| Study<br>programme                           | MEDICAL STUDIES  | IN ENGLISH   |  |  |                   |   |  |  |  |  |
|--|--|--|--|--|-------------------|---|--|--|--|--|
| Cycle  | INTEGRATED   | ATED Type UNIVERSITY   |  |  |                   |   |  |  |  |  |
| Study track                                  | -  | Module   |  |  |                   |   |  |  |  |  |
| Year of study                                | 1  | Semester   | 1  |  |                   |   |  |  |  |  |
| Course title                                 | MEDICAL  | Course   | MFMSE102   |  |                   |   |  |  |  |  |
|  | BIOLOGY  | code   |  |  |                   |   |  |  |  |  |
| ECTS   | 9.5  | Status   | OBLIGATORY   |  |                   | _ |  |  |  |  |
|  | Teaching hours   |  | Lectures   | Exercises  | Seminars Practice |   |  |  |  |  |
|  |  |  | 45   | 30   | 35                | 0 |  |  |  |  |
| Teachers                                     | dr.sc. Katarina Vu   | kojević, prof.   | 13   | 0  | 7                 | 0 |  |  |  |  |
|  | dr. sc. Sandra Kos   | tić, prof.   | 12   | 0  | 7                 | 0 |  |  |  |  |
|  | dr. sc. Snježana N   | lardešić, prof   | 10   | 0  | 7                 | 0 |  |  |  |  |
|  | dr. sc. Violeta Šolj   | ić, prof   | 10   | 0  | 7                 | 0 |  |  |  |  |
|  | dr. Maja Barbarić,   | viši asistent  | 0  | 15   | 7                 | 0 |  |  |  |  |
|  | Martina Vukoja, a  | sistent  | 0  | 15   | 0                 | 0 |  |  |  |  |
| objectives<br>Course<br>learning<br>outcomes | principles of mod<br>human diseases, a<br>necessary for und<br>molecular biology<br>involved in proble<br>in order to develo<br>processes, as well<br>Learning outcome<br>Student:<br>Describes and e<br>(macromolecules,<br>organelles, mitocl<br>and tumor biolog  | and the future of erstanding of r<br>, development<br>m-orientated of<br>p practical com<br>as critical thin<br>e (LO)<br>xplains the b<br>cytoskeleto<br>nondria and en | should acquire te<br>ts will learn basic<br>ology. They will be<br>ctures, seminars a<br>undamental biolog | rminology<br>cell biology,<br>e actively<br>ind exercises<br>gical |                   |   |  |  |  |  |
|  | Describes and explains the basics of molecular cell biology (cell genome,<br>replication and repair of DNA, transcription and RNA species, regulation<br>of transcription, RNA modification, translation, regulation of translation,<br>synthesis and modification of proteins, transport and function of<br>proteins)IU-MFMSE102-2<br>IU-MSE21IU-MSE2<br>IU-MSE21Distinguishes the principles of the basics of developmental biology<br>(fertilization, meiosis, mitosis, stem cells and the molecular mechanisms<br>of cell differentiation)IU-MFMSE102-3IU-MSE3                               |  |  |  |                   |   |  |  |  |  |
|  | Distinguishes the medical human genetics (basic principles of genetic IU-MFMSE102-4 IU-MSE4 inheritance, sexual and autosomal inheritance, chromosome aberrations, genetic counseling)   |  |  |  |                   |   |  |  |  |  |
| Prerequisites<br>for the course<br>enrolment | In accordance with the Rulebook on the Integrated Studies at the School of Medicine University of Mosta  |  |  |  |                   |   |  |  |  |  |
|  | Week / shift<br>Lectures   | Торі   |  |  |                   |   |  |  |  |  |
| Course<br>content                            | LecturesL1 - Cell -evolution prokaryotes vs. eukaryotes, cell compartments, inner<br>membrane, cytoplasm<br>L2 - cell structure, the cell chemistry, macromolecules, enzymes<br>L3 - Cell membrane<br>L4 - Nucleic Acids, gens, eukaryotic organisms, DNA<br>L5 - Nucleus, transport, organization, nucleolus<br>L6 - cytoskelet - microfilaments, intermediar filaments, microtubules<br>L7 - extracellular matrix and organization, cell surface, cellular interactions<br>L8 - Cell research methods and microscopy<br>L9 - Introduction to molecular biology - DNA replication and telomeres |  |  |  |                   |   |  |  |  |  |

|                       |                  |            |  |   |   | maintenance a  |                         |                                      | •              |       |            |  |  |
|-----------------------|------------------|------------|--|---|---|--|-------------------------|--------------------------------------|----------------|-------|------------|--|--|
|                       |                  |            | L11 - synthesis and RNA transcription, transcription factors |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | L12 - synthesis and RNA transcription, RNA trafficking<br>L13 - genomic DNA, recombination<br>L14 - synthesis of proteins, translation, protein sorting and transport |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | L15 - Bioenergetics and metabolism, mitochondria and peroxisomes<br>L16 - transport and protein sorting - ER, Golgi apparatus   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  | -                       |                                      |                |       |            |  |  |
