

THE MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
TOMSK STATE UNIVERSITY
Institute of Biology, Ecology, Soil Science, Agriculture and Forestry



APPROVED BY

Vice-Rector for Academic Affairs

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**Entrance examination program
on subject of Biology 06.04.01
Master's program "Biodiversity"**

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1. General Provisions

1.1. Entrance examination program on the subject of Biology 06.04.01 "Biodiversity" includes an interview. It allows to assess the level of knowledge of applicants to follow the master program.

1.2. The Entrance examination program includes sections corresponding to the state educational standard and it is based on the content of specific biological disciplines.

1.3. This program contains a description of the entrance examination procedure and the criteria for the answers evaluation. Entrance examination is held in English.

1.4. The entrance exam organization and conduction is carried out in accordance with the TSU Rules of admission, approved by the rector's order, acting for the current year of admission.

1.5. The entrant has the right to appeal the results of the entrance examination in accordance with the Admission Rules valid for the current year of admission.

1.6. The Entrance examination program is annually revised and updated taking into account changes in the higher education legislative framework of the Russian Federation and local documents regulating the admission procedure in the TSU. All changes are reviewed and approved at the meeting of the educational and methodological commission of the Biological Institute. The Entrance examination program is approved by the Vice-Rector for Academic Affairs.

1.7. The Entrance examination program is published on the official site of the TSU in the "Master's Courses" section not later than the date specified in the Admission Rules established as valid for the current year of admission. The Entrance examination program is stored in the documents of the Biological Institute.

2. Purpose and objectives of the entrance examination

2.1. Entrance examinations allow to assess the learning preparation of applicants to the master program. They are conducted with the purpose of determining the required competences of the applicant that are necessary for a master program in the subject of "Biology".

2.2. The main objectives of the interview of the master program is an assessment of the knowledge of the applicant to perform professional tasks established by the state educational standard of higher education in the master's program;

Verification of the level of fundamental training in general biology disciplines;

Determining the level of development of abilities for written and oral communication; skills of analysis of basic general professional information, creative qualities and general cultural competences;

Evaluating the level of knowledge of modern experimental methods when working with biological objects in field and laboratory conditions, skills in working with modern equipment.

3. Entrance exam: structure, procedure, program and criteria for evaluating the answers

3.1 Exam procedure

Entrance examinations help to determine the level of knowledge in the field of scientific and professional interests of the applicant, the motives for admission to the master's program, the readiness to conduct analysis, professional experience; specify the proposed research topic.

Entrance examinations shall be conducted in person or via electronic means. Entrance examinations shall be conducted in the form of interviews.

Interview is conducted by the Head of the master's program. The Head of the master's program asked about previous learning experiences and motivation for enrollment to the university.

The total duration of the interview is no more than 30 minutes, taking into account the individual characteristics of the applicant.

The maximum number of points for interview is 100.

The minimum number of points for interview required to participate in the competition for admission to the master's degree is 60. An applicant who has received less than 60 points for an essay is not allowed to further tests and cannot be enrolled in a master program.

3.2 Entrance examination program

Entrance examinations are conducted in order to determine the level of preparation of the applicant on the main professional issues, implemented at the level of the bachelor's degree:

in the sphere of research activities: in the field of wildlife research at all levels of its organization, development and creation of new biological, biomedical, agricultural environmental technologies; nature protection, environmental expertise and monitoring, assessment and restoration of territorial biological resources,

in the sphere of information biological activities: in the field of search and processing of scientific and bibliographic information in the domain of research, work with reference tools.

Contents of the interview program:

1. What prompted you to continue the education in the master's degree in the direction of training 06.04.01 "Biology"?
2. What program within the direction and why do you want to study?
3. What are your expectations from studying for the master's program?
4. What are your professional plans for the future? How can studying for the master's program assist in their implementation?
5. What are your individual scientific achievements? Do you have experience in presenting the results of the scientific activity at conferences? What are the conference rankings?
6. What topic do you intend to research? Do you have a research groundwork?

At an interview on the profile of the master's program, the applicant should demonstrate:

Possession

of the skills of expressing and substantiating one's own position in regard to modern biological problems.

Ability

to set a goal and formulate tasks related to the realization of professional functions; to participate in discussions, to maintain one's own position in a well-argued manner.

Knowledge

of modern biological problems, research methods in the field of biology.

3.3 Assessing the entrance examination

The examination and evaluation of the essay is carried out by the attestation commission acting on the basis of the order of the rector of TSU.

The overall score is defined as the average score exhibited by all members of the attestation commission based on the results of the entrance examination.

Criteria for assessing interview responses

Range of points	Criteria
91–100	The applicant demonstrated the ability to formulate, argue and defend the point of view. Additional questions were answered completely and coherently. A high level of motivation to study according to the profile of the program was demonstrated.
81–90	The applicant demonstrated the ability to formulate, argue and defend the point of view. Some inaccuracies were made in answering additional questions. A high level of motivation to study according to the profile of the program was demonstrated.

71–80	The applicant demonstrated skills of argumentation and defending the point of view. However, not all additional questions were answered completely and coherently. The applicant is fully motivated to study according to the profile of the master's program.
60–70	The applicant showed a level of knowledge sufficient to start training in the basic educational program: knowledge of basic concepts. However, the answers to the main and additional questions were given without completeness and coherence necessary for covering the issue, some inaccuracies were made. The applicant demonstrates a desire to learn according to the profile of the program.
1–59	Significant knowledge gaps of the educational material were found and gross mistakes were made in the answer of the applicant. The applicant responded to additional questions uncertainty and with significant errors. The level of knowledge and motivation does not allow to start training in the basic educational program.
0	The applicant refused to answer questions.

The evaluation of the results of the interview is carried out by the certification commission, acting on the basis of the order of the rector of TSU.

The overall score is defined as the average score given by all members of the attestation commission based on the results of the interview.

4. Recommended literature

1. This Is Biology: The Science of the Living World. Ernst Mayr. The Belknap Press of Harvard University Press, 1997.
2. https://en.wikibooks.org/wiki/General_Biology
3. Biology, Eldra Solomon, Charles Martin, Diana W. Martin, Linda R. Berg, Cengage Learning, 01 gen 2014 - 1440 pages
4. Mackenzie, L., Arwine, D. K., & Shewan, E. J. (2005). Biology: A Search for Order in Complexity. Christian Liberty Press.