Net Centric Computing (CSC-360) Tribhuvan University

Institute of Science and Technology Soch College of Information Technology

Bachelor of Science in Computer Science and Information Technology

Course Title: Net Centric Computing

Course no: Csc-360 ----- **Full Marks:** 60+20+20

Credit hours: 3 ----- Pass Marks: 24+8+8 Nature of course: Theory (3 Hrs.) + Lab (3 Hrs.)

Course Synopsis: This course explores the concepts of developing web technology.

Goal: To provide the knowledge of Web Centric Computing Using Active Server programming.

Course Contents:

Unit 1. Introduction ----- 4 Hrs.

Behind the scenes: Introduction, benefit and application of ASP; Introduction to IIS: Features, properties and application of IIS and MMC, Virtual directory properties; ASP requirements: Need for ASP, Scripting capabilities, Recognizing individuals, Database access, State maintenance, ASP extensibility.

Unit 2. Intrinsic ASP Objects ----- 6 Hrs.

The response object: ASP objects, Sending text with the response object and embedded quotes, Using variables, Other response; The request object; The application and server objects: Threads, Application variables and use, The server object, Limitation of application variables; The session object.

Unit 3. Writing Server-Side Code ----- 8 Hrs.

Coding using VBScript and JScript, The scripting dictionary object, File access with ASP, Debugging ASP and error-handling.

Unit 4. Using Components ----- 5 Hrs.

The browser capabilities component: Difference between browser, Components properties/methods, working and capabilities; Other ASP components; Sending and receiving Email with ASP.

Unit 5. Accessing Databases with ASP and ADO ----- 7 Hrs.

Introduction to relational databases and SQL, Introduction to ADO, Accessing data with ADO, Controlling transactions in ASP.

Unit 6. ASP Applications ----- 7 Hrs.

Introduction to ASP applications, State maintenance in ASP applications, Controlling access and

monitoring, Planning application, Develop a sample project using ASP.

Unit 7. Advanced ASP ----- 8 Hrs.

Client-side scripting, Building own components, Automating active server pages, Efficiency and scalability.

Laboratory works: Exercises covering all features of above.

Text / Reference Book: Active Server Pages 3, a Russell Jones, BPB Publications, New Delhi, 2