



MINISTRY OF EDUCATION AND SCIENCE OF RUSSIA
FSBEI HE "Chelyabinsk State University"

Institute of Education and Practical Psychology
Department of General and Professional Pedagogy

Work program of the course (module) 2.1.3.2. "Pedagogy and Psychology of Higher Education"
Scientific specialty – 1.1.2. Differential equations and mathematical physics
Direction - Differential equations and mathematical physics



APPROVED

Vice-rector for Scientific Affairs

A.I. Biryukov

« 24 » 02 2025

WORKING PROGRAM OF THE COURSE (MODULE)*

2.1.3.2 «Pedagogy and Psychology of Higher Education»

Scientific specialty – 1.1.2. Differential equations and mathematical physics

Direction - Differential equations and mathematical physics

Higher education – training of highly qualified personnel

Mode of study: Full-time

Chelyabinsk, 2025

* The work program of the course (module) is adapted for inclusive education of disabled people and people with disabilities



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The program for the course «Pedagogy and Psychology of Higher Education» is compiled in accordance with the passport of the scientific specialty 1.1.2. Differential Equations and Mathematical Physics and federal state requirements (level of education: higher education - training of highly qualified personnel), approved by order of the Ministry of Science and Higher Education of the Russian Federation dated October 20, 2021 No. 951.

Program developers:

Head of the Department of General
and Professional Pedagogy,
Candidate of Pedagogical Sciences, Docent

S.A. Kurnosova

The program was approved at the meeting of the Department of General and Professional Pedagogy on January 29, 2025, protocol No. 5.

The program was approved at the meeting of the Institute of Education and Practical Psychology on February, 2025, protocol No. 8.

APPROVED

/ Director of the Institute of Education
and Practical Psychology

I.A. Trushina

Head of the Department of General
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Head of the Department of
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Program summary: the discipline 'Pedagogy and Psychology of Higher Education' assumes mastering by postgraduates of knowledge about the structure and content of higher education, mastering of abilities and skills to design and implement training and education in the educational process of higher education and is focused on the formation of psychological and pedagogical thinking, in particular, assumes:

- a) assimilation of the idea of uniqueness and inimitability of each person, his psychological make-up and, as a consequence, the idea of inadmissibility for the pedagogue of purely prescriptive actions;
- b) attitude to the personality as the highest value, excluding manipulation of a person and using him/her as a means of achieving other goals;
- c) formation of ideas about the active, creative character of the human psyche;
- d) the recognition of human relations with other people as the main driving force and, at the same time, the source of new formations of the individual psyche.

1. Objectives and tasks of mastering the course

Objectives of the course:

The objectives of mastering the discipline 'Pedagogy and Psychology of Higher Education' are: the formation of a system of knowledge of its purpose and essence, content and structure of higher education, the principles of management of educational processes in higher education and legal issues of the functioning of the education system; the formation of skills to design the goals and objectives of education and training for different groups of students, to analyse and apply in practice the current educational standards and programmes; development of readiness to prepare educational and methodical materials, apply modern methods, organisational forms and technologies of education, training and assessment of the quality of learning outcomes.

Course tasks:

1. To familiarise with modern interpretations of the subject of pedagogical science, the subject of pedagogy and psychology of higher education. To outline the main trends in the development of higher education at the present stage.
2. To give an idea of the history and current state of higher education in Russia; to familiarise with the main approaches to determining the final and intermediate goals of higher education, methods of their achievement (methods of teaching and education); to give means to ensure pedagogical control (including tests) over the effectiveness of educational work and the achievement of pedagogical goals.

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3. To form the attitude to the constant search for applications of philosophical, socio-economic, psychological and other knowledge to the solution of problems of teaching and education.
4. To promote deep assimilation of the norms of professional ethics of a higher school teacher, understanding of his/her responsibility to students, establishment of partnership and interaction with the subjects of the educational space.
5. To get an idea of the specifics of professional labour of a higher school teacher

2. The place of the course in the structure of the educational program

The discipline "Pedagogy and Psychology of Higher Education" is optional. The discipline is taught in the second year (3rd semester). The total workload of the course, including midterm assessment, is 2 credit unit/72 hours, of which contact work with the teacher is 0.67 credit units/24 hours (lectures - 12 hours, practical - 12 hours), independent work - 1.27 credit units/46 hours, control - 0.06 credit units/2 hours.

To master the discipline, the student must have a basic humanitarian training and skills of modern computing facilities. The student must have skills of analytical work, as well as master the basic concepts of social sciences.

The discipline "Pedagogy and Psychology of Higher Education" is designed to help postgraduates master the skills and knowledge necessary for preparation for the Candidate's Examination, research work, including the fulfilment of the Candidate's thesis.

Requirements for the "entry" knowledge, skills and experience of the student, necessary when studying the course

Know	Be able to	Possess
ethical norms in the professional activity of a teacher	identify and formulate ethical problems of professional activity, based on the analysis of documents reflecting the requirements of society to the professional activity of a teacher, researcher	methods of assessment and self-assessment of ethical standards in solving professional tasks
main development trends in the relevant field of science	select material characterising the achievements of science, taking into account the specifics of the training direction	methods and technologies of interpersonal communication, public speaking skills

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teaching and methodological support in education	develop regulatory documentation	paperwork skills
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3. Requirements for the results of mastering the content of the course

Learning outcomes for the course	
know	the content of the process of goal-setting of professional and personal development, its peculiarities and ways of implementation in solving professional tasks, based on the stages of career development and labour market requirements
	normative-legal bases of teaching activity in the system of higher education; innovative trends in the world practice of education
be able to	formulate the goals of personal and professional development and the conditions for their achievement, based on the trends in the field of professional activity, stages of professional growth, individual and personal characteristics
	to select and use optimal teaching methods
	to develop ways and means of further improvement of education
possess	identify and assess individual and professionally significant qualities and ways to achieve a higher level of their development
	supervise the fulfilment of qualification works of bachelors, specialists, masters.
	the technology of designing the educational process

