A report on

MOOC FOSS training in collaboration with 'Spoken Tutorials' IIT Bombay In Department of Biosciences

Session 2017- 2018

Submitted to:

Head,
Department of Biosciences
Integral University, Lucknow.

By:

Dr. Swati Sharma
Faculty Coordinator Spoken Tutorials,
Department of Biosciences,
Integral University, Lucknow

A report on: Spoken Tutorials after successful completion of first FOSS training-session June-Dec 2017 in Department of Biosciences Integral University, Lucknow.

It is a matter of immense proud that in association with IIT-Bombay spoken tutorials (spoken-tutorial.org) have been made available to the students of Department of Biosciences, Faculty of Sciences, Integral University, Lucknow. Integral University has partnered with the Spoken Tutorials, IIT Bombay to empower the students with Information and Communication Technology (ICT). The project is an initiative of the 'Talk to a Teacher' activity of the National Mission on Education through ICT, launched by the Ministry of Human Resources and Development, Government of India. The university agrees to include Spoken Tutorials as MOOCs for practical courses, wherever possible. As an initiative of our Dean, Student Welfare, Prof. Monowar Alam Khalid, Spoken Tutorials training courses, mapped and unmapped with timetable, are already running in many departments of the university. In the month of November, 2017, under the guidance of Mr. Md. Usama, Integral University Centre Coordinator, Spoken Tutorial Project and Head Department of Biosciences, our department started conducting training on FOSS (Free Open Source Software) courses from Spoken Tutorial (spoken-tutorial.org), namely:

1. **J mol** : A FOSS used to create 3D chemical, crystal and biomolecules structure: opted by UG students from Biotechnology and Microbiology disciplines,
2. **Cell Designer**: FOSS used for drawing gene-regulatory and biochemical networks: opted by PG students from Biotechnology and Microbiology disciplines,
3. **Libre office suite**: FOSS for learning basic computer usage skills like Word processing, Spreadsheet, Presentation: opted by both UG and PG students from Biotechnology and Microbiology disciplines.

More than 55 UG and PG students from Biotechnology and Microbiology disciplines participated and mostly got enrolled in two courses and in a very short time. The course started, an induction session was conducted and students were introduced to the concept and procedures as well as method employed. They were given the sheets and also the offline content if needed.

With prompt help and support from Dr. Aashraya Seth our training coordinator, Spoken Tutorial IIT Bombay, and cooperation of our vigilant invigilator Mr. Sayed Saeed Ahmad, the tests were organised and smoothly conducted. More than 60% students qualified the exams and received the certificates. Though the turn out for exams was not as expected (33%

appx. were absent), may be because our final year students are undergoing training in this semester and we started late, the enthusiasm in students grew as more number of students are opting for Jan to June 2018 session. These tutorials are very useful for the students in improving their IT skills, their confidence and their employment potential as well. We hope to have another promising semester and impart more students with ICT.

Swati Sharma

Swati Sharma
Faculty Coordinator Spoken Tutorials,
Department of Biosciences,
Integral University, Lucknow
Date: 10.02.2018

Students of MSc Biotechnology, Microbiology and BSc Biotechnology, Department of Biosciences in revision/instruction session of spoken tutorial and while taking online tests.

Department of Biosciences, Integral University, Lucknow

A report on: Spoken Tutorials after successful completion of second FOSS training-session Jan-June 2018 in Department of Biosciences Integral University, Lucknow.

Second semester of FOSS (Free Open Source Software) courses training programme of IIT-Bombay spoken tutorials (spoken-tutorial.org) was conducted along Even SEM 2018 of regular session in Department of Biosciences, Faculty of Sciences, Integral University, Lucknow. The courses conducted were:

1. **Introduction to computers** : A FOSS for providing basic knowledge of computers and IT: opted by UG students from Biotechnology and Life sciences and PG Microbiology and PhD in the department.
2. **Cell Designer**: FOSS used for drawing gene-regulatory and biochemical networks: opted by PG students from Biotechnology and PhD in the department.
3. **INKSCAPE**: FOSS for editing professional quality vector graphics: opted by both UG from Biotechnology and Life sciences and PG students of Microbiology discipline.

55PG, 89 UG and 33 PhD students from Biosciences, Biotechnology and Microbiology disciplines participated and mostly got enrolled in two courses. The course started, an induction session was conducted and students were introduced to the concept and procedures as well as method employed. They were given the sheets and also the offline content if needed. Sessions of MSc Microbiology I and BSc Biotechnology II were mapped within lab hours and rest were mapped outside except for PhD. Student coordinators were appointed for each class for smooth conduction of training.

With prompt help and support from Dr. Aashraya Seth our training coordinator, Spoken Tutorial IIT Bombay, and cooperation of our vigilant invigilator Mr. Sayed Saeed Ahmad, the tests were organised and smoothly conducted. Though only 70% students turned up for tests 90% of them qualified the exams and received their certificates. As per students feedback the tutorials were very useful for them in improving their IT skills, their confidence and their employment potential.

Swati Sharma

Swati Sharma
Faculty Coordinator Spoken Tutorials,
Department of Biosciences,
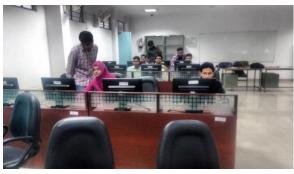Integral University, Lucknow
Date: 26.04.2018

Students of PhD, MSc Biotechnology/Microbiology and BSc Biotechnology/Life sciences, Department of Biosciences in revision/instruction session of spoken tutorial and while taking online tests 9th and 24th April 2018.

Department of Biosciences, Integral University, Lucknow

Annexure 1: Details of Session Jan to June 2018

FOSS MOOC (#spokentutorial; spoken-tutorial.org)	Discipline	Date	Total registered	**Enrolled**	Passed	Percent Passed
Session Jan to June 2018						
Introduction to Computers	MSc Micro	24-Apr-18	28	4	4	100
Inkscape	M.Sc., Biotechnology	24-Apr-18	3	3	2	67
Inkscape	MSc Micro	24-Apr-18	28	4	4	100
CellDesigner	M.Sc., Biotechnology	24-Apr-18	23	12	10	83
Introduction to Computers	BSc Life Sciences/Biosciences	09-04-2018	26	18	15	83
Inkscape	BSc Life Sciences/Biosciences	09-Apr-18	26	18	18	100
Inkscape	BSc Biotechnology	09-Apr-18	63	18	17	94
Introduction to Computers	BSc Biotechnology	09-Apr-18	63	15	15	100
Introduction to Computers	PhD	09-Apr-18,24-04-2018	33	17	16	94
CellDesigner	PhD	09-Apr-18	33	15	11	73
Session June to Dec 2017						
CellDesigner	MSc Micro	10-02-2018, 22-01-2018	7	7	7	100
LibreOffice Suite Base	MSc Micro	10-02-2018, 22-01-2018	7	7	6	86
Jmol Application	BSc Biotechnology	29-Jan-18	39	19	17	89
LibreOffice Suite Base	BSc Biotechnology	29-Jan-18	16	12	10	83
CellDesigner	M.Sc., Biotechnology	27-Jan-18	12	8	3	38
LibreOffice Suite Base	M.Sc., Biotechnology	27-Jan-18	12	8	8	100