Parvatibai Chowgule College of Arts and Science
Autonomous
Accredited by NAAC with Grade 'A' (CGPA Score 3.41 on a 4 Point Scale in 3rd cycle)
Best affiliated College-Goa University Silver Jubilee Year Award

LEARNING OUTCOME-BASED EDUCATION (LOBE)

for

Undergraduate Programme
BA/BSc _____
(LOCF)

A Template

GUIDELINE FOR PREPARING 'LOBE' DOCUMENT FOR BA/BSC UNDERGRADUATE PROGRAMMES AT PARVATIBAI CHOWGULE COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Learning Outcome Based Education (LOBE), is a means of adherence to student-centric learning approach to measure student's performance based on pre-determined set of outcomes. Each department shall prepare a consolidated document of LOBE for the programmes offered by them in view of the LOCF guidelines of UGC in January 2020. Learning Outcome Based Education (LOBE) advocates the importance of establishing a clear picture of what is important for students to be able to do, organizing the curriculum, instruction, and assessment to make sure that learning ultimately happens. Learning Outcome Based Education approach helps to focus on utilization of appropriate instruction and pedagogy, helps organize teaching and learning processes around career advancement and placement of students, helps in selection and design of appropriate assessment modes and that programmes are awarded based on demonstrated achievement of outcomes. The core philosophy of Learning Outcome Based Education rests in adhering to student-centric learning approach used to measure student's performance based on pre-determined set of outcomes.

Learning Outcome Based Education therefore focuses on bringing out reforms in curriculum framework that has to be outcome based; constant up gradation of academic resources; raising quality of research and teaching; technology integration in the teaching-learning processes; bringing out clarity among students as to what is expected

from them after completion of the programme and for teachers in bringing focus on what to teach, how to teach and evaluate.

In view of this, the present structure and terminologies adopted by the college for outcome based education will be aligned with the terminologies given by UGC in LOCF. Other structural changes also need to be considered to conform to the LOCF. Primary focus will be to prepare the LOBE document for the programmes and subsequently work on attainment of the PLOs and COs.

CHANGES REQUIRED TO BE DONE FOR BA/BSc PROGRAMMES:

1. CHANGE IN TERMINOLOGIES:

Present	**Proposed**
Outcome Based Education (OBE)	Learning Outcome Based Education (LOBE)
Programme Outcomes(POs)	Programme Learning Outcomes(PLOs)
Course Outcomes (COs)	Course Learning Outcomes (COs)

2. WRITING/REWRITING THE FOLLOWING:

a. Attributes for Graduates (Based on the POs and PSOs of the department).
b. Qualification descriptors

3. PREPARING LOBE DOCUMENT FOR BA/BSc PROGRAMME:

Flow of information for preparation of LOBE document is as follows:

1. **Introduction -**about the Programme, a paragraph 4-5 lines.
2. **Objective/Aim of BA/BSc Programme-** Mission statement of the department.
3. **Overview of Department-** About faculty,*infrastructure, facilities, opportunities for students, activities, progression highlights).*
4. **Graduate Attributes:** What your students will acquire (w*ill be written based on the existing POs and PSOs and the mission statement of the department- set of individually assessable outcomes that are indicative of the graduate's potential to acquire competencies in that programme***.**
5. **Qualification descriptors:** summative description of course objectives (may *be written based on the intended COs of all courses and so also PSOs).*
6. **Programme Learning Outcome (PLOs):** *(Represent the knowledge, skills and attitudes a student should at the end of the programme).*
7. **Course Structure:** *(with Component A,B,C and D)*
8. **Course Description:** *(highlight objectives of all courses in brief)*
9. **Course Learning Objectives (CLOs):** *Of all courses of the department.*
10. **Teaching-Learning-Evaluation Pedagogies:** *(list out the Teaching pedagogies and evaluation modes that will be adopted for the courses of the department).*
11. **Activities of the Department:** *(Indirect assessors of attainment of PLOs and attaining Graduate attributes)*
12. **Course Syllabus**

13. **Learning Outcome Matrix :** *(Templates attached as annexures):*

i. *Matrix -1: Mapping activities to the PLOs (single document for entire programme).*
ii. *Matrix -2: Mapping PLOs to CLOs (course wise).*
iii. *Matrix-3:* Mapping Teaching –Learning Pedagogies to PLOs and CLOs (Course wise).
iv. *Matrix-4:*Mapping Assessment modes to PLOs and CLOs (Course wise).