4. Structure and content of the course

4.1 Structure of the course

Type of work	Semester				Total
	1	2	3	4	
Total workload, academic hours	-	-	72	-	72
Contact work:	-	-	24	-	24
Lectures, academic hours	-	-	12	-	12
Practical (seminars), academic hours	-	-	12	-	12
Laboratory work, academic hours	-	-	-	-	-
Self-study, academic hours	-	-	46	-	46
Control	-	-	2	-	2
Type of control (credit, exam)	-	-	Graded credit	-	-

4.2. Contents of the course sections

№	Section name	Count of hours	
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		Total	Контактная работа				Self-study	Form of current control
			Lectures	Practical, seminars	Lab. work	Control		
1	The role of pedagogy and psychology in lifelong learning	4	2	2	-	-	-	Checking the outline of the report and the list of literature on the topic Checking the notes for the seminar, organising discussion, test of current knowledge control.
2	Development of higher education in Russia and abroad at the present stage	14	2	2	-	-	10	Checking the outline for a seminar class, organising a business game Verification of the developed outline of the training session Checking the notes for a seminar class, organising a discussion, current knowledge control test
3	Organisation of learning in higher education	14	2	2	-	-	10	Written mini-questionnaire Checking the class notes Checking the table reflecting the structure of the pedagogical process in higher education. Checking the outline for a seminar class, organisation of a business game, test of current knowledge control.
4	Organisation of care in higher education	12	2	2	-	-	8	Written mini-questionnaire Verification of the table reflecting the forms of



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								educational work in the university and the competences formed in them Verification of the developed programme of educational work in the university. Defence of the developed social projects, from the position of their social role and from the position of their influence on the formation of personality of students who design and implement the project, test of current knowledge control
5	The teacher as an organiser of the educational process in higher education institution	12	2	2	-	-	8	Check of the essay on the topic: 'Why pedagogical activity can be considered as a meta-activity'. Checking the notes for the seminar, organising a discussion, test of current knowledge control. Checking the table reflecting the main directions of activity of a university teacher and forms of their realisation. Self-diagnosis in order to determine the individual style of pedagogical activity
6	Student as a subject of learning	14	2	2	-	-	10	Verification of the developed set of tasks for

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	activity and self-education							independent work in the academic discipline 'Psychology and Pedagogy of Higher Education', organisation of a round table on the topic 'Ways to improve the effectiveness of independent work of students'. Test of current knowledge control. Self-diagnosis 'Study of individual psychological characteristics'. Preparation of the conclusion.
	Control	2				2		
	Total:	72	12	12		2	46	

№	Section name	Section Contents *
1	The role of pedagogy and psychology in lifelong learning	Introduction to the discipline. Basic requirements for mastering the content of the academic discipline. Structuring of the material. Organisation of the learning process. Content of independent work. Quality control of mastering the discipline. The role of pedagogy in lifelong learning. The essence of the concept of 'continuing education'. General concept of pedagogy of higher education. The specifics of higher school pedagogy. Methodological foundations of modern pedagogy of higher school. Scientific and pedagogical research, methods of its organisation. Interaction of pedagogical theory and practice. The role of psychology in continuing education. Psychology in the scientific approach to solving problems of continuing education. The subject of psychology of higher education
2	Development of higher education in Russia and	Trends in the development of the world system of higher professional education. The main trends in the development of higher education in Russia. Regulatory and legal basis for the

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	abroad at the present stage	functioning of higher professional education in Russia. Bologna process as integration of Russian higher education into the European educational space. Professional training of higher education teachers
3	Organisation of learning in higher education	Pedagogical process as a system. Goals and content of education in higher education. Principles of selecting the content of education in higher education. Modular construction of discipline content. Specificity of the educational standard of higher education. The structure of the curriculum, work programme. Curriculum of higher education institution. Federal state standards of the 3rd (3++) generation. Methods, main forms of teaching in higher education. Organisation of control in higher education. Rating control. Means of learning in higher education. Electronic methodical teaching complexes of disciplines. Learning technologies in higher education. Intensification of learning and problem-based learning. Active learning. Business game as a form of active learning. Heuristic learning technologies. Technology of sign-context teaching. Technologies of developmental learning. Information learning technologies. Technologies of distance education
4	Organisation of care in higher education	Theoretical foundations of the organisation of education in higher education. Directions and forms of educational work in modern higher education institution. Approaches to the organisation of educational work with students of different courses. Socially significant project as a way to educate the civic position of student youth
5	The teacher as an organiser of the educational process in higher education institution	General concept of pedagogical activity. Specificity of activity of a higher school teacher. Styles of professional activity of a higher school teacher. Readiness for professional activity in the conditions of higher school. Professional competence of a higher school teacher. The system of competences of a higher school teacher. Levels of formation of professional competence of a higher school teacher. General concepts of pedagogical communication. Features of pedagogical communication in the conditions of higher school. Models of pedagogical interaction in higher education. The concept of general, professional, basic culture of personality. Pedagogical ethics as the basis of pedagogical culture of a modern teacher. Analysis of the structure and content of pedagogical culture of a higher school teacher. The creative nature of the activity of a higher school teacher. Personal and professional growth of a higher school teacher

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6	Student as a subject of learning activity and self-education	Characteristics of learning activity in higher education institution. Students' position in learning activity and self-education. Peculiarities of student's personality development. Typology of the student's personality. Psychological and pedagogical study of student personality. The role of student groups in the training and education of students
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5. Educational technologies

- information and communication technologies;
- research methods in teaching;
- interactive technologies;
- application of new teaching methods related to the use of virtual information environment (multimedia technologies).

In accordance with the basic educational programme of postgraduate studies, the programme of discipline 'Pedagogy and Psychology of Higher Education' provides for a wide use in the educational process of active and interactive forms of conducting classes in combination with extracurricular work in order to form and develop professional skills of students. The effectiveness of the application of interactive forms of training is ensured by the implementation of the following conditions:

- creation of a dialogical space in the organization of the educational process;
- using the principles of social and psychological learning in educational and scientific activities;
- formation of psychological readiness of teachers to use interactive forms of teaching, aimed at the development of internal activity of postgraduate students and achieving a number of important educational goals: stimulation of motivation and interest in the field of education and pedagogical sciences; increasing the level of activity and independence of research work; development of skills of analysis, critical thinking, scientific communication.

