



Dr. D. Y. Patil Vidyapeeth, Pune (Deemed to be University)

Accredited (3rd Cycle) by NAAC with a CGPA of 3.64 on a four point scale at A++ Grade)
(An ISO 9001: 2015 Certified University)

DPU-LMS

Learning Management System (LMS) As a Tool for Teaching Learning and Assessment

DPU has made substantial investment in upgrading and integrating technology to suit advancements needed in teaching learning content and pedagogies. DPU is making use of Learning Management Systems (LMS) to support online classes, and focusing on creating digital and inter-operable infrastructure that can be utilized by multiple platforms.

DPU-LMS: An In-house tailor-made facility

Dr. D.Y. Patil Vidyapeeth Learning Management System (LMS) is completely in-house made and required amount of efforts made that is a testament to the institution's commitment to providing a high-quality learning experience to its students.

By developing its own LMS, the institution has been able to tailor the platform to meet the specific needs of its faculty and students, ensuring that it provides a seamless and user-friendly experience. Additionally, the in-house development of the LMS has allowed for greater flexibility and customization, which can be difficult to achieve with off-the-shelf software solutions.

The state-of-the-art facility underscores the distinctiveness of Dr. D.Y. Patil Vidyapeeth and its commitment to innovation and technology-driven education. This sets it apart from other institutions and positions it as a leader in the field of higher education. Having an in-house developed LMS can also provide the institution with greater control over the platform's features and functionality, allowing it to adapt and evolve to meet the changing needs of its faculty and students.

Considering the University's commitment to inspire and mentor faculty in their role as teachers, researchers and as mentors Dr. D. Y. Patil Vidyapeeth, Pimpri, Pune, has a dynamic Learning Management System developed by the Software Development Cell for ensuring transparency in the teaching learning and assessment of students. The regular faculty development programs conducted by University Centre for Professional Education and Faculty Development (UCPE&FD) create a cohesive and value-based culture for the faculty, while encouraging sharing of teaching experiences

and collaborative research. The teaching effectiveness of faculty is sharpened through intense faculty development programs on Andragogy and Research Methodology. The University's interventions through regular workshops have ensured that the faculty are familiar with learner centric Massive Open Online Courses (MOOCs) and conventional teaching methods on a blended platform.

Diverse student centric methods of teaching (experiential, participatory and problem solving) are regularly adopted. Field Trips Industry Visits, participation in competitions/exhibitions, guest lectures, Seminars/workshops/MOOCs/Swayam/NPTEL courses are blended into the teaching-learning process.

