MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC

Jalal-Abad State University named after B. Osmonova

Adopted at the meeting of the Academic Council of JASU, protocol No. 5

"31" 01 2059.



Regulations

on electronic educational resources in JASU named after B. Osmonova

1.General provisions

- 1.1. The Regulation on Electronic Educational Resources in B. Osmonova JASU (further-JASU), (further- Regulation) defines the types of electronic educational resources (further- EOR) and the requirements for them.
- 1.2. EOR means materials and tools containing systematized information of an educational nature for any academic course, allowing for an easily accessible search for sections of this course, their study and the possibility of self-assessment, the level of knowledge of the student before and after studying the electronic course, including with the use of distance learning technologies (DLT) and performed within the scope of the job responsibilities of the teachers.
- 1.3. EOR facilitate the organization of independent work, individualization of learning, and activation of students' learning activities.
- 1.4. EOR, created in JASU must:
 - contribute to improving the quality of training of specialists;
 - correspond to the modern scientific and technical level;
 - ensure creative and active acquisition by students of knowledge, skills and abilities, provided for by the goals and objectives of the educational process;
 - be distinguished by a high level of technical execution and design, completeness of information, quality of methodological examples, clarity, logic and consistency of presentation of educational material.
- 1.5. These Regulations have been developed in accordance with the current legislation of the Kyrgyz Republic, existing international standards (IMS, LOM, SCORM, etc.) and the standards of the Kyrgyz Republic in the field of publishing, software documentation, namely:
 - Law of the Kyrgyz Republic, "On informatization", No. 70 of 07.07.2011
 - Law of the Kyrgyz Republic, "On legal protection of programs for electronic computers and databases", (as amended by Law of the Kyrgyz Republic No. 205 of 08.12.2006
 - GOST 7.60-2003. "Interstate standard SIBID. Publications. Main types, terms and definitions"

- GOST 7.83-2001. "Interstate standard SIBID. Electronic publications. Main types and output information."
- ISO/MEK 709294-90. "Information technology. Guide to software documentation management."
- ISO 912 7-88. "Information processing systems User documentation and packaging information for consumer software packages".
- ISO/MEK 8631-89. "Information technology Software constructs and conventions for their representation".
- Charter of the JASU named after B. Osmonova.
- International practice of quality assurance of EUMK.
- 1.1. These Regulations are agreed upon, amended and supplemented in accordance with changes in the current legislation of the Kyrgyz Republic, regulatory acts of the Ministry of Education and Science of the Kyrgyz Republic and JASU.
- 1.2. When deciding on the assignment of the academic title of associate professor and professor, the Academic Council of JASU takes into account educational electronic publications of JASU that have the status of an official electronic educational resource of the Ministry of Education and Science of the Kyrgyz Republic. When deciding on the issue of election by competition to the positions of teaching staff, the Academic Council of JASU takes into account electronic publications as publications that have undergone the approval procedure in the established manner.
- 1.3. Requirements for the form and structure of the JASU EOR are determined in accordance with this Regulation, including the preparation of materials for the electronic educational and methodological complex for full-time and part-time students using DOT forms of education and are approved by the AMC of JASU.

2.Terms and definitions

- 2.1. Electronic educational resource: a set of educational and teaching materials presented in the form of a specific information technology structure that is convenient for study and use in the learning process.
- 2.2. Information technology design of the EOR: the result of a complex of technological processes for preparing electronic educational resources and the software and technological tools involved, ensuring the operability of electronic educational resources using possible functional properties (reference relationships hyperlinks, interactive elements, search, multimedia properties, and others).
- 2.3. Content EOR: (from the English content content, essence): information that is logically connected and presented in a form aimed at the direct perception of students.
- 2.4. Multimedia component EOR: an integral part of and EOR, resource that implements a combination of several types of information (text, infographics, graphics, audio materials, video materials and animation), which simultaneously affect several channels of student perception.

