

Course Title: **21st Century Skills**

Course No.: ICT. Ed. 438

Level: Bachelor.

Semester: Third

Program: BICTE

Nature of course: Theoretical

Credit Hour: 3 hours

Teaching Hour: 48 hours

1. Course Description

The aim of the course is to help students on 21st Century skills that today's students need to succeed in their careers during the Information Age. After the learn and practices of Critical thinking, Creativity, Collaboration, Communication, Media literacy, Flexibility, Leadership, cross-culture adaptation skills, the student will be able to develop and deepen their professional and general competences, to use innovative teaching tools and techniques as well as facilitate classroom.

2. General Objectives

After the completion of this course, the students should be able to:-

- To explore the different dimension of 21st century skills and practices.
- To able to demonstrate critical thinking and problem solving skill toward the new creation in classroom.
- To able establish the collaboration and communication teaching learning environment.
- To build skill to e-leadership and self-directed learn abilities.
- To explore the cross-culture practices on 21st CS and ready to cope up with learning environment.

3. Course Outlines:

| Specific Objectives | Contents | |
|--|---|-----------|
| <ul style="list-style-type: none">• Describe the concept of 21st CS skills.• Explain the 21st CS component of 4C, IMT and FLIPS.• Define the ATCs 21 CS Skills. | Unit I: Introduction to 21st CS 1.1 Definition of 21st CS 1.2 Components of 21st CS: 4C, IMT, FLIPS 1.3 National Curriculum framework and 21st CS 1.4 ATC21s 21st Century Skills 1.5 Broad Outcomes of 21 st Century Skills | 8 |
| <ul style="list-style-type: none">• Explore the different levels arguments.• Apply the rational discussion into critical thinking process.• Demonstrate a critical thinking activity in classroom.• Explain a creativity and innovation.• Demonstrate the creative and innovative activities in classroom. | Unit II: Critical Thinking, Creativity and Innovation 2.1 Concept of argument 2.2 Example of good vs bad argument 2.3 Rational discussion and reply rationally to an argument 2.4 Deductive arguments vs non-deductive arguments 2.5 Critical thinking activities in classroom 2.6 Concept of innovation and creativity 2.7 Creativity, innovation and learning 2.8 Classroom Activities of creativities and innovation 2.9 Classroom Activities on creativity and innovation | 12 |
| <ul style="list-style-type: none">• Explain basic component of communication.• Define the types of communication. | Unit III: Communication, collaboration and media literacy 3.1 Component of Communication 3.2 Types of communication media | 12 |

| | | |
|---|---|---|
| <ul style="list-style-type: none"> Explain the different mode of collaboration. Explain the media literacy for learner Demonstrate the application for create, publish, share learning materials | 3.3 Concept of collaboration 3.4 Social media and collaboration practices 3.5 Classroom collaboration 3.6 Concept of media literacy for learner 3.7 Digital citizen and netiquettes 3.8 Application of create, publish, share audio, video materials. 3.9 Classroom activities on publishing students portfolios in online | |
| <ul style="list-style-type: none"> Define the 21st Century e-Leadership. Describe the flexibility and adaptability in learning environment. Explain the self-direct learner characteristics | Unit IV: e-Leadership and Responsibility 4.1 Concept of e-leaderships in education 4.2 Characteristics of 21 st Century leadership 4.3 Learning flexibility and adaptability 4.4 Self-directed leader 4.5 Self-director learning classroom activities 4.6 Classroom activities on 21 st Century leadership | 6 |
| <ul style="list-style-type: none"> Define the social and cross-culture learning environment. Explore the ethical issues in cross-culture learning environment. | Unit V: Social and Cross-Cultural Interaction 5.1 Concept of digital culture and global villages 5.2 Ethical issues of cross culture interaction 5.3 Privacy and freedom of expression in digital world 5.4 Cultural difference and Privacy 5.5 Classroom Activities on ethical issues, privacy and freedom of expression on online behaviours. | 6 |
| <ul style="list-style-type: none"> Analyze the practices of 21st CS skills in education system. | Unit VI: CASE Study on critical thinking, creativity and innovation and collaboration practices in classroom using digital technology. | 4 |

4 Instructional Techniques

The instructional techniques for this course are divided into two groups. The first group consists of general instructional techniques applicable to most of the units. The second group consists of specific instructional techniques applicable to specific units.

4.1 General Instructional Techniques

- Introductory presentation on each topic of the unit by the teacher
- Use of lecture, question answer, discussion, brainstorming and buzz sessions for the theoretical contents.

4.2 Specific Instructional Techniques

| Unit | Suggested specific Instructional Techniques |
|----------|---|
| I | <ul style="list-style-type: none"> Students are divided into gender disaggregated groups. Each group is assigned to prepare key aspects 4C, IMT, FLIPS 21st CS skills. The students will present the group work in the class. |
| II, III, | <ul style="list-style-type: none"> Students are divided into groups. The groups will visit a nearby school, observe a class |

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|-------|--|
| IV, V | and assess which 21 st CS Skills teachers are using. Each group prepares a report and present in the class. |
| VI | <ul style="list-style-type: none"> Students work in pair and discuss different case study about 21st CS and drawn the educational implications from 21st CS for classroom teaching in their computer science areas. |

5 Evaluation

5.1 Internal Evaluation 40%

Internal evaluation will be conducted by subject teacher based on following activities:

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|---|-----------|
| 1) Attendance | 5 |
| 2) Class participation | 5 |
| 3) First assignment (Group work based on unit I, II, III, IV,V) | 10 |
| 4) Second assignment (Pair work based on Unit VI) | 10 |
| 5) Third assignment (Written test: objectives and subjective) | 10 |
| Total | 40 |

5.2 Final/Semester Evaluation 60%

Examination Division, office of the Dean, Faculty of Education will conduct final examination at the end of semester.

| | |
|--|-----------|
| Objective type question (Multiple choice 10 x 1pnts) | 10 |
| Short answer questions with two OR option (6 questions x 5 points) | 30 |
| Long answer questions with one OR option (2 questions x 10 points) | 20 |
| Total | 60 |

5. Recommended books and References materials (including relevant published articles in national and international journals)

Recommended books:

21st Century Skills : A Handbook, Central Board of Education, Delhi, 2020

References materials:

Walter Sinnott Armstrong and Robert Fogelin, Understanding Arguments: An Introduction to Informal Logic. 8th Ed. Wadsworth Cengage Learning.

Bellanca, J. A. (Ed.). (2015). *Deeper learning: Beyond 21st century skills*. Solution Tree Press.

Lamri, J. (2019). *The 21st century skills: How soft skills can make all the difference in the digital era*.