

2017

# Workshop on Development of Online Courses using OERs and Moodle LMS

**November 21-23, 2017**

Organised by Computer Science & IT, Uttarakhand Open University,  
Haldwani & CEMCA, New Delhi

Report Prepared by  
Dr. G. Mythili



## CEMCA-UOU

### Workshop on Development of Online Courses using OERs and Moodle LMS

November 21-23, 2017

Organised by

Computer Science & IT, Uttarakhand Open University, Haldwani

&

CEMCA, New Delhi

## Background

Teaching and Learning has changed in the 21<sup>st</sup> century. The British Open University and other Traditional Universities have developed online distance courses. Private institutions are also offering online courses. Students' all over the world in the coming years will be using the e - learning tools more than the printed textual material and India is not far behind. The worldwide e learning industry is estimated to be worth over \$48 billion.

Open Universities (OU) in the last more than 20 years have moved from print material to web based courses for delivery of instruction. With the emergence of new technologies, the universities have to move fast and keep the pace with the rest of the world.

Online Learning (OL) is mainly the transfer of skills and knowledge through computer. The content is delivered via Internet or audio/video or satellite or CDROM.

Keeping this new technological development in view, the teachers should be prepared to meet the challenges of the future. In this connection, Uttarakhand Open University (UOU) in collaboration with Commonwealth Media Centre of Asia (CEMCA) organized three day workshop on how to create /develop online courses.

## Objectives

The training objectives of this workshop are as follows:

- Explain and Describe the Instructional Design for Online Courses.
- Highlight some of the tools used to create online courses
- Understand the Learning Management System
- Publish the Resources for an Online Course
- Create an Online Course using modular object –oriented dynamic learning environment (Moodle).

## Venue

This workshop was held in UOU, organized from **21-23, November, 2017**.

## Participants

The training programme accommodated faculty members from UOU, list of participants enclosed in appendix-2.

Universities are entering into the launch of online courses. This type of training helped the faculty involved in designing and building online courses and also build interactivity. As this concept is a new development, this will take some time to mature and spread. The faculty should get ready now to use this technology.

## Methodology

This training is awareness and Capacity Building programme to the faculty of university in developing Online Courses. The methodology used for the training made full use of experiential learning methodologies. Accordingly the programme used structured presentations on the new concepts. After the brief presentations, the faculty worked individually on the terminal and explore the usefulness of the new technology for their courses.

## Schedule

A detailed schedule is enclosed in Appendix-1

## Coordinator

**Dr. Jeetendra Pande**

Assistant Professor

Computer Science, Uttarakhand Open University

[jpande@uou.ac.in](mailto:jpande@uou.ac.in)

## Resource Person (s)

**Dr. G. Mythili**

Deputy Director, STRIDE, IGNOU

[gmythili@ignou.ac.in](mailto:gmythili@ignou.ac.in)

## Day One (21 November, 2017)

### Inaugural Session

Since the Vice-Chancellor had to attend an important meeting with State Education Minister at Dehradun, Prof. Nageshwar Rao VC, UOU inaugurate the workshop through Skype. Initially, Prof. Durgesh Pant, Professor of Computer and Information Technology of UOU, welcome the participants and VC. He mentioned the importance of learning management system (LMS) and its usefulness towards teaching-learning process. He also highlighted the Massive Online Open course( MOOCs) and Open educational resources ( OER) which will be the future of online Distance Learning (ODL). He also emphasized the capacity building programme to develop the

skills on latest development in ODL. While developing the inaugural address, Prof. Rao welcomed all the participants with the great pleasure to the 3 day Workshop on development of online course through Moodle. He raised the importance of quality concern in high education and the role of UOU to focus on changing scenario in high education system. Also encourage the participants to develop OER in different perspectives.

Also he complimented CEMCA for its active collaboration with UOU in different projects on development of OER and capacity building programme. He highlighted the SWAYAM (study webs of active –learning for young aspiring minds) project of Ministry of Human Resource development (MHRD) and invited the faculty to develop MOOC on SWAYAM.

He welcomed Dr. G. Mythili, Resource Person from IGNOU and the workshop coordinator Dr. Jeetendra Pande and requested the participants to gain skills to develop online course on Moodle. The workshop coordinator proposed the formal vote of thanks to conclude the inaugural session.

