Educational Technology & ICT

Course Code: EDU-201 Credit Hours: 03 (3-0)

Objectives:

The course will enable learners to:

- Understand the meaning, concept and importance of instructional technology in education process.
- ➤ Know the meaning of learning and appreciate what is effective teaching and learning by using latest instructional technology.
- Select, arrange and use appropriate methods/strategies and material for effective use of technology.
- Develop indigenous materials as instructional aids.

Course Outline

1. Introduction:

- **1.1.** Meaning and definition of educational technology
- **1.2.** Origin of educational technology
- **1.3.** History of educational technology
- **1.4.** Types of educational technology
- **1.5.** Components of educational technology
- **1.6.** Classification Of AV-aids
- **1.7.** Merits and demerits of educational technology in the field of education

2. Types of Educational Technologies, Media and Their Uses in Learning Process

Introduction: Basic concepts, Tape-Recorder, Radio, Television and video, Educational telecasting, Videotext and electronic mail, Interactive video, Video and film, Projectors, types and uses, Computer, Internet and intranet, Multimedia, Language laboratories, Models and modeling, Reprography, Board work: Bulletin and flallen boards, Use of locally available low cost material of educational technology, Media: Meaning and concept, Use of Mass Media in Education.

3. Current types of the educational technology systems and their application

3.1. Computer-based educational technology

- **3.2.** Interactive video and multimedia stations
- **3.3.** Virtual reality systems: Simulations & games
- **3.4.** Teleconferencing
- **3.5.** Personal digital assistants (PDAs)
- **3.6.** Laboratory and workshop instructions

4. Planning and implementation for effective technology integration in

- **4.1.** Teaching
- **4.2.** Preparing / planning for technology integration
- **4.3.** Obtaining the right material and personnel resources
- **4.4.** Choosing the right software & hardware for yours needs
- **4.5.** Training the teachers for using educational technology
- **4.6.** Introduction to technology support tools
- **4.7.** Using graphics tools
- **4.8.** Using planning and organizing tools
- **4.9.** Using tools to support specific content areas
- **4.10.** Using interactive videodisc technology in teaching
- **4.11.** Using hypermedia in teaching and learning

5. Integrating Technology into the Curriculum and Instruction

- **5.1.** Introduction
- **5.2.** Technology in science and mathematics instruction
- **5.3.** Technology in social science instruction
- **5.4.** Technology in language arts and foreign language instruction
- **5.5.** Technology in music and art instruction
- **5.6.** Technology in exceptional student education
- **5.7.** Issues and trends related to technology use in instruction
- **5.8.** Educational technology resources

6. Media and Teaching

- **6.1.** Concept of teaching: Structure and features
- **6.2.** Professionalism in teaching
- **6.3.** Teaching as an art or science
- **6.4.** Teaching competence

- **6.5.** Factors affecting teaching competence
- **6.6.** Effective teaching or effective teacher

Recommended Books:

Feden, P. D. and Vogel, R. M. (2003). **Methods of teaching**. Boston: Mc-Graw Hill.

Joyce,B.; Weil, M.& Calhoun, E. (2000). **Models of teaching**. (6th ed.). Boston: Allyn and Bacon.

Norton, P. & Sprague, D. (2001) **Technology for teaching** Boston Allyn & Bacon.

Rashid, M. (Ed.). (2001). Allied material on teaching strategies. Islamabad: AIOU.

Sharma, S. R. (2000). **Effective classroom teaching: Modern methods, tools and techniques.** Jaipur: Mangal Deep Publications.

Web Recourses

Journal of Research on Technology in Education (JRTE, International Society for Technology in Education (ISTE) - http://www.iste.org/learn/publications/journals/jrte-old.aspx

Journal of Technology and Teacher Education (JTATE) - http://aace.org/pubs/jtate/ Partnership for 21st Century Skills. 2010. Framework for 21st Century Learning.

http://www.21stcenturyskills.org/index.php?Itemid=120&id=254&option=com_contentwise.

National Geographic Channel: http://maps.google.com/

Videos – National Geographic:

http://video.nationalgeographic.com/video/player/national-geographic-channel/

Videos – Discovery Channel

http://dsc.discovery.com

Videos – The Khan Academy

http://www.khanacademy.org/

English Grammar software free download

 $\frac{http://freesoftwarepc.biz/educational-software/download-free-software-3d-grammar-english-portable/}{}$

Philosophy of Education

Course Code: EDU-202 Credit Hours: 03 (3-0)

Objectives:

- ➤ Understand the meaning of the term Philosophy
- ➤ Understand the subdivisions of philosophy, how they are defined, and
- ➤ How do they reflect their own beliefs and their teaching about truth and values?
- ➤ Understand the leading philosophies and theories of education
- ➤ Understand whether they (the teachers) have certain philosophies and
- ➤ Theories present in their educational experiences?

Course Outline

1. Philosophy

- 1.1. Definition and scope of philosophy
- **1.2.** Metaphysics, Epistemology, Axiology, Logic: Deductive logic, Inductive logic

2. Western Philosophies of Education

- **2.1.** Idealism: Its metaphysics, epistemology, axiology, educational implications. Proponents: Plato.
- **2.2.** Realism: Its metaphysics, epistemology, axiology, educational implications. Proponents: Aquinas, Aristotle, Bacon, Locke.
- **2.3.** Naturalism: Its metaphysics, epistemology, and axiology, educational implications Proponents: Rousseau.
- **2.4.** Pragmatism (Experimentalism: Its metaphysics, epistemology, axiology, educational implications. Proponents: Dewey
- **2.5.** Postmodernism: Its metaphysics, epistemology, axiology, educational implications. Proponents: Derrida, Foucault.

3. Muslim Philosophical Perspective on Education

- **3.1.** Imam Ghazali
- **3.2.** Ibne-Khaldun
- **3.3.** Shah waliullah
- 3.4. Sir Syed Ahmed Khan
- **3.5.** Allama Iqbal

4. Theories of Education:

- **4.1.** Progressivism (rooted in pragmatism): Aims, Curriculum, and Educational Implications. Proponents: Dewey, Kilpatrick, Parker, Washburne.
- **4.2.** Critical Theory rooted in neo Marxism and postmodernism): Aims, Curriculum, and Educational Implications. Proponents: McLaren, Giroux.
- **4.3.** Perennialism (rooted in realism): Aims, Curriculum, and Educational Implications. Proponents: Adler, Bloom, Hutchins, Maritain.
- **4.4.** Essentialism (rooted in idealism and realism): Aims, Curriculum, Educational implications. Proponents: Bagley, Bestor, Conant, Mor.