|                       |                  |            |  |   | L17 - protein transport - vesicular transport, lysosome   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   | L18 - Cell signaling - signal molecules and action of cell surface receptors  |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   | L19 - Cell signaling - intracellular signal transduction, cytoskelet and signaling  |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   | network<br>L20 - cell cycle - cell cycle checkpoints, cell cycle regulation, mitosis and meiosis<br>L21 - Meiosis   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   | Programed cell   | death                   |                                      |                |       |            |  |  |
|                       |                  |            |  |   | L23 - Stem cells  |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | L24 - Cancer - development and causes, tumor viruses, oncogenes   |   |  |                         |                                      |                |       |            |  |  |
|                       | Sen              | ninars     |  |   | S1 - c  | ell structure, th  | e cell chemistry        | , macromolecu                        | les, enzy      |       |            |  |  |
|                       |                  |            |  |   | S2 - cell membrane - micro and macro molecules transport<br>S3 - Nucleus, DNA   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   | S4 - extracellular matrix and cytoskeleton  |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | S5 - DNA analysis<br>S6 - protein analysis  |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   | <ul> <li>S7 - cell genome, DNA replication</li> <li>S8 - transcription, transcription regulation, transport and processing of RNA</li> <li>S9 - translation and translational regulation</li> </ul> |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            | S10 - ER and Golgi apparatus                                 |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | S11 - Bioenergetics and metabolism, mitochondria and peroxisomes  |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | S12 - Cell signaling  |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   | S13 - cell cycle  |  |                         |                                      |                |       |            |  |  |
| Tutoriala             |                  |            |  |   | S14 - Stem cells and programed cell death   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | S15 - Cancer<br>S16 - repetition and knowledge testing<br>E1 (10 hours) - DNA analysis  |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       | Tutorials        |            |  |   | •   | •  | •                       | tigation Microscope and microscopy 1 |                |       |            |  |  |
|                       |                  |            |  | E2 (4 hours) - Methods of cell investigation. Microscope and micros   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  |   |   | 3 (4 hours) - Methods of cell investigation. Microscope and microscopy 1 |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | E4 (2 hours) - Repetition. Microscope and microscopy<br>E5 (10 hours) - Protein analysis  |   |  |                         |                                      |                |       |            |  |  |
| Language              | Eng              | lish       |  |   | LJ (1   | o noursj - Frole   | anarysis                |                                      |                |       |            |  |  |
| E-learning            |                  | to 20% (l  | ecture   | es).  |   |  |                         |                                      |                |       |            |  |  |
| Teaching              |                  | -          |  | -   | ctive-e   | experiential.  |                         |                                      |                |       |            |  |  |
| methods               |                  |            |  |   |   |  |                         |                                      |                |       |            |  |  |
|                       |                  | _          | <u>,</u>   |   |   | of assessment (i   | ndicate - <b>Bold</b> ) |                                      |                |       |            |  |  |
|                       |                  |            |  |   | nation obligation   |  |                         | Type of                              |                | 1     |            |  |  |
