

# Organization of Independent Education in the Credit-Module System of Teaching

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**Abstract:** The article explains that the effectiveness of education in the credit-module system of education depends on the proper organization of independent learning of students, and provides specific recommendations for the use of innovative methods in this process. While students are free to pursue a particular program in their independent study, it is important that the teacher provides the students with information on the subject, motivates them, and monitors their activities.

**Keywords:** Credit-module system, independent education, creative thinking, information age, labor market, competitive personnel.

**Introduction:** Although science emerged because of the real needs of humanity in its time, the evolution of science and the needs of humanity in the new era do not always develop in parallel. The experience of developed countries has shown that the most important thing is that the knowledge we acquire is focused primarily on issues that are relevant for the time. So, changes in the education system, revision of state education standards and curricula in accordance with modern needs, necessary changes are a natural and very responsible process.

Given that the basics of science are taught in general secondary education, especially in higher education, these changes must be a modern, frequent process in line with new needs. It should not be ruled out that these changes may be slightly different in each HEI, depending on the conditions of each region, if necessary. In order to adapt to these changes more quickly, each university must first be academically independent and organize education in accordance with the principles of the credit-modular system of education, as has already been proven in the world.

**Literature analysis and methods:** Looking at the history of the introduction of the credit-module system, in the second half of the XIX century, the interest of students in reading decreased as a result of the presence of many subjects in Latin American curricula, which lost their relevance in practice (Latin, etc.). and students who graduated from universities "well" have not yet become modern, "good professionals." In 1869, Charles Elliot was elected president of Harvard University, and he soon abolished the firmly established curricula at the university. As a result, university students have the opportunity to choose the subjects they are interested in from the offered subjects. Thus, in 1872, the first credit-module system was introduced at Harvard University. The reform will increase interest in Harvard among U.S. youth. The subjects in the university curriculum also naturally begin to be selected [1].

Subjects of high practical importance, such as economics and the labor market, will become the main subjects in the curriculum.

Finally, by 1989, a new credit-module system was developed in Europe based on the American credit system and the Dutch higher education system, and it was called the European Credit Transfer System (ECTS). Appendix 1 to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 824 of December 31, 2020 on measures to improve the system related to the organization of the educational process in higher education institutions, in higher education institutions According to the Regulations on the procedure for introducing a credit-module system in the educational process, the order of transfer to the modular system will be introduced [2].

The transition to a credit-module system will not only create more opportunities and conveniences for the student, but also increase his personal responsibility. This can be seen in the

credit-module system, where only independent study hours account for 60% of full-time study at the undergraduate level and 70% at the master's level. So, this is a system that focuses on students' independent learning. So, in this system, properly organized independent education is a key factor in increasing the effectiveness of education.

**Independent education** is one of the forms of education focused on the knowledge and skills to be formed in the student, which are defined in the curriculum of a particular subject and must be mastered by the student. based on the recommendations of the audience. Independent study of the student under the guidance of the teacher (course work, course project, thesis for conferences, preparation of articles, etc.) and without the guidance of the teacher (basically, the student reads a certain part of a particular course to be formed).

The main objectives of independent study of students are:

- Have the ability to independently acquire new knowledge;
- Ability to search for relevant information, identify convenient ways and means of learning;
- Effective use of information sources and addresses;
- Work with educational and scientific literature, normative documents;
- Work with electronic textbooks and databases;
- Effective use of the Internet;
- Database analysis;
- Determine the rational solution of the given tasks;
- Systematic and creative approach to tasks;
- Be able to receive scientific information independently of educational and scientific literature;
  - Must be able to complete practical assignments (independent work) for independent work in practical classes and defend independent work between the responsible teacher and the group of students, etc.

In most cases, students learn to work independently, self-manage, monitor and evaluate, which allows them to understand their activities, self-determine the level of knowledge and skills, see their mistakes and allows them to be eliminated [4].

The order of organization of independent study and the main tasks of the supervisor in this process:

- Topics of independent study are given;
- information on the deadline (time interval) and forms of submission of work;
- The knowledge, skills and competencies to be acquired in the topics are provided in the form of recommendations;
- Relevant literature is recommended;
- Assists the student in planning the topic as needed;
- Regularly monitors the implementation of independent work and plans and makes recommendations;
- Assignments will be considered in due time;
- The solution of practical tasks is shown and checked with the help of similar examples;
- Control (test, question-answer, etc.) is carried out when it is necessary to clarify the level of mastery of the topic by the student;

The student's responsibilities in doing independent work.

- Choose the topic of the work based on the requirements of the department;
- Timely completion of assignments based on a plan developed jointly with the supervisor;
- To submit independent work and reports to the department in a timely manner [5].

The final control is carried out by professors and teachers on the basis of the schedule developed by the department in order to clarify the level of mastery of the topic, the achievement of the objectives of the student's independent work. Types of control over the independent work of students and the criteria for their evaluation are developed at the beginning of the academic year and approved by the Academic Council of the faculty.

**Discussion:** It is true that the reforms in today's education system are aimed at developing students' independent thinking, overcoming problems that hinder the development of students' creative

thinking skills and the formation of practical skills, but students It is important to keep in mind that it is important for the teacher to organize the process properly, to motivate the students in the process, and to monitor their activities. Therefore, first of all, every professor-teacher should be well-versed in the methodology of organizing independent learning of students through innovative methods, based on the nature of the subject, and be able to adequately assist the student in this process. To this end, in order to be effective in the student's independent learning without the teacher's guidance, which is the most important thing for students, today the teacher has to decide what specific documents and information the student must provide, that is, the student who wants to learn the subject independently As for what should be in the lead.