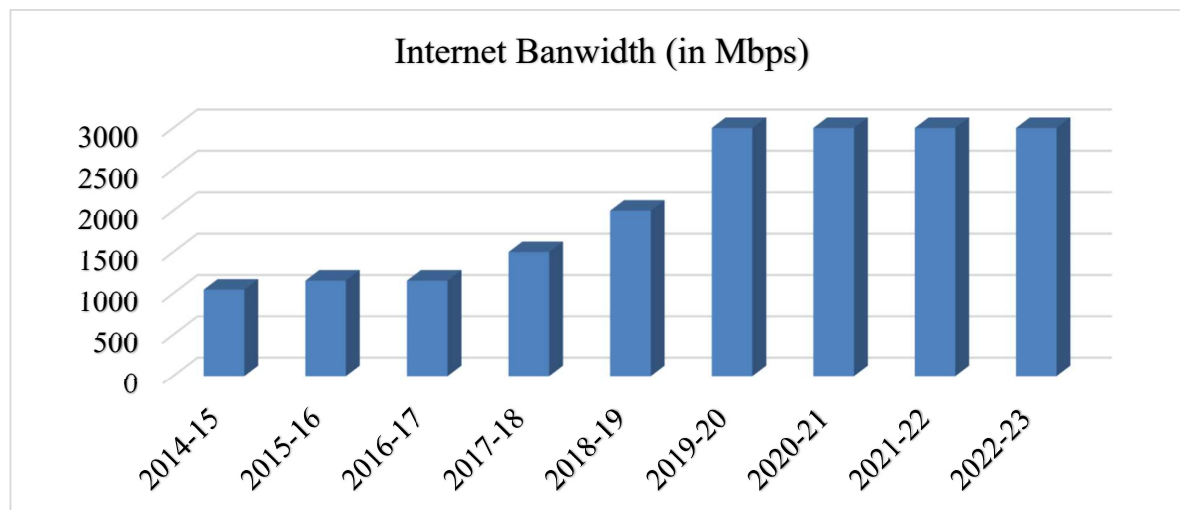
- Every teaching faculty uploads the lesson plans on LMS well in advance, which is visible to the students, helping the students to come prepared for the lecture.
- The teaching faculty uploads lecture details after the lecture is completed including topic taken, whether it is completed/half complete, lesson plan for that topic, e-content for that topic and also marks for the attendance by students.
- This helps the students to refer to the topic specific e-content if they are absent for a particular topic. Therefore, they do not miss on the learning.
- The teaching faculty also uploads their e-content in the form of ppt, pdf, videos images for the benefit of the students wherein the students can refer the e- content at any given point of time and date.
- The syllabus, advanced teaching plan, time-table is also uploaded for the benefit of the students.
- Students are being made aware of the graduate attributes, program outcomes as well as course outcomes which are also uploaded on the LMS.
- Assessment of the students is conducted in the form of assignments, MCQ Tests as well as subjective theory examinations to assess their learning ability.
- This has helped identify slow learners and advanced performers and take necessary steps.
- Case discussions, problem-based learning is conducted through the discussion forum, which has helped enhance the problem-solving skills of the students

Salient Features of DPU-LMS:

- ✓ Teacher specific
- ✓ Student centric
- ✓ All Graduate Attributes, Program Outcomes, Course Outcomes are visible to teachers and students
- ✓ Syllabus, Advanced teaching plan is uploaded
- ✓ Lesson plan, lecture entry, Attendance can be marked
- ✓ Uploading of E-Content
- ✓ Assignments, Case based learning; Problem solving, Formative exams can be conducted.

