I. GENERAL COURSE DESCRIPTION

1. The Medical Genetics course includes **20 hours of lectures** and **50 hours of classes** during one semester for:

-Taiwanese Program

-American Program

2. The course consists of the following parts: Molecular genetics, Molecular methods, Chromosomes and chromosomal disorders, Single gene alterations, Multifactorial diseases, Mitochondrial diseases, Oncogenesis, Immunogenetics, Population genetics, Genetic counseling, Clinical cases.

3. During the course students write short quizzes.

4. The course ends with the **Final Test**.

5. All information are available at the Department website: **www.genetyka.umlub.pl** bookmark **English Division.**

II. THE RULES

1. A Student is obliged to come for classes and lectures on time and **CAN NOT** enter the class, if the time of delay exceeds **15 minutes.**

2. **The lectures are mandatory**. Student with more than **2 absences** will **NOT** receive a credit for lectures, **even if all the absences are justified**.

3. Students are obliged to be prepared **earlier for each class** according to the topics.

4. **The classes are mandatory**.

-More than **3 absences** during the course are not allowed. **The student with more than 3 absences at classes cannot take the Final Test, and will not pass a semester**, **even if all the absences are justified**.

-A medical certificate or other documents must be provided to respective Teachers. If a medical certificate or other documents are **not presented**, **an absence will be registered as an unjustified one**.

-If an **absence is unjustified** a Student can **NOT** take a short quiz.

-If an **absence is justified** (original document with medical stamp), a Student is obliged to take a short quiz **within three weeks from the date of a missed class**. If a documented absence lasts **continuously for more than two weeks**, a Student is obliged to take missed short quizzes in appropriate terms with a respective Teacher.

The student loses the right to take a short quiz, if the material from missed class is **not passed within the obligatory period.**

5. **Using mobile phones, making photos and recording during the classes and lectures is prohibited**. Students who use mobiles or other recording devices without teacher's permission receive **NEGATIVE POINTS** (up to -10 POINTS / USAGE).

6. Students are obliged to change shoes while taking the classes at the Department.

7. Bad behaving students are forbidden to participate in classes and take the quiz. The teacher is allowed to turn student out of the classroom.

III. ABOUT CLASSES

1. The Student is obliged to **prepare one presentation during the semester**. The terms and subjects of presentations are established by the Teacher at the first class.

2. The student must prepare presentation according to **the topic list**, available on the website **www.genetyka.umlub.pl**.

3. Student, who presents a respective presentation, receives **points** (from 0 to 10 points) and is **exempted from the respective short quiz**. The rest of Students write short quiz.

4. It is possible to prepare more than one presentation, but only for very good students.

5. Presentation evaluation

Presentation evaluation sheet	**Total score: 10 points**
Compatibility of the presentation with the obligatory topics	Up to 1 point
Engagement of the group in the topic	Up to 1 point
The presence of the illustrations and/or short animations.	Up to 2 points
The way of the presenting – speaking instead of reading from the slides.	Up to 2 points
The knowledge of the student – teacher will evaluate answers to short questions.	Up to 4 points

6. On 6th lecture students take the **semi-final test** (partial test). This test consists of 20 (multiple choice) questions (1 point for each correct answer) and is based on lectures

(from 1st to 5th) and classes (from 1st to 4th). The semi-final result (20 points) is added to the final score. A student can take partial test only once. Retakes are not allowed.

IV. THE POINT SYSTEM

1. Students are **obliged to be familiar with the issues covered by the lecture** held during respective week and **with the material to be discussed during classes** according to the topic schedule.

2. Classes (2nd-11th) will end with a short quiz, class 12th will end with descriptive quiz.

3. SHORT QUIZZES (classes 2nd-11th).

Short quiz consists of **8 questions** including:

-4 multiple choice questions (1 point for each correct answer),

-2 false/true questions (1 point for each correct answer),

-2 open questions (up to 2 points for each correct answer).

4. Student can receive 10 points from each short quiz. Students have two weeks from the day when they took the quiz to review it together with the teacher.

5. The 12th class will end with a **short descriptive quiz**.

DESCRIPTIVE QUIZ (only class 12th) consists of 2 clinical cases (to point symptoms, indicate diagnostic methods, make a correct diagnosis etc.). Student can receive 10 points from descriptive quiz (up to 5 points from each clinical case).

6. During 11 classes (from 2nd to 12th class) a Student can receive 110 points. The semi-final score (20 points) is added to 110 points so the total score (final score) equals 130 points (means 100%).

7. To pass the genetics course the mean of 60% (78 points) from all quizzes and semi-final test is required.

8. CLASSES

Student will receive an **additional 2 extra** points from classes to the final score for two conditions:

-**punctual arriving for <u>classes</u> and**

-**having <u>no absences</u>**.