| midterm               | seminar          | <i>''</i>  |  | prac  | tical/p   | project task   | other                   | written                              | ora            |       | practical  |  |  |
|                       | paper report     |            |  |   | ion of  |  | exam                    | exar                                 | r)             |       |            |  |  |
| Church and a          | obligati         | -          |  |   | ion of  | ECTS credits an  |                         |                                      |                | Char  | o in grada |  |  |
| _                     |                  | -          | U  |   | Hours of workload   |  | Share in ECTS           |                                      | Share in grade |       |            |  |  |
|                       | Class attendance |            | tcome co   |   |   | 10   | 3,6                     |                                      |                |       |            |  |  |
|                       |                  | 111-       | - MFMSE102-1   |   | 110<br>45   |  | 3,6<br>1,5              |                                      | 20%            |       |            |  |  |
|                       |                  |            | IU- MFMSE102-1<br>IU- MFMSE102-2                             |   | 40  |  | 1,0                     |                                      | 2070           |       |            |  |  |
| IU- MFI               |                  |            |  | MSE102-2  |   |  |                         |                                      |                |       |            |  |  |
|                       |                  |            |  | J- MFMSE102-4   |   |  |                         |                                      |                |       |            |  |  |
| Pre-exam/Written exam |                  |            | J- MFMSE102-1  |   | 130   |  | 4,4                     |                                      | 80%            |       |            |  |  |
|                       |                  |            | MFMSE10  |   |   |  | .,.                     |                                      |                |       |            |  |  |
|                       |                  |            |  | MFMSE102-3  |   |  |                         |                                      |                |       |            |  |  |
|                       |                  | 10 + + + - | 10-  | MFMSE10   | 285   |  |                         | 9.5 100                              |                | 1000/ |            |  |  |
|                       |                  | In total   |  |   | 10+4-   |  |                         | 9,5                                  |                |       | 100%       |  |  |
|                       |                  |            |  | IV  | ietho   | d of calculating   | the final grade         |                                      |                |       |            |  |  |

| Impulsor       Cooper       GM,       x   | Literature    | Title                     | Edition   |           | viven in the additional course informatior<br>Language |           |               |                |        | Type of I | iteratur   | e      |
|---|---------------|---------------------------|-----------|-----------|--|-----------|---------------|----------------|--------|-----------|------------|--------|
| Hausman RE. The       Image: Cell, a Molecular         Approach. 8th ed.       Washington DC,         Sunderland       (Massachussets):         ASM Press, Sinauer       Associate         Cox TM, Sinclair J.       Image: Cox TM, Sinclair J.         Molecular biology in       Image: Cox TM, Sinclair J.         New York, Garland Science, 3/e, 2009       Image: Cox TM, Sinclair J.         Medical Genetics.       Image: Cox TM, Sinclair J.         Ath edition, Itsevier       Image: Cox TM, Sinclair J.         Churchill Livingstone, Edinburg 2011.       Image: Cox TM, Sinclair J.         Inthe explanation: The course of Medical biology is performed during the first semester in the form of lectures (45 surges; findmation the seminar (demonstrated knowledge, understanding, ability to fine problems and reasoning).         Inters explanation: The course of Medi   | (indicate)    | (title, author, year)     | own       | other     | croatian   | english   | other         | multilingual   | book   | article   | script     | other  |