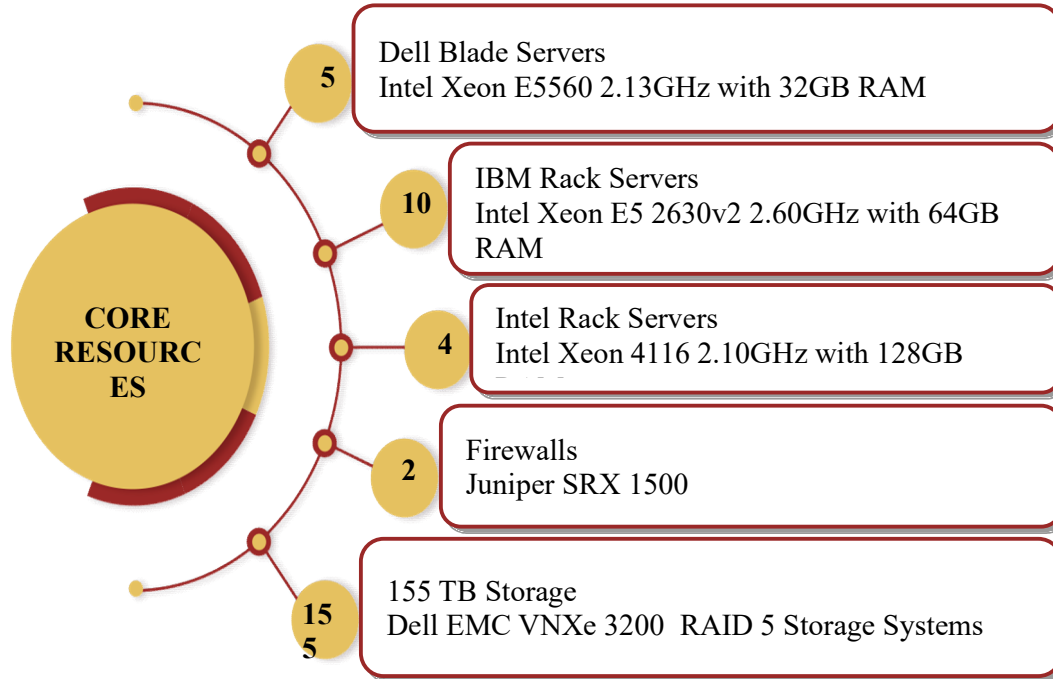
Infrastructure

An efficient and extensive network consisting of 3 tier architecture comprising of the Core, Distribution and Access is laid out throughout the campus. The primary requirement of internet connectivity was met with 3-GBPS connectivity from TATA Communications and BSNL. A central IT Department consisting of dedicated and efficient staff has been set up to keep it functional and running.



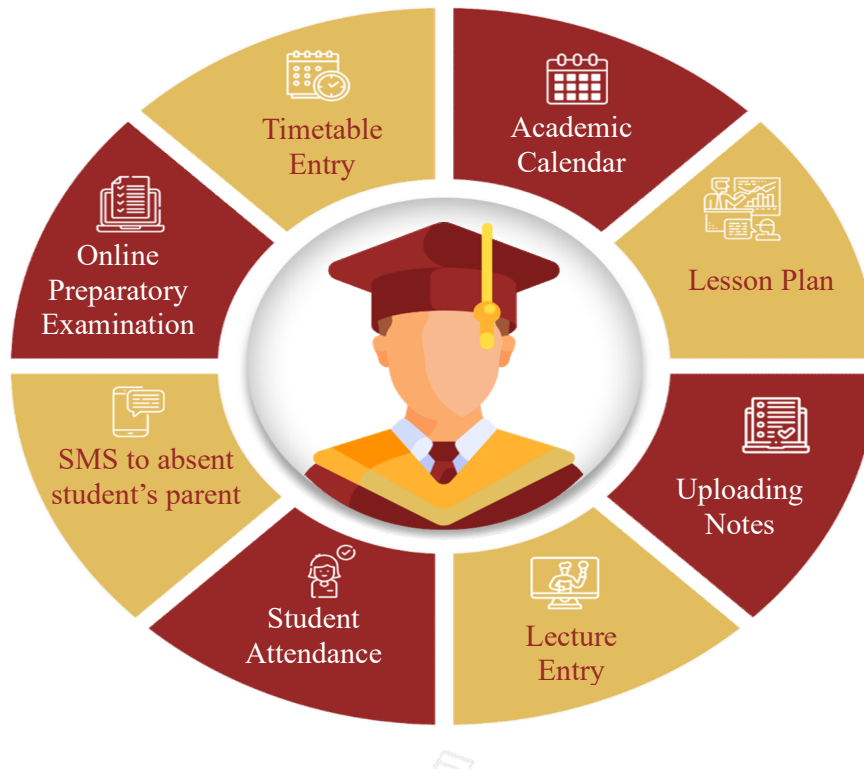
DPU has a state-of-the-art Data Centre which is equipped with 19 high end servers, secured through 2 robust advanced firewalls from Juniper. For storing data, we have a massive 155 TB RAID 5 Storage System. Various servers like Proxy Server, Database Server, Campus ERP Server, Web Server,

Active Directory Server, PACS Server, HIS Server, Antivirus Server, Tally Server, Squid Proxy Server, DHCP Server, File Server, Telecom Server and Backup Server are hosted in it.

