Syllabus of the compulsory course 'Computer application in teaching learning' (AC101)

Director IQAC
Rama Devi Women's University
Bhubaneswar

Registrar
RD Women's University
Bhubaneswar

Course Type: **ALLIED CORE**

Course Code: **AC-101**

Course Title: **COMPUTER APPLICATIONS IN TEACHING LEARNING**

(Compulsory Course for All PG students)

Credits: 03	Marks: 50	Mid-Sem 10 + Pract. 10 = 20 marks	End Sem: 30 Marks	Total Hours: 45

Course Objectives:

1. To provide basic knowledge to students on computer applications essential for teachning learning in higher education.
2. To make the students understand the e-learning and its applications.
3. To impart knowledge to students on Trends in Teaching Learning Practices.

Course Learning Outcomes (CLOs):

At the end of the course, the students will be able to:

CLO1: Learn basis of Basics of MS Windows. (Remembering)

CLO2: Demonstrate basic understanding of computer applications with reference to MS Windows, MS excel and MS PowerPoint. (Applying)

CLO3: Generate spreadsheets, charts and presentations. (Creating)

CLO4: Design personal, academic and business documents using MS Office. (Creating)

CLO5: Model the modes of development of self-learning materials and prepare different types of instructional material. (Applying)

CLO6: Explain different OERs, MOOCs available for effective learning. (Understanding)

CLO7: Develop learners' e-portfolios. (Creating)

CLO8: Classify various e-resources for effective learning. (Analyzing)

CLO9: Describe the concept of artificial intelligence and its applications in teaching learning. (Understanding)

CLO10: determine similarity index of the various documents like dissertations, theses etc through plagiarism testing software. (Evaluating)

Course Contents

Unit-I: Basics of Computer Applications (CLO1, CLO2, CLO3, and CLO4)   15 Hours

- Basics of MS Windows: Desktop, Recycle bin, My Computer, Documents, Pictures, Music, Videos, Task Bar and Control Panel. MS-Word and its features: Creating, Editing, Formatting and Printing of Documents, Inserting, Word Art, Page Numbers, Mail Merge.

- MS-Excel and its features: Creating a new worksheet, selecting cells, Entering and editing Text, Numbers, Inserting Rows/Columns, changing widths and heights of ros and columns, Formulae, referencing cells, changing of font sizes and colors.

- MS-PowerPoint and its features: Creating, Inserting and Deleting Slides of a Presentation. Adding Pictures, Inserting Objects, Audio, Video, Custom Animation and Hyperlinking of documets.

Unit-II: E-learning and its applications (CLO5, CLO2, CLO3)   15 Hours

- Concept of e-learning, Approaches to e-learning: Offline, Online, Synchronous, Asynchronous, Blended learning and Mobile Learning. Security concerns related to

interactive contents: Viewing, disabling and managing interactive content; securing the computer from viruses and other Internet attacks.

- Creating and Sharing: (i) G-Suite: Gmail, Drive, Calendar, Meet, Chat, Doc, Sheet, Slides (ii) Surveying: SurveyMonkey, Google Forms, online spreadsheets (iii) Google Classroom: conducting classes, assessment and evaluation.

- Development of Self-Learning Materials (SLM) and e-content: Concept and its purposes, Conventional Teaching versus SLMs & e-content, Types of SLMs and e-content, Process of Developing SLMs and e-content, Content Organization, Integrating video and audio into SLMs.

Unit-III: Trends in Teaching Learning Practices (CLO6, CLO7, CLO8, CLO9, CLO10) 15 Hours

- Open Education Resources: Creative Common, Massive Open Online Courses; creating learners' E-portfolios; Accessing Online Repositories, Online Libraries and E-Resources.

- Artificial Intelligence: Concept and its applications in teaching learning practices. Introduction to SPSS and R, Latex.

- Plagiarism: Regulations, similarity index of the various documents like dissertations, theses etc. through plagiarism testing software (Mendeley, Zotero).

Transaction Mode

Workshop, ICT-Lab Learning, Lecture Method, Seminar, team teaching, tutoring, peer group discussion, mobile teaching, self-learning, Collaborative learning, Cooperative learning.

Book and Materials Recommended

(Any other Books and Materials may be followed)

Creating learning materials for open and distance learning: A Handbook for Authors and Instructional Designers (2005). Commonwealth of Learning. Vancouver: Canada

Excel 2020 in easy steps-Michael Price – TMH publications

Foundations of Self-Learning Materials. http://wikieducator.org/Session_3.

Garrison, D.R. and Anderson, T. (2003). e-learning in the 21st century: a framework for research and practice. London: Routledge.

Haas, K.B. and Packer, H.Q. (1990): Preparation and use of audio-visual aids, 3rd Edition, Prentice Hall, Inc.

Jayaram, K and Dorababu, K.K. (2015). Self learning materials in distance education system. International Journal of Current Research. Vol. 7, Issue, 10, pp.21929-21934.

Minnick, D.R. (1989). A guide to creating Self Learning Materials. International Rice Research Institute Los Baños, Laguna, Philippines.

MS Office 2007 in a Nutshell –Sanjay Saxena – Vikas Publishing House.

Murthy, CRK and Santosh Panda (2002). Report of the workshop on strategies for revision of self-learning materials, IGNOU, New Delhi. (Unpublished).

Oreyet.al. (2009). Educational media and technology. New York: Springer Science Business Media.

Rana, S. (1994): Open Learning in India, Commonwealth Publishers, New Delhi.

Roblyer, M.D. (2008). Integrating educational technology into teaching. New Delhi: Pearson.

Rowntree, Derek (1986). Teaching through self-instruction, Kogan Page, London/Nichola Pub. Comp. New York.

Senapaty, H.K. (2009). ICT integrated learning materials on basic school subjects from constructivist perspectives. Bhubaneswar: Regional Institute of Education, NCERT.

7.5.22