

EDUCATIONAL PROGRAM

OBLIGATORY COURSES

Discipline	Lectures	Laboratory classes	Credits
Viral replication	45	45	8
Medical Virology	45	60	9
Natural foci of transmissive infections	30	15	6
Phages and lysogeny	30	30	5
Regulation and control of immune response	30	15	5
Therapy and prophylaxis of viral diseases	45	15	8
Phyto-viruses	30	45	8
Vaccines – general principles and viral vaccines	15	15	3
Pre-diploma practicum		450	15

OPTIONAL COURSES

Discipline	Lectures	Laboratory classes	Credits
Cell cultures	15	30	4
Modeling of biological membranes	30	15	4
Viral inhibitors with natural origin	15	15	4
Viral Evolution	30	15	4
Arthropoda – as viral vectors	15	15	4
Mammals and birds – viral carriers in animals and humans	30	15	4
Helminths and viruses transmitted by them in animals and humans	30	15	4

FOR CONTACTS:

Academic affairs of the Faculty of Biology

tel. (+359 2) 8668 712

Head of the Masters Program

tel. (+359 2) 8167 294

Secretary of the Masters Program

tel. (+359 2) 8167 293

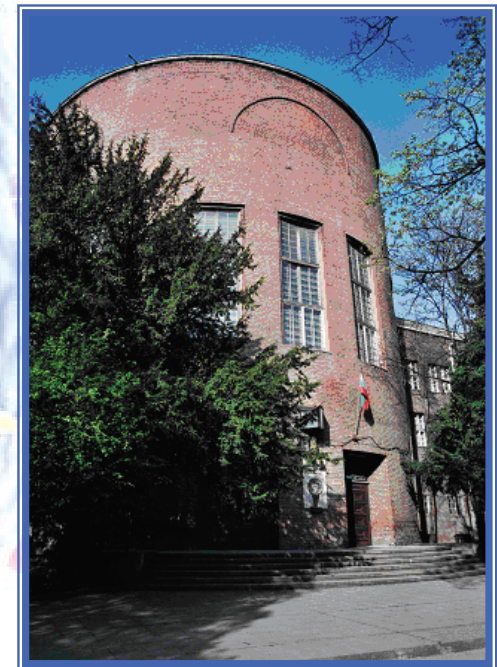
E-mail: sshishkov@biofac.uni-sofia.bg

stoysh@yahoo.com



SOFIA UNIVERSITY
ST. KLIMENT OHRIDSKI
FACULTY OF BIOLOGY

Laboratory of Virology

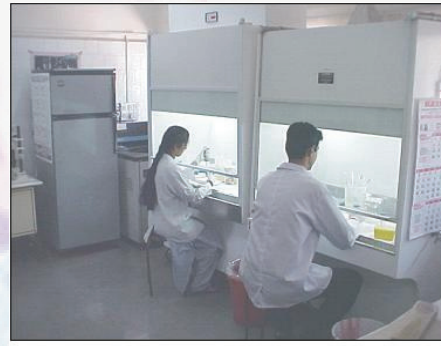


MASTERS
PROGRAM IN
VIROLOGY

QUALIFICATION CHARACTERISTICS

The education plan is built on a consideration of the interdisciplinary character of the problem and provides a profiled complementation of the Natural Sciences knowledge with the appropriate modules. The aim is that the students who have graduated the MASTERS PROGRAM IN VIROLOGY will be able to:

- apply contemporary Virology, Molecular Biology, Immunology and Biology knowledge in order to prove new viral agents, as well as possibilities for overcoming of viral diseases;
- possess an in-depth understanding of the molecular mechanisms of viral replication – a prerequisite for the successful solving of scientific and applied problems;
- to apply contemporary methods of analysis;
- to give a creative interpretation of acquired data;
- to apply their knowledge in biological-medical and agricultural practices, in the production of pharmacological preparations, to participate in the development of high technologies.



Students who have graduated successfully the Program will hold the following competences:

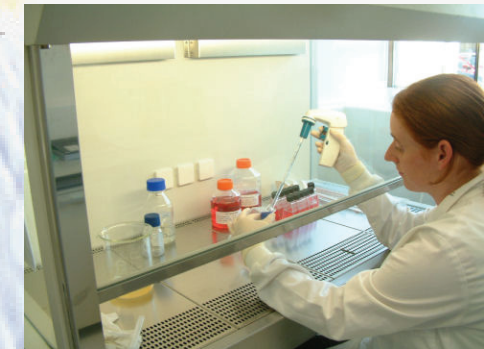
- Application of knowledge and practical skills in working with specialized virology and molecular biology equipment;
- Utilization of state of the art techniques, allowing the isolation of viruses and their identification;
- Studying of the molecular mechanisms of viral replication;
- Investigation of the anti-viral effect of new synthetic preparations as well as ones of plant origin, on objects as cell cultures and laboratory animals;
- Participation in professional and business dialogue with specialists working in the field of virology, biotechnology, pharmacy;
- Active application of practical and theoretical knowledge in the bio-medical, agricultural and pharmacological practice.

The students will be able to find realization in:

- Educational and scientific institutions, conducting fundamental and applied virology investigations;
- Diagnostic medical laboratories;
- Units for the manufacturing and control of biological products;
- Sanitary control institutions.

The Masters Program in Virology aims at enriching and broadening of the knowledge and skills of students in the field of molecular virology of all groups of viruses – human and animal, bacteriophages and plant viruses. The educational process includes an in-depth study of the stages of viral replication, transmission, control, prophylaxis and treatment of viral diseases.

The candidates for the Masters Program must hold the educational qualification Bachelor's degree in the subjects of the professional sphere of Biological sciences.



The duration of education is three semesters. During the first two auditorial and laboratory classes are led. The Program is completed by preparation and defending of a diploma thesis during the third semester.

The educational program includes 9 obligatory disciplines as well as 2 optional, which are selected from 7 disciplines. The preparation is implemented in a module principle, giving the students the knowledge and skills necessary for their professional realization. The education is led with the participation of established specialists from all fields of Virology.

The evaluation of training is based on the European Credit Transfer System (ECTS). The program corresponds to 90 credits.