**AL-FARABI KAZAKH NATIONAL UNIVERSITY**

**Medicine and Health Care Faculty**

**Higher School of Medicine**

**Department of Fundamental Medicine**

**Map of discipline provision with educational literature**

**“Molecular Biology and Bioorganic Chemistry”**

**(5 credits)**

**Fall semester, academic year 2022-2023**

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| --- | --- | --- | --- | --- |
| **N** | **Name of subjects (main/ elective)** | **The name of the literature available in the library/quantity, year of publication in Kazakh / Russian / English** | **Number of students** | **Amount of literature** |
| **Main literature** | **additional literature** |
| **kaz** | **rus** | **eng** | **kaz** | **rus** | **eng** |
| 1 | Molecular Biology and Bioorganic Chemistry | Bruce Alberts, Alexander Johnson, Julian Lewis, David Morgan, Martin Raff, Keith Roberts, Peter Walter; with problems by John Wilson, Tim Hunt. Molecular biology of the cell. 6th ed. 2015. Garland Science. ISBN 978-0-8153-4432-2 (hardcover) -- ISBN 978-0-8153-4464-3 (paperback) |  |  |  | EV\* |  |  |  |
| 2 | Harvey Lodish, Arnold Berk, Chris A. Kaiser, Monty Krieger, Anthony Bretscher, Hidde Ploegh, Angelika Amon, Kelsey C. Martin. Molecular cell biology. 8th ed. 2016. WH Freeman. ISBN-13: 978-1-4641-8339-3;ISBN-10: 1-4641-8339-2 |  |  |  | 20 / EV\* |  |  |  |
| 3 | John McMurry, et al. Fundamentals of General, Organic, and Biological Chemistry, 8th Edition. 2018. Pearson Education Limited. |  |  |  | EV\* |  |  |  |
| 4 | Soderberg Timothy. Organic Chemistry with a Biological Emphasis. Volume I, II 2016. Chemistry Publications. |  |  |  | EV\* |  |  |  |
| 5 | Azimbayeva, Gulnur Toleugaziyevna. Organic Chemistry [Text]: textbook / Gulnur Toleugaziyevna Azimbayeva; Ministry of Education and Science of the Republic of kazakhstan. - Almaty: Association of Higher Educational Institutions of Kazakhstan, 2016. - 313 p.: tab. - Bibliogr.: p. 313. - 1200 (circulation) экз. - ISBN 978-601-7529-86-4 |  |  |  |  |  |  | 20 |
| 6 | Jenis, Janar. Chemistry of Natural Compounds [Text]: educational man. / J. Jenis; Al-Farabi Kazakh National University. - Almaty: Qazaq university, 2016. - 133, [1] p.: tab. - Bibliogr.: p. 123-133. - ISBN 978-601-04-1691-8 |  |  |  |  |  |  | 40 |
| 7 | Peter J. Russell, iGenetics A Molecular Approach. Third Edition. Pearson Education Limited 2014. ISBN 10: 1-292-02633-2. ISBN 13: 978-1-292-02633-6 |  |  |  |  |  |  | EV\* |
| 8 | Karp G. Cell and molecular biology. Concepts and experiments. 7th ed. 2013. Wiley. ISBN-13 978-0-470-48337-4 |  |  |  |  |  |  | EV\* |
| 9 | Hartwell L. et al. Genetics. From genes to genomes. 4th ed. 2011. McGraw Hill. |  |  |  |  |  |  | EV\* |
| 10 | Zhussupova, Aizhan Izbasarovna. Molecular Biology (Interdisciplinary Approaches in Teaching and Research) [Text]: educational man. / A. I. Zhussupova, Z. G. Aytasheva, R. A. Islamov; Al-Farabi KazNU. - Almaty Qazaq university, 2016. - 197, [1] p.: il. - Bibliogr. at the end of sec. - ISBN 978-601-04-1809-7 |  |  |  |  |  |  | 10 |
| 11 | Iminova, Rizvangul Sinyasulkyzy. Organic Chemistry of Aliphatic and Cyclic Compounds: Theory and Practice [Text]: educational man. / R. S. Iminova; Al-Farabi Kazakh National University. - Almaty: Qazaq University, 2018. - 147 p.: il. - Bibliogr.: p. 147. - 80 (circulation) экз. - ISBN 978-601-04-3625-1 |  |  |  |  |  |  | 21 |
| 12 | Jenis, J. Study Guide and Practice Tests for Organic Chemistry (Organic Compounds of Aliphatic Series) [Text]: educational-methodical handbook / Janar Jenis, Rizvangul Sinyasulkyzy Iminova; Al-Farabi KazNU. - Almaty: Qazaq university, 2017. - 103 p. - 130 (circulation) экз. - ISBN 978-601-04-2331-2 |  |  |  |  |  |  | 60 |
| 13 | Seitenova, G. Zh. Organic Chemistry [Text]: textbook / G. Zh. Seitenova, M. O. Turtubayeva; Ministry of Education and Science of the Republic of Kazakhstan. - Almaty: Association of Higher Educational Institutions of Kazakhstan, 2016. - 213 p.: il. - Bibliogr.: p. 213. - 1000 (circulation) экз. - ISBN 978-601-7529-99-4 |  |  |  |  |  |  | 21 |
| 14 | Kudaibergenova, Bates Malikovna. Organic Chemistry [Text]: educational man. / B. M. Kudaibergenova; Al-Farabi Kazakh National University. - Almaty: Qazag University, 2019. - 100 (circulation) экз. Pt. 1-2. - 322 p.: tab. - Bibliogr.: p. 321. - ISBN 978-601-04-4020-3 |  |  |  |  |  |  | 15 |

\*EV – electronic version