6. Assessment tools for ongoing monitoring of academic performance and midterm assessment

6.1. Passport of the fund of assessment tools for the course "Differential equations in linear topological spaces"

№	Controlled sections of the course	Results	Name of the assessment tool
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1	The role of pedagogy and psychology in lifelong learning	<p>know: methods of generating new ideas in solving research and practical problems, including in interdisciplinary areas.</p> <p>be able to: when solving research and practical problems generate new ideas that can be operationalised based on available resources and constraints</p> <p>possess: skills of critical analysis and evaluation of modern scientific achievements and results of activity in solving research and practical problems, including in interdisciplinary areas.</p>	<p>1. test</p> <p>2. report</p> <p>3. business game</p> <p>4. discussion</p>
2	Development of higher education in Russia and abroad at the present stage	<p>to know: technologies of evaluation of the results of collective activity on the solution of scientific and scientific-educational tasks</p> <p>be able to: make personal choices in the process of work in Russian and international research teams, assess the consequences of the decision made and bear responsibility for it to oneself, colleagues and society</p> <p>possess:</p> <p>technologies of activity planning within the framework of work in teams for solving scientific and scientific-educational tasks</p>	<p>1. test</p> <p>2. report</p> <p>3. business game</p> <p>4. discussion</p>
3	Organisation of learning in higher education	<p>know: professional ethics of teacher's activity</p> <p>be able to: analyse documents reflecting the requirements of society to the professional activity of a teacher, researcher.</p> <p>to know: different types of communication when working in teams to solve scientific and scientific-educational tasks.</p>	<p>1. test</p> <p>2. report</p> <p>3. business game</p> <p>4. discussion</p>
4	Organisation of care in higher education	<p>know: basic principles and methods of research organisation;</p> <p>be able to: draw up a general plan of work on a given topic</p> <p>know: technologies of planning activities</p>	<p>1. test</p> <p>2. report</p> <p>3. business game</p> <p>4. discussion</p>
5	The teacher as an organiser of the educational process in higher education institution	<p>know: main sources of scientific information and requirements for presentation of information materials</p> <p>be able to: propose research methods and ways of processing the results</p> <p>possess: systematic knowledge in the field of activity</p>	<p>1. test</p> <p>2. report</p> <p>3. business game</p> <p>4. discussion</p>

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6	Student as a subject of learning activity and self-education	know: goals and objectives of scientific research in the area of activity be able to: conduct research according to the plan agreed with the supervisor, present the results obtained possess: in-depth knowledge of the chosen area of training	1. test 2. report 3. business game 4. discussion
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6.2. Evaluation tools

Current control

Questions, topics, tasks for current control

Current control is carried out on the following items:

1. lecture part
2. practical part, consisting of:
 - a) main, including all types of practical activities of postgraduate students and independent work, provided by the discipline programme and obligatory for performance;
 - b) variable, containing tasks for additional independent work on the academic discipline, including UIRS and NIRS.

The following forms of control are used during the control and training activities: didactic tests; control tasks; individual tasks, practical tasks; intermediate tasks; final tasks, etc. The following forms of control are used. Quantitative and qualitative characteristics of all used control materials are calculated by the teacher.

Samples of test tasks

The main normative document in the sphere of education, which forms the basis for the development of regional basic plans and serves as a source document for the financing of educational institutions is:

- 1 Federal Law 'On Education in the Russian Federation'
- 2 Federal State Educational Standard
- 3 Basis curriculum

The federal component of the FSES EE and FSES HE is established by:

- 1 by a subject of the Russian Federation;
- 2 by the Russian Federation;
- 3 by the educational institution.

Preservation of a unified educational space is

- 1 principle of the state policy in the field of education
- 2 function of the charter of an educational institution
- 3 the task of the pedagogue-psychologist's activity

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Conditions for continuous education through the implementation of basic educational programmes and various additional educational programmes, providing an opportunity for simultaneous mastering of several educational programmes, as well as taking into account the existing education, qualifications, practical experience in education creates:

- 1 education system;
- 2 institutions of additional general and professional education
- 3 state policy in the sphere of education.

Autonomisation of educational institutions is ensured by:

- 1 the possibility of the EI director to make independent personnel decisions
- 2 the existence of an educational institution's charter
- 3 the possibility for the class teacher to draw up a plan of extracurricular educational activities.

The renewal of the paradigm of education, which is characterised by a change in the idea of the student's personality, acting in modern conditions as a system-forming beginning of the educational process and endowed with subjective properties determining its independence, autonomy, ability to self-regulation and reflection - is:

- 1 profiling of education;
- 2 modernisation of education;
- 3 personality-oriented education.

The increase in the share of humanitarian disciplines up to 30% of the teaching load characterises the trend formulated in the programme documents:

- 1 humanisation
- 2 humanisation
- 3 humanism

Interim assessment

Questions for the differentiated credit

1. Subject, tasks and main categories of higher education pedagogy
2. Methods of pedagogical research
3. Goal setting in the system of higher professional education
4. Content and forms of controlled independent work of students.
5. Goals and principles of teaching and education in higher education in modern conditions
6. The content and structure of the teacher's activity, conditions of its effectiveness.
7. Subject, tasks and main categories of didactics of higher school.