| Hausman RE. The       Image: Cell, a Molecular         Approach. 8th ed.       Washington DC,         Sunderland       (Massachussets):         ASM Press, Sinauer       Associate         Cox TM, Sinclair J.       Image: Cox TM, Sinclair J.         Molecular biology in       Image: Cox TM, Sinclair J.         New York, Garland Science, 3/e, 2009       Image: Cox TM, Sinclair J.         Medical Genetics.       Image: Cox TM, Sinclair J.         Ath edition, Itsevier       Image: Cox TM, Sinclair J.         Churchill Livingstone, Edinburg 2011.       Image: Cox TM, Sinclair J.         Inthe explanation: The course of Medical biology is performed during the first semester in the form of lectures (45 surges; findmation the seminar (demonstrated knowledge, understanding, ability to fine problems and reasoning).         Inters explanation: The course of Medi   | Compulsor     | Cooper GM,                |           | х         |  | х         |               |                | х      |           |            |        |
| Approach. 8th ed.       Washington DC,         Sunderland       Sunderland         (Massachussets):       ASM Press, Sinauer         ASSociate       Cox TM, Sinclair J.         Cox TM, Sinclair J.       Molecular biology in         medicine. Blackwell       Science, 1997.         Oxford, UK (Sth and       X         Atberts B et. all.       X         Essential Cell Biology,       X         New York, Garland         Science, Je, 2009         Turnpenny P, Ellard S.         Emery's Elements of         Medical Genetics.         14th edition, Elsevier         Churchill Livingstone,         Edinburgh 2011.         Iditional course information         wrther explanation: The course of Medical biology is performed during the first semester in the form of lectures (45 uprs), seminars (35 hours) and exercises (30 hours). All forms of education are obligatory, and the participation of udents will be monitored regularly.         we teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to fine problems and reasoning).         wminars of 35 hours) and exercises. For seminar work each student will get their own topic and presentation of udents will be evaluated as 10% of grade. All 16 seminars will finish with quiz (10 question per minar). Maximal number of points can be 160 (16 seminars). These pointis will be evaluated as 10% of final grade cording to  | y .           |                           |           |           |  |           |               |                |        |           |            |        |
| Washington       DC,<br>Sunderland         Sunderland       Sunderland         (Massachussets):       ASM Press, Sinauer         ASM Press, Sinauer       Associate         Cox TM, Sinchair J.       Molecular biology in<br>medicine. Blackwell         Science, 1997.       Oxford, UK (Sth and<br>17th chapter)         Jditional       Alberts B et all.       x         X       x       x         Science, 3/e, 2009       Turnpenny P, Ellard S.         Turnpenny P, Ellard S.       Enery's Elements of<br>Medical Genetics.         Idtional       Alberts B et coll         Idtional course information         Turnpenny P, Ellard S.         Enery's Elements of<br>Medical Genetics.         Idtional course information         Tirther explanation: The course of Medical biology is performed during the first semester in the form of lectures (45<br>uors), seminars (55 hours) and exercises (30 hours). All forms of education are obligatory, and the participation of<br>udents will be monitored regularly.         we teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to<br>effine problems and reasoning).         wminars consist of seminar work and quizzes. For seminars work each student will get their own topic and presentation<br>functions of seminars work and quizzes. For seminars work each student will be evaluated as 10% of final grade<br>cording to the key: 91 - 110 – pass; 111 - 120 – good; 121 – 140 – very good; 141 - 160 –  |               | Cell, a Molecular         |           |           |  |           |               |                |        |           |            |        |
| Sunderland<br>(Massachussets):<br>ASM Press, Sinauer       Image: Construction of the second o  |               | Approach. 8th ed.         |           |           |  |           |               |                |        |           |            |        |
| (Massachussets):       ASM Press, Sinauer         ASM Press, Sinauer       ASSociate         Cox TM, Sinclair J.       Molecular biology in medicine. Blackwell         Science, 1997.       Oxford, UK (Sth and 17th chapter)         Iditional       Alberts B et. all.       x         Essential Cell Biology, New York, Garland       x       x         Science, 3/99.       Turnpenny P, Ellard S.       Emery's Elements of Medical Genetics.         Ith editional Cell Biology and the edition of the editin of the editi   |               | Washington DC,            |           |           |  |           |               |                |        |           |            |        |
