Teaching-LearningProcesses

DescribeProcessesfollowedtoimprovequalityofTeaching&Learning
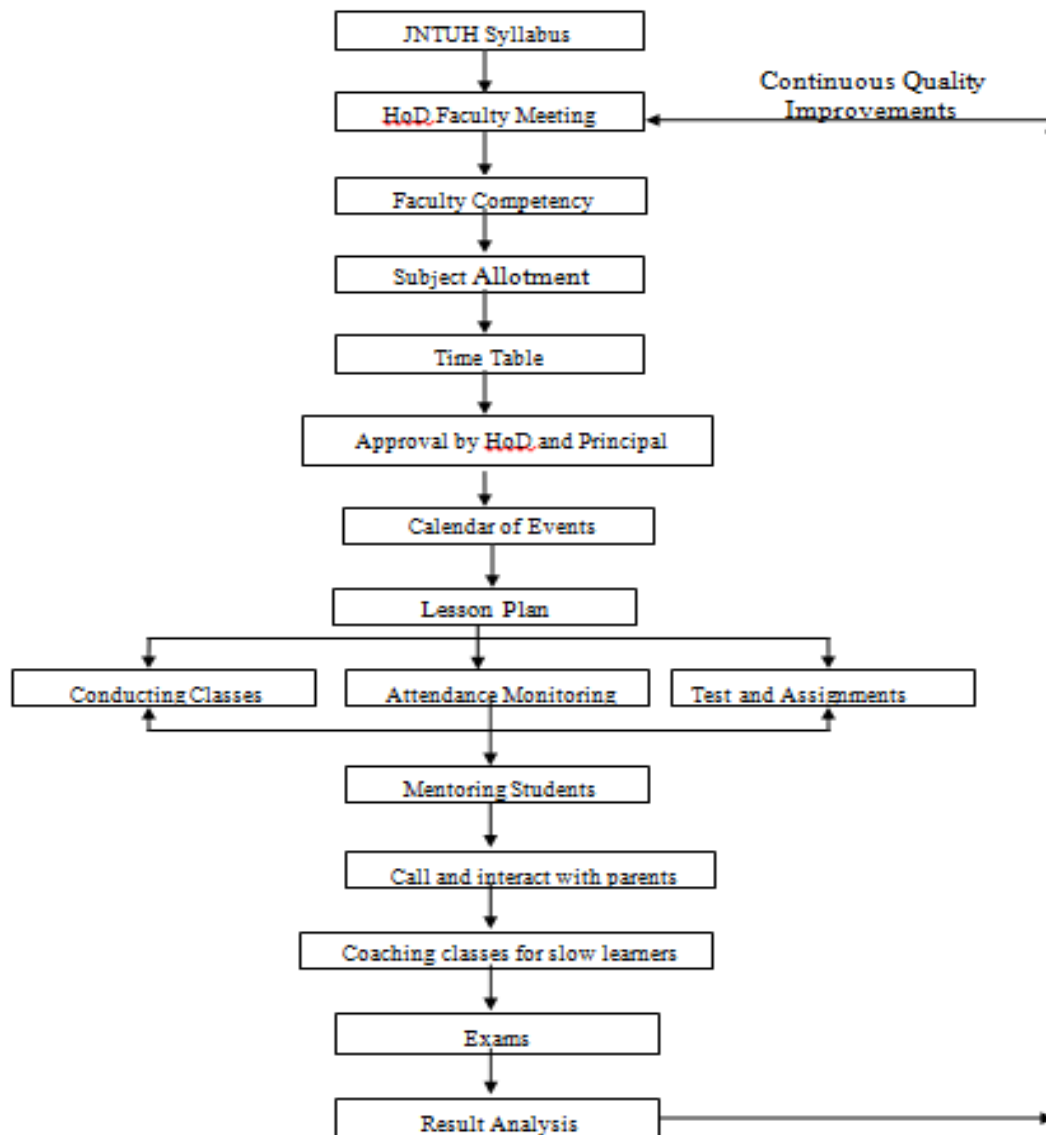
Teaching Learning Process:

