

S-01 &amp; 02 June, 2016 AC after Circulars from Circular No.100 &amp; onwards+ - 39 -

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY****CIRCULAR NO. SU/Service Course/30/2016**

It is hereby inform to all concerned that, the Choice Based Credit and Grading System have been implemented to the affiliated colleges from the academic year 2015-16 at Post Graduate level for the all Faculties. According to the guidelines of C.B.C. & G.S. it is essential to teach the Service Course to students. The authorities of the university has decided that the service courses run at University Campus and Sub-Center, Osmanabad be apply to the college level. The concerns are inform that to instruct to the students to Choice any one Service Course as per their willingness. Where only one post graduate course they can take the service course of the concerned subject. The syllabi of the service courses are uploaded with the circular on the University website [www.bamu.ac.in](http://www.bamu.ac.in)

The service courses be teach to the students with the **syllabus of IVth-Semester for this year only and hereafter** to tech with the syllabus of III-Semester as per their relevant courses.


This is effective from the academic year 2016-17.

All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University Campus,  
Aurangabad-431 004.  
REF.NO. SU/SERVICE COURSE /  
SYLLA./2016/5117-516  
Date:- 02-09-2016.

★  
★  
★  
★

\*\*\*\*\*

  
Director,  
Board of College and  
University Development.

**Copy forwarded with compliments to:-**

**1] The Principals of concerned Colleges,  
Dr. Babasaheb Ambedkar Marathwada University.**

**Copy to :-**

- 1] The Controller of Examinations,
- 6] The Section Officer, [ M.A. Unit ],
- 7] The Section Officer, [ M.Sc. Unit ],
- 8] The Section Officer, [ M.Com. Unit ],
- 9] The Section Officer, [ Management Unit ],
- 10] The Section Officer, [ Professional Unit ],
- 11] The Section Officer, [ Engineering Unit ],
- 3] The Programmer [Computer Unit-1] Examinations,
- 4] The Programmer [Computer Unit-2] Examinations,
- 5] The Public Relation Officer,
- 6] The Co-ordinator, E-Suvidha Kendra, [Rajarshi Shahu Maharaj Pariksha Bhavan],
- 7] The Record Keeper.

Dr. Babasaheb Ambedkar Marathwada University,

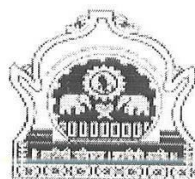
--\*\*--

S\*/-160916/-

S-Cover Page

- 24 -

**DR. BABASAHEB AMBEDKAR  
MARATHWADA UNIVERSITY,  
AURANGABAD.**



**M.Sc. Bio-Chemistry**

**Service Course**

*[ Academic Year 2016-17 & onwards ]*

**Course Code: 30043S**

**Course Name: Plant Biotechnology**

Total Credits: 4

**Plant defence:**

**Unit I**

Credit: 1

Plant pathogens and integrated defense response to infection  
Gene silencing as an adaptive defense  
Natural products and plant disease resistance

**Unit II**

Credit: 1

Programmed cell death  
Hypersensitive response of plants and mitochondrial function  
Biochemistry of airborne signals during plant defense  
Co-evolution and plant resistance to natural enemies

**Engineering pest and disease resistant plants**

**Unit III**

Credit: 1

Production of transgenic organisms: microbes  
Producing proteins in bacteria and fungi  
Methods to produce transgenic plants  
Herbicides, manipulating herbicide tolerance in plants  
benefits and problems of herbicide tolerance in plants

**Unit IV**

Credit: 1

Plants with increased resistance to insects  
Biotechnology and tomato, genetic modifications of foods, oils and starches  
Improving plant tolerance to environmental stress  
Production of transgenic animals  
Release of transgenic organisms in the environment  
Safety and regulation of genetically engineered food