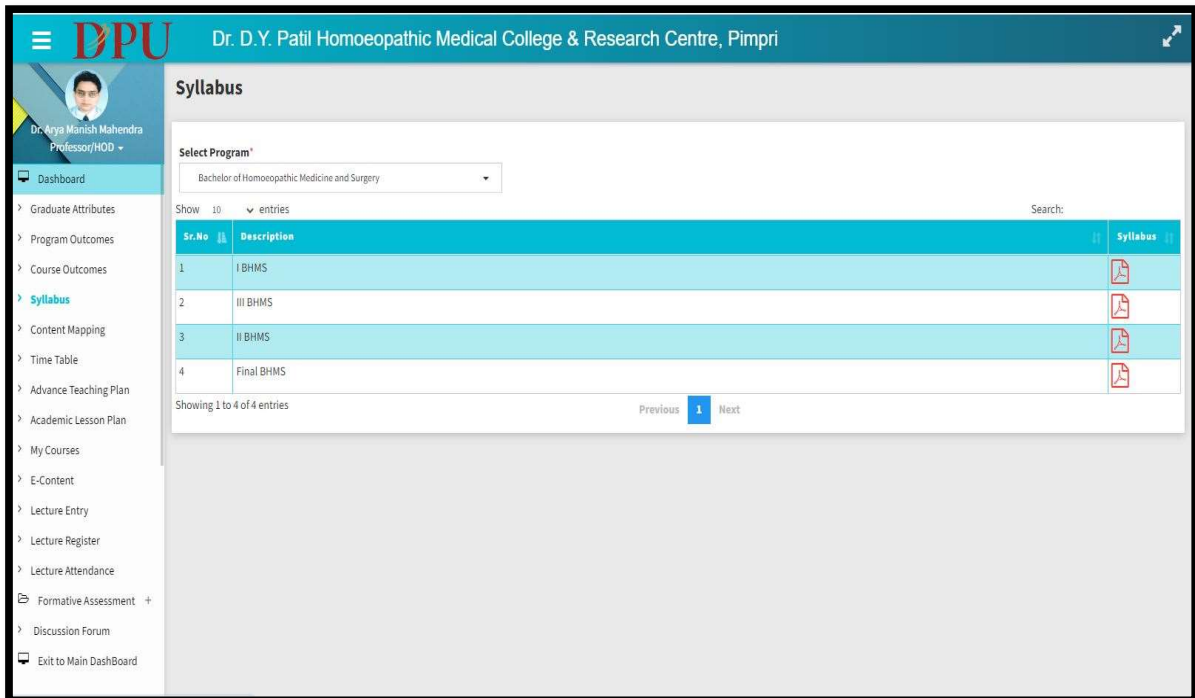


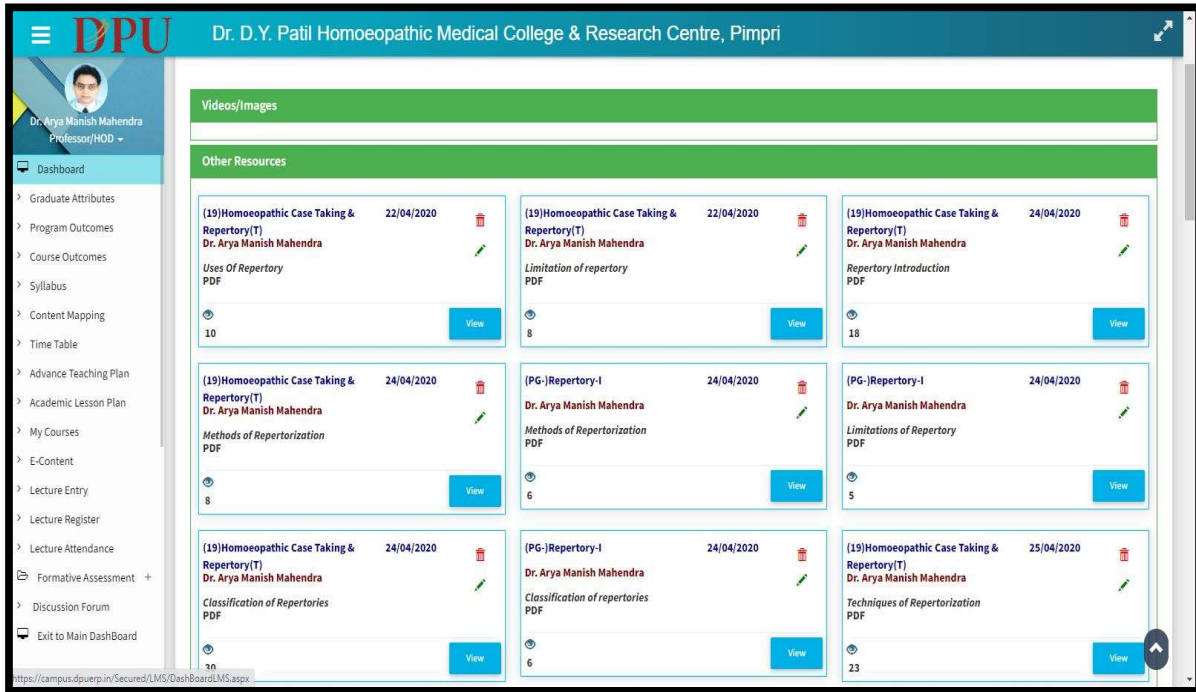
The Data Centre is well protected with advance CCTV Surveillance, Fire Alarm System, Access Control System and Precision Air Conditioning System. The servers are powered through two 20KVA Online UPS systems. Network connectivity has been provided by TATA Communications and BSNL. A robust data backup system provided by Veritas is also implemented in the Data Centre.