- 2.5. Interactivity: (from English Interactive interaction): the ability of an EOR to actively and diversely respond to the actions of a student without the participation of a teacher(navigation through content elements; multiple selection from content elements; scaling and/or spatial orientation of objects; organizing searches by content, etc.).
- 2.6 Electronic learning: organization of educational activities using information contained in databases and used in the implementation of educational programs and information technologies that ensure its processing, technical means, as well as information and telecommunication networks that ensure the transmission of the specified information via communication lines, and the interaction of students and teaching staff.
- 2.7. Distance educational technologies (DET): educational technologies implemented mainly using information and telecommunication networks with indirect (at a distance) interaction between students and teaching staff.
- 2.8. Information and training system (ITS): an information system accessible in network mode, operating in interactive form, providing shared access to electronic educational resources with the ability to control the mode and statistics of their use in the educational process. ITS allows for the formation of an individual learning trajectory.
- 2.9. Control and measuring materials (CMM): a set of tools for assessing knowledge and skills that allows one to evaluate (expertly or automatically) the level of acquisition of knowledge and acquired skills by a student.
- 2.10. Derivative EOR: resources that reproduce in electronic form some printed publication or audiovisual product
 - 3. Types of electronic educational resources
- 3.1. From the point of view of the methodology of using electronic educational resources in the educational process, this Regulation divides the resource into:
 - main EOR- resources used for the direct implementation of the educational process;
 - organizational EOR resources used to organize the educational process.
- 3.2. Basic electronic educational resources.
- 3.2.1. Electronic book.
- Methodological aspect: an educational publication containing a systematic presentation of an academic discipline, corresponding to its curriculum and its name in the curriculum and officially approved as this type of publication.
- Minimum composition: structured theoretical material that allows you to master the required competencies; control and measuring materials; glossary of terms; information and reference materials; list of primary and secondary literature.
- Technical implementation: a publication prepared using hypertext technology with the use of multimedia components and posted on the educational portal of AVN JASU or on other resources.

3.2.2. Electronic teaching aid.

- Methodological aspect: an educational publication that supplements or partially (completely) replaces a textbook, officially approved by the Statement of the ME and S of the KR as this type of publication and containing a systematic presentation of an academic discipline (a certain section), corresponding to the curriculum of the discipline.
- Minimum composition: theoretical material; control and measuring materials; glossary of terms; information and reference materials; list of primary and secondary literature.
- Technical implementation: a publication prepared using hypertext technology, using multimedia components and posted on the educational portal of AVN JASU or on other resources.

3.2.3. Electronic course of lectures.

- Methodological aspect: an educational publication, which is a set of lectures covering the content of the curriculum of the discipline.
- Minimum composition: lecture plan; theoretical material; bank of control and measuring materials, divided by topic.
- Technical implementation: a publication prepared using hypertext technology, with the use of multimedia components and/or with the help of visual graphic representations (slides) and posted on the educational portal of AVN JASU.

3.2.4. Electronic reader.

- Methodological aspect: an educational publication containing literary, artistic, historical and other works or excerpts from them, which constitute the object of study of the academic discipline.
- Minimum composition: theoretical material; control and measuring materials; information and reference materials.
- Technical implementation: a publication prepared using hypertext technology, using multimedia technologies and posted on the educational portal of AVN JASU.

3.2.5. Electronic reference materials.

• Methodological aspect: an educational publication containing brief information of a scientific and applied nature. In technical terms, it is a publication prepared using hypertext technology using multimedia components and posted on the educational portal of AVN JASU.

3.2.6. Electronic simulator.

- Methodological aspect: educational publication designed to develop and consolidate practical skills obtained as aresult of mastering theoretical material
- Technical implementation: a set of modeling programs and methodological tools prepared using multimedia components and posted on the educational portal of AVN JASU.

3.2.7. Electronic practical training.

• Methodological aspect: a textbook containing practical assignments and exercises that facilitate the assimilation of the theoretical material covered. This type of EOR includes:

virtual laboratory practical training (VLP), automated laboratory practical training (ALP).

- Minimum composition: brief theoretical information; a set of software tools; hardware and software complexes (HSC) (laboratory installations, specially connected to a personal computer); software that generates report structures for laboratory work; control and measuring materials; methodological instructions prepared using traditional technology, in which reflects the technology of interaction between a student and a teacher during the laboratory practical training.
 - Technical implementation:
- virtual laboratory workshop implemented on the educational portal of AVN JASU a set of software tools that ensure the implementation of laboratory work carried out using a set of mathematical models formed and studied using modeling programs;
- automated laboratory practical training implemented on the educational portal AVN JASU a set of software and hardware tools that ensure the implementation of laboratory work based on the HSC;
- automated laboratory practical training with remote access (ALP UD) implemented on the educational portal AVN JASU a set of software and hardware tools that ensure the implementation of laboratory work based on a hardware and software complex (HSC). In this case, access to the HSC is carried out via the Internet.
- 3.2.8. Electronic educational and methodological complex (EEMC).
- Methodological aspect: this is a set of educational publications intended for a certain level of training and including a textbook, a teaching aid, and educational and methodological materials.
- Minimum composition: Working curriculum of the discipline; theoretical material (book or teaching aid and/or reader and/or lecture course); laboratory practical training (automated or virtual); guidelines for course design and organization and implementation of independent work, control and measuring materials; additional information and reference materials; syllabus glossary, interactive schedule for studying the discipline, conducting independent work and passing checkpoints; methodological instructions prepared using traditional technology, which reflect the technology of interaction between the student and the teacher in the process of using the electronic educational and methodological complex.
- Technical implementation: publication prepared using hypertext technology, using multimedia components and posted on the educational portal of AVN JASU.
- 3.3. Organizational electronic educational resources.
 - 3.3.1. Working curriculum.
- Methodological aspect: a publication that defines the content, volume, and also the procedure for studying and teaching any academic discipline (its section, part).
 - 3.3.2. Control and measuring materials.

