

OBE ATTAINMENT GUIDELINES

AUXILIUM COLLEGE (Autonomous), Vellore - 6



IMPLEMENTATION OF OUTCOME BASED EDUCATION

INTRODUCTION

Outcome Based Education (OBE) is an educational approach that focuses on defining specific learning outcomes or competencies that students should achieve by the end of an educational programme. It is a student-centered instruction model that focuses on measuring student performance through outcomes. Outcomes include knowledge, skills and attitudes. Its focus remains on the evaluation of outcomes of the programme by stating the knowledge, skill and behavior a graduate is expected to attain upon completion of a programme.

The key features for implementation of Outcome Based Education are:

- Development of curriculum framework that outlines specific and measurable outcomes.
- Instructional methodology to ensure delivery for specified outcomes.
- Standards-based assessments that determine whether students have achieved the stated standards.

OUTCOME BASED EDUCATION AT AUXILIUM COLLEGE

Outcome-Based Education is a student-centric teaching and learning methodology in which the course delivery and assessment is planned to achieve stated objectives and outcomes. It focuses on measuring student performance, i.e., outcomes at different cognitive levels.

In adherence to the UGC and NAAC guidelines, Auxilium College (Autonomous) adopted Outcome Based Education for students admitted from 2020-2021 onwards. The curriculum framework was revised for all the Undergraduate and Postgraduate Programmes with special focus on the knowledge, understanding, skills, attitudes and values that the students should have attained on the completion of the programmes.

PROGRAMME OUTCOMES (PO)

Programme Outcomes (POs) are broad statements that describe what students are expected to know and be able to do by the time they graduate from a specific academic programme, and are framed in alignment with the vision and mission of the institution

and cater to the holistic development of students. These outcomes provide an overall picture of the knowledge, skills, and attitudes that students should have acquired throughout their course of study. The Programme Outcomes framed for different levels of study programme are given below.

Undergraduate Programme:

On completion of the UG Programme, students of will be able to;

PO1: Attain knowledge and understand the principles and concepts in the respective discipline.

PO2: Acquire and apply analytical, critical and creative thinking, and problem-solving skills.

PO3: Effectively communicate general and discipline-specific information, ideas and opinions.

PO4: Appreciate biodiversity and enhance eco-consciousness for sustainable development of the society.

PO5: Emulate positive social values and exercise leadership qualities and team work.

PO6: Pursue higher knowledge, qualify professionally, enhance entrepreneurial skills and

contribute towards the needs of the society.

Postgraduate Programme:

On completion of the PG Programme, students will be able to;

PO1: Attain an in-depth knowledge in the respective domains augmented through self-learning.

PO2: Assimilate and apply principles and concepts towards skill development and employability.

PO3: Apply critical and scientific approaches to address problems and find solutions.

PO4: Develop research skills through multi/inter/trans-disciplinary perspectives.

PO5: Integrate issues of social relevance in the field of study.

PO6: Persist in life-long learning for personal and societal progress.

M.Phil. Programme:

On completion of the M.Phil. Programme, scholars will be able to;

PO1: Develop research aptitude in the respective discipline.

PO2: Master the framework of research process.

PO3: Acquire technical and writing skills to communicate research findings.

PO4: Engage in ethically oriented original research for the benefit of the society.

PO5: Design innovative research techniques and find probable solutions to socially relevant research problems.

PO6: Commit to life-long learning with the intellectual interest created.

Ph.D. Programme:

On completion of the Ph.D. Programme, scholars will be able to:

PO1: Acquire expertise in specific areas of study.

PO2: Formulate, analyze and apply theories and design methodologies.

PO3: Focus on socially relevant research and follow research ethics.

PO4: Gain skills to write research and project proposals for grants.

PO5: Network and offer consultancy at national and international levels.

PO6: Strive to obtain Intellectual Property Rights for inventions and innovations.

PROGRAMME SPECIFIC OUTCOMES (PSO)

Programme Specific Outcomes (PSO) denote discipline-specific knowledge, understanding, skills, attitudes and values that the student should have attained on completing the particular programme, and are measurable so that the attainment can be assessed objectively.

Auxilium College (Autonomous) offers 16 UG, 12 PG and 8 Ph.D. programmes. There are six Programme Specific Outcomes formulated for each programme.

COURSE OUTCOMES (CO)

Course Outcomes (COs) are specific statements that describe the knowledge, skills, abilities, and attitudes that students are expected to achieve by the end of a particular course. These outcomes are derived from the broad programme outcomes and are designed to be achievable within the duration and scope of the specific course. COs serve as a guide for instructors, students, and other stakeholders to understand the intended learning goals of a course.

There are five Course Outcomes, one for each unit, articulated for each course. By clearly defining Course Outcomes, educators can ensure that their teaching aligns with the overall goals of the programme and provides students with a structured and purposeful learning experience.

SYLLABI

The syllabi of all Programmes include Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and course objectives, Course Outcomes (COs), content, text books and references for the various courses.

Each course content is divided into five units and each unit is further split into 6 subunits. The expected Cognitive Knowledge Levels (K1/K2/K3/K4/K4/K5/K6) to be attained out of each subunit are specified in the course content.

