Virtual Classroom with Video Conferencing

University of North Bengal

Centre for Information and Resource Management (CIRM)

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INTRODUCTION

University of North Bengal has set up virtual classroom in 25 departments to enhance online learning environment which allows for live interaction between the faculty and the students as they are participating in learning activities. In other words, the virtual classroom is a shared online space where the students and the teacher work together simultaneously. Usually, these interactions take place through videoconferencing.

In this type of interaction, the teacher has the particularly important role of the moderator who guides the learning process and supports group activities and discussions.

FEATURES

Advanced interactive whiteboard

➤ The interactive whiteboard comes with a full-screen mode, creating a bigger workspace. User can open multiple whiteboards to draw, illustrate, show diagrams, upload presentations, images or even play videos from your library without any hassles. The out-of-the-box advanced **geometric** shapes and graphs make it easy to teach math and statistics. Circuit diagrams, line diagrams, and apparatus shapes have been included for teaching physics, electrical sciences, and chemistry in a hassle-free manner in an online classroom. The inclusion of maps helps a great deal when teaching geography. You can annotate to explain, illustrate and comment on an existing file or image. You also get the option to choose different colors from the color palette**.**

High-definition video conferencing

➤ Collaborate face-to-face with enhanced audio-video quality. The full-screen conference mode ensures improved output and the 5-way audio-video layout with instinctive speaker recognition brings alive the real classroom experience. Enjoy unhindered interactive live online classes with low-latency online video streaming and unlimited, echo-free audio output for better results.

Server side recording

➤ The server-side recording (SSR) works in the background when video conferencing establishes. Five concurrent users can take part in this conferencing. The recording is captured directly on our server. The recording is available in the server Computer Library in MP4 format within minutes of the end of the session. internet speed can impact the recording, very little buffering even on low-end connections. Individual users should make sure that respective computer systems have all the application software installed properly.

Integrated library

  ➤ The integrated library supports all types of files, saving the hassle of transferring and carrying data. Upload text, audio, video, PPT, and HTML files in different formats (PDF, DOC, DOCX, XLS, XLSX, PPT, PPTX, MP3, MPEG, WMV, MP4, JPEG, GIF, PNG). The cloud storage saves the hassle of transferring and carrying data. It's easy to search for content and share it with your audience.

Easy administration

  ➤ Use of the **TrueConf** software from any browser and set it up within minutes. TrueConf makes it easy and seamless to carry out administrative activities for your live sessions. User can define roles and permissions for individual attendees and manage your ongoing sessions with a host of in-class features.

GENERAL GUIDELINES

Users may be aware that by using this virtual teaching-learning environment, the users are agreeing to abide by the following policies:

➢ The facility of virtual classroom environment should be used for academic and official purposes and to a limited extent for personal purposes.

➢ Computer Centre, NBU will manage and administer the virtual classroom environment network connectivity to the respective departments.

➢ Use of the University network in the virtual classroom will depend on the availability of network bandwidth, usage of electronic resources and count of simultaneous access and will be administered by Computer Centre, NBU.

➢ All physical connections to the University network must be made in accordance with the industry best practices and standards.

➢ The devices using in Virtual Classroom connecting to the University network must be registered (in stock) either centrally or at department level.

➢ The configuration and operation of devices (using in virtual classroom) connecting to the University network must comply with all applicable University security policies, procedures, and practices.

➢ Individual user/department should ensure that the Operating System Installed in virtual classroom is proper, valid and active. In case of any confusion, installation or reinstallation the only point of contact is Computer Centre.

➢ Computer Centre subscribes licenses for all Windows Operating System supported by Microsoft and latest version of MS Office through campus agreement. All the departments or users should submit a written request or send a request mail from institutional email id to get these software(s) installed into the computer system

➢ Recorded lecture stored in Central Streaming Server set up at the Computer Centre. User/department should contact with the Head, Computer Center for retrieve.

➢ If any devices use in virtual classroom is not in working condition, user/department should inform the Computer Centre.

➢ The representative of the Computer Centre will inform the vendor on earliest to resolve it and vendor will maintain the call log.

➢ Computer Centre will determine the technical specifications, installation practices, standards, and operational criteria for newly replaced devices by faulty devices uses in virtual classroom.

CURRENT INSTALLATION

1   Department of Physics

2   Department of Chemistry

3   Department of Mathematics

4   Department of Geography and Applied Geography

5   Department of Zoology

6   Department of Botany

7   Department of Bio-Technology

8   Department of Computer Science and Application

9   Department of Anthropology

10   Department of Bengali

11   Department of English

12   Department of Nepali

13   Department of Hindi

14   Department of Political Science

15   Department of Economics

16   Department of Commerce

17   Department of History

18   Department of Philosophy

19   Department of Sociology

20   Centre for Himalayan Studies

21   Department of Law

22   Department of Library and Information Science

23   Department of Lifelong Learning and Extension

24   Department of Microbiology

25   Department of Management

CONCLUSION

The CIRM, NBU, formerly known as Computer Centre is responsible for installation, commissioning and sharing user experience with vendors associated with Virtual Classrooms with Video Conferencing Solution of concerned department of our University.