thereof, recalling personalized the proper completion of the same, and offering guidelines for use of resources technological or responding to problems raised by each user.

#### Literature

1. Deconstructing disengagement: Analyzing learner subpopulations in Massive Open Online Courses. Paper presented at LAK13 / R.F. Kizilcec, C. Piech, E. Schneider // 2013. – Leuven, Belgium.

2. Lang, S. Replicating and Extending Dialogic Aspects of the Graduate Seminar in Distance Education // S. Lang. – 2005. – Online Education, Amityville, New York: Baywood Publishing Company Inc.

3. Johnson, D. W. Student-student interaction: The neglected variable in education. Educational Research / D. W. Johnson // -1981. - 10, 5-10.

4. Realigning Higher Education for the 21st-Century Learner through Multi-Access Learning. Journal of Online Learning and teaching. -2013. -9(2).

5. The development of virtual learning communities. In. S. R. Hiltz & R. Goldman, Asynchronous Learning Networks: The Research Frontier. New York: Hampton Press / K. Swan, P. Shea // 2005. – pp. 239–260.

6. Interactivity in a Webconference training context: Effects on trainers and trainees, Communication Education / K. K. Stephens, T. P. Mottet // 2008. – 57(1). – 88–104.

# THE POSSIBILITIES OF ORGANIC CHEMISTRY SELF-STUDY BY STUDENTS OF PHARMACY EXTERNAL FORM OF EDUCATION

### L. M. Antypenko

Organic and Bioorganic Chemistry Department, Zaporizhzhya State Medical University

The most of the Organic Chemistry program for external Pharmacy students is focused on independent study. So, students are often left to choose their own courses in order to gain valuable experience. Graduates may build careers in academia or pursue advanced research positions in the private sector. Among the most popular career option usually is Pharmacist, but the Diploma allows to work as General, Research, Industrial, Production and Forensic chemist, as well as educator or Government regulator.

The intent of this paper was to surf the internet to form the list of the sites with free organic chemistry lessons, to be used as self-sustainable personal development in organic chemistry for students, teachers and chemists to enlarge their professionalism.

There are presented different courses: as introductory for students with limited background in chemistry, so more sophisticated chemical studies. Even sometimes, there is opportunity to receive a certificate signed by the instructor after successful graduation the lessons.

The information could be found at:

- 1. https://www.coursera.org/course/chem99
- 2. http://ocw.mit.edu/courses/chemistry/

3. http://study.com/articles/List\_of\_Free\_Online\_Organic\_ Chemistry\_Courses\_Classes\_and\_Learning\_Materials.html

4. http://www.openculture.com/chemistry-free-courses

5. http://academicearth.org/chemistry/

6. http://ocw.uci.edu/collections/open\_chemistry.html

7. https://ps.uci.edu/content/openchemistry-lectures

8. http://www.learnerstv.com/Free-Chemistry-Video-lectures-ltv327-Page1.htm

9. http://www.skilledup.com/articles/learn-chemistry-online-free

10. https://www.edx.org/course/subject/chemistry

11. https://itunes.apple.com/us/itunes-u/organic-chemistry-video/id341651370?mt=10

12. https://alison.com/courses/Chemistry-1

13. https://legacy.saylor.org/chem201/Intro/

14. http://als.csuprojects.org/free\_online\_courses

Besides there is free chemistry books site:

http://www.freebookcentre.net/Chemistry/Organic-Chemistry-Books.html

Moreover, one can find lots of other interesting and fascinating other information, when searching the above mentioned sites, during lifelong learning.

## FORMATION OF PROPHYLACTIC THINKING IN STUDENTS OF THE MEDICAL FACULTY

### E. Beletskaya, E. Antonova

### State Establishment «Dnipropetrovsk Medical Academy of Health Ministry of Ukraine»

An integral part of the learning process of medical students and their comprehension of basics of medical skills lies in forming of hygienic thinking in dialectical understanding of the unity of the human body and the environment. This will contribute to the competence of future physicians for proper assessment of the impact of factors of natural and social environment on the health of each individual and population as a whole. Academician I.P. Pavlov wrote: «Only having known all the causes of diseases, modern medicine turns into medicine of the future, ie, hygiene more broadly». Basic knowledge of hygiene and human ecology helps clinicians to better navigate the issues of hygienic diagnostics which enables to set changes in the human condition in the preclinical (prepathological) level as well as adequately treat and develop recommendations for patients about points of regimen, nutrition, physical activity, healthy lifestyle. Besides, based on the basic knowledge of human hygiene and ecology, medical doctor will be able to competently participate in the dissemination of hygienical and ecological knowledge among the population to improve sanitary culture and health promotion.