Knowledge Levels as per Bloom's Taxonomy

LEVELS	PARAMETERS	DESCRIPTION
K1	Knowledge	It is the ability to remember the previously learned information.
K2	Comprehension	It is the ability to grasp the meaning of the concept.
К3	Application	It is the ability to use learned material in new and concrete situations.
K4	Analysis	It is the ability to relate, connect, compare and contrast the ideas.
K5	Evaluation	It is the ability to interpret, criticize, justify, appraise idea/concept/information.
K6	Create	It is the ability to create, compose, reconstruct concept/statement/research work for a given purpose.

MAPPING BETWEEN PO AND PSO

Developing a mapping document or matrix that clearly shows the alignment between Programme Outcomes and Programme Specific Outcomes is essential to determine how each programme-specific outcome contributes to or aligns with the achievement of the overall programme outcomes. It also ensures that the programmes offered by the institution are focused, coherent, and effectively prepare students for their careers or further studies in the field.

The six Programme Outcomes of UG/PG/M.Phil./Ph.D., are mapped with Programme Specific Outcomes on a 3-point scale having H for highly correlated, M for moderately

correlated and L for least correlated.

MAPPING CO WITH PSO

Mapping Course Outcomes (COs) with Programme Specific Outcomes (PSOs) is a systematic process that ensures students graduate with the knowledge, skills, and attributes necessary to excel in their chosen fields.

Course Outcomes of each course of a programme are mapped with PSOs on a 3-point scale having H for highly correlated, M for moderately correlated and L for least correlated.

MAPPING CO WITH PO

Mapping Course Outcomes effectively with Programme Outcomes ensures that the courses collectively contribute to the overarching goals of the academic programme.

Course Outcomes of each course of a programme are mapped with POs on a 3-point scale having H for highly correlated, M for moderately correlated and L for least correlated.

ASSESSMENT

Assessment is a core academic activity and an essential component of the learning process. It is an ongoing process to support educational quality and student achievement. It is the main mechanism to monitor the effectiveness of the learning environment based on evidences that determine whether students have met the learning outcomes. The College makes sure that assessment occurs consistently and systematically to ensure quality education.

Assessment is done by two ways – Formative (internal) and Summative (end semester)

- Internal Two Continuous Assessment Examinations (ICA and II CA), Innovative Component (IC) – assignments/seminars/projects/open book assignments/model making/report writing/debates/field visits/industrial visits/internship/oral presentations etc.
- Summative End semester examinations.

S. No.	Assessment Tool	Maximum Marks	Weightage	
	I Continuous	50		
	Assessment (ICA)		35	
1.	II Continuous	50		
	Assessment (IICA)			40
	Innovative Component	5	5	

	(IC)		
2.	End Semester	100	60
	Examination		

ATTAINMENT OF OUTCOMES

The following procedure is adopted to measure students' performance with respect to OBE concept. The flow of measurement is taken from students' marks obtained in the internal (I CA, II CA & IC) and semester examinations. The marks are then converted to scores on a 3-point scale to check whether they meet the Course Outcomes (COs) set by the course instructor. After getting the Course Outcome scores, the contribution of each CO to Programme Specific Outcomes (PSOs) and Programme Outcomes (POs) is measured progressively until students complete their 3/2-year UG/PG programme. The various steps that are involved in this method are:

- ➤ Mapping questions (internal/semester) with COs and Bloom's Taxonomy K levels.
- ➤ Including questions in the question paper (internal/external) at all K levels (K1 to K6) for PG / including questions up to K4 levels and assessing the students' performance at K5/K6 levels through IC tools for UG.
- Entering marks question wise (internal/semester) in the ERP portal.
- ➤ The threshold value is 40% for UG courses, and 50% for PG courses for CO attainment calculation.
- Considering 20% weightage for CO scores obtained from internal assessments and 80% weightage for CO scores obtained from semester examinations to calculate the overall attainment of various COs of a particular course.
- ➤ Calculating the COs attainment scores for each course, and the contribution of COs to obtain PSOs & POs attainment scores by the software.
- ➤ Calculating students' attainment of COs and K levels and reporting in the form of diagrams/graphs by the software.
- ➤ If the calculated scores of COs, PSOs and POs are ≥40% for UG courses and ≥50% for PG courses of the targeted values given in the mapping tables, then the outcomes are achieved or attained.
- Listing actions/corrective measures to be initiated to achieve the targeted attainment values in case they are not achieved.

ACTION TAKEN REPORT

The attained percentages are analysed to understand how well students have collectively achieved each Course Outcome and the areas where students performed

exceptionally well and areas that might need improvement are identified. Accordingly, specific action plans/corrective measures are to be developed and implemented to achieve the targeted attainment values. The assessment data, student feedback, and other relevant indicators will be used to evaluate the effectiveness of the implemented changes. The Action Taken Report summarizing the identified issues, action plans, implementation details, outcomes, and plans for further improvement will be prepared and documented.

CONTINUOUS IMPROVEMENT

The attainment data will be used as a basis for continuous improvement in the course design, teaching methods, and assessment strategies and to make necessary adjustments to enhance student learning and improve Course Outcome Attainment in subsequent offerings of the course. Continuous monitoring and adjustment are essential to ensuring that the course remains effective and aligned with its intended learning outcomes.

AGGREGATE AND REPORT

The attainment data for all Course Outcomes will be aggregated and a report summarizing the overall attainment levels will be prepared and shared with stakeholders, including students, faculty, and relevant administrative bodies.

IMPLEMENTATION AND MONITORING

Implementation of OBE will be the responsibility of-

- IQAC Coordinator
- Controller of Examinations
- Deans/Heads of the Departments/Faculty
- Curriculum Development Cell

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