Course: Electrochemistry 1150-PE000-ISA-0217 Coordinators: dr hab. inż. Leszek Niedzicki Period: Summer Semester 2022/2023 2023L Approval date: 13.10.2023

# 1. Course allocation

Lecture is intended for 5th semester, III year students of Electric and Hybrid Vehicle Engineering at SiMR faculty.

After completion of the course student should have acquired: electrochemical knowledge for effective communication in the interdisciplinary engineering team; knowledge on materials used to build galvanic cells, their basic properties and methods to measure them; understanding of basic phenomena taking place inside the cells, their advantages and limitations; knowledge on corrosion - what risks it carries for metal constructions and cells, how it occurs and how to prevent it/protect against it; ability to predict potential risks for galvanic cell resulting from use of certain materials and way of their assembly; ability to formulate adequate cell parameters and operational requirements for the cell choice for the given application; awareness of the necessity and be able to cooperate and communicate with specialists from other fields for the sake of the parameters and requirements formulation for the cells for the given application.

## 2. Conducting classes

Lecture is conducted in a stationary form, save from the situations when the remote/different form has been agreed earlier with the group or there are situations of force majeure and other not possible to foreseen and/or independent from the lecturer.

In case of the remote form of the course:

Lectures take place on the days and hours provided in the course schedule. It means that lecturer is available for students through the remote communication means (email, MS Teams application and Moodle).

Student should prepare workplace for remote work including: computer with the access to the internet, access to the platform/application MS Teams and in case of the exam Moodle, and should be able to take part in the video conference (external webcam or webcam integrated into notebook).

Student should work and behave according to the information and directions sent by the lecturer.

Student should regularly check communication channels indicated by the lecturer as the means of communications during lecture/course (email, MS Teams team channel/chat/file repository, Moodle, etc.).

In case of online lecture student should not record the video/audio stream without a clear consent of the lecturer. In case of obtaining such consent, the recording of video/audio stream of the lecture is for personal use only. It is prohibited to share the recording through any electronic channels (Warsaw University of Technology Academic Regulations § 11 point 8).

All internet access issues should be solved individually.

Student writing an exam should attach the following statement at the end of the exam (filled on Moodle platform or sent to the lecturer's email):

"I hereby declare that this work (constituting the basis for the recognition of achieving educational effects) in the Electrochemistry course has been done exclusively by myself.

[First name and last name], [index number]"

#### 3. Course materials

http://lniedzicki.ch.pw.edu.pl

#### 4. Class attendance

According to Warsaw University of Technology Academic Regulations § 11 point 7, attendance in lectures are not compulsory.

#### 5. Verification of achievement of learning outcomes

During the lecture lecturer is initiating discussions with students and they are encouraged to ask questions regarding the presented issues.

Lecture is passed based on the exam according to the exam session schedule. Result of the exam can be improved during the retake exam (held according to the exam session schedule). Additional retake exam is held in the autumn exam session according to its schedule. As a special exception, it is possible to hold oral retake exam.

## 6. Aids acceptable for use during verification of achievement of learning outcomes

During the exam it is allowed to have one A4-size sheet of paper with personally written notes (equations/formulae with the symbol denotations). Using any other materials in not allowed. Student should have a calculator on the exam. Exam should be written independently (without anyone's help) and in person.

## 7. Rules for passing the course and for calculating the final grade

Lecture is passed (grade 3) through acquiring at least half of the maximum possible points on the exam plus one. The higher grades are given for surpassing by one point respective shares of the maximum possible points on the exam (60% - 3.5; 70% - 4; 80% - 4.5; 90% - 5). In order to pass the course, one has to pass the lecture, that is to get grade 3. Final grade from the course is the same as the lecture exam grade.

## 8. Deadline and procedure for announcing grades

Exam results are announced to students through USOS system within a week after the exam and before the end of the exam session in case of the retake exams.

#### 9. Rules for retaking classes due to failure to pass a course

Positive grades (3 and above) from the passed exam remain valid for the following years. In special cases (e.g. change of the lecture program, resuming interrupted studies, moving between faculties and/or universities, tests passed outside of the faculty) Dean of the Faculty consent is required for recognizing grade.

Thus, when course is repeated, student does not have to come to the lectures or pass the exam again (if already passed). Transcription of the previously acquired grade requires notice of such intention to the lecturer responsible for the course in the first two weeks of the course in the semester.

# 10. Other

On course matters not covered by these regulations the final decision is up to the lecturer responsible for the lecture.