### **Session 1: Open Education Resources**

The Coordinator of this workshop, Dr. Jeetendra Pande explained the importance of OERs and its uses in the ODL System. He further explained the understanding of the OERs with 5Rs namely, Reuse, Revise, Remix, Redistribute and Retain. Then he discussed regarding the Creative Common License and the Relationship with the Concepts .Creative Commons by Concepts –Attribution, Share Alike, Non-Commercial and Non-Derivatives. He further discussed how to search OER and the Quality Assurance of OERs in detail. Then the participants are requested to search some OERs for their course.

### **Session 2: Online Courses and Instructional Design**

The session was taken by Dr. G. Mythili. The concept, basic idea and requirements, approaches and methods of Instructional Design were discussed. The resource person discussed various instructional designs, models, theories and its utilization unique to one's own discipline or course. The session concluded by summarizing with 40 different types of Instructional design models, 52 different theories of Instructional designs. She, also emphasized the importance of Instructional designs and mentioned the necessity of knowing the various instructional designs to designs courses with the use of ICTs.

### **Session 3: Working on Online Course: Introduction, Objectives, Outline (Concept Map)**

Theme of this session was the design and structure of online course. Resource person

Dr. G. Mythili emphasized on the learners' outcomes in design of course, concepts maps, and online learning. According to her, developing an online course is entirely different from attending an online course. She clarified the various terminologies used in designing of online courses and also explained learning environment. She elucidated the architecture of learning outcomes in designing of courses. Well defined objectives for teachers as well as for learners, must be taken into consideration in inception of course design and development. She revealed the concept map as a graphical tool for arranging and representing knowledge in course designing. The various factors like time management, team effort, proper planning of design and development processes are important in designing practice. She stressed that proper instructional

activities, sequencing of contents in appropriate order, self-assessment or activity based questions enhance the effectiveness of course.

Dr. Mythili expressed that the concept map as a graphical tool, those are used for organizing and representing the knowledge, and developed in the year of 1972. She revealed the several important concept mapping tools such as Cmap, Freemind, VUE and Xmind, and revealed the sketch of concept map with the examples. Dr. Mythili had given an activity to all the participants to work on the Cmap tools. All the participants actively participated in this activity and interacted with the resource person to solving their queries regarding this tool.

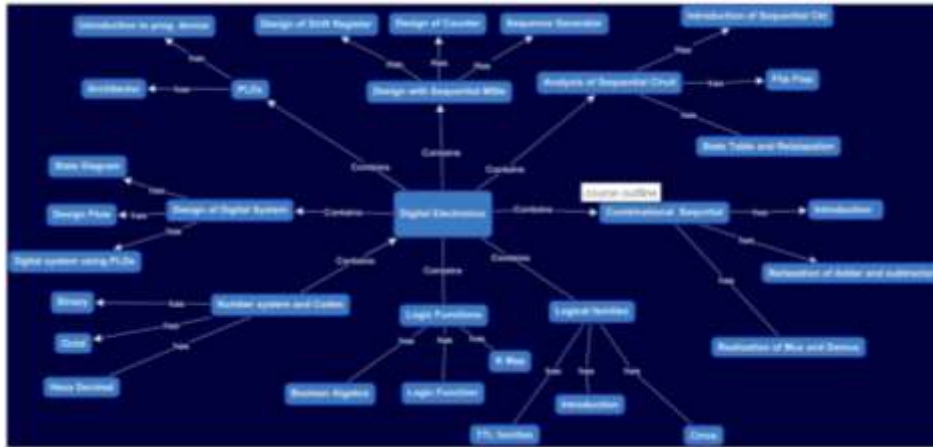


Figure-1: Concept Map created using CMap Tool

#### **Session 4: Learning Management System (Moodle): Distribution of Authentication, Creating Course on Moodle**

UOU technical team created exclusive training platform on Moodle. The uniform resource locator (url) of the Moodle LMS (learning management system) is [moodle.uou.ac.in](http://moodle.uou.ac.in). Dr. Mythili created authentication for each participant and asked to update their profile in the profile page on the Moodle. The role of the participants was changed to content creators. Stepwise demonstrations were made by the resource person to explain how to create course on Moodle Dr. Mythili explained on the different ways to develop the template and its various stages and they were able to create a new course on Moodle.

### **Day Two: November 22, 2017**

#### **Session 5: Creating Resource: Online Assessment**

In this session Dr. Mythili introduced an online assessment package called Hot potatoes developed by Half-baked software Inc which free software. Window based Hot potatoes 6.3 version was installed in all the participant's computer. She explained the features of the software which included six applications, enabling you to create interactive multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering and gap-fill exercises for the World Wide Web.