| ASM Press, Sinauer<br>Associate<br>Cox TM, Sinclair J.<br>Molecular biology in<br>medicine. Blackwell<br>Science, 1997.<br>Oxford, UK (5th and<br>17th chapter)<br>Alberts B et. all. x x x x x<br>Essential Cell Biology,<br>New York, Garland<br>Science, 3/e, 2009<br>Turpneny P, Ellard S.<br>Emery's Elements of<br>Medical Genetics.<br>14th edition, Elsevier<br>Churchill Livingstone,<br>Edinburgh 2011.<br>dditional<br>dditional course information<br>minars (35 hours) and exercises (30 hours). All forms of education are obligatory, and the participation of<br>udents will be monitored regularly.<br>He teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to<br>effine problems and reasoning).<br>He teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to<br>effine problems and reasoning).<br>He teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to<br>effine problems and reasoning).<br>Maximal number of points can be 160 (16 seminars). These points will be evaluated as 10% of frail grade<br>cording to the key: 91 – 110 – pass; 111 – 120 – good; 121 – 140 – very good; 141 - 160 – excellent.<br>He teacher evaluates the student's participation is necessary to pass (44 points). Written test will be evaluated as 80% of<br>pala grade.<br>H-52 – sufficient<br>H-52 – sufficient<br>H-52 – sufficient<br>H-52 – sufficient<br>H-50 – good<br>H-71 – very good<br>H-30 – excellent   |               |                           |           |           |  |           |               |                |        |           |            |        |
| Associate       Image: Construction of the second of the sec  |               |                           |           |           |  |           |               |                |        |           |            |        |
| Cox TM, Sinclair I.       Molecular biology in medicine. Blackwell science, 1997.         Oxford, UK (5th and 17th chapter)       X       X         Iditional       Alberts B et. all. Essential Cell Biology, New York, Garland Science, 3/9, 2009       X         Turnpenny P, Ellard S.       Emery's Elements of Medical Genetics. 14th edition, Elsevier Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchill Livingstone, Edinburgh 2011.       Image: Churchill Livingstone, Edinburgh 2011.         Iditional course information       Image: Churchillivingstone, Edinburgh 2011.       I  |               |                           |           |           |  |           |               |                |        |           |            |        |
| Molecular biology in<br>medicine. Blackwell<br>Science, 1997.<br>Oxford, UK (Sth and<br>17th chapter)       x       x       x         Iditional       Alberts B et. all.<br>Essential Cell Biology,<br>New York, Garland<br>Science, 3/e, 2009       x       x       x         Turnpenny P, Ellard S.<br>Emery's Elements of<br>Medical Genetics.<br>14th edition, Elsevier<br>Churchill Livingstone,<br>Edinburgh 2011.       u       u       u       u         Iditional       Iditional course information       the excises (30 hours). All forms of education are obligatory, and the participation of<br>udents will be monitored regularly.         the teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to<br>effne problems and reasoning).         eminars consist of seminar work and quizzes. For seminar work each student will get their own topic and presentation<br>ill be graded from 1-5. This mark will be evaluated as 10% of grade. All 16 seminars will finish with quiz (10 question per<br>minar). Maximal number of points can be 160 (16 seminars). These points will be evaluated as 10% of final grade<br>cording to the key: 91 – 110 – pass; 111 – 120 – good; 121 – 140 – very good; 141 - 160 – excellent.         +52 – sufficient<br>+62 – good<br>+71 – very good<br>+20 – excellent  |               |                           |           |           |  |           |               |                |        |           |            |        |
| medicine.       Blackwell<br>Science, 1997.<br>Oxford, UK (Sth and<br>17th chapter)       x       x       x         iditional       Alberts B et. all.<br>Essential Cell Biology,<br>New York, Garland<br>Science, 3/e, 2009       x       x       x       x         Turnpenny P, Ellard S.<br>Emery's Elements of<br>Medical Genetics.<br>14th edition, Elsevier<br>Churchill Livingstone,<br>Edinburgh 2011.       u       u       u       u       u         iditional course information       u   |               |                           |           |           |  |           |               |                |        |           |            |        |
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| 17th chapter)       x       x       x         Iditional       Alberts B et. all.<br>Essential Cell Biology,<br>New York, Garland<br>Science,3/e, 2009       x       x       x         Turnpenny P, Ellard S.<br>Emery's Elements of<br>Medical Genetics.<br>14th edition, Elsevier<br>Churchill Livingstone,<br>Edinburgh 2011.       u   |               | -                         |           |           |  |           |               |                |        |           |            |        |