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8. Features of the pedagogical activity of the teacher on the implementation of personality-oriented education.
9. The essence, structure, driving forces of the learning process in higher education.
10. Methods of learning in higher education.
11. Classification of teaching methods in modern didactics.
- 12 . Laws and principles of learning as methodological and didactic regulators of teaching activity.
- 13 . Teaching and methodological support of the educational process.
- 14 . Training and methodological complexes of the new generation.
15. Technical means and computer systems of teaching in higher education.
16. Genesis and definition of the category 'pedagogical technology'. Types of pedagogical technologies.
17. Technology of block-modular teaching.
18. Technological foundations of problem-based learning.
19. Heuristic learning technologies.
20. Types of lecture and their structure.
21. Seminar, practical, laboratory classes in higher education and their features.
22. Teaching and research principle of training organisation.
23. Course and diploma projecting.
24. The system of practical training of future specialists at the university. Types of practical training.
25. Independent work as a component of the educational process.
26. Technologies of active learning.
27. Technologies of contextual learning.
28. Organisation of training sessions with the use of electronic resources.
29. General concept of forms of learning.
30. Class-lesson and lecture-practical learning systems.
31. Lecture as a form of organisation of learning in higher education.
32. Personal and professional formation of a graduate.
33. Federal State Educational Standards of Higher Education: structure, functions, requirements for implementation.
34. Higher education teacher as a subject of the learning process.
35. Institutions providing higher education, their tasks. Modern university.
36. Continuing education: goals, objectives, principles.
37. Postgraduate education.
38. The essence of control in the educational process. Functions, types and methods of control.
39. Prospects and trends in the development of higher education.

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Approximate topics of scientific, methodological works

- a) Designing a working curriculum for the course.
- b) Designing interdisciplinary links in the educational practice of higher education.
- c) Experience of designing the regional component of the content of higher education (on the material of academic discipline).
- d) Task structuring of educational material (on the example of an academic discipline).
- e) Learning tasks: designing a humanitarian context.
- f) Technology of including students' life cognitive experience in the structure of the content of university education (on the example of an academic discipline).
- g) Designing teaching methods in the educational practice of higher education (on the example of an academic discipline).
- h) Designing methods of activation of students' cognitive activity (on the example of an academic discipline).
- i) Ways of constructing problem situations in the educational process of higher education.
- j) The use of multimedia in the educational process of higher education: didactic bases of design.

Assessment tools for the disabled and persons with disabilities are selected taking into account their individual psychophysical characteristics.

If necessary, disabled persons and persons with disabilities are given additional time to prepare an answer for the exam/credit.

The procedure for assessing the learning outcomes of persons with disabilities and persons with disabilities provides for the use of technical means necessary for them due to their individual characteristics. These means may be provided by ChelSU or ChelSU's own technical means may be used.

The procedure for assessing the learning outcomes of persons with disabilities and persons with disabilities in the discipline provides for the provision of information in forms adapted to the limitations of their health and perception of information:

For persons with visual impairments:

- in printed form in enlarged font,
- in the form of an electronic document,
- in the form of an audio file,
- in printed form in Braille.

For persons with hearing impairments:

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- in printed form,
- in the form of an electronic document.

For persons with musculoskeletal disorders:

- In printed form,
- in the form of an electronic document,
- in the form of an audio file.

6.3. Criteria for assessing learning outcomes

Assessment of learning outcomes is carried out on a five-point scale:

‘Excellent’ (5 points) - The student has excellent knowledge of the material, is able to analyse the problem and argue his/her point of view, has a sufficient vocabulary for the statement, competently speaks in a foreign language using precise terms and names. The student practically does not make mistakes.

‘Good’ (4 points) - The student knows the material well, is able to analyse the problem and argue his point of view, has a sufficient vocabulary for the statement, competently speaks in a foreign language using precise terms and names. The student makes minor mistakes.

‘Satisfactory’ (3 points) - The learner is familiar with the material, has a sufficient vocabulary for the statement. The student makes factual and linguistic errors, does not operate the vocabulary on the topic.

‘Unsatisfactory’ (1-2 points) - The student does not know the main provisions of the question, is not oriented in the basic concepts, presents the material with difficulty, with gross factual and linguistic errors, or refuses to answer questions.

When carrying out the procedure for assessing the learning outcomes of disabled persons and persons with disabilities in a discipline (module), the following additional requirements are provided, depending on the individual characteristics of students:

a) instruction on the order of the evaluation procedure is provided in an accessible form (orally, in written form, in written form in Braille, orally with the use of sign language interpreter services);

b) accessible form of providing assessment tasks (in printed form, in printed form in enlarged font, in printed form in Braille, in the form of an electronic document, tasks are read out by an assistant, tasks are provided with the use of sign language interpreter);

c) an accessible form of providing answers to the tasks (written on paper, a set of answers on the computer, written in Braille, using the services of an assistant, orally).

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If necessary, for students with disabilities and persons with disabilities the procedure of assessment of learning outcomes in the discipline (module) can be carried out in several stages.

7. Educational and methodological support of the course

Independent work of postgraduate students is carried out in the form of studying individual theoretical issues on the proposed literature and independent solution of problems with their further analysis or discussion in classroom classes. During independent training students are provided with access to databases and library funds and access to the Internet.

Independent work contributes to:

- deepening and expansion of knowledge;
- formation of interest in independent research activities;
- mastering the techniques of the cognitive process and the development of cognitive abilities.

Independent work of postgraduate students has the main purpose - to ensure the quality of training of graduating specialists.

Educational and methodological materials for independent work of students:

Independent work of a graduate student is an indicator of scientific potential, the ability to work with literary sources and normative acts, practice materials, the ability of a graduate student to independently analyse problematic issues. It consists in the study of educational and scientific literature, in the fulfilment of tasks for independent work.

Full-time postgraduate students study and develop theoretical and practical material mostly independently. At the Department of General and Professional Pedagogy in the list of recommended literature offered volume of academic and scientific literature, therefore, postgraduate student should as often as possible refer to the funds of scientific libraries, as well as to periodical literature, to follow the novelties in the field of economic development. When studying scientific and educational literature, it is necessary to compare the content of the available literature with the programme of the candidate examination in the specialty. In the absence of this or that source of literature, it is necessary to refer to the funds of the Russian State Library (Moscow). Postgraduate student should make a thorough preparatory work with scientific literature on his/her speciality, master theoretical, general and particular scientific methods of search.