The resource person demonstrated the each exercise and participants were created exercises on each component.



*Figure-2: Assessment created using HotPotatos and uploaded in Moodle*

### **Session 6: Uploading Resources on Moodle**

The resource person of this session, Dr. Mythili demonstrated how the resource/study materials can be uploaded in the Moodle. A Resource is a study materials that the teacher can use for learning, such as a file or web link. Each resource appears as a link by an icon that represents the resource type (File, Folder, Page, URL, label, IMS packages etc.). Most resources allow settings such as conditions for viewing, or display properties. They can be moved, hidden, and edited by a Teacher or Course creator, viewed/downloaded only by students. Dr. Mythili demonstrated each component and asked the participants to practice and upload the relevant materials to their course.

### **Session 7: Working on Moodle: creating Activities (Assignments & quiz)**

The resource person, Dr. Mythili explained the benefits of activities in Moodle which are interactive tools used to engage students in learning and assess their progress. Moodle includes forums, assignments, and quizzes, along with collaborative activities such as wikis, chats, glossaries and databases. In this session Dr. Mythili explained and demonstrated two activities (assignments and quiz). Step by step instructions were given to the participants to create assignments and quiz for their course. Each participant created an assignment and 5 different types of questions (multiple choice, short answer, true/false etc.) in the quiz.

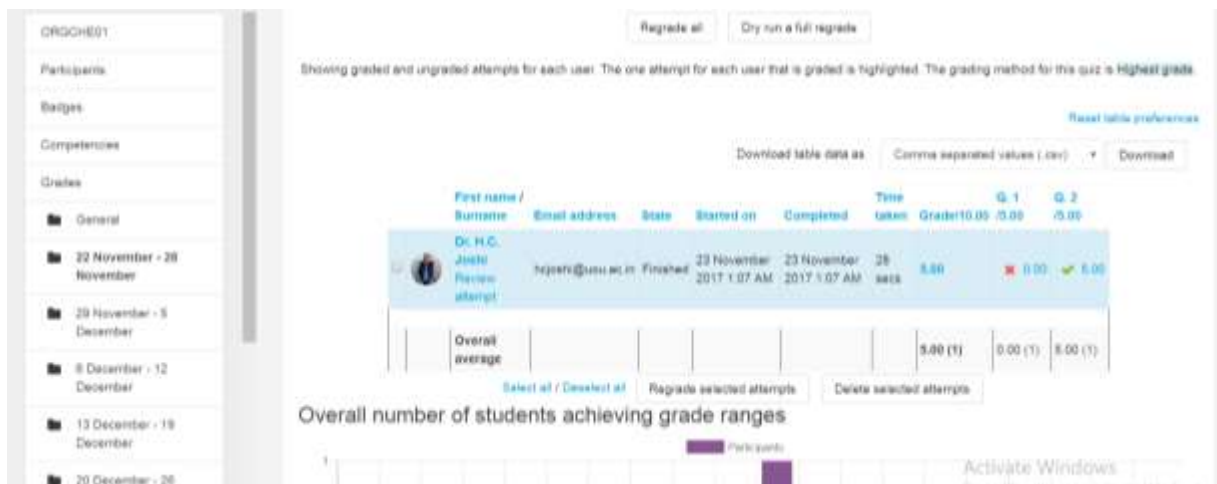


Figure-3: Report of the quiz attempted by a student

### Session 8: Working on Moodle: creating Activities (Discussion Forum)

In this session, participants were engaged with discussion forums on Moodle. Discussion forums are the interactive tool built into Moodle for asynchronous discussion. Discussion forums can be used to get students communicating and interacting among themselves under moderation by the teacher. They can also be used for peer reviews/comments and assessment of student activities. The resource person discussed and explained about discussion forum on Moodle. Each participant created discussion forum in their course and created post on it.