• Methodological aspect: The electronic fund of control and measuring materials for assessing knowledge is a resource containing a set of tasks, organized in the form of a database, with various types of presentation of questions, practical tasks and exercises, generated and

checked in electronic form and the corresponding actions of the student (in particular, answer options) in accordance with a specific subject area of knowledge.

- Technical implementation:
 - instructions that reflect the order of actions of the student;
- a database containing assessment materials for knowledge assessment (for example, questions and related answer options) with a structure corresponding to the structure of discipline sections
- a computerized knowledge testing system that works with a database of assessment aterials for knowledge assessment;
 - a navigation system.
- 3.3.3. Electronic educational and methodological materials.
- Methodological aspect: a publication containing materials on the methods of teaching, studying an academic discipline (its section, part) or education.
- Technical implementation: publication prepared using hypertext technology, with the use of multimedia components, included in the database of the educational portal AVN JASU
- 3.3.4. The initial components for the creation of ESM
- Methodological aspect: components designed to demonstrate the studied individual phenomena, processes, etc. and contribute to the assimilation of the theoretical material.
 - Technical implementation:
- realistic visuals: photographs of exhibits, objects of the subject area, demonstrations of experiments, video excursions and others;
- synthesized visuals: two- and three-dimensional static and dynamic models; animations; representations of imaginary elements, objects, hidden structures, processes, phenomena of subject area; objects of virtual reality and interactive modeling;
- sound series: sound recordings of speeches, musical works, sounds of living and non-living nature and others, as well as synchronized audio and video objects; symbolic objects and business graphics: diagrams; charts; maps; explanatory texts; formulas; headings and other elements, including those created by the user using standard applications, cartographic materials;
- genealogical trees.
- 3.3.5. These Regulations define the following categories of electronic educational resources:

• local electronic publication: a publication intended for local use within the corporate computer network (CCN) of the university.

Network electronic publication: a publication accessible to a potentially unlimited number of users through telecommunications networks both within the CCN, and on the Internet.

- Electronic publication of combined distribution: a publication that can be used both as a local resource and as a network resource.
- 3.3.6. These Regulations permit the use of individual components of the electronic educational resource (individual sections of theoretical material (chapters, paragraphs), lectures, laboratory work, etc.) in the educational process and posting on the educational portal AVN JASU, subject to their compliance with this Regulation in terms of fulfilling methodological, content and technical requirements, without mandatory registration.

4. Requirements for types of electronic educational resources and their components

- 4.1 Basic requirements for electronic educational resources:
 - availability via information and telecommunications networks, including the Internet, around the clock;
 - accessibility via a single service (the student's "personal account");
 - demand for electronic educational resources by students during the educational process;
- 4.2 The development of the EOR is carried out taking into account the requirements of educational standards (state educational standards of higher education), as well as taking into account the requirements of the curriculum of the discipline.
- 4.3. The development of the EOR is carried out using software and technological tools

5. Using EOR in the educational process

- 5.1. The placement of the electronic educational resources is carried out on the basis of:
 - AVN. JASU-educational portal AVN. B. Osmonov JASU.
 - Jasulib.org.kg Educational and scientific library and information center (scientific library) (ESLIC) (SL) B. Osmonov JASU.
- 5.2. A necessary condition for the demand for EOR in the educational process is:
 - the presence of students and teachers who use EOR (access educational materials, complete educational assignments, use means of interaction with the teacher and other means provided by the resource)
 - the presence of the EBBR fund

6. Formation of the EOR fund

- 6.1. The preparation of the content of the EOR is carried out in accordance with the requirements for the preparation of the teaching and methodological kit for university students and the requirements for the preparation of the EOR.
- 6.2. Individual teachers and staff of JASU, creative teams of teachers and staff, and, if necessary, third-party contractors may participate in the development of the EOR.
- 6.3. Development of the electronic educational resource in JASU can be carried out: by teachers within the framework of the methodological work provided for in their individual work plans.
- 6.4. In order to determine the needs for electronic educational resources, the educational and methodological councils of the faculties (EMC) conduct an analysis of the availability of electronic educational resources for disciplines, which is carried out in close cooperation with the Educational Department (hereinafter referred to as the ED) of JASU and using information on existing and developed electronic educational resources.

7. Amendments and additions to this Regulation

7.1. Changes and additions to this Regulation are approved by the rector JASU, upon the submission of the vice-rector for Academic Affairs, the Chairman AMC of the JASU.

Vice-rector for Academic Affairs of JASU:	Alıbaev A.P.

Director of the ESLIC (scientific library) of JASU: Kultaeva R.T.