Course title	ECTS code
Seminar II - Experimental publications in molecular biology and biotechnology (KBMiK)	13.1.0234

Name of unit administrating study

Teaching staff

prof. dr hab. Jarosław Marszałek; prof. dr hab. Igor Konieczny

Studies

faculty	field of study	type	form	specialty	specialization	semester
Intercollegiate Faculty of Biotechnology UG-MUG	Biotechnology	second tier studies (MA)	full-time	all	all	2

Forms of classes, the realization and number of hours

Forms of classes

Seminarium (to translate)

The realization of activities

lectures in the classroom

Number of hours

Seminarium (to translate): 30 hours

ECTS credits

5

The academic cycle

2013/2014 summer semester

Type of course

- elective (to translate)
- obligatory

Language of instruction

english

Teaching methods

ćwiczenia audytoryjne - analiza tekstów z dyskusją (to translate)

Form and method of assessment and basic criteria for eveluation or examination requirements

Final evaluation

Zaliczenie na ocenę (to translate)

Assessment methods

Course completion (graded)

The basic criteria for evaluation

Graded presentation
Final grade based on constituent grades obtained during the semester

Required courses and introductory requirements

A. Formal requirements

B. Prerequisites

Biochemistry, Molecular Biology, Microbiology, Biophysics, General Chemistry, Organic Chemistry, Genetics

Aims of education

Depending on the specific cycle of the discussed publications, seminar participants should acquire factographic and methodological knowledge concerning a given research issue, e.g. molecular mechanisms responsible for the functions of Hsp70 chaperone proteins (K_W03)
Seminar participants should acquire an ability to review published research results on the basis of text publication and presentation of results in the form of charts and tables (K_U03).They should be able to present briefly and logically the results of particular experiments. They should acquire an ability to explain in brief the methodological basis of published research and to present the research methods and results by means of schemes drawn on the blackboard (K_U06). They should be able to critically discuss the published results and ask questions concerning their significance (K_U07)
Seminar participants should acquire an ability to present the results in the presence of other people, including the course tutor. They should be able to answer questions concerning the content and the presentation itself. They should be able to defend their point of view and respond to critical comments concerning their presentation. They should be involved in the classes, they should actively ask questions aiming at an improvement of the presentation quality and express their doubts regarding the quality of the presented results and their significance (K_K03).

Course contents

Publications discussed during the seminar concern contemporary biomedical research conducted by means of molecular, biochemical, biophysical

and genetic techniques. The discussed publications constitute a logical sequence of research concerning some specific problem. For example, publications can concern the molecular basis of the functioning of chaperone proteins or molecular mechanism of the process of iron-sulfur center biogenesis. There are discussed 'classical' papers which initiated some research directions as well as contemporary publications that show which research techniques are used nowadays. The discussed publications are selected by the tutor in such a way as to embrace a wide range of research techniques.

Bibliography of literature

The course tutor prepares for the first class a set of around 10 publications for the students to access. At the same time students obtain bibliography of accessible review papers which they have to access individually and read in order to get acquainted with a wider context of research discussed in the seminar. The course tutor encourages students to search bibliography on their own giving them key words connected with the subject discussed during the seminar.

The learning outcomes

K_W03
K_U03
K_U06
K_U07
K_K03

Knowledge

K_W03 - Possesses knowledge in the field of selected issues currently discussed in biotechnological literature and problems concerning related scientific areas and disciplines significant for biotechnology

Skills

K_U03 - Knows the English language to an extent that allows him/her to understand an utterance and read with understanding scientific literature and simple reviews in the fields of science and scientific disciplines connected with biotechnology; can prepare a short written review and an oral presentation in English, concerning particular issues of biotechnology and related scientific areas and disciplines

K_U06 - Uses scientific language, including specialist terminology and notional apparatus proper for biotechnology and related areas and disciplines

K_U07 - Can prepare and present in Polish and/or English a short oral presentation concerning particular issues in the field of biotechnology and related areas and disciplines; has an ability to participate in a discussion

Social competence

K_K03 - Effectively plans his/her work, professional career, organizes his/her work, in particular in the lab or concerning reviews in the field of biotechnology and related scientific areas and disciplines

Contact

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