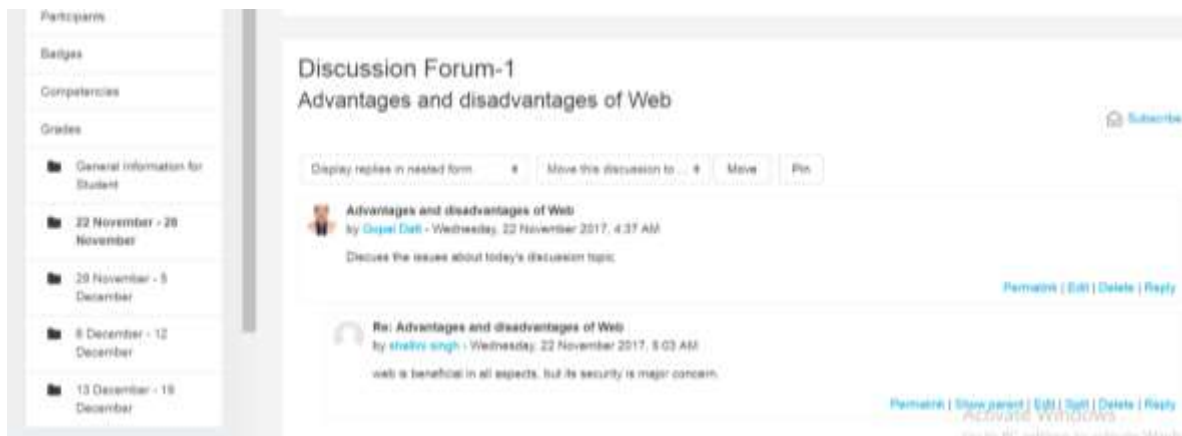


Figure-4: Discussion forum

## Day Three: November 23, 2017

### Session 9: Online Course: Enrolling Students

Third day of workshop started with enthusiasm to enroll students in the online courses. The resource person of this session was Dr. Mythili. She demonstrated the process of adding students to courses. She explained various methods of enrolling students into courses, once they have logged in to Moodle. Further she explained a teacher can view, activate, add and remove the enrolment methods within their course and also students are automatically enrolled into the

course by an administrative process, and the teacher does not need to do anything. All the participants were asked to enroll minimum 5 students in their course.

### **Session 10: Evaluating Student Activities**

Dr. Mythili demonstrated how to evaluate activities which are created in the earlier session by the participants for their courses. All the participants evaluated the discussion forum, assignments and quiz. They also created live chat session and interacted with students. They have enjoyed the session and cleared their doubt on Moodle.

### **Session 11: Moodle on Cloud**

The resource person of this session was Dr. Jeetendra Pande. He introduced Moodle on cloud and explained that Moodle Cloud is the cloud-hosted solution for the learning environment, created by Moodle - the world's open source learning platform. In addition to the hundreds of standard features in Moodle, Moodle Cloud packages and plans come with additional plugins and tools for engaging, and interactive learning. He also explained the features of free version of Moodle Cloud. The Moodle Cloud provides 50 users, 200 MB file storage, Latest Moodle version, unlimited courses and activities, personalised site name, mobile app enabled and web conferencing with Big Blue Button. Dr. Pande demonstrated Moodle cloud and asked the participants to practice on their own to get familiar with Moodle.

## **Outcomes of the workshop**

The following screen shots shows the online courses created by the participants.





moodle.uou.ac.in/course/view.php?id=3

Apps 4.4 Acknowledging Apwajay Styx Univer

UOU

## Certificate in Web Designing & Development

Dashboard / Courses / UOU Workshop / CWDD

Participants

Badges

Competencies

Grades

- General Information for Student
- 22 November - 28 November
- 29 November - 5 December
- 8 December - 12 December
- 13 December - 19 December

Dashboard

### General Information for Student

Dear Students, Please go through the following instructions below.

Good wishes.

- Announcements
- Course Objectives
- Course Structure

### 22 November - 28 November

Dear Students, Greetings of the Day!

In this week, we will start with the following-

- Digital Computer-introduction
- Computer Generation
- Functional Units of the Computer

Activate V  
Go to PC, self

moodle.uou.ac.in/course/view.php?id=10

Apps 4.4 Acknowledging Apwajay Styx Univer

UOU

## Psychological bases of Education

Dashboard / Courses / UOU Workshop / MAED 102

Participants

Badges

Competencies

Grades

- General
- 23 November - 29 November
- 30 November - 8 December
- 7 December - 13 December
- 14 December - 20 December

Dashboard

Site name

Placeholder

### MAED 102: Assignment 1 (last date of submission is 27.11.2017)

Dear Learner

Kindly attempt the given assignment and submit on 27th November 2017.

Explain the meaning of Psychology in historical perspective. word limit is 500 words.

Please submit your responses in doc file.

### 23 November - 29 November

Dear Learners,

We will cover the first 2 units of this course in this week.

