TERMS AND CONDITIONS FOR BUILDING MATERIALS 2
IN ACADEMIC YEAR 2022/2023

§1 Organization of classes

1. The "Building Materials 2 – laboratory" can be attended by students who have received a positive grade for the "Building Materials 1 – laboratory" class.
2. Each dean's group is assigned a particular tutor.
3. Depending on the decision of the WUT authorities, classes may be conducted in one of three variants: fully stationary, in the hybrid or completely remote mode. The hybrid variant assumes conducting some classes in a stationary way, and some remotely (on-line). A detailed schedule of the subject along with information about the variant of the classes are provided to the participants of the course during the first classes. In the event of a change in the guidelines, the variant of the classes may be changed during the semester. (The schedule for the fully stationary variant is given in the Appendix 1.)
4. The transfer of students between groups is impossible.
5. Stationary laboratory classes are held during the hours specified in the schedule in two laboratory rooms - 530 and 536.
   The on-line classes are conducted remotely during the hours specified in the schedule through the MS TEAMS application and the MOODLE educational platforms. The main channel of the teaching team (MS TEAMS) and the main course page (MOODLE) are used to organize the course.
6. To obtain a positive assessment from the subject (conducted in the stationary mode, hybrid mode as well as remote mode) necessary are:
   - attendance at laboratory classes;
   - passing the reports from the laboratory classes;
   - positive tests score (grade 3.0 or higher);
   - positive presentation score (grade 3.0 or higher);
   - positive exam score (grade 3.0 or higher).
7. Preparation for laboratory classes is mandatory. Lack of preparation results in removal from classes.
8. Grade from the "Building Materials 2 – laboratory" is issued on the basis of the grade for the presentation and the grades of two tests. The tutor (teacher) has the right to adjust the grade –/+ 1 depending on the student's activity in the class and the quality of reports.
9. Grade from the "Building Materials 1 – laboratory" has no impact on grade from the "Building Materials 2 – laboratory".
10. In the case of accepting a stationary or hybrid variant of the classes, the tutor is obliged to notify the students during the first class or immediately after changing the variant of conducting the classes, about the sanitary regimes required during the stationary classes. Students are required to get acquainted with the content of the rules, confirming it on the protocols (Appendix 2: Confirmation of the knowledge of health and safety rules and Appendix 3: Confirmation of the "Building Materials 2 – laboratory" regulations) and to comply with them during stationary classes. Students who do not comply with these rules will be asked to leave the classes.
11. Lectures in Building Materials 2 are held stationary or remote (on-line).
12. Recommended literature and standards for the "Building Materials 2 – laboratory":

- EN 206 Concrete - Specification, performance, production and conformity,
- EN 197-1 Cement Part 1: Composition, specifications and conformity criteria for common cements,
- Instructions for practical tasks for "Building Materials 2 – laboratory".

13. Students are required to get acquainted with the content of the "Terms and the conditions" of the course, and they may submit any comments by e-mail to the head of the course by the date of the second class in the semester. After this date, students are deemed to have known the given regulations and to comply with its provisions.

§2 Attendance at classes

1. Attendance at laboratory classes is obligatory.
2. During laboratory classes, students are recommended to have their own working clothes, e.g. an apron. If such clothing is damaged, Warsaw University of Technology shall not be held responsible for it.
3. In accordance with the Rector's Regulation, it is recommended that hands be disinfected before each class and as needed during class.
4. In the case of classes conducted remotely (on-line), the student is obliged to join a meeting conducted through MS TEAMS during the course hours resulting from the schedule. In the case of classes conducted in the stationary way, the student is obliged to take part in the class in the proper laboratory room (530 or 536).
5. A delay of more than 15 minutes results in absence from classes.
6. There is no possibility of stationary re-taking or taking part in the classes of another group.
7. A student is allowed to be absent from laboratory classes once during the semester. In such case the student is obliged to present an appropriate excuse, get acquainted with the subject matter covered by the omitted classes on his/her own and give an oral answer in order to confirm his/her knowledge during the next class following the absence.

§3 Tests

1. In the fully stationary variant of classes two tests are scheduled. First test is scheduled during the 6th laboratory class and second test – during the 15th laboratory class.
2. In the remote (on-line) and hybrid variant of classes, there is one test conducted on-line during the last class via the MOODLE educational platform. During the test the student is obliged to participate in a meeting conducted through MS TEAMS with a camera and microphone on.
3. Students can take one re-take of the test (written or oral – the mode and date for individual arrangement with the tutor/teacher). The grade from such test must be obtained by the end of the examination session.
4. Failure to pass the "Building Materials 2 – laboratory" (analogically to "Building Materials 1 – laboratory") makes it impossible to take the exam in Building Materials course.