Fig: 2.2.1 Teaching Learning Process

2.2.1.1 Teaching Learning Plan:

With the help of above teaching methodologies, before the beginning of every semester, the college prepares an academic and event calendar taking the University prescribed Academic Calendar as a reference. This helps in better planning and effective implementation of various Teaching Learning Processes that are conceptualized from time to time. Steps are taken to ensure strict adherence to the academic plan by all Faculty members. Regular feedback is taken by the Academic Audit Committee and Classroom Representatives to facilitate the adherence by all stakeholders. Subjects are allotted faculty based on their preferences and strengths in order to meet the expectations of all stakeholders

Instructional Methods andPedagogies

Teaching methods comprises the principles and methods used by teachers to enable student learning. These are determined partly on subject matter to be taught and partly by the nature of thelearner.

The following methods are some of the appropriate and efficient methodologies according to the characteristic of the learner.

1. Talk & Chalk: Usage of black board, chalk andlecture
2. PPT: Power Point Presentation for the relevanttopic
3. Seminars: Seminar should be given by thestudent
4. Quiz: Asking Questions on the covered topic by forming thebatches.
5. NPTELVideos
6. Field visit
7. Think Pair Share
8. Flip class

S.No	Teaching Aid / Methodology	Number of Courses
1	Talk & Chalk	31
2	PPT	31
3	Seminars	27
4	Quiz	28
5	NPTEL Videos	24
6	Think Pair Share	17
7	Flip class	14

2.2.1.1 Methodology to identify bright& weak students

Focus is always placed on ensuring that all the students achieve the Learning outcomes prescribed. In the process, slow learning students and quick learning students are identified. They are identified based on their past performances, classroom performances and their scores in direct assessment methods. Assessments are carried out periodically and hence allow the faculty members to monitor and provide attention to the students who may not be attaining the POs to the required level. This ensures that all students attain the minimum level of each programmed outcome. The frequency of above assessments can vary from course to course and program to program. In order to facilitate the Slow-learning students, few of the following steps are taken
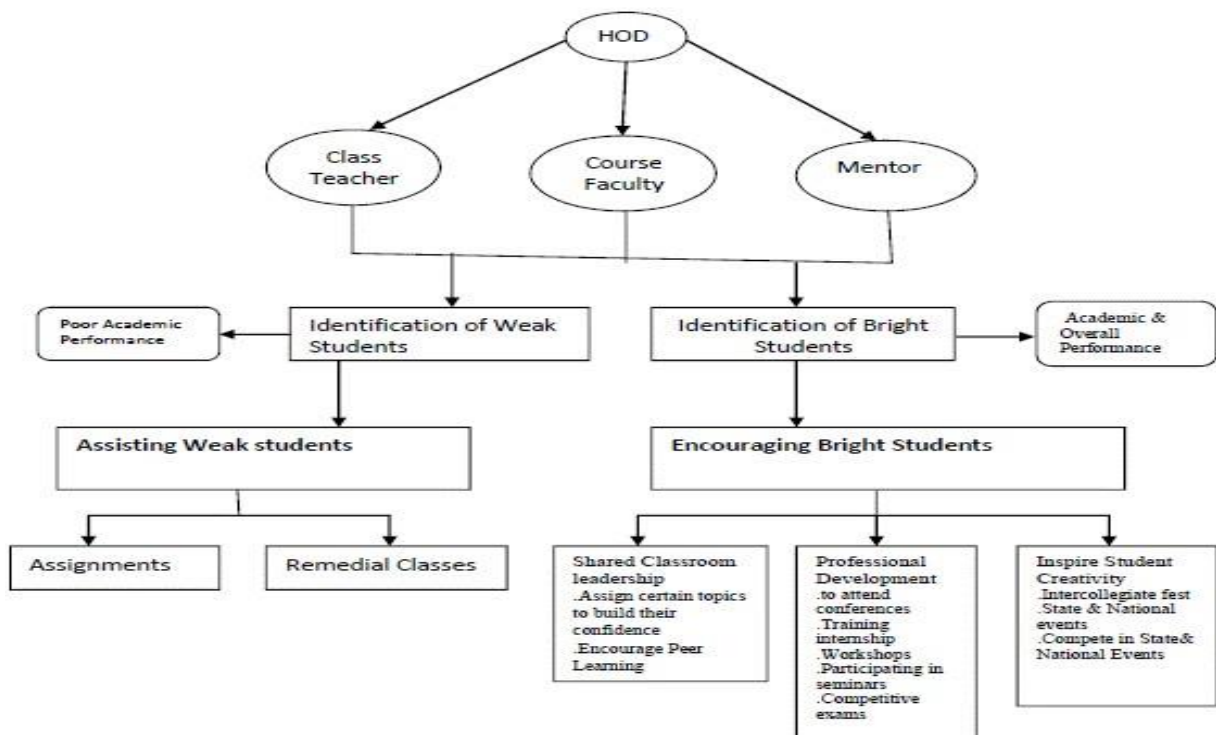
- Mentoring system is adopted to help at individual levels
- Remedial classes and additional make-up tests help academically weaker students