Unit 1- meaning an importance of psychology and its relation with education

Meaning of Psychology in Historical Perspective and its Relation with Education

Unit 2- that meaning an importance of psychology

Educational Psychology - Meaning, Nature and Scope

Activate V  
Go to PC, self

UQU

## Compulsory course on Environmental Studies

Dashboard / Course / UQU Workshop / FES 10

Participants

Designs

Competencies

Quizzes

- General
- 22 November - 20 November
- 28 November - 5 December
- 6 December - 12 December
- 13 December - 19 December

Dashboard

Your progress

- Assessments
- Course objectives
- Course outline
- Course Teaching Learning Processes
- Discussion Forum
- For Attention

Dear learners  
I shall be available in the everyday in the afternoon from 3 to 4 pm.

**22 November - 28 November**

Dear Learners

In this week, we will discuss the first unit of the course i.e. environment, its definition and multidisciplinary nature of environmental studies. Further, you will also be able to appreciate the need of environmental conservation.

UQU

## Organic Chemistry

Dashboard / Course / UQU Workshop / ORGCH01

Participants

Designs

Competencies

Quizzes

- General
- 22 November - 20 November
- 28 November - 5 December
- 6 December - 12 December
- 13 December - 19 December
- 20 December - 26 December
- 27 December - 2 January

Dashboard

General

Please go through the following links given below.

- Assessments
- Course objectives
- Course outline
- Teaching Learning Processes

**22 November - 28 November**

Dear learners,

In this week you will learn about definition and types of isomerism in organic compounds.

All the best.

- What are isomers?
- Research achievement in isomers
- Isomers of carbohydrates

Activate Windows  
Go to PC settings

UQU

## Digital Electronics

Dashboard / Course / UQU Workshop / TEC 302

Participants

Designs

Competencies

Quizzes

- General
- 22 November - 20 November
- 28 November - 5 December
- 6 December - 12 December
- 13 December - 19 December
- 20 December - 26 December
- 27 December - 2 January

Dashboard

General

Dear learners,

Welcome to the Digital Electronics course

Please go through the following links.

- Assessments
- Course Objectives
- Course outline
- Teaching Learning Processes

**22 November - 28 November**

Activate Windows  
Go to PC settings

## Valedictory Session

Dr. Jeetendra Pande, the workshop Coordinator welcomes the VC, Prof. Nageshwar Rao and the participants, faculty and resource person to the valedictory session. He presented brief report on the three day workshop. Some of the participants expressed that the workshop provided hand on skill to develop online course on Moodle. While delivering the valedictory address, Prof. Rao expressed his gratitude and compliments to the participants and the resource persons. He further added that the distance learning (DL) is moving into technology based learning (TBL). He asked the faculty to equip themselves with latest technology and explained the benefits of capacity building. He congratulated the CEMCA-COL (Commonwealth of Learning) for their effort towards this workshop and distributed the certificates to the participants. He finally requested the participants, benefited by this workshop to train other faculty of the university. The workshop ended with vote of thanks.

## Feedback Report

A feedback form was distributed to the participants to collect their feedback about the workshop. The important feedback was highlighted here.

1. All the participants felt that the workshop met their expectations and they recommend similar types of workshop to their fellow colleagues in future.
2. 90% of the participants felt that the workshop was helpful in achieving the objectives of the workshop. They enjoyed in all the activities and produced output for each component of Group tool, Hot Potatoes(<https://hotpot.uvic.ca>) and Moodle.
3. 93% of the participants expressed that the sessions was logically organized.
4. They also acquired skills on developing online courses on Moodle and understood the concept of OER.