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Educational and methodical materials for independent work of students with disabilities and persons with disabilities are provided in forms adapted to the limitations of their health and perception of information:

For persons with visual impairments:

- in printed form in enlarged font,
- in the form of an electronic document,
- in the form of an audio file,
- in printed form in Braille.

For persons with hearing impairments:

- in printed form,
- in the form of an electronic document.

For persons with musculoskeletal disorders:

- In printed form,
- in the form of an electronic document,
- in the form of an audio file.

Main literature

(* literature available in the Chelyabinsk State University library or electronic library system; ** literature available in the electronic library system)

1. Smirnov, S. D. Pedagogy and psychology of higher education. From activity to personality: textbook for students studying in the direction and speciality of psychology / S. D. Smirnov. - Moscow: Academy, 2021. - 304 c. - (Higher Education).

2. Pedagogy and psychology of higher education: textbook for students and postgraduates of universities / ed. by M. V. Bulanova-Toporkova. - 3rd ed., revision and supplement. - Rostov n/D: Phoenix, 2020. - 512 c. - (Higher Education) [Grif MO].

3. Popkov V. A. Didactics of higher school: textbook for students of universities, trained in speciality 033400 - Pedagogy / V. A. Popkov, A. V. Korzhuev. - 2nd edition, revised and supplemented. - M.: Academy, 2022. - 192 c. - (Higher professional education. Pedagogical specialities).

Further reading

1. Humanitarian technologies in higher professional education: scientific and methodical materials for training teachers of higher schools / E. N. Glubokova [et al.]; A. I. Herzen Russian State Pedagogical University. A. I. Herzen. - SPb.: Academy of Culture Research, 2014. - 118 c. - Bibliogr.: p. 107-116. - Innovative Educational

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Programme of Herzen University. - Authors are listed on the back of the title page - [Grif].

2. Efremov, O. Y. Professional-oriented communication as a humanitarian technology of training and activity of a teacher of higher school: textbook for training for additional qualification 'Teacher of higher school' / O. Y. Efremov, N. M. Fedorova; A. I. Herzen Russian State Pedagogical University. A. I. Herzen. - SPb.: Academy of Culture Research, 2014. - 184 c. - Innovative educational programme of Herzen University. - [Grif].

3. Zeer, E. F. Zeer, I. I. Khasanova; Ministry of Education of the Russian Federation [and others]. - Ekaterinburg: Izd. Ros. gos. prof.-ped. un-ta, 2013. - 158 p.: tabl. - ISBN 5-8050-0156-x : 52-20.

4. Isaev, I. F. Professional and pedagogical culture of a teacher: textbook for students of universities / I. F. Isaev; International Academy of Pedagogical Education Sciences. - Moscow : Academy, 2012. - 208 c. - (Higher education).

5. Korzhuev, A. V. Scientific research on pedagogy. Theory, methodology, practice: [textbook for students of the system of additional professional education of teachers of higher school] / A. V. Korzhuev, V. A. Popkov. - Moscow: Academic Project : Triksta, 2010. - 287 c. - (Gaudeamus). (Academic Project)

6. Morozov, A. V. Creative pedagogy and psychology: textbook / A. V. Morozov, D. V. Chernilevsky. - 4th edition, revised and supplemented - Moscow: Academic Project, 2014. - 560 c. - (Gaudeamus). [Grif MO].

7. Reshetnikov P. E. Non-traditional technological system of teacher training. The birth of the master: a book for teachers of higher and secondary pedagogical educational institutions / P. E. Reshetnikov. - MOSCOW: VLADOS, 2000. - 301 p.: ill. - (Pedagogical workshop).

8. Pidkasty, P. I. Organisation of students' learning and cognitive activity / P. I. Pidkasty. - 2nd edition, supplement and revision. - Moscow : Ped. society of Russia, 2015. - 144 c.

9. Trainev, V. A. Intensive pedagogical game technologies in humanitarian education (methodology and practice) / V. A. Trainev, I. V. Trainev ; University of Informatics and Management. - Moscow : Dashkov and K, 2011. - 282 c.

10. Chernilevsky, D. V. Didactic technologies in higher school : textbook for universities / D. V. Chernilevsky. - M. : UNITY-DANA, 2012. - 437 c.

Electronic funds and resources

The means of access to the system of own electronic resources is the library's website www.lib.csu.ru. The electronic catalogue provides a complete and operative

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representation of the library collection, improves the quality and efficiency of information retrieval - more than 5 million records.

1. Electronic catalogue. Bibliographic databases.

Books, electronic resources, dissertations and abstracts.

2. Electronic library.

ChelSU publications, UMK; dissertations defended in the councils of ChelSU, reserve collections, rare books fund, electronic reference book 'Informio', statistical publications of Russia and CIS countries.

3. Abstract

INION RAS databases, VINITI databases, Scopus (<http://www.scopus.com>), Science (archive).

4. Full-text

Dissertation databases RGB, ARBICON, SIGLA, scientific electronic library <http://elibrary.ru>, subscription to the full-text collection of Russian scientific journals (20-205, 48 titles), publishers: Taylor&Francis, Sage Publications (archive of scientific journals); Springer, Wiley (<http://onlinelibrary.wiley.com>).

5. digital library systems with the possibility to use licensed materials from any place.

to use licensed materials from any point with access to the Internet (registration of a personal account from the university network): University Library Online (www.biblioclub.ru), Lan (www.e.lanbook.com).

Internet resources

1. Actual problems of modern science, technology and education [Electronic resource]. - Access mode: http://elibrary.ru/title_about.asp?id=32607

2. Higher Education in Russia: Scientific and Pedagogical Journal of the Ministry of Education and Science of the Russian Federation
<http://www.informika.ru/windows/magaz/higher>

3. Legislative and regulatory documents [Electronic resource]. - Access mode: <http://www.edu.ru/>, <http://www.rg.ru/>

4. The concept of long-term socio-economic development of the Russian Federation until 2020 : the order of the Government of the Russian Federation from 17.11.2008 № 1662-r [Electronic resource]. - Access mode:
<http://www.consultant.ru/online/base/?req=doc; base=law;n=82134>

5. Korytchenkova, N.I., Kuvshinova, T.I. Psychology and pedagogy of professional activity: a textbook / N.I.
<http://biblioclub.ru/index.php?page=author&id=80857> Kuvshinova, Kemerovo T.I. : Kemerovo. - Kemerovo, Kemerovo State University, 2012.- 172 p.

