38
Preparatory Hours	3.38	0	0	0	0	0	0	0	0	3.38
Total	6.76	0	0	0	0	0	0	0	0	6.76

Repeatability : **Not Repeatable**

The repeatable restrictions apply for Credit Courses do not apply to Non-Credit Courses. Only Non-Credit Courses can be repeated on unlimited number of times.

Reason for Repeatability:

- ☐ Courses for which repetition is necessary to meet major requirements of CSU or UC for completion of a bachelor's degree.
- ☐ Intercollegiate academic or vocational competition
- ☐ Intercollegiate Athletics

Methods of Delivery

- ☒ Face-to-Face ☐ On-Line – Primarily taught via Internet
- ☐ Hybrid – Blend of On-Campus and On-Line ☐ ITV – Instructional T.V.

Maximum Class Size (NCN) 35

Minimum Qualifications (Discipline)

Physical Education (Masters)
Health (Masters)
Biological Sciences (Masters)

Semester of First Offering Summer 2018

Default Grading Option

B - Course for grade or pass/no pass

Non-Default Grading Option

- ☐ B - Course for grade or pass/no pass
- ☐ E - CE - By Exam
- ☐ U - NG - Non-Graded course
- ☐ N - Non-Credit course
- ☐ P - Course taken for pass/no pass
- ☐ L - Course taken for letter grade only
- ☐ A - Audit

COURSE APPLICABILITY, TRANSFER AND ARTICULATION

Course Credit Status: **D Credit – Degree Applicable**

State Transfer Code: **C1 Not Transferable, AA/AS Degree**

State Classification Code:

Basic Skills Status/Level: **Y NA**

☐ Aligns with C-ID Descriptor

Purpose of Course

- ☐ UC Transferable
- ☐ IGETC Area: Specify Area
- ☐ Gen Ed. Local AA degree: Please specify
- ☐ AA/AS Diversity Requirement in:
 - ☐ Global Studies
 - ☐ Ethnic & Gender Studies
 - ☐ Other: Please specify
- ☐ CareerTech Certificate: Indicate name of Certificate(s)

Yoga Teacher Trainer

REPRESENTATIVE TEXTBOOKS OR OTHER MATERIALS

Book 1

Author :	Thompson, C. W., Floyd, R. T.
Title :	Manual of Structural Kinesiology
Publisher:	McGraw Hill
Date of Publication:	2016
Edition:	19th

Other materials and/or supplies required of students:

RESOURCES & DEPARTMENT PLANNING

Additional Resources Needed:

none

Facilities Needed to Teach this Course:

Smart classroom

Equipment Needed to Teach this Course:

none

PROGRAM APPLICABILITY

Program Information

- ☐ In an approved program.
- ☒ Part of a new program.
- ☐ Not part of an approved program.

Program Category

- ☒ General Education
- ☐ Career and Technical Education Program
- ☐ Noncredit Program

Instructional Methods

- ☒ Lecture
- ☐ Lab
- ☐ Lecture & Lab
- ☐ Distance Ed / Online Course
- ☐ Work Experience
- ☐ Independent Study
- ☐ TBA

TOP Code Information

Program title - TOP Code: **083520 *Fitness Trainer**

SAM Code

- ☐ A - Apprenticeship course (Courses offered to apprentices only.)
- ☐ B - Advanced occupational (Courses taken in the advanced stages of an occupational program. Each "B" level course must have a "C" level prerequisite in the same program area.)

- ☒ C - Clearly occupational (Courses taken in the middle stages of an occupational program. Should provide the student with entry-level job skills.)
- ☐ D - Possibly occupational (Courses taken in the beginning stages of an occupational program.)
- ☐ E Non-occupational

NON CREDIT ONLY**Funding Category**

- ☐ A English as a Second Language
- ☐ B Immigrant Education
- ☐ C Elementary & Secondary Education
- ☐ D Health & Safety Education
- ☐ E Education Programs for Persons with Substantial Disabilities
- ☐ F Parenting Education
- ☐ G Family & Consumer Sciences
- ☐ H Education Programs for Older Adults
- ☐ I Short-term Vocational Programs With High Employment Potential
- ☐ J Workforce Preparation Enhanced Funding
- ☐ K Other Non-Credit Enhanced Funding
- ☐ L Non-enhanced Funding