## PROGRAMME SCHEDULE

<b>Session</b>	<b>Day 1: November 21, 2017</b>
9:30 to 10: 00 am	Registration
10.00- 10.30 am	Inaugural Session: <ul style="list-style-type: none"> <li>• Introductions of participants</li> <li>• Welcome Address by: Prof. Durgesh Panda, UOU</li> <li>• Inaugural Address by: Prof. Nageshwar Rao, Vice Chancellor, UOU</li> <li>• Vote of Thanks by: Dr. Jeetendra Pande, Workshop Coordinator</li> </ul>
10:30 to 11:15 am	OER in Higher Education ( <i>Dr. Jeetendra Pande</i> )
11:15 to 11:30 am	Tea Break
11:30 to 1:00 pm	Online Programmes: Demo & Online Courses and Instructional Design( <i>Dr. G. Mythili</i> )
1:00 to 2:00 pm	Lunch
2:00 to 3:15 pm	Working on Online Course: Introduction, Objectives, Outline (Concept Map) ( <i>Dr. G.Mythili</i> )
3:15 to 3:30 pm	Tea Break
3:30 to 5.00 pm	Learning Management System (Moodle): Distribution of Authentication, Creating Course on Moodle ( <i>Dr. G.Mythili</i> )
<b>Session</b>	<b>Day 2: November 22, 2017</b>
10:00 to 11:15 am	Creating resource: Video and online Assessment ( <i>Dr. G.Mythili</i> )
11:15 to 11:30 am	Tea Break
11:30 to 1:00 pm	Uploading Resources on Moodle ( <i>Dr. G.Mythili</i> )
1:00 to 2:00pm	Lunch
2:00 to 3:15pm	Working on Moodle: creating Activities (Discussion Forum)( <i>Dr. G.Mythili</i> )
3:15 to 3:30pm	Tea Break
3:30 to 5.00 pm	Working on Moodle: creating Activities(Assignments & quiz) ( <i>Dr. G.Mythili</i> )
<b>Session</b>	<b>Day 3: November 23, 2017</b>
10:00 to 11:15 am	Online Course: Enrolling students ( <i>Dr. G.Mythili</i> )
11:15 to 11:30 am	Tea Break
11:30 to 1:00 pm	Evaluating students activities ( <i>Dr. G.Mythili</i> )
1:00 to 2:00pm	Lunch
2:00 to 3:15pm	Moodle on Cloud (Dr. Jeetendra Pande)&Participants Presentation
3:15 to 3:30pm	Tea Break
3:30 to 5.00 pm	Feedback from participants and Distribution of Certificates Concluding Session By Prof. Nageshwar Rao Vice Chancellor, UOU

## List of Participants

S. No	Name	Designation	Department	Affiliation	email
1	Balam Dafouti	Academic Consultant	Computer Science & IT	Uttarakhand Open University	bdafouti@uou.ac.in
2	Dr.Dinesh Kumar	Assistant Professor	School of Education	Uttarakhand Open University	dineshkumar@uou.ac.in
3	Dr. H.C. Joshi	Assistant Professor	Forestry and Environmental Science	Uttarakhand Open University	hcbjoshi@gmail.com
4	Dr. Gopal Datt	Academic Associate	Vocational Studies	Uttarakhand Open University	gdatt@uou.ac.in
5	Ashutosh Kumar Bhatt	Assistant Professor	Computer Science	Birla Institute of Applied Sciences, Bhimtal	ashutoshbhatt123@rediffmail.com
6	Sumit Prasad	Assistant Professor	Management Studies	Uttarakhand Open University	Sprasad@uou.ac.in
7	Dr. Jeetendra Pande	Assistant Professor	Computer Science	Uttarakhand Open University	jpande@uou.ac.in
8	Shalini Singh	Assistant professor	chemistry	Uttarakhand Open University	shalinisingh@uou.ac.in
9	Manjari Agarwal	Assistant Professor	Management Studies	Uttarakhand Open University	som@uou.ac.in
10	Rajendra Goswami	Computer Programmer	ICT	Uttarakhand Open University	rgoswami@uou.ac.in
11	Ghanshyam Joshi	Academic Consultant	Public Administration	Uttarakhand Open University	gjoshi@uou.ac.in
12	Saurav Joshi	Assistant Professor	ECE	Birla Institute of Applied Sciences	saurav.rkt@gmail.com

13	Virendra Kumar	Assistant Professor	Agriculture	Uttarakhand Open University	vkumar@uou.ac.in
14	Rajendra Kaira	Academic Associate	Hindi	Uttarakhand Open University	rkaira@uou.ac.in
15	Mamta Tamta	Assistant Professor	Education	Uttarakhand Open University	mtamta@uou.ac.in
16	Suryabhan Singh	Assistant Professor	Political Science	Uttarakhand Open University	sbhansingh@uou.ac.in
17	Umesh Chandra	Programmer	Uttarakhand Science Education Research Center		
18	Rajdeep Jung	Programmer	Uttarakhand Science Education Research Center		
19	Vineet Paudiyal	Hardware Engineer	ICT	Uttarakhand Open University	vpaudiyal@uou.ac.in
20	Mohit Rawat	Network Administrator	ICT	Uttarakhand Open University	mrawat@uou.ac.in
21	Rajesh Arya	Hardware Engineer	ICT	Uttarakhand Open University	rarya@uou.ac.in

## Photo Gallery