6. Ministry of Education and Science <http://www.mon.gov.ru>

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7. Pedagogical library. Books and articles. Literature on pedagogy and its applied branches <http://www.pedlib.ru>

8. Portal 'Humanitarian Education' <http://www.humanities.edu.ru>.

9. Federal portal 'Russian Education' <http://www.edu.ru> 9.

10. Federal State Educational Standards of General Education [Electronic resource]. - Access mode: <http://standart.edu.ru/>

11. Federal State Educational Standards of Secondary and Higher Professional Education [Electronic resource]. - Access mode: <http://www.edu.ru/>

Licensed software for the discipline (module) Adobe Reader, Microsoft Office 365.

8. Logistics and technical support

To conduct classes in the discipline 'Pedagogy and Psychology of Higher Education', envisaged by the curriculum of postgraduate training, there is a necessary material and technical base that complies with the current sanitary and fire safety rules and regulations, providing all types of theoretical and practical training, as well as the effective implementation of the final qualification work (dissertation):

- lecture halls equipped with multimedia complexes on the basis of vandal-proof podium;
- specialised computer classrooms with peripheral devices and equipment connected to them;
- methodological materials for independent work on the discipline.

The University has computer classes connected to the local network, Internet access, equipped with modern high-performance computers. It maintains its own website: <http://csu.ru>.

To obtain higher education on postgraduate programmes for disabled people and persons with disabilities, the University has classrooms equipped with the following equipment:

Room name	Equipment
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Room for the typhlotechnical patient, room A-28 of the first academic building	Typhlotechnical aids: Braille computer with display and printer, typhlocomplex "Reading machine", television magnifying device, tiflocassette tape recorders (3 units) and digital voice recorders (6 units). Special software: speech navigation program JAWS, speech synthesizers ("talking mouse"), screen magnifiers.
Room for the deaf, room A-27 of the first academic building	radio class "Sonet-R" (for 6 people), programmable hearing aids (6 pcs.) for individual use with a device for setting the operating mode on a computer, audio equipment.
Adaptive Information Technologies room, Room A-27, First Academic Building	Computer class for 2 people, interactive whiteboard ActiveBoard with voting system, acoustic amplifier and speakers, multimedia projector, TV, VCR, VCON HD3000 videoconferencing device.

All courses specified in this work program, methodological and technical support for the educational process for disabled people and people with limited health capabilities are provided by the Regional Educational and Scientific Center for Inclusive Education of CSU.

9. Methodological guidelines for students on mastering the course (module)

Teaching of the discipline: lectures combined with intensive independent work of students. Lectures are conducted through the method of oral presentation with elements of problematisation of educational information and discussion of practical situations. It is possible to use distance technologies. In the lecture course the main emphasis is placed on theoretical problems of higher education. In the course of lectures the teacher organises frontal work of the audience for active discussion of the educational material. The discussion of practical situations is conducted in the form of individual, group or team work of students, active and interactive forms and methods are used: analysis of educational situations, mini-training sessions, round tables on various topics determined by the needs and interests of students. If necessary, the teacher organises and conducts discussions. For in-depth development of professional skills of students in parallel with classroom work is carried out independent work of students. Independent work of students includes active fulfilment of tasks (writing essays, preparation of reports and essays), individual and collective projects on the problems of development of higher education, solving tests.

In the process of independent work, students carry out the following activities: selection of educational information from a variety of scientific and pedagogical

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sources, analysis and comprehension of the different approaches and points of view presented in them; compilation of didactic handouts or presentation materials; participation in forms of work, simulating situations from the real practice of implementation of innovative ideas, concepts, approaches in the framework of higher education; formulation of their own evaluative judgements about modern higher education on the basis of.

Organisational forms of students' activities

Type of training training sessions	Organisation of the learner's activities
Lecture	It is advisable to start studying the topic by working on the lecture notes. The basic rules of lecture notes include the ability to: highlight key concepts and main points, draw conclusions and generalisations. Terms, concepts used in the text of the lecture should be checked with the help of encyclopaedias, dictionaries, reference books with writing out the interpretations in a notebook. Identify questions and terms that cause difficulties, mark them and try to find the answer in the recommended literature. If it is impossible to understand the material independently, it is necessary to formulate a question and ask the teacher at the counselling or practical training.
Seminars classes	When preparing for seminars, you should use the basic literature from the list provided, as well as be guided by the given instructions and recommendations. For the most profound mastering of the discipline it is recommended to study the literature marked as 'additional' in the list provided. The following scheme of preparation for the seminar is recommended: 1. Study the lecture notes; 2. Read the main and additional literature recommended for the section under study; 3. To answer the questions of the plan of the seminar class; 4. Complete the homework. In case of difficulties, formulate questions to the teacher.
Practical classes	When preparing for practical classes, it is necessary to use the basic literature from the presented list, as well as to be guided by the given instructions and recommendations. For the most profound mastering of the discipline it is recommended to study the literature marked as 'additional' in the list provided. Active participation in the discussion of specific situations, the ability to find the most effective solutions to problems on the basis of the knowledge gained, the ability to find useful additional material on the topics of practical classes is welcomed. The following scheme of preparation for the practical training is recommended to the student: to work through the lecture notes; to read the main and additional literature on the topic; to prepare answers to the questions of the plan of the practical

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	training; to perform the necessary other tasks (for example, to work through the test tasks, to make schemes, tables, crossword puzzles, etc.). In case of difficulties, formulate questions to the teacher.
Preparation for credit	When preparing for the credit it is necessary to be guided by lecture notes, knowledge gained during practical classes and recommended literature. It is necessary to prepare for the credit purposefully, regularly, systematically, from the first days of training in this discipline. Systematic performance of academic work in lectures and practical classes will allow you to successfully master the discipline and create a good basis for passing the credit.

