

ANATOMY AND PHYSIOLOGY OF A CLASSICAL DANCER

Licentiate Diploma Anatomy Examination Details

To gain their Licentiate Diploma, candidates are required to undertake a learning module in Anatomy and Physiology for a Classical Dancer.

Studies are aimed at gaining a knowledge of the principles of anatomy and physiology as they relate to the candidate's dancers, dance technique and dance performance.

WHAT DO CANDIDATES NEED TO KNOW?

At the completion of this unit, candidates will be able to:

1. Formulate/Demonstrate knowledge of the principles of posture and alignment as demanded by classical ballet technique and performance.
2. Specify a knowledge of connective tissue elements and their functions as they relate to the dancer.
3. Formulate knowledge of the structure and function of the principle bones of the human skeleton.
4. Combine a knowledge of the different types of joints of the human body and their function in dance.
5. Analyse the major muscle groups as utilised by the dancer and describe their basic structure and function in dance alignment and technique.
6. Apply knowledge of the basic function of the nervous system in relation to movement, posture, dance technique and mental training.
7. Combine the basic principles of nutrition with the requirements of a dancer specific to the demands of dance training, performance and injury prevention.
8. Summarise the function of the body's systems with a particular understanding of the cardiorespiratory system as it relates to classical ballet.
9. Demonstrate a knowledge of the basic elements of injury prevention for dancers

ASSESSMENT STRUCTURE

There are 3 parts to the Licentiate Diploma assessment in anatomy and physiology as they relate to the classical dancer:

PART A

8 short answer questions, each to be answered in approximately 200-400 words

PART B

2 detailed answer questions, each to be answered in approximately 600-800 words.

PART C

1500-2000 word essay.

TEXTBOOKS

Studies for the both the Associate and Licentiate Diplomas should be based on the following compulsory texts:

- Haas, JG, 2017. *Dance Anatomy*. 2nd ed. Human Kinetics. Champaign, Illinois. (The first edition published in 2010 is also a valid text).
- Wilmerding, MV, Krasnow, DH, 2017. *Dancer Wellness*. Human Kinetics. Champaign, Illinois.

The following text is particularly useful and is a fabulous text with a comprehensive discussion of anatomy as it relates to the dancer and dance technique:

- Clippinger K, 2016. *Dance Anatomy and Kinesiology*. 2nd edition. Human Kinetics. Champaign, Illinois.

These textbooks are available for purchase through many online sites.

Additionally, the IADMS site (International Association for Dance Medicine & Science) offers some extremely useful resource papers and bulletins for teachers that provide some wonderful information on dance related anatomy and nutrition. These documents can be found at iadms.org. Some of the information may only be available to IADMS members.

Ausdance has also produced a number of documents and fact sheets relating to Safe Dance® practice. These can be found at <https://ausdance.org.au>.

NOTE: The exam questions will be based on information provided in the compulsory texts. However, candidates should be mindful that further research and self-learning will allow them to develop a better understanding of the topics and to provide more detail to their answers than by using the text alone.

Candidates will need to provide enough information in their answers to be able to demonstrate that they have sufficient knowledge to achieve a satisfactory result.

SUGGESTED TEXTBOOK REFERENCES

It is essential for candidates to recognise that at the base of their knowledge in this unit is a strong understanding of basic anatomical principles (i.e. the skeletal and muscular systems). However, study should also include theory on the topics listed below in order to provide more depth to the candidate's level of understanding. **Be aware that additional references to these topics may also be found elsewhere throughout the texts:**

1. A more in-depth study of anatomy, anatomical terms and principles as they relate to dance alignment and technique (Wilmerding and Krasnow, 2017, Chapters 2 and 8; Haas, 2017) than studied in the Associate Diploma, focusing on a knowledge of:
 - a) Planes of movement and movement terms
 - b) Alignment
 - c) Basic anatomy – including an understanding of the following with respect to classical ballet: connective tissues (e.g. fascia, bone, muscles); bone structure; joint structure; the bones, joints and muscles of the body
 - d) Elements that enhance bone formation and mineral density

- e) Joint health – activities that can negatively impact joint health, ways to enhance joint health
 - f) Specific anatomical concepts in relation to dance technique
 - g) Motor learning in dance
 - h) Applying physics to dance movements
 - i) Exercises for dancers to enhance muscle strength and flexibility
2. Understand the benefits and principles of cross training, conditioning and recovery for dancers (Wilmerding and Krasnow, 2017, Chapters 3 and 6; Haas, 2017), focusing on a knowledge of:
- a) The benefits of cross-training
 - b) Preparing for and recovering from training (i.e. warm up and cool down)
 - c) The principles of training
 - d) Training for muscular strength, power and endurance
 - e) Flexibility training
 - f) Cardiorespiratory endurance and anaerobic capacity
 - g) Dance-specific systems and somatic practice
 - h) Conditioning myths
 - i) Rest
 - j) Optimising your training schedule
 - k) Overuse, overtraining and burnout
 - l) Proactive practice of self-care
3. A knowledge of providing a safe dance environment (Wilmerding and Krasnow, 2017, Chapter 1) – focusing on an understanding of:
- a) The dance space and facilities (including flooring, temperature, ventilation, and sound)
 - b) Dance apparel
4. Understanding and the employment of effective injury prevention strategies (Wilmerding and Krasnow, 2017, Chapters 9 and 6), including:
- a) Common dance injuries
 - b) Predisposing factors of common dance injuries
 - c) Common dance activities that can cause injuries
 - d) Measures to prevent common dance injuries
 - e) Benefits of getting enough rest
 - f) Avoiding overuse, overtraining and burnout
 - g) Basic first aid (P.R.I.C.E.D.)
 - h) The relevance of H.A.R.M. in the days following an acute injury
 - i) The inflammatory response and the healing process

5. Mental training and psychological wellness (Wilmerding and Krasnow, 2017, Chapters 4, and 5), including an understanding of:
 - a) The role of the brain in moving the body
 - b) Types of feedback
 - c) The mirror system
 - d) Somatics and sensory awareness
 - e) Imagery
 - f) Mental practice and mental rehearsal
 - g) Mindfulness
 - h) Principles of psychological health: motivation, self, dealing with stress, and coping strategies

6. Nutrition for dancers (Wilmerding and Krasnow, 2017, Chapters 7 and 8), including a knowledge of:
 - a) The basics of nutrition
 - b) Risks of poor nutrition