| Iditional       Alberts       B       et. all.       x <td></td>  |               |                           |           |           |  |           |               |                |        |           |            |        |
| Essential Cell Biology,<br>New York, Garland<br>Science,3/e, 2009       Image: Color of the second se  | Additional    |                           |           | v         |  | V         |               |                | v      |           |            |        |
| New York, Garland<br>Science,3/e, 2009       Image: Science,3/e, 2009         Turnpenny P, Ellard S.<br>Emery's Elements of<br>Medical Genetics.<br>14th edition, Elsevier<br>Churchill Livingstone,<br>Edinburgh 2011.       Image: Science, 3/e, 2009         Iditional course information       Image: Science, 3/e, 2009       Image: Science, 3/e, 2009         Iditional course information       Image: Science, 3/e, 2009       Image: Science, 3/e, 2009         Iditional course information       Image: Science, 3/e, 2009       Image: Science, 3/e, 2009         Inthe explanation: The course of Medical biology is performed during the first semester in the form of lectures (45 bours), seminars (35 hours) and exercises (30 hours). All forms of education are obligatory, and the participation of udents will be monitored regularly.         The teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to science problems and reasoning).         Imminars consist of seminar work and quizzes. For seminar work each student will get their own topic and presentation ill be graded from 1-5. This mark will be evaluated as 10% of grade. All 16 seminars will finish with quiz (10 question per iminar). Maximal number of points can be 160 (16 seminars). These points will be evaluated as 10% of final grade cording to the key: 91 – 110 – pass; 111 – 120 – good; 121 – 140 – very good; 121 – 140 – very good; 121 – 140 – very good; 141 - 160 – excellent.         I-52 – sufficient       I-62 – good       I-71 – very good       I-44 – very good       I-41 – very good       I-42 – science       I-44 – very good       I-40 – very good <td< td=""><td>Auditional</td><td></td><td></td><td>^</td><td></td><td>^</td><td></td><td></td><td>^</td><td></td><td></td><td></td></td<>  | Auditional    |                           |           | ^         |  | ^         |               |                | ^      |           |            |        |
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| Churchill Livingstone,<br>Edinburgh 2011.       Image: Churchill Livingstone,<br>Edinburgh 2011.         additional course information         wrther explanation: The course of Medical biology is performed during the first semester in the form of lectures (45<br>bours), seminars (35 hours) and exercises (30 hours). All forms of education are obligatory, and the participation of<br>udents will be monitored regularly.         we teacher evaluates the student's participation in the seminar (demonstrated knowledge, understanding, ability to<br>effine problems and reasoning).         erminars consist of seminar work and quizzes. For seminar work each student will get their own topic and presentation<br>ill be graded from 1-5. This mark will be evaluated as 10% of grade. All 16 seminars will finish with quiz (10 question per<br>minar). Maximal number of points can be 160 (16 seminars). These points will be evaluated as 10% of final grade<br>tcording to the key: 91 – 110 – pass; 111 – 120 – good; 121 – 140 – very good; 141 - 160 – excellent.         etc2 – sufficient<br>8-62 – good<br>8-71 – very good<br>2-80 – excellent   |               | Medical Genetics.         |           |           |  |           |               |                |        |           |            |        |
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| 8-62 – good<br>8-71 – very good<br>2-80 – excellent   | final grade.  |                           | ,   -     |           | ,  |           |               | -,             |        |           |            |        |
| 3-71 – very good<br>2-80 – excellent  | 44-52 – suffi | icient                    |           |           |  |           |               |                |        |           |            |        |
| 2-80 – excellent  | 53-62 – good  |                           |           |           |  |           |               |                |        |           |            |        |
|   | ,             | 0                         |           |           |  |           |               |                |        |           |            |        |
| nal mark: seminar work (10% of grade) + seminar quizzes (10% of grade) + written exam (80 % of grade).  |               |                           |           |           |  |           |               |                |        |           |            |        |