A Student **will not receive 2 extra points** to the final score for having **even <u>one delay</u>** or an **<u>unexplained absence</u>.**

9. **CREATIVE ACTIVITY**

Your activity during classes is also evaluated. The most active Student can receive **0.5 point per lab**, which makes a maximum of **6 extra points** to the final score for all 12 classes. Activity points are added according to the decision of the Coordinator at the request of the Teachers.

10. **LECTURES**

Student will receive an **additional 2 extra points from lectures** to the final score for two conditions:

-punctual arriving for a lectures and

-having no absences.

A Student **will not receive 2 extra points** to the final score for having even one delay or an unexplained absence.

11. Final score is calculated including extra points (from classes - 2 points, for activity - 6 points, from lectures - 2 points = 10 points maximum) before Written quiz.

12. WRITTEN QUIZ

A Student is obliged to take a WRITTEN QUIZ (material from the whole semester), **if the final score from the classes is less than 60% (78 points), but more than or equal 40% (52 points).** The written quiz consists of 6 descriptive questions. The maximal number of the points possible to collect is 30 (0-5 points for each question). The sum of all the collected points gives a final score. Only a Student who gains at least 78 points (or more) can take the final test.

13. **A Student who gains at least 90% (117 points) through the whole semester is exempted from the Final Test with very good (5.0) final score. A Student who gains**

112 points (86%) and more, but less than 117 points, will be exempted from the Final Test with the final score of more than good (4.5).

14. If Student has to take the written quiz, she/he can NOT be exempted from the Final Test even having 117 points or more.

V. THE FINAL SCORE AND THE FINAL TEST

1. The Students with final score between 92-111,5 points receive extra point/points for Final Test, as follows:

FINAL SCORE	EXTRA POINT/POINTS FOR THE FINAL TEST
109,5-111,5 points	**4.0 points**
107-109 points	**3.5 points**
104,5-106,5 points	**3.0 points**
102-104 points	**2.5 points**
99,5-101,5 points	**2.0 points**
97-99 points	**1.5 point**
94,5-96,5 points	**1.0 point**
92-94 points	**0.5 point**

Additional points are added **only at the first term** of the Final Test.

2. The Final Test consists of **38 questions**. It means:

-36 multiple choice questions including 30 questions from classes (3rd and 5-12th), 6 questions from lectures (8th-10th) (1 point for each correct answer) and

-2 written (open) questions with medical cases, pedigree drawing, genetic counseling or population genetics (up to 2 points for each correct answer).

3. A student can receive 40 points from the Final Test.

4. To **PASS** the Final Test, the required final score is 60% (**24 points**) of correctly answered questions out of all questions. Students that fail the first Final Test exam will be given another test. **Only two retakes are possible**.

The final score for final test will be calculated as follows:

Per cent	Grade
100-91	5
90-86	4.5
85-76	4.0
75-71	3.5
70-60	3.0
59 and less	2.0

VI. SOURCES OF LEARNING

1. OBLIGATORY BOOKS:

- L.B. Jorde, J.C. Carey, M.J. Bamshad "Medical Genetics (fifth edition)". Elsevier, 2016.
- R.W. Dudek "GENETICS". Lippincott Williams & Wolters Kluwer business, 2010.

2. RECOMMENDED BOOKS:

-C.P. Schaaf, J. Zschocke, L. Potocki "Human genetics: from molecules to medicine" - Lippincott Williams & Wolters Kluwer business, 2012 (first edition). ISBN-13: 978-1-60831-671-7 and ISBN-10: 1-60831-671-8.
-P.J. Russell " iGenetics. A Mendelian Approach". Pearson Education International, 2006.
-William S. Klug, Michael R. Cummings "Essentials of Genetics", Pearson Education, Inc
-Vasef MA, Auerbach A. "Molecular Oncology" Elsevier 2016
-Lauren Pecorino "Molecular Biology of Cancer", Oxford University Press 2012 (third edition) or newer

3. OTHER BOOKS:

-T. Strachan and A.P. Read "Human Molecular Genetics 2". Bios Scientific Publishers, 2000.
-B. Lewin, J.E. Krebs, E.S. Goldstein, S.T. Kilpatrick "Lewin's genes". Jones and Bartlett Publishers International, 2011.
-L.B. Jorde, J.C. Carey, M.J. Bamshad, R.L. White "Medical Genetics". Mosby, 2003.

4. **INTERNET SOURCES:** Genetics Home Reference: https://ghr.nlm.nih.gov/,
Atlas of Genetics and Cytogenetics in Oncology and Haematology
http://atlasgeneticsoncology.org,
Sequence Variant Nomenclature http://varnomen.hgvs.org/
The Cancer Genome Atlas https://cancergenome.nih.gov/
National Comprehensive Cancer Network https://www.nccn.org/
PubMed https://www.ncbi.nlm.nih.gov/pubmed/