§4 Laboratory Reports

1. Each student is obliged to prepare reports from laboratory classes on their own, including descriptions of research methods used, test results and their analysis, as well as conclusions.

Reports from all laboratory classes conducted during the semester should be made in the *.docx or *.pdf and formats and sent via e-mail to the laboratory tutor. Each report should be signed by the student's own hand and include a clause with the content: "I declare that I made the Report myself".

2. Depending on the form in which the laboratory will be conducted (stationary/remotely/hybrid), the reports should include the analysis of the results of the determinations provided by the tutor or obtained by the student himself /herself during the laboratory classes.
3. On the basis of the obtained results (own protocols/notes) or data provided by the tutor each student prepares a report, that must be provided to the tutor by the date of the second test (15th laboratory class).

§5 Presentation

1. The multimedia presentation is prepared in teams (one presentation per one team) and presented must be by each team member during the class.
2. The topic of presentation must be related to the issues concerning the “Building Materials” course. The topic of the presentation may be proposed by the students’ team or given by the tutor.
3. The required scope of the presentation is included in Appendix 4: Topic of the term presentation that is given to each team.
4. The presentation is presented during the 14^{th} or 15th class.
5. The grade for the presentation is given individually for each student.

Appendix 1:

LABORATORY SCHEDULE (STATIONARY VARIANT)

Odd-numbered groups:

1. Hydraulic building binders: Cement binders.
2. Non-hydraulic building binders: gypsum binders and lime binders.
3. Testing the technical characteristics of aggregate for ordinary concrete and lightweight concrete.
4. Composition of aggregate for ordinary concrete (iteration method).
5. Building mortars composition determination.
6. **Test No 1.**
7. Introduction to concrete design.
8. Concrete design: three equations method.
9. Concrete design: paste method.
10. Modification of concrete with admixtures.
11. Modification of concrete with mineral additives.
12. Lightweight concrete design: ITB method.
13. Concrete conformity assessment (EN 206).
14. Students' presentations.
15. **Test No 2.**

Even-numbered groups:

1. Non-hydraulic building binders: gypsum binders and lime binders.
2. Hydraulic building binders: Cement binders.
3. Composition of aggregate for ordinary concrete (iteration method).
4. Testing the technical characteristics of aggregate for ordinary concrete and lightweight concrete.
5. Building mortars composition determination.
6. **Test No 1.**
7. Introduction to concrete design.
8. Concrete design: paste method.
9. Concrete design: three equations method.
10. Modification of concrete with mineral additives.
11. Modification of concrete with admixtures.
12. Concrete conformity assessment (EN 206).
13. Lightweight concrete design: ITB method.
14. Students' presentations.
15. **Test No 2.**

Appendix 2:

PROTOCOL
Confirmation of the knowledge of health and safety rules

We, students who take part in "Building Materials 2 - Laboratory" class declare that we have been informed about the health and safety regulations of the subject and health and safety regulations of the laboratories located at Faculty of Civil Engineering (WUT) in rooms No 530 and 536 by the tutor …...……..…….. and that we will follow the given rules.

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Date Signature of teacher

Appendix 3:

PROTOCOL
Confirmation of the "Building Materials 2 – laboratory" regulations

We, students who take part in "Building Materials 2 - Laboratory" class declare that we have been informed about the rules and regulations of the course by the tutor …...……..…….. and that we will follow the rules.

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Date Signature of teacher

Appendix 4:

TOPIC OF THE TERM PRESENTATION

Group: ……. Semester……. Academic Year ……

Team:

1. ……
2. ……
3. ……
4. ……

Scope of presentation:

1. Application/use of the material/product.
2. Basic technical properties (based on current Polish and foreign standards, specifications and guidelines - e.g. EN, DIN, etc.).
3. Testing methods and procedures (e.g. EN, ASTM, etc.).
4. Production technology (raw materials, a short description of the production process, organizational and technical diagrams, technological parameters).
5. Examples of application in civil engineering (e.g. existing buildings and structures).
6. Producers, distributors.
7. Prices.
8. Alternative solutions - comparison with other materials / products with the same or similar purpose.

The presentation should include:

1. Table of content.
2. Photographs and drawings.
3. Bibliography – list of used literature and resources (including sources on-line).