### 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
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By:

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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. Osama, 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

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.

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.

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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 9<sup>th</sup> and 24<sup>th</sup> April 2018.

**Annexure 1:** Details of Session Jan to June 2018

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