Course Title: **Teaching Method in ICT Education**

Course No.: ICT. Ed. 478	Nature of course: Theoretical
Level: Bachelor	Credit Hour: 3
Semester: Seven	Teaching Hour: 48

1. Course Description

Teaching methods in Information and Communications Technology (ICT) include the various instructional approaches and strategies applied to deliver ICT-related knowledge and skills to students efficiently. The methods used could include hands-on computer lab sessions, interactive multimedia presentations, online learning modules, collaborative projects, and problem-based learning activities that actively involve students in the practical implementation of ICT ideas. The course aims to give students a comprehensive understanding of ICT tools, software, programming, and digital literacy, and endow them with the necessary understanding and abilities for the digital era.

2. General Objectives

The general objectives of this course are as follows:

- To explore innovative teaching methods to enhance instructional effectiveness and engage students in a technology-rich environment.
- To create comprehensive lesson plans to optimize student learning experiences.
- To design and apply strategies for utilizing ICT tools effectively in the classroom.
- To utilize ICT tools for student assessment, online assessments, and digital portfolio management, providing constructive feedback.
- To explore emerging technologies in education to stay updated with advancements and best practices in teaching methods.

3. Course Outlines:

Specific Objectives	Contents
• Explain pedagogy and andragogy concepts for effective teaching strategies across age groups. • Describe flipped classroom models • Explain online and face-to-face instruction to create flexible, cohesive blended learning experiences. • Explore gamification elements to enhance motivation and engagement. • Explore real-world problems, collaboration, and critical thinking concept.	**Unit I: Innovative teaching methods (4)** 1.1 Concept of Pedagogy and Andragogy 1.2 Flipped Classroom 1.3 Blended Learning 1.4 Gamification 1.5 Project-Based Learning (PBL) 1.6 Inquiry-Based Learning

• Describe inquiry-based learning	
• Create learning objectives to guide session planning and measure student progress effectively. • Create lesson plans that align with objectives, ensuring structured and engaging content delivery. • Incorporate ICT tools seamlessly into lesson plans to enhance learning and student interaction. • Develop strategies for effective time management and pacing to maintain lesson flow and student engagement. • Design lessons with interactive elements to actively involve students and promote hands-on learning.	**Unit II: Session Planning and Design (6)** 2.1 Determine Learning Objectives 2.2 Designing Effective Lesson Plans 2.3 Integrating ICT Tools into Lesson Plans 2.4 Time Management and Pacing 2.5 Designing Interactive Lessons
• Design strategies for effective ICT tool use in the classroom. • Plan management for a technology-enhanced classroom environment. • Create a plan for facilitating collaborative learning among students. • Use gamification, quizzes, and polls to enhance student engagement. • Engage students using social media for interactive learning.	**Unit III: Classroom Teaching Strategies (12)** 3.1 Strategies for effective use of ICT tools 3.2 Design Technology-enhanced classroom 3.3 Design collaborative learning 3.4 Student engagement using gamification, interactive quizzes and polls 3.5 Post-class engagement using social media
• Assess student performance using ICT tools effectively. • Implement online assessments and manage e-portfolios efficiently. • Provide feedback to students through digital channels. • Use data-driven insights for educational decision-making.	**Unit IV: Evaluation and Feedback (4)** 4.1 Assessing Student Performance with ICT 4.2 Online Assessments and E-Portfolios 4.3 Providing Feedback through Digital Means 4.4 Data-Driven Decision Making in Education
• Explore emerging technologies for future educational applications. • Prepare strategies for future classroom technology integration. • Analyze case studies of innovative ICT classroom practices.	**Unit V: Future Direction ICT teaching methods (12)** 5.1 Emerging Technologies in Education 5.2 Preparing for the Future Classroom

• Develop a comprehensive semester plan incorporating ICT method.	5.3 Case Studies of Innovative ICT Practices in classroom 5.4 Project about complete plan of one semester

4 Instructional Techniques

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

4.1 General Techniques

Reading materials will be provided to students in each unit. Lecture, Discussion, use of multi-media projector, brain storming are used in all units.

4.2 Specific Instructional Techniques

Demonstration is an essential instructional technique for all units in this course during teaching learning process. Specifically, demonstration with practical works will be specific instructional technique in this course.

5. Evaluation :

Internal Assessment	Semester Examination	Total Marks
40 Marks	60 Marks	100 Marks

***Note**: Students must pass separately in internal assessment and semester examination.*

5.1 Internal Evaluation (40 Marks):

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

- Class Attendance 5 Marks
- Learning activities and class performance 5 Marks
- First assignment (written assignment) 10 Marks
- Second assignment (Case Study/project work with presentation) 10 Marks
- Terminal Examination 10 Marks

Total 40 Marks

5.2 Semester Examination (40 Marks)

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

- Objective question (Multiple choice 10 questions x 1mark) 10 Marks
- Subjective short answer questions (6 questions x 5 marks) 30 Marks
- Long answer questions (2 questions x 10 marks) 20 Mark

Total Marks	60

6. Recommended Books and Reference Materials

6.1 Recommended Books:

Author Name. (2019). Educational Technology. (2019). New York, NY: Springer Berlin Heidelberg.

Agarwal, J.C. (2008): *Essentials of Educational Technology: Innovations In Teaching Learning.* New Delhi: Vikas Publishing House Pvt. Ltd.

6.2 References materials:

Kolb, L. (2017). Learning first, technology second: The educator's guide to designing authentic lessons (First edition). Portland, Oregon: International Society for Technology in Education.

Radha Mohan. (2007). Innovative science teaching. New Delhi: Prentice-Hall of India Private Limited.

Mangal, S. K., & Mangal, U. (2012). Essentials of educational technology. New Delhi: PHI Learning Pvt. Ltd.