Methodological instructions for preparation for practical classes

One of the important forms of independent work is preparation for a practical class. The aim of practical classes is to teach students to independently analyse academic and scientific literature and to develop their experience of independent thinking on the problems of the course.

In the course of independent preparation each student prepares presentations on all questions of the topic. Reports are made orally, in detail, refer to the notes during the presentation.

Approximate plan of the practical lesson.

1. Introductory speech of the teacher - 3-5 min.
2. Consideration of each issue of the topic - 15-20 min.
3. Final word of the teacher - 5-10 min.

Homework (for each seminar).

1. Study and complete the recommended literature. 2.
2. Prepare an oral report on each question of the lesson plan (5-10 min.), be ready to participate in the discussion and completion of reports and messages (up to 5 min.).

A presentation at a practical training session should meet the following requirements: it should present theoretical approaches to the issue under consideration, analyse principles, laws, concepts and categories; theoretical provisions should be supported by facts and examples, the presentation should be reasoned. It is necessary to prepare for practical classes not the day before, but well in advance.

Methodological guidelines for organising independent work

Independent work is an essential part of the learning process. The purpose of independent work is to consolidate the knowledge that they received in classroom

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classes, as well as to contribute to the development of postgraduate students' creative skills, initiative, ability to organise their time.

Self-work plan

Name of topic	Content of work	Number of hours	Reporting form	Control period
Module 1: Psychology of Higher Education				
Topic 2: Peculiarities of student's personality development. Typology of student's personality	Preparation for practical practical session	2	Discussion problematic issues	Practical lesson
	Essay preparation	2	Defence of the essay	Practical lesson
	Preparation for credit	2	Survey	Credit
Theme 3: Psychology of Teaching and Education in Higher Education	Preparation for practical practical session	2	Discussion problematic issues	Practical lesson
	Preparation abstract	2	Defence of the abstract	Practical lesson
	Preparation for credit	2	Survey	Credit
Theme 4: Crises of professional development	Preparation for practical practical session	2	Discussion problematic issues	Practical lesson
	Essay preparation	2	Defence of the essay	Practical lesson
	Preparation for credit	2	Survey	Credit
Module 2. Pedagogy of higher education				
Theme 1: Organisational forms of learning at HEIs	Preparation for practical practical session	2	Discussion problematic issues	Practical lesson
	Preparation abstract	2	Defence of the abstract	Practical lesson
	Preparation for credit	2	Survey	Credit

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Theme 2: Teaching methods and tools	Preparation for practical practical session	2	Discussion problematic issues	Practical lesson
	Preparation abstract	2	Defence of the abstract	Practical lesson
	Preparation for credit	2	Survey	Credit
Theme 3: Control and assessment of students' knowledge, skills and abilities	Preparation for practical practical session	2	Discussion problematic issues	Practical lesson
	Essay preparation	2	Defence of the essay	Practical lesson
	Preparation for credit	2	Survey	Credit
Theme 4: Modern requirements to the level of competence of a higher school teacher. School. Professional mastery.	Preparation for practical practical session	2	Discussion problematic issues	Practical lesson
	Preparation abstract	2	Defence of the abstract	Practical lesson
	Preparation for credit	2	Survey	Credit

Independent work should begin with familiarisation with the plan of the practical class, which includes questions to be discussed, recommendations for preparation for the practical class, recommended literature on the topic. Studying the material for the seminar should begin with reviewing the lecture notes. Having restored the material in the memory, the student brings in the system the main provisions of the topic, issues of the topic, highlighting the main and new things that were emphasised in the lecture. Then the corresponding chapter of the textbook should be carefully read. For a more in-depth study of the issues, it is recommended to outline the main and additional literature. Having selected, worked out the material and learnt it, the student should start direct preparation of his/her speech at the seminar for which he/she should think over how to answer each question of the topic. To be able to read the recommended literature does not mean to passively take note of everything written, it is necessary to analyse the text, think about it, this is facilitated by notes during reading, which turn reading into a process. Notes can be

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made in various forms: extended and simple plans, extracts (theses), annotations and outlines.

Methodological guidelines for the preparation of abstracts

An abstract is a creative research paper based primarily on the study of a significant amount of scientific and other literature on the topic of study.

The abstract, as a rule, should contain the following structural elements:

1. title page;
2. content;
3. introduction;
4. main part;
5. conclusion;
6. list of used sources;
7. appendices (if necessary).

The content contains the names of structural parts of the abstract, chapters and paragraphs of its main part, indicating the page number from which the corresponding part, chapter, paragraph begins.

In the introduction it is necessary to indicate the rationale for the choice of topic, its relevance, object and subject, purpose and objectives of the study, describes the object and subject of the study, the information base of the study.

The main part outlines the essence of the problem and objective scientific information on the topic of the abstract, gives a critical review of sources, own versions, information, assessments. The content of the main part should exactly correspond to the topic of the project and fully disclose it. Chapters and paragraphs of the abstract should reveal the description of the solution of the tasks set in the introduction. Therefore, the titles of chapters and paragraphs, as a rule, should correspond in their essence to the wording of the tasks of the abstract. The heading 'MAIN PART' in the content of the abstract should not be.

The text of the abstract should contain address references to scientific works, drawn up in accordance with the requirements of GOST. Also mandatory is the presence in the main part of the abstract references to the sources used. It is necessary to speak in the third person ('The author believes...') or use impersonal constructions and indefinite-personal sentences ('At the second stage the following approaches are investigated...', 'The conducted research allowed to prove...', etc.).

The conclusion contains the conclusions reached by the student as a result of the essay, revealing the tasks set in the introduction. List of references should be made in accordance with generally accepted bibliographic requirements and include only publications used by the student. The number of sources in the list is determined independently, for the essay their recommended number of 10 to 20.

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In the annexes should be brought auxiliary material, which when included in the main part of the work clutters the text (tables of auxiliary data, instructions, methods, forms of documents, etc.).