The System



Screenshots of DPU- LMS





Dr. D.Y. Patil Homoeopathic Medical College & Research Centre, Pimpri

Dr. Arya Manish Mahendra
Professor/HOD

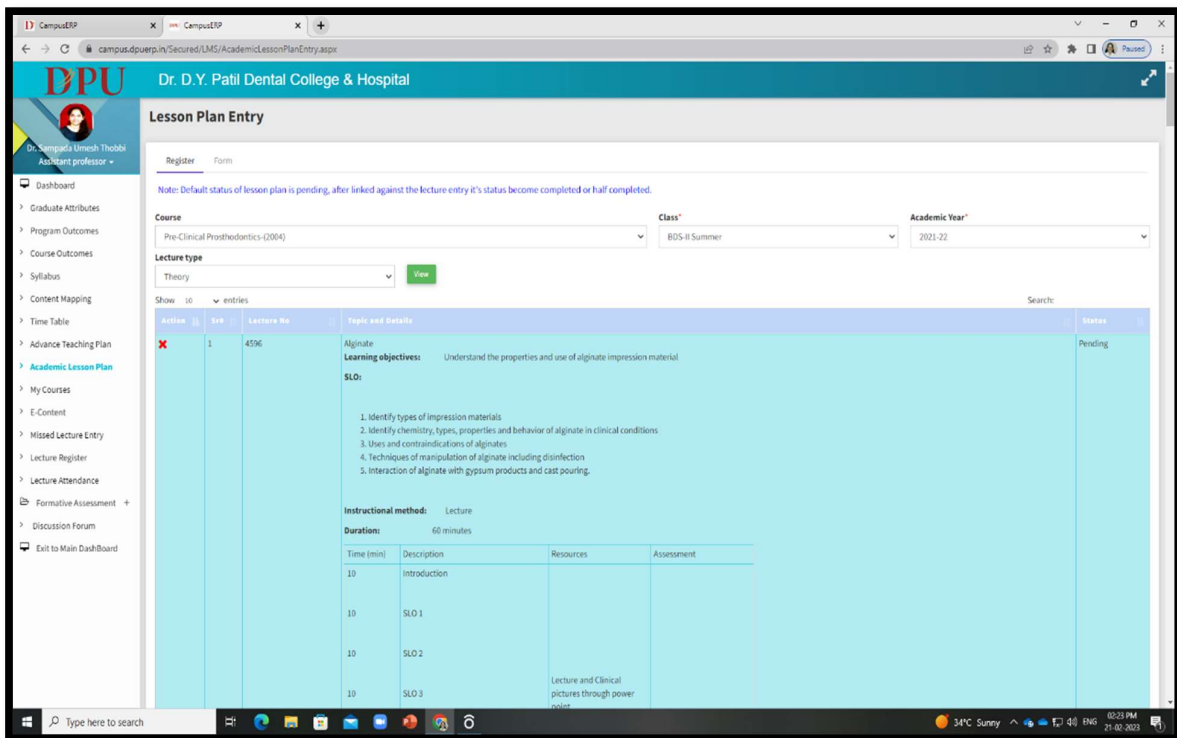
Dashboard

- Graduate Attributes
- Program Outcomes
- Course Outcomes
- Syllabus
- Content Mapping
- Time Table
- Advance Teaching Plan
- Academic Lesson Plan
- My Courses
- E-Content
- Lecture Entry
- Lecture Register
- Lecture Attendance
- Formative Assessment
- Discussion Forum
- Exit to Main Dashboard

Videos/Images

Other Resources

Course	Date	Resource	View Count
(19)Homoeopathic Case Taking & Repertory(T) Dr. Arya Manish Mahendra	22/04/2020	Uses Of Repertory PDF	10
(19)Homoeopathic Case Taking & Repertory(T) Dr. Arya Manish Mahendra	22/04/2020	Limitation of repertory PDF	8
(19)Homoeopathic Case Taking & Repertory(T) Dr. Arya Manish Mahendra	24/04/2020	Repertory Introduction PDF	18
(19)Homoeopathic Case Taking & Repertory(T) Dr. Arya Manish Mahendra	24/04/2020	Methods of Repertization PDF	8
(PG-)Repertory-I Dr. Arya Manish Mahendra	24/04/2020	Methods of Repertization PDF	6
(PG-)Repertory-I Dr. Arya Manish Mahendra	24/04/2020	Limitations of Repertory PDF	5
(19)Homoeopathic Case Taking & Repertory(T) Dr. Arya Manish Mahendra	24/04/2020	Classification of Repertories PDF	30
(PG-)Repertory-I Dr. Arya Manish Mahendra	24/04/2020	Classification of repertories PDF	6
(19)Homoeopathic Case Taking & Repertory(T) Dr. Arya Manish Mahendra	25/04/2020	Techniques of Repertization PDF	23