14. **Question bank:** *Summative exams indicating levels of Blooms taxonomy. (To be done later).*

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TEMPLATES FOR MAPPING LEARNING OUTCOMES TO ASSESSMENTS AND ACTIVITIES

In essence, Programme Learning Outcomes need to be developed with a broad perspective. Achievement of learning outcomes does not solely depend upon one single type of assessment at the end of the term. It is an integration of strong learning culture, identification of competencies, appropriate teaching pedagogy, design of holistic learning experiences and choice of assessment in the form of continuous internal evaluation that is formative in nature. The system of assessment to be adopted needs to be inherently linked to programme/curriculum goals as one can objectively assess student performance by relating assessment type to Program Learning Outcomes and Program Education Objectives. Course Learning Outcomes (CLOs) should also be set for every course of the program and a process may be prepared to measure the attainment of Program Learning Outcomes (PLOs) and Program Educational Objectives (PEOs). Assessment methods and its questions must be mapped to each CLO and every CLO must be mapped to a PLO. Each question of the internal assessment modes as well as the external examination should be linked to the CLO, hence the student performance for each question must be monitored to measure the attainment of CLO. The assessment tools for each course must be mapped to the revised Bloom's taxonomy action verbs to help measure student performance.

MATRIX -1 *(Entire Programme)*
MAPPING COURSES/ACTIVITIES TO PROGRAMME LEARNING OUTCOME
PROGRAMME: _____

(use ☑ if linked, ☒ if not linked)

PLOS / Course /Activity		PLO-1: Use of Technology, Problem Analysis and Solutions	PLO-2 : Environment Sustainability & Ethics	PLO -3: Individual and Team work, Communicationa & Life Skills	PLO-4: Research Aptitude & Social responsibility	PLO-5: *(Add from dept.)*	PLO-6 (Add from dept.)	PLO-7: (Add from dept.)	PLO-8: (Add from dept.)
Courses Component A	xxx-I-C-01								
	xxx-I-C-02								
	xxx-II-C-03								
	xxx-II-C-04								
	xxx-III-C-05								
	xxx -III-E-01								
	xxx -III-E-02								
	xxx -III-E-03								
	xxx -IV-C-06								
	xxx -IV-E-05								
	xxx -IV-E-06								
	xxx -IV-E-07								
	xxx -V-C-07								
	xxx -V-E-09								
	xxx -V-E-10								
	xxx -V-E-12								
	xxx -VI-C-08								
	xxx -VI-E-13								
	xxx -VI-E-14								
	xxx -VI-E-16								
Courses Component B	Language								
	Academic Writing								
	Research Writing								
	Statistical methods								
	EVS								
	SEC-1								
	SEC-2								
Component C	Sports/NSS /NCC/SE/OP								
Component D	Internship								
Activities of the department	…. *Add*								
	…. *Add*								
	…. *Add*								

	…. Add								
	…. Add								

MATRIX -2 *(Course-wise)*

MAPPING OF PROGRAMME LEARNING OUTCOME TO COURSE LEARNING OUTCOMES

Programme:

Type of Course: *(GEC/ SEC/ DSE/ Core)*

Course Code:

Course Title:

(use ☑ if linked, ☒ if not linked)

PLOs / CLOs	1	2	3	4	5	6	7	8
1								
2								
3								
4								
5								

MATRIX 3 *(Course wise)*

MAPPING TEACHING METHODS/PEDAGOGIES TO CLOs AND PLOs
PROGRAMME: _____
Course:_____
(use ☑ if linked, ☒ if not linked and ⊟ if mode not used)

