Course Title: **Digital Pedagogy**

Course No.: ICT Ed. 468 Nature of Course: Theoretical + Practical

Level: Bachelor Credit Hours: 3 (2T+1P)

Semester: Six Teaching Hours: 64 (32T+32P)

1. Course Description

This course provides the exploration and integration of a broad range of information and communication technologies (ICT) into learning and teaching to improve student learning outcomes. This course cover the e-learning concept and practices, Learning management system and integration with other tools, e-assessment and e-portfolio, educational system management, teachers professional development, e-content and education resources using ICT tools in the academic arena.

2. Course Objectives

The general objectives of this course are as follows:

- To gain an understanding of the theories and concepts underlying e-learning
- To improve familiarity with current challenges and issues in LMS
- To apply and implement database driven LMS in pedagogy.

3. Specific Objectives and Contents

Specific objectives	Contents
• sketch the History of e-learning • define e-learning and blended learning • explain the Characteristics of e-learning	**UNIT I: Concept of e-Learning** 1.1 Concept of E-learning 1.2 Synchronous Vs Asynchronous Learning 1.3 Concept of E-Learning 3.0 1.4 Concept of Virtual Learning Environment (VLE) 1.5 Importance and challenges of e-learning **Practical Activities** • Surfing the five key e-Learning portals and explore the key features • Demonstrate the any three VLE online environment and explores the key features

• explain the features of Learning Management System(LMS) • differentiate LMS from LCMS • list the advantages and Limitations of e-learning • list examples of different Learning Management Systems • use learner management system • explain the importance of e-learning standards	**UNIT II: Gamification on Learning** 2.1 Concept of Gamification in Education 2.2 Concept of story telling 2.3 Application of MIT Scratch for gaming 2.4 Application of MIT Apps Inventor for gaming 2.5 Use of Mobile gaming tools for learning 2.6 Importance of gamification in learning **Practical Activities** • Develop any two story-telling project using Scratch block programming (Scratch_3.29.1) • Develop any three gaming-project using Scratch block programming • Develop any five mobile apps for learning using MIT Game Inventor tools
• list Web 2.0 technology tools • explore the uses of Wiki • describe the features and benefits of blogs and blogging • identify various elements of blog and tools for blogging • explain approaches to integrating blogs in education • describe the meaning and scope of constructivist learning • explore the scope of 5E model in integrating ICT • explore the different dimensions of PBL • describe WebQuest as a learning activity • describe the various features of social bookmarking websites. • create and manage bookmarks • explore the potential of WebQuest for developing twenty first century skills • define Virtual Field Trip • explore the uses of Virtual Field Trip in education • create a Virtual Field Trip	**UNIT III: e-Learning 3.0 tools integration** 3.1 Concept of Pedagogy Wheels and e-learning tools 3.2 Use of social media such as Facebook and YouTube for learning 3.3 Integration of Podcasting tools for learning 3.4 Integration of AI Generative tools for learning such as ChatGPT, Bard 3.5 Integration of online quiz maker tools for learning 3.6 Integrate blogs for learning **Practical Activities** • Demonstrate any three features of Facebook and YouTube for learning • Use any one Podcasting tool and broadcast the recorded audio. • Use AI generative tools such as ChatGPT or Google Bard and explore the key features • Integrate the AI generative tools in MS Word, Excel, PowerPoint and email. • Integrate the AI generative tools in Google Doc, Presentation, Gmail and Calendar. • Integrate any one online quiz maker tools such as Quizizz • Create own personal blog using blog tools such as blogger.
• revise the basic concepts related to assessment • explain the role of ICT in assessment	**UNIT IV: LMS and Learning Resources Design** 4.1 Concept of Learning Management System (LMS) 4.2 Open source based LMS tools 4.3 LMS course and learner enrollment 4.4 Create and upload the text base (PDF) materials in LMS

• explain the concept of computer assisted and computer adaptive testing • list various technology tools and possibilities for assessment of student learning • design and create digital assessment portfolio • create tests/ quizzes/rubrics using online and offline software tools • explore various digital online and offline assessment alternatives available	4.5 Create and upload the audio/video/website materials (weblink) in LMS **Practical Activities** • Create account and enroll LMS tools for learner • Create, upload and assign to PDF based text materials in LMS • Create, upload and assign to audio, video and web link materials in LMS **Note:** LMS tools Means Moodle or Google Classroom or MS Teams or EdX or Canva or similar tools.
• explain the meaning of Teacher Professional Development concept in the context of ICT • review the scope of ICT as a tool assisting in teaching and managing school activities	**UNIT V: Learning Activities and Assessment** 5.1 Assignment 5.2 Quiz 5.3 Forum 5.4 Workshop

4.0 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 Instructional Techniques

Reading materials will be provided to students in each unit. Lecture preferably with the use of multi-media projector, demonstration, practical classes, discussion, and brain storming are used in all units.