

# Medical Competence 1

08NHYPE4A Microbiologi 1 ECTS credits

08NHYPE4B Anatomy and Physiology 4 ECTS credit

## Learning outcomes

Students will be able to:

- explain the basics of human anatomy and physiology
- describe common pathogenic microbes, routes and mechanisms of transmission and infection risk factors
- describe the methods of infection prevention and precautions in nursing

## Contents

Anatomy and physiology, the cell, tissue, skin, urine secretion, the digestive and endocrine system, the nervous system, brain, senses, the circulatory and respiratory systems, the defence mechanisms of blood and organs, the musculoskeletal system

Microbiology: the main microbe groups, routes and mechanisms of transmission, body defence mechanisms, common precautions, preventing the spread of infection, common sampling methods

## Modes of delivery

Active learning

Online learning

Exam

## Assessment

T1 - K5

## Course assessment criteria

Students will be able to:

LEVEL 5

- provide a comprehensive and reasoned account of the basics of human anatomy and physiology
- provide a comprehensive and reasoned description of common pathogenic microbes, routes and mechanisms of transmission and infection risk factors
- provide a broad and reasoned description of the methods of infection prevention and precautions in nursing

LEVEL 3

- explain, with reasons, the main aspects of human anatomy and physiology
- describe common pathogenic microbes, routes and mechanisms of transmission and infection risk factors
- describe common methods of infection prevention and precautions in nursing

LEVEL 1

- explain the main aspects of human anatomy and the basics of physiology
- describe some of the most common pathogenic microbes, routes and mechanisms of transmission and infection risk factors
- describe some of the methods of infection prevention and precautions in nursing

## Learning materials

Leppäluoto, J., Kettunen, R. & Rintamäki, H. 2013. Anatomia ja fysiologia. Sanoma Pro Oy.

Bjälje, J., Haug, E., Sand, O., Sjaastad, O. & Toverud, K. 2012. Ihminen, Fysiologia ja Anatomia. Sanoma Pro Oy.

Huovinen, P., Hedman, K., Heikkinen, T., Järvinen, A., Meri, S. & Vaara, M. (eds.) 2010. Mikrobiologia - Mikrobiologia, immunologia ja infektiosairaudet. Duodecim.

Hellsten, S. (ed.) 2005. Kliininen mikrobiologia terveydenhuollossa. The Association of Finnish Local and Regional Authorities.

Karhumäki, E., Jonsson, A. & Saros, M. 2010. Mikrobit hoitotyön haasteena. Sanoma Pro Oy.

Optional:

Öystein, V., Sjaastad, O., Toverud, K., Sand, O., Bjälje, J. 2003. Ihminen, Fysiologian ja anatomian työkirja.