The volume of the abstract should be no less than 12 and more than 20 pages of typewritten text at 1.5 intervals on one side of a standard sheet of A4 with the following margin size: top and bottom -2, right - 1.5, left - 3 cm. The font is 14. The abstract can be handwritten, written in even lines (not less than 30 per page), clearly legible handwriting. Paragraph indent - 5 printed characters. Pages are numbered in the lower right corner without dots. The first page is the title page, it is not numbered, the second page is the table of contents. Each structural element of the abstract begins on a new page.

The list of used sources should be formed in alphabetical order by the last name of the authors. Literature is usually grouped in the list in the following sequence:

1. sources, legislative and regulatory and methodological documents and materials;
2. special scientific domestic and foreign literature (monographs, textbooks, scientific articles, etc.).

The literature included in the list is numbered in a continuous order from the first to the last title.

For each literary source the author (or a group of authors), the full title of the book or article, place and name of the publishing house (for books and brochures), year of publication; for journal articles the name of the journal, year of issue and number are indicated. For collections of works (articles) the author of the article, its title and further the name of the book (collection) and its output data should be indicated.

Appendices should be arranged as a continuation of the abstract on its subsequent pages. Each appendix should start on a new page. The word 'Appendix' and its number should be indicated at the top of the page on the right. The appendix should have a title, which is placed in the centre of the sheet on a separate line and printed in capital letters.

All appendices should be referenced in the text of the work. Appendices should be arranged in the order in which they are referenced in the text.

Topics of abstracts

1. peculiarities of traditional and innovative strategies of educational organisation.
2. The role of higher education in the modern era.

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3. Connection of pedagogical science with other sciences.
4. Principles of teaching as the main reference point in teaching activity.
5. Methods of teaching in higher education.
6. Pedagogical skills of a higher school teacher.
7. Self-consciousness of a teacher and the structure of pedagogical activity.
8. Development of the lecture form in the system of higher education.
9. Seminar as interaction of participants.
10. Activation and ways to improve the independent work of undergraduates.
11. Organisational principles of pedagogical control.
12. Technologies in the structure of the educational process.
13. Modular construction of the discipline content and rating control.
14. The phenomenon of psychology in history classes.
15. Age approach in teaching history.
16. Formation of professional culture of the teacher.
17. Lecture in the system of professional training.
18. Experiments and demonstrations in history classes.
19. The role of visual aids in teaching history.
20. The role of the game as a method of active teaching of history in higher education.

Methodological guidelines for the preparation of essays

Essay - translated from French - *essai* - an essay, a sample, an attempt. An essay on the problems of municipal law is a small, free creative work expressing the author's opinion on the essence of the problem. The work may be of scientific, philosophical, historical-biographical, journalistic, literary-critical or purely fiction character); imagery, aphoristic, conversational tone of the work; absence of the task for an exhaustive interpretation of the subject of presentation.

The essay can be prepared in oral or written form. In oral form, the prepared material is presented at the seminar class. Both the content and depth of analysis of the problem and the style of presentation of the material are evaluated: knowledge and fluent command of scientific and normative sources; ability to identify relevant problems and general patterns; demonstration of skills of comparison and logical linkage of state decisions, legislative provisions and specific practical problems of their implementation; professional-legal nature of presentation of the material and its argumentation; brightness, imagery, literacy of presentation of the material.

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As a rule, the written volume of the essay does not exceed 8-10 pages of text and is submitted for inspection and evaluation to the teacher who conducts seminars in the given group. The topic of the essay can be chosen by the student from the list of questions for essays and essays proposed and recommended by the department, and can be independently proposed by the author of the essay, based on his desire and scientific interest. A new topic or coverage of new aspects of one of the topics proposed by the department may be chosen by the student also in agreement with the teacher.

Essay topics

1. Teacher of the XXI century: new requirements and new qualities.
2. analysing the competences of a specialist studying in the direction of training - 1.1.2 Differential equations and mathematical physics
3. Teaching in electronic educational environment: pros and cons.
4. Possibilities of project activity in the study of mathematical physics.
5. Possibilities of the 'case-method' technology in the study of mathematical physics.
6. Possibilities of group forms of educational work in the study of mathematical physics.
7. Possibilities of game technologies in studying mathematical physics.
8. Possibilities of the Internet in the study of disciplines of the natural science cycle.
9. Innovations in teaching the disciplines of the natural science cycle.
10. Development of critical thinking in the study of mathematical physics.
11. How to make students' independent work productive and interesting?
12. Does the lecture lose its importance in the educational process of modern higher education institution?
13. What should a modern lecture be?
14. Seminar on natural science disciplines: modern, useful, interesting.
15. How to teach natural sciences to 'lyricists'?
16. How to teach humanities to 'physicists'?
17. Improving the organisation and procedure of credits and examinations.
18. Evaluation activity of a university teacher.
19. The point-rating system: advantages and disadvantages.
20. The best ideas of foreign higher education.

Criteria for evaluating essays

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№ п/п	Criterion	High level	Medium level	Low level
1	Adequacy of understanding of the topic, relevance of the content of the work to its topic	3	2	1
2	Adherence to the structure of the essay (problem statement, its analysis, justification of positions and opinions, conclusions and generalisations)	3	2	1
3	Consistency, logicity, integrity of presentation	3	2	1
4	Argumentation and justification of own position	3	2	1
5	Conformity to the essay genre, vividness, imagery, emotionality of presentation	3	2	1
6	Independence, originality of reasoning, ability to propose interesting approaches to the consideration of the problem	3	2	1
7	Reliance on the conceptual apparatus and theoretical provisions of psychology and pedagogy	3	2	1
8.	Culture of written speech, stylistic and orthographic literacy	3	2	1
	Sum of points	24	16	8

Outcome:

the grade 'excellent' is given to the learner if he has scored from 20 to 24 points;
 grade 'good' if he scored from 15 to 19 points;
 grade 'satisfactory' if he scored from 10 to 14 points;
 grade 'unsatisfactory' / 'no credit' if he scored less than 10 points.