

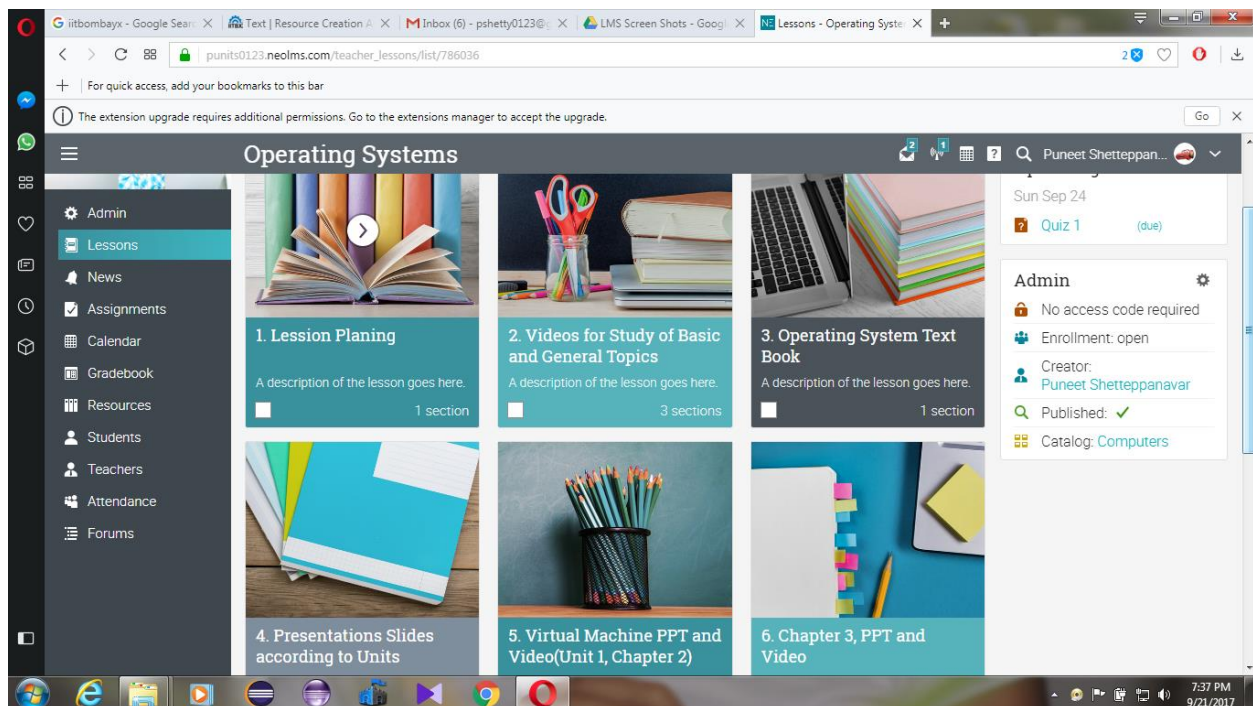
INNOVATIVE TEACHING AND LEARNING METHODS

The traditional or innovative methods of teaching are critically examined, evaluated and some modifications in the delivery of knowledge are suggested. As such, the strengths and weaknesses of each teaching methodology are identified and probable modifications that can be included in traditional methods are suggested.

The following are the teaching methodologies implemented by our faculty

- ❖GOOGLE CLASSROOM/LMS
- ❖FLIPPED CLASSROOM
- ❖THINK-PAIR SHARE ACTIVITY
- ❖POWER POINT PRESENTATION
- ❖SEMINARs
- ❖PEER ASSESSMENT
- ❖REFLECTIVE SPOT QUESTIONS

Some of the screen shots for LMS as follows.



Operating Systems

Stand-alone assignment

Quiz: Quiz 1

Assignment Questions **Grades** Not submitted Analytics Completion

#	Student	Show/Grade	Submitted	Score	Grade	Teacher comment
1	Addur, Sahil		Sep 11 11:54 pm	13	A- 87%	
2	Aitha, Ashish		Sep 11 2:19 pm	15	A+ 100%	
3	Aitha, Ganesh		Sep 11 11:50 pm	11	B- 73%	
4	Aloori, Kalpana		Sep 10 2:23 pm	12	B+ 80%	
5	anil kumar, nainapally					
6	Annadi, Sravan		Sep 10 2:27 pm	12	B+ 80%	
7	Anurag, Kistiagari		Sep 10 4:53 pm	10	C+ 67%	

Online Assignment at LMS.

Operating Systems

Stand-alone assignment

Quiz: Quiz 1

Assignment Questions Grades Not submitted **Analytics** Completion

Question 1: Process is

- program in High level language kept on disk: 2 ✗ (1%)
- contents of main memory: 4 ✗ (3%)
- a program in execution: 94 ✓ (90%)
- a job in secondary memory: 2 ✗ (1%)
- None of the above: 2 ✗ (1%)

Total: 104

Question 2: The part of machine level instruction, which tells the central processor what has to be done, is

- Operation code: 89 ✓ (84%)
- Address: 7 ✗ (6%)
- Locator: 1 ✗ (0%)
- Flip-Flop: 4 ✗ (3%)
- None of the above: 4 ✗ (3%)

Flipped Class Room Activity at LMS.

The screenshot shows a video player interface. The main content is a diagram illustrating the Java execution process. On the left, an oval labeled "Java program .class files" has a dashed arrow pointing to a box labeled "class loader". On the right, another oval labeled "Java API .class files" has a dashed arrow pointing to the "class loader" box. Below the "class loader" box is a box labeled "Java interpreter", with a solid arrow pointing from the "class loader" to it. Below the "Java interpreter" box is a box labeled "host system (Windows, Linux, etc.)", with a solid arrow pointing from the "Java interpreter" to it. In the top right corner of the video frame, there is a small inset video of a man wearing headphones. At the bottom right of the video player, there is a button that says "Download file from this page". The browser's address bar shows a Google Drive link: drive.google.com/file/d/0Bxc7mxNYfj0WVWNbcTdtTU1neUk/view. The taskbar at the bottom shows various application icons and the system clock indicating 7:52 PM on 9/21/2017.

