

## Physical and Motor Development (D002421)

Course size (nominal values; actual values may depend on programme)

Credits 4.0 Study time 120 h Contact hrs 40.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 1)	English	lecture	35.0 h
		practicum	5.0 h

Lecturers in academic year 2018-2019

Coppens, Eline	GE25	staff member
Deconinck, Frederik	GE25	lecturer-in-charge
Lenoir, Matthieu	GE25	co-lecturer

Offered in the following programmes in 2018-2019

	crdts	offering
<a href="#">Bachelor of Science in Physical Education and Movement Sciences</a>	4	A
<a href="#">Exchange Programme Physical Education and Movement Sciences</a>	4	A

Teaching languages

English

Keywords

physical development, growth, child, motor development, motorische competentie

Position of the course

This course addresses the development of motor competence using the interaction between changing/developing physical properties and motor control and coordination. In doing so, we use knowledge and principles taught in Motor Control and Motor Learning (2nd y) and General Physiology (2nd y). In addition to this, we use an extensive selection of international studies, including work by our own research group. This course prepares students for the development-oriented approach required in training and teaching and other courses such as Methodology of movement activities (3rd y), Specialisation in movement activities (3rd y), and Diagnostics of movement problems and the internships at master's level.

Contents

**Physical development:**

- Definitions, general principles and methods
- Body dimensions, body composition, and somatotype
- Somatic growth
- Growth and body composition
- Somatotype and growth
- Skeletal growth and maturation: skeletal age
- Muscle mass and strength during growth
- Changes in cardiovascular and pulmonar system, and aerobic capacity during growth
- Indexes of sexual maturity
- Regulating factors of growth and maturation

**Motor development:**

- Definitions of motor development
- Different approaches of human development and motor behavior
- Prenatal development, development of the central nervous system, cerebral lateralisation
- Prenatal development and development of motor behavior of newborns, infants and children
- Development of perception

- Intercultural influences on motor competence and development

#### Initial competences

This course builds upon certain competences obtained in Motor Control and Motor Learning and General Physiology

#### Final competences

- 1 Relate current knowledge on typical motor development to theoretical developmental models.
- 2 Relate current knowledge on typical physical development to underlying principles of physical development
- 3 Have insight into the reciprocal relationship between physical and motor development.
- 4 Use frequently used instruments and methods for the evaluation of motor development
- 5 Use frequently used instruments and methods for the evaluation of physical development
- 6 Interpret results of tests for the evaluation of motor and physical development
- 7 Describe age-related changes with respect to motor behavior and physical characteristics in humans
- 8 Explain the intercultural differences in motor competence and development.

#### Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

#### Conditions for exam contract

This course unit cannot be taken via an exam contract

#### Teaching methods

Lecture, practicum

#### Extra information on the teaching methods

This course is taught in English and can be followed by incoming exchange students. In addition to the general lectures, during which the theory is taught and discussed, there are two practicals:

- anthropometry
- measuring motor competence

#### Learning materials and price

Syllabus Physical and Motor Development including recent international research papers.

#### References

- Haywood, K.M. & Getchell, N.(2001). Life span motor development. Champaign IL: Human Kinetics.
- Malina RM, Bouchard C. Growth, Maturation, and Physical Activity. Human Kinetics Books. 1991, (leeszaal HILO / RUG)
- Heyward VH, Stolarczyk LM. Applied Body Composition Assessment. Human Kinetics Books. 1996 (leeszaal HILO/RUG)
- See syllabus for an extensive list of international research papers.

#### Course content-related study coaching

Frederik.Deconinck@UGent.be

#### Evaluation methods

end-of-term evaluation and continuous assessment

#### Examination methods in case of periodic evaluation during the first examination period

Written examination with open questions, written examination with multiple choice questions

#### Examination methods in case of periodic evaluation during the second examination period

Written examination with open questions, written examination with multiple choice questions, report

#### Examination methods in case of permanent evaluation

Report

#### Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

#### Extra information on the examination methods

Knowledge of and insight into the principles addressed in the general lectures is assessed with a written exam, if logistically feasible with an oral part.

Participation in the practical sessions and insight into the matter addressed there is evaluated on the basis of a written report.

#### Calculation of the examination mark

The total mark is the weighted mean of the practical sessions (20%) and the exam (80%).

#### Addendum

This course is open for incoming mobility students (Erasmus)