Faculty of Information Technology

Department of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Approved

Vice-Rector of Academic and Educational Affairs of IITU JSC

\_\_\_\_\_\_\_\_\_\_\_\_\_Full name

«\_\_\_\_» \_\_\_\_\_\_\_\_\_\_ 20\_\_

**SYLLABUS  
(ACADEMIC PROGRAM)**

**Course (code, title):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(code, title):

**Major (code, title)**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(code, title):

**Educational program** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(code, title)

**Year:** \_\_\_\_ **Semester:** \_\_\_\_ **Number of credits**: \_\_\_\_ ECTS

**Lectures:** \_\_\_\_ hours

**Laboratory classes:** \_\_\_\_ hours

**T/SIS:** \_\_\_\_\_ hours

**Total:** \_\_\_\_\_ hours

**Final assessment form**: Examination

Almaty 20\_\_\_

Academic program of the course (code, title) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has been developed on the basis of Standard Academic Program.

Academic program has been reviewed at the meeting of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ department.

Minutes №. \_\_\_\_ dated «\_\_\_\_\_» \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20\_\_\_

Head of the Department\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

signature full name, title, degree

Author \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

signature full name, title, degree

The working academic program was approved at the meeting of the Educational and Methodological Board of JSC "IITU"

Minutes № \_\_\_\_\_ dated "\_\_\_"\_\_\_\_\_\_\_\_\_\_\_ 20\_\_\_.

Director of the Department \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A. Mustafina

*Signature*

for Academic Affairs

|  |  |
| --- | --- |
| **1. GENERAL INFORMATION** | |
| Faculty | Information Technology |
| Major code and title |  |
| Educational program code and title |  |
| Year, semester |  |
| Subject category | Compulsory Elective Profiling |
| Number of credits (ECTS) |  |
| Prerequisites |  |
| Postrequisites |  |
| Lecturer | Name, title, position, office address, telephone, fax, e-mail, office hours, etc) |
| **2. GOALS, OBJECTIVES AND LEARNING OUTCOMES OF THE COURSE** | |
| The course goal is | |
| The objectives of the course are | |
| Learning outcomes of the course  Students successfully completing the course will be able to: | |
| 3. Coursedescription | |
| 4. COURSE POLICY | |
| 5. LITERATURE | |
| Basic literature:  1.  Supplementary literature:  1. | |

1. **Course schedule**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Week/  date | Course topics | References | Lectures  (h/w) | Practical sessions  (h/w) | Lab. sessions (h/w) | TSIS  (h/w) | SIS  (h/w) |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |
|  | **Total hours:** |  |  |  |  |  |  |

1. **List of topics/ assignments for laboratory classes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| № | Topic Title | Number of hours | References | Form of reporting | Deadline |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |

1. **List of topics/** **assignments for practical classes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| № | Topic Title | Number of hours | References | Form of reporting | Deadline |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |

1. **List of topics/assignments for Student Independent Study**

Proper organization of students’ independent study is the key to the formation of skills in mastering, learning, assimilation and systematization of acquired knowledge, ensuring a high level of academic performance in the learning process

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| № | Topic/Assignment title | Number of hours | References | Form of reporting | Deadline |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |

1. **System for evaluating student performance in a discipline:**

*Option 1*

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Assignments** | **Score** | **Total** |
| 1st attestation | **Laboratory works:**  Lab work 1,  Lab work 2,  Lab work 3,  Lab work 4,  Lab work 5,  **Practical lessons:**  Exercise 1,  Exercise 2**,**  Exercise 3,  Exercise 4**,**  Exercise 5,  **Mid-term**  **SIS assignments** | **35**  7  7  7  7  7  **25**  5  5  5  5  5  **25**  **15** | **100** |
| 2nd attestation | **Laboratory works:**  Lab work 1,  Lab work 2,  Lab work 3,  Lab work 4,  Lab work 5,  **Practical lessons:**  Exercise 1,  Exercise 2**,**  Exercise 3,  Exercise 4**,**  Exercise 5,  **End-of-term**  **SIS assignments** | **35**  7  7  7  7  7  **25**  5  5  5  5  5  **25**  **15** | **100** |
| **Exam** | | | **100** |
| **Total** | **0,3\*1stAtt+0,3\*2ndAtt+0,4\*Final** | |  |