Dr. D.Y. Patil Dental College & Hospital

Dr. Sampada Umesh Thobbi
Assistant professor

Lesson Plan Entry

Register Form

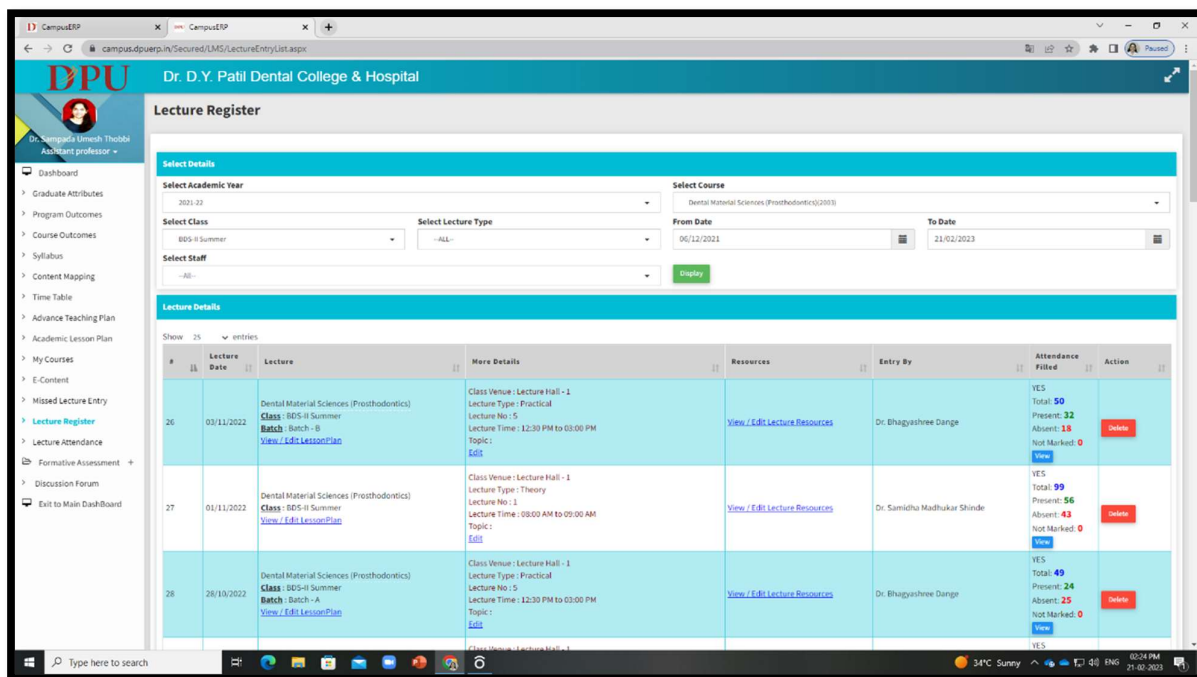
Note: Default status of lesson plan is pending, after linked against the lecture entry it's status become completed or half completed.

Course: Pre-Clinical Prosthodontics (2004) | Class: BDS-II Summer | Academic Year: 2021-22

Lecture type: Theory

Show 10 entries

Action	Seq	Lecture No	Topic and Details	Status																				
X	1	4596	<p>Alginite</p> <p>Learning objectives: Understand the properties and use of alginate impression material</p> <p>SLO:</p> <ol style="list-style-type: none"> 1. Identify types of impression materials 2. Identify chemistry, types, properties and behavior of alginate in clinical conditions 3. Uses and contraindications of alginates 4. Techniques of manipulation of alginate including disinfection 5. Interaction of alginate with gypsum products and cast pouring. <p>Instructional method: Lecture</p> <p>Duration: 60 minutes</p> <table border="1"> <thead> <tr> <th>Time (min)</th> <th>Description</th> <th>Resources</th> <th>Assessment</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>Introduction</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>SLO 1</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>SLO 2</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>SLO 3</td> <td>Lecture and Clinical pictures through power point</td> <td></td> </tr> </tbody> </table>	Time (min)	Description	Resources	Assessment	10	Introduction			10	SLO 1			10	SLO 2			10	SLO 3	Lecture and Clinical pictures through power point		Pending
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#	Lecture Date	Lecture	More Details	Resources	Entry By	Attendance Filled	Action
26	03/11/2022	Dental Material Sciences (Prosthodontics) Class : BDS-II Summer Batch : Batch - B View / Edit LessonPlan	Class Venue : Lecture Hall - 1 Lecture Type : Practical Lecture No : 5 Lecture Time : 12:30 PM to 03:00 PM Topic : Edit	View / Edit Lecture Resources	Dr. Bhagyashree Dange	YES Total: 50 Present: 32 Absent: 18 Not Marked: 0 View	Delete
27	01/11/2022	Dental Material Sciences (Prosthodontics) Class : BDS-II Summer View / Edit LessonPlan	Class Venue : Lecture Hall - 1 Lecture Type : Theory Lecture No : 1 Lecture Time : 08:00 AM to 09:00 AM Topic : Edit	View / Edit Lecture Resources	Dr. Samidha Madhukar Shinde	YES Total: 99 Present: 56 Absent: 43 Not Marked: 0 View	Delete
28	28/10/2022	Dental Material Sciences (Prosthodontics) Class : BDS-II Summer Batch : Batch - A View / Edit LessonPlan	Class Venue : Lecture Hall - 1 Lecture Type : Practical Lecture No : 5 Lecture Time : 12:30 PM to 03:00 PM Topic : Edit	View / Edit Lecture Resources	Dr. Bhagyashree Dange	YES Total: 49 Present: 24 Absent: 25 Not Marked: 0 View	Delete

