COURSE DESCRIPTION CARD - SYLLABUS

Course name
Swimming - beginner level [C_CS>NP15]

Course

Field of study
Chemical and Process Engineering

Year/Semester
1/2

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
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
15

Projects/seminars
0

Number of credit points

0,00

Coordinators

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Lecturers

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