\*If the number of absences exceeds 20%, student will be automatically scheduled for a Retake (summer semester)

*Option 2*

Each type of educational work is evaluated on a 100-point scale and is included in the average assessment of the current control, taking into account the weighting coefficient in accordance with the table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Period** | **Assignments** | **Maximum score** | Weighting coefficient | **Total** |
| 1st attestation | Laboratory practice | 100 | 0,2 | **100** |
| Course paper | 100 | 0,3 |
| CGW | 100 | 0,3 |
| Attending lectures | 100 | 0,1 |
| Working during practical classes | 100 | 0,1 |
| 2nd attestation | Laboratory practice | 100 | 0,2 | **100** |
| Course paper | 100 | 0,3 |
| CGW | 100 | 0,3 |
| Attending lectures | 100 | 0,1 |
| Working during practical classes | 100 | 0,1 |
| **Exam** | | | | **100** |
| Total | **0,3\*1stAtt+0,3\*2ndAtt+0,4\*Ex** | | | **100** |

\*If the number of absences exceeds 20%, student will be automatically scheduled for a Retake (summer semester)

1. **Assessment criteria:**

*Option 1*

*Example of assessment criteria on a 5-point scale for laboratory works:*

|  |  |
| --- | --- |
| Points | Assessment criterion |
| **5** | The work was completed in full and correct answers were received for additional questions from the teacher within the framework of the program. |
| **4** | The work was completed in full, but mistakes were made when answering additional questions from the teacher. |
| **3** | The work was completed in full, correct conclusions were made, however, there are some non-compliance with design requirements, for example, errors in the design of graphs, tables, or in recording measurement results. After teacher's instructions, these shortcomings are eliminated. |
| **2** | The work was performed in an incomplete volume, for example, fault calculations were not carried out or carried out incorrectly, some results are incorrect, the conclusions do not correspond to reality, there are significant errors in the graphical data. After teacher's instructions, the main shortcomings were eliminated, and the graphs were corrected. |
| **1** | Work is performed in an incomplete volume, for example, there are errors in the calculations of most or all of the desired values, no faults, the results are mostly present, but not true, the conclusions do not correspond to reality, there are significant errors in the design, there are no graphs, calculation formulas are not specified, etc. After teacher's instructions, the main shortcomings are eliminated. |
| **0** | The work is incomplete, for example, there are errors in the calculations of most or all of the required values, there are no faults, the results are mostly present, but not true, the conclusions do not correspond to reality, there are significant errors in the design, there are no graphs, calculation formulas are not specified, etc. |

*Option 2*

The point-rating letter system for assessing the educational achievements of students with their interpretation in the traditional grading scale:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Letter Grade | Numerical equivalent | Points (%) | Traditional system assessment | General description of grading criteria |
| А | 4,0 | 95-100 | Excellent | The student has knowledge of the subject in the full scope of the curriculum, understands the discipline deeply enough; shows a high level of knowledge that exceeds the volume provided by the syllabus, gives an exhaustive answer |
| А- | 3,67 | 90-94 | The student has knowledge of the subject in the full scope of the curriculum, understands the discipline deeply enough; gives an exhaustive answer |
| В+ | 3,33 | 85-89 | Good | The student shows a complete, well-founded knowledge of the subject, but the answers did not always highlight the main idea, rational methods of calculation were not always used; the answers were mostly brief and sometimes unclear. |
| В | 3,0 | 80-84 |
| В- | 2,67 | 75-79 |
| С+ | 2,33 | 70-74 |
| C | 2,0 | 65-69 | Satisfactory | The student demonstrates sufficient knowledge of the subject, but without proper depth and justification, the answers are unclear and without proper logical sequence. |
| С- | 1,67 | 60-64 |
| D+ | 1,33 | 55-59 |
| D | 1,0 | 50-54 |
| FX | 0,5 | 25-49 | Unsatisfactory | The student demonstrates insufficient knowledge of the subject, positive answers were not given to individual questions. |
| F | 0 | 0-24 | The student demonstrates a very low level of knowledge of the subject. |

1. **Assessment and evaluation materials (exam questions)**

* List of exam questions on lecture topics.
* Form of assessment (exam): written, oral, comprehensive, design, testing.
* Sample exam card with assessment criteria (required).