A clear articulation of Program Outcome's and Course Outcome's ensures that teaching is directed towards their attainment. A robust LMS and ICT enabled processes help to monitor all academic activities. Learning resources are accessible to students 24x7. Pedagogical interventions include field trips, tinker labs, live industry projects, online courses, simulations, mock trials, case studies, and workshops/seminars/conferences. All these make learning immersive and engaging. Apart from classroom engagement by qualified and experienced teachers, use of e-resources including databases, MOOCs, Bloomberg terminals, simulation and statistical software enrich the learning.

These bring vibrancy to the classroom, provide students with an opportunity to work with a range of material, ideas and content, and improve their ability to apply theory and methods learned in the course. Adequate weightage is given to objective based tests ensure conceptual clarity. To make students' career ready, grooming workshops, skill set mapping, Mock GDs and PIs are conducted with inputs from alumni. Students undertake mandatory Summer Internship Programs and Live Projects enhancing their application of skills. Faculty creates and uploads videos on specific topics and engages in discussions based on them. Faculty have adopted the Flipped Classroom methodology

where students attend asynchronous online sessions and then attend synchronous/face-to-face, teacher-guided discussions.

Usage Data

Using LMS and DPU-ERP system, DPU has saved approximately 42,77,908 sheets of papers which is equivalent of saving 54 trees. The DPU-ERP system implementation was a great success and is evident through the increasing number of usages by staff and students. Easy access of e-resources/library resources through the system contributed to increased usage of the same by the students and staff.

Serial No:	Usage data	2022-2023	2021-2022
1.	E- resources Uploaded by Faculty	33,423	10,932
2.	Lecture Entries	49,332	29,355
3.	Preparatory Online Exam	7,171	1,150
4.	Training Sessions Conducted	760	610
5.	Staff Usage	5,05,693	5,04,390

Training is a continuous process and the trainers from Software Development Cell are constantly providing training and support to the staff in the usage of LMS and its features. The graph below shows the number of training sessions conducted which is showing a progressive increase. Similarly with progress in time and advancement of technology, the teaching faculty is able to reap the advantages of using the LMS.

Conclusion

In conclusion, the DPU-LMS is a distinctive feature as it provides its students with a modern and interactive learning experience. The LMS is accessible from any device with an internet connection, provides access to a range of resources, and enables collaboration and interaction between students and faculty members. The LMS also provides faculty members with tools for managing and offering their courses, which helps them to deliver high-quality education.



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In addition to the current implementation of the Learning Management System, Dr. D.Y. Patil Vidyapeeth has plans to further enhance its digital infrastructure and expand the use of technology in education. One of the future plans is to incorporate artificial intelligence (AI) and machine learning (ML) technologies into the Learning Management System. This will enable the LMS to personalize the learning experience for each student based on their individual learning styles and preferences. The LMS will also be able to provide real-time feedback to students on their performance and suggest areas for improvement.

Dr. D.Y. Patil Vidyapeeth also plans to establish virtual laboratories and simulations that will provide students with hands-on learning experiences in a digital environment. These virtual laboratories and simulations will enable students to gain practical knowledge and skills without the need for physical lab equipment, which can be expensive and time-consuming.

This is to certify that the above documents have been verified.

(Dr. Narendra M. Kadu)
Registrar (Offg.)