- Access to self-learning tools such as Internet facilities, e-learning activities
- Peer learning activities are done for slow students to be helped by quick learners

Efforts are also put in place to ensure engagement of quick learners as well. Those identified are

- Mentored with additional topics
- Guidance is given for Career Advancement
- Encouraged to participate and involve in different clubs/societies such as Student Technical Society activities, Departmental Association Activities, technical fests and cultural fests
- Encouraged to appear for GATE, GRE, CAT etc. and scores of such exams are also used as secondary tools to evaluate attainment of POs
- Encouraged to participate in National and International level competitions for various technical and cultural activities
- Access to latest E-learning (NPTEL) content and reference materials

Process for Encouraging Bright Students and Assisting Weak Students:

Quality of class room teaching:

Regular department audit is done on teaching methodologies implement and attendance of the students by the Head of the department and the academic in charge i.e., for every 15days and suggestion required to improve the quality is given by the head of the department.

Department CR meeting is conducted as mentioned in the above academic schedule to take the corrective measures in academics.

Conduct of LaboratoryExperiments

The Department continuously strives to improve the laboratory experience by conducting add-on experiments that are relevant to certain underachieved Learning Outcomes.

Continuous Assessment in the Laboratory:

Continuous assessment in the lab is done in every lab session by the faculty based on the student performance in the lab. The following tables give a brief description on the evaluation of every lab session and for internal lab exams.

Rubrics used for continuous evaluation in every lab session

Conduction	5	Given experiment is performed and analyzed the results completely with standards of material	Given experiment is performed and analyzed the results completed partially.	Given experiment could not perform.
		5 Marks	3 Mark	0 Mark
Viva Voce	5	Student answered all the viva voce Questions	Student Answered only a few viva voce questions	Student did not answer any viva voce question
		5 Marks	3 Mark	0 Mark
Record writing	5	completed record was submitted	Record was submitted but incomplete.	Record was not submitted in the lab
		4 - 5 Marks	1 - 3 Marks	0 Mark

Table: lists the rubrics for assessment in Internal Lab Examination.

Write up (Including records)	10	Student was able to write the experiment in detail with the specifications of the equipment.	Student performed the experiment partially and could not specify the specifications of the equipment.	Student was unable to perform the experiment.
		6- 8 Marks	2 - 4 Marks	0 Mark
Execution	10	Student was able to perform the experiment, analyzed the results and compared with the IS standards.	Student to perform the experiment partially, and could not analyze the results with IS standards.	Student was not able to perform the experiment.
		6- 8 Marks	2 - 4 Marks	0 Mark
Viva Voce	5	Student answered all the questions.	Student answered only few question	Student did not answer any question
		3 - 4 Marks	1 - 2 Marks	0 Mark

2.2.1.2   Student Feedback of Teaching Learning Process and actionstaken

Faculty performance analysis is done based on the feedback of students given in the survey collected, the sample copy is provided below. Feedback is collected on five levels, they are:

1. Excellent
2. Average
3. Good
4. Satisfied
5. Unsatisfied