B.Ed(4 Years) Elementary Education

Code	Subject Title	Cr. Hrs	Semester
EDE- 326	Computer Applications in Education	3	1

Year	Discipline
1	Elementary Education

Aims

This course will prepare teachers to understand, use and apply technologies (computer, digital camera, mobile phones) in an effective, efficient and ethical ways. Prospective teachers will actively explore the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. Teachers-in-training will engage with the design and creation of exciting, intellectually challenging and authentic learning environments. Trainees in this course will examine how Information Communication Technology (ICT) might be used to both enhance and transform learning.

Objectives

- Use computer technology as a tool for communication & collaboration, problem solving
- Develop a well-articulated perspective on information and communications technology in education informed by personal experience and critical examination of computer resources, curriculum, and educational practice.
- Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning
- Evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- Develop confidence, skill and an attitude to use a range of technologies for instruction and long learning.
- Use computers technology for personal & professional growth, for research and generating new knowledge

Syllabus

1. **Introduction to Computers in Education**
   - 1.1. The Role of Computers in Education
     - 1.1.1.1. Identify ways in which schools use computers today.
     - 1.1.1.2. Milestones in Computer History
   - 1.2. Milestones in Computer History - Timeline 2000
   - 1.3. Computer Technology
     - 1.3.1.1. PCs and Macintosh Computers
     - 1.3.1.2. Components of a Computer
     - 1.3.1.3. Computer Software
     - 1.3.1.4. Networks and the Internet
2. **Hardware Applications for Education**
   - 2.1. The System Unit
     - 2.1.1.1. Components of the System Unit
     - 2.1.1.2. Data Representation
   - 2.2. Input Devices
   - 2.3. Output Devices
   - 2.4. Storage Devices
   - 2.5. Peripheral Devices

3. **Software Applications for Education**
   - 3.1. Software
     - 3.1.1.1.System Software
     - 3.1.1.2.Application Software
   - 3.2. Common Features of Software
   - 3.3. Types of Application Software
   - 3.4. Types of System Software
4. **Uses of MS Office in Education**
   - 4.1. MS Word
   - 4.2. MS Excel
   - 4.3. MS PowerPoint
   - 4.4. Internet
5. **Use of Computers in Educational Research**
   - 5.1. Data Entry using SPSS
   - 5.2. Data Analysis using SPSS
6. **Education and Technology Integration**
   - 6.1. Curriculum Standards and Benchmarks
     - 6.1.1.1.Requirements for Students
     - 6.1.1.2.Requirements for Teachers
     - 6.1.1.3.Planning Lessons that Incorporate the Standards and Benchmarks
   - 6.2. Technology Integration and the Learning Process
     - 6.2.1.1.Learning Styles
     - 6.2.1.2.The Impact, or Role, of Technology
     - 6.2.1.3.Strategies for Teaching with Technology
   - 6.3. Planning for Technology Integration in the Classroom
     - 6.3.1.1.Planning Lessons with Technology
     - 6.3.1.2.Putting It All Together - Creating an Integrated Learning Environment
     - 6.3.1.3.How Teachers Can Use E-mail in the Classroom
     - 6.3.1.4.Identifying Online E-mail Projects

Text Books

- Shelly, G., &Vermaat, M. (2011). Discovering computers fundamentals: your interactive guide to the digital world: Nelson Education.
- Evans, A., Martin, K., &Poatsy, M. A. (2008). Technology in action: Pearson Prentice Hall.
- Bunzel, T. (2008). Master VISUALLY Microsoft Office 2007 (Vol. 740): John Wiley & Sons.

Reference Material

- Fundamentals of Information Technology by S. K. Bansal

Web Resources

http://office.microsoft.com

http://www.openoffice.org/