## POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name Swimminig [C CS>Pły15]

#### Course

Field of study **Chemical and Process Engineering** 

#### Area of study (specialization)

Year/Semester 1/2

Profile of study general academic

Requirements

elective

**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 Course offered in Level of study Polish

# first-cycle

Form of study full-time

#### Number of hours

0,00

Lecture Laboratory classes 0 0 Tutorials Projects/seminars 15 0 Number of credit points

Other (e.g. online) 0

#### Coordinators

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#### Lecturers

mgr Waldemar Olejniczak waldemar.olejniczak@put.poznan.pl

#### **Prerequisites**

No health contraindications to physical exercise and swimming. Ability to swim with elementary technique, hold on to deep water, dip the body under the water surface, perform any jump from the edge of the pool. General knowledge and interest in swimming issues.

#### Course objective

Organizational activities. Regulations of the course. Conditions for passing the semester. Dissolution. Test of skills. Exercises, games and games familiarizing with the water environment,. Exercises fun and games shaping elements of swimming technique. Exercises and games for those who can swim. Dorsal style. Teaching NN, RR work and coordination of NN work, RR with breathing, starts and turns. Freestyle. Teaching the work of the NN, RR and coordination of the work of the NN, RR with breathing, starts and turns. Classical style. Teaching the work of the NN, RR and the coordination of the work of the NN, RR with breathing . Butterfly style. Teaching the work of NN, RR and coordination of the work of NN, RR with breathing Practical credit - 50 m in backstroke and freestyle - evaluation of technique and time.

#### 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:

Active participation in program activities and demonstration of knowledge resulting from the content of the program implemented in each semester.

Demonstration of the ability to swim with four techniques including starts and turns over a specified distance with notation of time.

Demonstrate theoretical knowledge of the issues implemented during the course of the subject.

#### 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**

Exercises, fun and games to familiarize yourself with the aquatic environment. Fun exercises and games developing elements of swimming technique. Exercises and games for those who can swim. Backstroke. Teaching legs, arms and work coordination

arms with breathing, learning starts and turns.

Freestyle. Teaching the work of legs, arms and work coordination with breathing, learning starts and turns.

Classic style. Teaching footwork, arm movement and work coordination with breathing.

Butterfly style. Teaching the work of legs, arms and work coordination with breathing

Practical examination – 50 m backstroke and freestyle – assessment technique and time.

#### **Teaching methods**

Teaching methods - based on practical action of students, demonstrative, verbal. Synthetic, analytical, comprehensive method. Play method - imitative, play - classical. Lecture - multimedia presentation.

#### Bibliography

Karpinski R., Swimming, AWF Katowice, 2005. Bartkowiak E., Sport swimming, Central Sports Center, Warsaw, 1999. Czabański B., Fiłon M., Zatoń K., Elements of swimming theory, 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