



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Swimming - beginner level [C_CS>NP15]

Course

Field of study

Mathematics in Technology

Year/Semester

1/1

Area of study (specialization)

Bionics and Virtual Engineering

Technical Electrochemistry

Production Informatics and Robotics

Production Informatics

Engineering of Implants and Prosthesis

Construction Engineering and Management

Composites and Nanomaterials

Machine Design

Structural Engineering

Supply Chain Logistics

Corporate Logistics

Metal and Plastics Materials

Nanomaterials

Aircraft Piloting

Aircraft Engines and Airframes

Logistics Systems

Onboard Systems and Aircraft Propulsion

Production Systems

Organic Technology

Polymer Technology

Medical and Rehabilitation Devices

Virtual Engineering

Managing Enterprise of the Future

Enterprise Resource and Process Management

Integrated Work Safety Management

null

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

15

Projects/seminars

0

Number of credit points

0,00

Coordinators

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Lecturers

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Prerequisites

No health contraindications to exercise and swimming.

Course objective

Swimming - jellyfish, cork, lying on the chest and back, slipping on the chest and back. Staying upright in the water for 4-5 sec. pulling an object from the bottom of the pool. Breathing - blowing air into the water (bubbling), exhaling into the water at the swim wall, inhaling into the water in combination with leg work at the swim wall, exhaling into the water in combination with leg work with the board. Propulsion - Imitation of arm and leg movements on land, alternating leg movements at the swim wall on the breaststroke and backstroke, Alternating leg movements and glide on the breaststroke(swim 4-5m), leg work with the board on the breaststroke and backstroke, arm work with the board between the legs, swimming the whole style.

Course-related learning outcomes

The student acquires the ability to behave in an aquatic environment,

Submerging the head, opening the eyes underwater, breathing, lying on the chest and back, sliding on the chest and back.

-coordination of arm and leg work in backstroke kraul.

-straight backstroke in backstroke kraul.

-starting from the water for the backstroke kraul.

-coordination of arm and leg work and breathing in the backstroke kraul.

-straight backstroke in breaststroke kraul.

- headlong water jump.

-coordination of arm work, leg work and breathing in classic style.

-jumping into the water and turning in classical style.

The student is able to swim 50 m in each of the learned styles

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Mandatory, active participation in exercises according to the schedule of the

Classes. Acquisition of the ability to stay safely in the water, swimming a distance of 25 meters with the taught styles.

Programme content

Crawl technique

Back technique

Butterfly technique

breaststroke technique

Swimming using a swim board

Swimming with the use of fins

Exercises to improve strength and endurance in the water

Underwater breathing exercises

Exercises using swimming balls

Swimming competitions and water games.

Course topics

Teaching basic motor activities in the environment

water, teaching dipping your head, opening your eyes under water,

learning to breathe. Simple jumps into the water. Teaching lying on

breasts and back, slips on the chest and back. Teaching footwork for a back crawl.
 Teaching footwork for a back crawl.
 Teaching arm work for a back crawl.
 Coordination of the work of arms and legs in a back crawl. Learning to make a straight turn in a back crawl.
 Learning to start from water to do a back crawl. Perfecting your style dorsal.
 Completing the footwork technique for the back crawl.
 Completion of a 50m swimming distance. backstroke.
 Teaching arm work and breathing for a breast crawl.
 Coordination of the work of arms, legs and breathing in a breast crawl.
 Completing the footwork technique for the breast crawl. The science of relapse straight breast crawl.
 Coordination of the work of arms, legs and breathing in a breast crawl.
 Learning a straight turn in a breast crawl.
 Learning to jump into the water headfirst.
 Improving your freestyle.
 Completing the swimming distance of 50 m freestyle.
 Teaching footwork in the breaststroke style.
 Teaching arm work in the breaststroke style.
 Coordination of arm work and breathing.
 Learning to coordinate the work of arms, legs and breathing in style classic.
 Jumps into the water and a turn in the breaststroke style.
 Perfecting the classic style
 Classifying the footwork technique as a breaststroke 0style.
 Completion of the swimming distance of 50 m in breaststroke style.

Teaching methods

practical methods: hands-on exercises,
 administering methods: description and explanation with emphasis on the most common mistakes made,
 expository methods: demonstration, error analysis based on video recording.

Bibliography

Karpinski R.,: Swimming-basics of technique-teaching. Katowice 2005
 Czabański B., Fiłon M., Zatoń K.,: Elements of swimming theory. Publisher AWF Wrocław 2003

Breakdown of average student's workload

	Hours	ECTS
Total workload	15	0,00
Classes requiring direct contact with the teacher	15	0,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	0	0,00