



Certificate of Achievement

Katarzyna Bascik

has completed the following course:

EXERCISE PRESCRIPTION FOR THE PREVENTION AND TREATMENT OF DISEASE
TRINITY COLLEGE DUBLIN

This online course explored how physical exercise can help patients, including those with cardiovascular disease, mental health problems and cancer. The course covered topics including exercise prescription guidelines, safety considerations, and the evidence supporting exercise prescription.

2 weeks, 4 hours per week



Dr Cuisle Forde
Assistant Professor of Physiotherapy
Trinity College Dublin



**Trinity
College
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The University of Dublin

The person named on this certificate has completed the activities in the attached transcript. For more information about Certificates of Achievement and the effort required to become eligible, visit futurelearn.com/proof-of-learning/certificate-of-achievement.

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STUDY REQUIREMENT

2 weeks, 4 hours per week

LEARNING OUTCOMES

- Identify basic physical activity measurement tools e.g. Heart rate monitors, accelerometers, pedometers and questionnaires.
- Reflect on experiences of exercise prescription, physical activity guidelines, and exercise prescription safety.
- Summarise the history of exercise prescription guidelines.
- Describe cardiovascular and respiratory responses to acute and chronic exercise.
- Identify the benefits of exercise for brain health, the musculoskeletal system, cardiovascular disease, type 2 diabetes, and COPD.
- Critically appraise current physical activity guidelines.
- Appreciate the complex interaction between exercise, physical activity and the immune system, specifically the anti-inflammatory effects of exercise.
- Describe how to objectively measure fitness and strength e.g. the six minute walk test, and hand grip dynamometer use.
- Describe how exercise prescription guidelines can be adapted for clinical pediatric populations.
- Describe how exercise prescription guidelines can be adapted for older populations.

- Demonstrate an awareness of the evidence to support exercise as a treatment tool for various clinical populations including those with osteoarthritis, type 2 diabetes, and other chronic diseases.

SYLLABUS

Over two weeks discover the benefits of exercise in both preventing and treating diseases and enhance your confidence in exercise prescription as a treatment.

- Week 1: Explore research on the benefits of physical activity; the evidence that has informed exercise prescription guidelines and safety considerations.
- Week 2: Learn how physiological adaptations to exercise translate to improved health outcomes and the evidence that supports exercise prescription in several common clinical populations.

Learn with physiology and physiotherapy experts

Throughout the course there will be an opportunity to engage with researchers, healthcare professionals and exercise prescription experts from the [Discipline of Physiotherapy](#) at Trinity College Dublin.

Some of the topics we will cover include:

- Introduction to exercise prescription and physical activity
- How does the body respond to physical exercise?
- The evidence behind exercise prescription
- Physical activity guidelines
- Perceptions of exercise prescription