

# Kinesiology / Injury Prevention

## DAN 3714

### Kinesiology Course Outline & Syllabus

New World School of Arts (NWSA) - Dance Department

Instructor: David R. Gonzalez, MS, PTA, LMT, CSCS

E-mail: [davidgonzalez1@ufl.edu](mailto:davidgonzalez1@ufl.edu)

Office Hours: By appointment

Class: Tuesday & Thursday - 11:30 am to 1:30 pm

Room #5702

3 credits

#### I. Content and Description

This class will cover key kinesiological concepts in order to understand the basis of human movement. It will also cover basic motor control and motor learning principles in order for the student to better understand movement acquisition. All these concepts will be applied to common dance movements so the students can apply it to their daily dance routine. The class will also cover common sports/dance injuries and explore different ways to prevent and minimize them. The anatomy learned in DAN 3724 will serve as the foundation for this class: ie, knowing the names of the planes of motion, the primary muscles and the joints, the students will be ready to learn how the body deals with gravity and its impacts on posture and movement and specifically how the musculoskeletal and nervous system function.

#### II. Required Text

*The dance anatomy coloring book—a visual guide to form, function, and movement* by Tricia Zweier

#### A. Recommended Text

*Dance Anatomy and Kinesiology, Second Edition*, by Karen Clippinger

#### III. Objectives and goals

The course objectives are as follows:

- Describe how muscles function and apply them to common dance movements and describe the importance motor control/motor learning principles to movement acquisition.

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- Identify agonist versus antagonist muscles and their key roles in performing human movement in particular dance movements.
- Describe the importance of the kinematic chain with regard to performing human movement in particular dance movements (ie, how distal joints can impact proximal joints).
- Identify common movement deviations and sports/dance injuries and describe some of the ways to prevent them/minimize them.
- Describe the importance of the nervous system and sensory systems with regard to performing human movement in particular dance movements

### IV. Procedures

#### A. Class Attendance

Regular class attendance is expected and is essential for success in this class. You are allowed 3 absences for any reason. One additional absence may be allowed only due to illness, injury, or another university-established excused absence, and only when written documentation and appropriate notification are provided.

Any absence after the maximum allowed (described in first paragraph under class attendance) will lower the final course grade by half a letter. You are encouraged to save absences for unanticipated situations or circumstances out of your control. In cases of illness or injury that necessitate exceeding the permitted absences, the instructor, you, and the Dance Department Dean will discuss options for continuing or withdrawing from the course. This policy is specific to the Dance Department. Please inform instructor of your absence.

If you have an excused absence on an exam day or oral presentation day, you will have the opportunity to make up those points.

#### B. Tardiness and Class participation

Please be on time and ready to learn and interact with the class material. Participation is essential to course success. Students are expected to engage in class discussions, contribute to discussions, and support each other's learning.

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**C. Grading (subject to change depending on class progression)**

Grades are based on the following:

Daily participation \_\_\_\_\_ 20 points total

5 Exams (subject to change) \_\_\_\_\_ 20 points each

Total points for class: 120 points

Make-up tests will be allowed only for documented excused absences.

Extra credit points: to be discussed further in class

### **Grading Scale:**

93 - 100 percent = A

90 - 92 percent = A-

86 - 89 percent = B+

83 - 85 percent = B

80 - 82 percent = B-

77 - 79 percent = C+

73 - 76 percent = C

70 - 72 percent = C-

67 - 69 percent = D+

63 - 66 percent = D

60 - 62 percent = D-

59 percent and below = F

### **V. Preliminary Course Outline and Topics (subject to change)**

#### **Lecture Topics and Exam schedule**

**(exam dates and topics covered are subject to change depending on class progression)**

**Readings in the form of an outline will be given in advance of lectures**

Week 1	Gravity and its impact on movement
Week 2	Center of mass, base of support, line of gravity
Week 3	Test 1
Week 4	Lever arms, motor control/learning, intro to injuries
Week 5	Muscle function (eccentric, concentric, isometrics)
Week 6	Test 2
Week 7	Nervous system and sensory systems

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Week 8	Equilibrium and balance and arthrokinematics
Week 9	Test 3
Week 10	Neuromuscular control, muscle flexibility
Week 11	Applying kinesiological concepts to common exercises
Week 12	Test 4
Week 13	Injuries part 1
Week 14	Injuries part 2
Week 15	Test 5
Week 16	Final day review

### VII. Additional Policy Information\*

#### A. Office Hours

Office hours are by appointment or according to my door schedule. If you have any questions, please send an e-mail with your available times and I will do my best to accommodate.

#### B. Communications

##### i. E-Mail

Please use e-mail communications for all absences or expected missed classes. You can submit questions regarding class material for a response or to set up a meeting to further discuss. I will respond to you as quickly as possible.

#### C. Absences

The attendance policy is provided earlier in this syllabus. You are encouraged to save your absences for uncontrollable circumstances. Furthermore, informing the instructor that you are going to be absent does not make it excused. You are responsible for keeping track of your absences.

#### D. Make-Up Policy

Make-up of class testing will be allowed only in the case of an excused absence. In the case of an excused absence, upon provision of appropriate documentation, you should make make-up arrangements with the instructor. Assignments not turned in at the beginning of class on the date listed in the syllabus will be considered late and graded in accordance with the late policy described for that assignment. In the case of an excused absence, appropriate documentation must be provided to allow an assignment to be turned in late without penalty.

#### E. Add and Drop

It is your responsibility to notify the instructor and complete the necessary paperwork for adding or dropping a class in accordance with university policy. Withdrawal after the second week of classes and prior to the final three weeks of the regular semester is permissible only for

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serious and compelling reasons, and signatures by the instructor and chair of the department are required.

### **F. Accommodations and Health issues**

It is your responsibility to notify the instructor as soon as possible of the need for accommodation of a university-verified disability. Also, please let me know, as soon as possible, if you have any injuries or anything else that could limit your class participation particularly during movement demonstrations. Your safety and wellness is a priority.

### **G. Method of Instruction**

Tactile cues are commonly used to point out individual muscles or bones during the activity portion of this class. Tactile cues are used to identify bony landmarks or muscles accurately, in order foster correct movement for class demonstrations and educational purposes. It is your responsibility to notify the instructor if you are not comfortable with this routine method of instruction. Alternative cueing methods will gladly be substituted if the instructor is informed.

### **H. Cheating and Plagiarism**

Cheating and plagiarism are serious academic offenses. In accordance with university policy, the consequence for cheating or plagiarism is a decision of the faculty member. In this course the consequence is receiving a failing final grade for the entire course.