The screenshot shows an LMS (Learning Management System) interface. The main header is "Operating Systems". The left sidebar contains a navigation menu with items like "Chapter 2)", "Chapter 3, PPT and Video", "Chapter 5, Process Scheduling", "Videos for Assignment Examples", "Assignment 1 Video", "News", "Assignments", "Calendar", "Gradebook", "Resources", "Students", "Teachers", "Attendance", and "Forums". The main content area is titled "Videos for Assignment Examples" and shows a video resource for "Assignment 1 Video". The video title is "Assignment 1 Video" and it has a "Content" tab selected. Below the title is a link: <https://youtu.be/tEOXoDrhuBU>. The video thumbnail shows a hand writing in a notebook. At the bottom right of the video player, there is a button that says "Download video from this page". The browser's address bar shows the URL: punits0123.neolms.com/teacher_lesson/show/786036. The taskbar at the bottom shows various application icons and the system clock indicating 7:54 PM on 9/21/2017.

GOOGLE CLASSROOM / LMS:-

Assignments are stored and graded on Google's suite of productivity applications that allow **collaboration between the teacher and the student or student to student**. Instead of sharing documents that reside on the student's Google Drive with the teacher, files are hosted on the student's Drive and then submitted for grading. Teachers may choose a file that can then be treated as a template so that every student can edit their own copy and then turn back in for a grade instead of allowing all students to view, copy, or edit the same document. Students can also choose to attach additional documents from their Drive to the assignment.

Students can access the Google classroom through college website.

Grading

Google Classroom supports many different grading schemes. Teachers have the option to attach files to the assignment which students can view, edit, or get an individual copy. Students can create files and then attach them to the assignment if a copy of a file wasn't created by the teacher. Teachers have the option to monitor the progress of each student on the assignment where they can make comments and edit. Turned in assignments can be graded by the teacher and returned with comments to allow the student to revise the assignment and turn back in. Once graded, assignments can only be edited by the teacher unless the teacher turns the assignment back in.

Mobile applications

Google Classroom mobile apps, are available for iOS and Android devices. The apps let users take photos and attach them to their assignments, share files from other apps, and support offline access.

FLIPPED CLASSROOM

A **flipped classroom** is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. In a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home while engaging in concepts in the classroom with the guidance of a mentor.

The flipped classroom intentionally shifts instruction to a learner-centered model in which class time explores topics in greater depth and creates meaningful learning opportunities, while educational technologies such as online videos are used to 'deliver content' outside of the classroom. In a flipped classroom, 'content delivery' may take a variety of forms. Often, video lessons prepared by the teacher or third parties are used to deliver content, although online collaborative discussions, digital research, and text readings may be used. It has been shown that the ideal length of the video lesson to be is eight to twelve minutes

THINK-PAIR-SHARE ACTIVITY

Think-pair-share (TPS) is a collaborative learning strategy where students work together to solve a problem or answer a question about an assigned reading. This strategy requires students to (1) think individually about a topic or answer to a question; and (2) share ideas with classmates. Discussing with a partner maximizes participation, focuses attention and engages students in comprehending the reading material.

Why use think-pair-share?

- It helps students to think individually about a topic or answer to a question.
- It teaches students to share ideas with classmates and builds oral communication skills.
- It helps focus attention and engage students in comprehending the reading material.

POWER POINT PRESENTATION

PPT is a file extension for a presentation file format used by Microsoft PowerPoint, the popular Presentation software commonly used for office and educational slide shows. All text images, sound and video used in the presentation are contained in the PPT file. PPT files can be viewed by PowerPoint, PowerPoint Viewer or the Open Office software suite.

SEMINAR

A seminar may be defined as a gathering of people for the purpose of discussing a stated topic. Such gatherings are usually interactive sessions where the participants engage in discussions about the delineated topic. The sessions are usually headed or led by one or two presenters who serve to steer the discussion along the desired path.

PURPOSE OF A SEMINAR

A seminar may have several purposes or just one purpose. For instance, a seminar may be for the purpose of education, such as a lecture, where the participants engage in the discussion of an academic subject for the aim of gaining a better insight into the subject. Other forms of educational seminars might be held to impart some skills or knowledge to the participants. Examples of such seminars include personal finance, web marketing, real estate, investing or other types of seminars where the participants gain knowledge or tips about the topic of discussion.

PEER ASSESSMENT

In peer assessment, a collaborative learning technique, students evaluate their peers' work and have their work evaluated by peers.

Often used as a learning tool, peer assessment gives students feedback on the quality of their work, often with ideas and strategies for improvement. At the same time, evaluating peers' work can enhance the evaluators' own learning and self-confidence. Peer involvement personalizes the learning experience, potentially motivating continued learning.

When used in grading, peer assessment can give the instructor needed information on student performance. Especially for large online classes, it may allow inclusion of assignments where students' creative work could not be graded reliably through automation or efficiently by teaching staff.

REFLECTIVE SPOT QUESTIONS

Reflective practice is the ability to reflect on one's actions so as to engage in a process of continuous learning. According to one definition it involves "paying critical attention to the practical values and theories which inform everyday actions, by examining practice reflectively and reflexively. This leads to developmental insight". A key rationale for reflective practice is that experience alone does not necessarily lead to learning; deliberate reflection on experience is essential.