- First of all, the student must have a syllabus - a working curriculum for the student. This is because the student needs to have a general idea of the science, albeit superficial, by knowing when, for how long, and what literature he or she can master in a given subject. In addition, the syllabus will cover everything from when to take control of the course, to when to get advice from the teacher.

- Along with the list of textbooks, at least the electronic format of the basic literature should be provided to the student.

- The set of Internet links - digest, which is necessary for mastering the subject, should also be provided to students by the teacher.

- A brief explanation of science terms - glossaries should be prepared by the teacher and given to the student. However, it is advisable to provide the student with links to such references and, if necessary, their basics in electronic form.

- A set of tasks, i.e. exercises (for example, problems) are very important as they strengthen the theoretical knowledge of the student, as well as develop the ability to apply their knowledge in practice. Cases related to problem situations also serve to develop the student's ability to think independently and creatively.

- Presentations or videos with logical, high-quality animations on specific topics in science increase the student's interest in science.

Forums are a great way for students to exchange ideas about science. Nowadays, there are opportunities for students to master a particular course by helping each other with ideas and information through telegram groups. At the same time, using the most popular mobile applications in the world today, students can achieve high efficiency in independent learning, and so on.

Assignments for independent work are given at the beginning of the semester and their deadline is set. Assignments for independent work should consist of two parts:

1. Mandatory part. Topics within the minimum knowledge that a student should take in a particular course should include course sections.

2. Optional section. Basically, gifted students are given additional assignments and materials to improve their knowledge in this field, so that they can master it independently, which is of a recommendatory nature.

Depending on the situation of the students in the group, the teacher can also ensure the success of students in mastering a certain part of the subject by allowing them to choose topics and materials in a certain order, in separate groups [6].

Estimated student spending on independent work:

Preparation for the lecture	1,5-2 hours
Preparation for laboratory (practical) lesson	1,5-2 hours
Preparation for the seminar	2-4 hours
Preparation for the colloquium	4-6 hours
Preparation for control work	3-6 hours
Independent study of individual topics (questions) from the recommended literature	3-6 hours
Synopsis writing	3 hours
Text analysis	1 hours
Essay preparation, essay writing	6-10 hours
Writing a course work	12 hours

Preparation of abstracts	5 hours
Preparation of a report for the conference	10 hours
Participation in research	2 hours per week
Preparation of presentations	2 hours
Glossary analysis, compilation	3 hours
Analysis of problem situations	2 hours
Preparation of visual aids, drawing up schemes and tables, preparation for the report, preparation for the exam	12 hours

Table 1.

As the ratio of independent study hours to general education hours increases, educators will not be able to fully control their students. However, by teaching students' self-control, we can dramatically increase educational effectiveness by eliminating one of the shortcomings of independent learning. To do this, we must first ensure that students have a scientifically based strict agenda, as well as sports and fitness classes. Regardless of the major, students should have the understanding and desire to play sports to the extent that they have a positive impact on recreation, nutrition, and activities between classes.

In any case, the mental state of a student who leads a healthy lifestyle and engages in a certain sport is very stable, and this self-confidence always helps the student to master the sciences and overcome difficulties. At the same time, it is necessary to create conditions for aesthetic recreation of students.

**Conclusion:** Not only modern knowledge, but also independent analysis of the received information through its advanced analytical-critical thinking, sorting and use of selected information for the development of science, the development of the country, the welfare of the people, As we plan to train competitive personnel in the labor market, it is necessary to use innovative technologies in the process, taking a responsible approach to the organization of independent education in higher education. Independent education is also one of the most convenient and effective methods of teaching, which is a modern opportunity and sometimes a modern necessity - the basis of distance learning. Yes, a good teacher conveys, explains, and teaches a science, and a great teacher reveals the essence of that science, and a great teacher inspires, motivates, and guides the student to master that knowledge. The phrase "shows" is even more valuable today. Students, first of all, should take advantage of the opportunities created by our government in the information age, learn the secrets of science from teachers, get their valuable advice, work on themselves and strive to become competitive professionals in the labor market.

### References

1. <https://mt.bimm.uz>. Organization of educational processes on the basis of credit-module system. Distance learning courses for higher education professors and teachers.
2. APPENDIX 1 to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 824 of December 31, 2020 Regulations on the procedure for introducing a credit-module system in the educational process in higher education institutions.
3. Turaev Shukhratjon. The role of independent education in teaching physics. Society and Innovations Special Issue -12 (2021). 115-121.
4. Dadamirzaev G., Vahobova S. Modular education as a means to achieve goals for independent work. International Scientific Journal <http://www.inter-nauka.com>.
5. Siddik Qakhkhorov, Shukhratjon Turaev. An important contribution of independent education in higher education in the training of specialists who meet modern requirements // JOURNAL OF PEDAGOGICAL SKILLS No. 2, (April, 2022), p.75.
6. Balakireva E.V., Bogdanova R.U., Dautova O.B., Dargevichene L.I., Piskunova E.V., Tryapitsyna A.P. Organization of independent work of students in pedagogical disciplines: Uchebno-metodicheskoe posobie dlya prepodavateley vysshey shkolы. Chast I. / Under redactsiey professor, chlena-correspondent RAO A.P.Tryapitsynoy. - SPb., 2008.