

Department of Computer Applications National Institute of Technology, Tiruchirappalli

1. Course Outline							
Course Title	Free and Open Sou	Free and Open Source Software Lab					
Course Code	CAS 757						
Department	CA	No. of Credits	2				
Programme	M. Sc.	Lab Hours	3				
Course Type	Laboratory	Course Teacher	Dr. Mrs. B. Janet				
Pre-requisites	Programming Princ	iples, Languages					
E-mail	janet@nitt.edu	Telephone No.	0431-2503741				
Course Type	Lab Course	Office	Lyceum 108				
Course Page	http://egov.nitt.edu/	http://egov.nitt.edu/moodle/course/view.php?id=23					

2. Course Content

The FOSS Lab deals with the study and analysis of free and open source software usage and application.

3. Course Objectives

- The student will be able to identify the difference between open source code and proprietary and commercial software and highlight their advantages.
- 2. To experiment open source software
- 3. To study and analyze free code
- 4. Explore the nature and logic of a free code and make changes in them

4. Course Learning Outcomes (CO)

- 1. To download a free code and run it.
- 2. To use github for software development and version control in teams.
- 3. To use Open source software by running its source code
- 4. To read a Research Paper and implement the open source code given for it
- 5. To create an Application using open source code

5. Course Outcome	Aligned Programme Outcome (PO)											
(CO)	POI	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10	PO11	PO12
To download a free code and run it.	Н	Н	A	A	A	Н	Н	A	Н	Н	H	Н
To use github for software development and version control in teams.	Н	Н	A	A	Н	Α	Н	A	Н	Н	Н	Н
To use Open source software by running its source code	Н	Н	Н	A	Н	A	Н	L	L	Н	Н	Н
To read a Research Paper and implement the open source code given for it	Н	Н	Н	A	Н	A	Н	L	L	Н	Н	Н
To create an Application using open source code	Н	A	Н	A	Н	Н	Н	Н	L	Н	Н	Н

Exercise

The Moodle site will be available for detailed lab exercise dissemination and discussion inside and outside the Laboratory, between students and with the teacher. Student engagement in the Moodle course site will count towards assessment of student participation that has assessment weightage.

6. Lab Exercise

Week	Topic					
1.	Identify the difference between open source code and proprietry and commercial software					
2.	Download a free code and run it.					
3.	Create a java project					
4.	Use weka software by running its source code					
5.	Read a Research Paper and implement the open source code					
6.	Use github for software development and version control in teams					

Week	Topic					
7.	Prepare a code for a research paper					
8.	Create a website using open source					
9.	Use any one data analytics open source tool					
10.	Create mobile application using open source					

The assessment details for this course are given below. The assessment will be done for a total of 100 marks.

Sl. No.	Mode of Assessment	Nature		Duration in Min.	Weightage (%)	
1.	Test	Formative	4 th week	60	10	
2.	Test	Formative	8 th week	60	15	
3.	Lab activity	Periodic	Lab duration	NA	50	
4.	End Semester Exam	Summative	11 th week	120	25	
				Total	100	

8. Lab Survey

- The students may give their feedback at any time to the course Teacher or through an email message in moodle, which will be duly addressed.
- The students may also give their feedback during Class Committee meeting and fill
 up the feedback form in moodle site at the end of each test.

10. Course Policy (including plagiarism, academic honesty, attendance, etc.)

Lab Behavior

 Ensure that the course atmosphere, both in the Lab and discussions outside the Lab with Teacher, is conducive for learning. Participate in discussions but do not dominate or be abusive. Be considerate of your fellow students and avoid disruptive behavior.

Exam policy

 Each student is required to take all exams at the scheduled times. All exceptions must be cleared with the professor prior to the exam time. Exams missed for insufficient reason and without being cleared with the professor prior to the exam time will be assigned a score of zero.

Assignments

 All assignments are due on or before the mentioned date and time and is to be uploaded on the Lab moodle site.

Late assignments

Late submissions are not accepted.

Plagiarism

 The students are expected to come out with their original work on term activity, assignments and tests/examinations. If found to be plagiarized, it will be assigned a score of zero.

Attendance

Attendance is expected. If a student misses a Lab, the student is still responsible for the
material that is studied and for completing any assignments by the due date that may
have been handed out by the instructor during class.

Academic Honesty

- No type of academic dishonesty will be tolerated. If the student is caught cheating (on the assignments, exams, or project) the punishment will be the most severe penalty allowed by the Institute policy.
- ii) Possession of any electronic device, if any, found during the test or exam, the student will be debarred for 3 years from appearing for the exam and this will be printed in the Grade statement/Transcript.
- iii) Tampering of MIS records, if any, found, then the results of the student will be withheld and the student will not be allowed to appear for the Placement interviews conducted by the Office of Training & Placement, besides (i).

11. Additional Course Information

- The students can get their doubts clarified during Lab.
- Prior request for appointment through mail, stating the subject matter to be discussed, is required to fix a time for discussion of subject matter outside class. Appointment time will be communicated through reply mail.

For Senate's Consideration

(Dr. Mrs. B. Janet

Course Faculty

(Dr. Michael Arock)

PAC Chairperson

(Dr. S. R. Balasundaram)

Head