Level of Blooms Taxonomy (1-6)	**T-L-E modes**	**CLO -1**	**CLO 2**	**CLO 3**	**CLO 4**	**CLO 5**	**PLO1**	**PLO2**	**PLO3**	**PLO4**	**PLO5**	**PLO6**	**PLO7**	**PLO 8**
	Traditional Lecture Method													
	Interactive Lecture Method													
	Group Discussion													
	Debate													
	Experiential Learning													
	Out-door Experiments													
	Laboratory Work													
	POGIL													
	Flipped Classroom													
	Field Based studies													
	Problem Based Learning													
	Project based Learning													

Blooms Taxonomy: 1-Remembering, 2-Understanding, 3-Applying, 4-Analysing, 5-Evaluating, 6-Creating

MATRIX 4 *(Course wise)*

MAPPING ASSESSMENT MODES TO CLOs AND PLOs
PROGRAMME: _____
Course:_____

(use ☑ if linked, ☒ if not linked and ⊟ if mode not used)

Level of Blooms Taxonomy (1-6)	**T-L-E modes**	**CLO-1**	**CLO 2**	**CLO 3**	**CLO 4**	**CL O5**	**PL O1**	**PL O2**	**PL O3**	**PL O4**	**PL O5**	**PL O6**	**PL O7**	**PL O8**
	Problem Based Learning													
	Project based Learning													
	Student Seminars													
	Case Studies													
	Student Presentation													
	Gobbet													
	Assignments													
	Open Book Exam													
	SAQ													
	MCQ													
	Portfolio													
	Concept Maps													
	Research based Analysis													
	Enacting /Roleplay													
	Summative term end Exam													
	Laboratory practical													
	Research project													
	Any other..													

EXAMPLE

MATRIX -1

MAPPING COURSES/ACTIVITIES AND PROGRAMME LEARNING OUTCOME

PROGRAMME: BSc ZOOLOGY

(use ☑ if linked, ☒ if not linked)

PLOS / Course /Activity		PLO-1: Use of Technology, Problem Analysis and Solutions	PLO-2 : Environment Sustainability & Ethics & Social responsibility	PLO -3: Individual and Team work, Communicationa & Life Skills	PLO-4: Research Aptitude	PLO-5 Sound subject knowledge	PLO-6 Good practical skills	PLO-7 Critical thinking	PLO-08- Leadership quality
Courses Component A	ZOO-I-C-01	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-I-C-02	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-II-C-03	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-II-C-04	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-III-C-05	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-III-E-01	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-III-E-02	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-III-E-03	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-IV-C-06	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-IV-E-05	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-IV-E-06	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-IV-E-07	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-V-C-07	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-V-E-09	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-V-E-10	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-V-E-12	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-VI-C-08	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-VI-E-13	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-VI-E-14	☑	☑	☑	☑	☑	☑	☑	☑
	ZOO-VI-E-16	☑	☑	☑	☑	☑	☑	☑	☑
Courses Component B	Language	☑	☑	☑	☒	☒	☒	☑	☑
	Academic Writing	☑	☑	☑	☑	☒	☒	☑	☑
	Research Writing	☑	☑	☑	☑	☑	☑	☑	☑
	Statistical methods	☑	☑	☑	☑	☑	☑	☑	☑
	EVS	☑	☑	☑	☑	☑	☑	☑	☑
	SEC-1	☑	☑	☑	☒	☑	☑	☑	☑
	SEC-2	☑	☑	☑	☒	☑	☑	☑	☑
Component C	Sports/NSS /NCC/SE/OP	☒	☑	☑	☒	☒	☒	☑	☑
Component D	Internship	☑	☑	☑	☑	☑	☑	☑	☑
Activities of the department	Butterfly garden	☒	☑	☑	☒	☑	☑	☑	☑
	Birders Club	☒	☑	☑	☒	☑	☑	☑	☑
	Community outreach	☑	☑	☑	☑	☒	☒	☒	☒
	Industry-Academia Lectures	☑	☑	☑	☑	☑	☑	☑	☑
	Symbiosis Activity	☒	☑	☑	☒	☑	☑	☑	☑