CO-PO POLICY DOCUMENT

1. Introduction

This document outlines the procedures, and the responsibilities associated with the mapping of Course Outcomes (COs) to Program Outcomes (POs) of programmes offered by IET Bhaddal. This framework aims to define laws for evaluation of outcomes in an endeavor to enhance the quality of education, support continuous improvement, and align learning outcomes with institutional goals.

2. Objectives

- To define clear and measurable COs for each course.
- To establish linkages between COs and POs based on the competencies students should develop.
- To monitor and assess the attainment of COs and POs effectively.
- To facilitate continuous improvement based on assessment results.

3. Definitions

- Course Outcomes (COs): Specific learning outcomes that students should achieve by the end of a course.
- Program Outcomes (POs): Broader competencies that graduates are expected to possess upon completing their program.

4. Responsibilities

4.1 Faculty Members

- Develop COs for each course under their instruction.
- Continuously assess student performance against defined COs and POs.
- Engage in curriculum and instructional improvements based on assessment data.

4.2 Department Heads

- Oversee the alignment of COs and POs across courses within the department.
- Implement strategies to close gaps identified in CO and PO attainment.
- Ensure faculty members receive ongoing training and resources to effectively assess learning outcomes.

4.3 Academic Affairs Committee/IQAC

- Receive periodic reports on CO and PO attainment from departments.
- Review and approve any changes to COs and POs in the curriculum.
- Promote best practices in assessment and continuous improvement.

5. CO and PO Mapping Process

- Mapping COs to POs: Each CO should be mapped to specific POs based on the expected competencies. The mapping should indicate the correlation level:
  High Correlation (3): Substantial contribution towards PO attainment
  Moderate Correlation (2): Moderate contribution
  Low Correlation (1): Slight contribution
- Setting Attainment Targets: Define targets for each CO based on expected performance levels, e.g., percentage of students achieving a minimum score.
- Assessment Methods: Utilize a combination of direct assessments (exams, projects, assignments) and indirect assessments (surveys, feedback) to evaluate attainment.

6. Assessment and continuous improvement

- Data Collection: Collect data on student performance related to COs and POs every semester.
- Analysis: Analyze attainment data to identify strengths and areas for improvement.
- Reporting: Faculty will prepare reports that summarize CO and PO performance, providing recommendations for enhancement.

7. Continuous Improvement Strategies

- Action Plans: Develop and implement action plans based on analysis findings to address weaknesses in CO and PO attainment.
- Feedback Loops: Use student and faculty feedback to refine courses and instructional strategies regularly.

8. Documentation and Review

- Maintain documentation of CO and PO mapping, assessment results, and action plans.
- Regularly review the policy and procedures to ensure they remain effective and relevant to institutional goals.

9. Conclusion

The CO-PO policy serves as a key framework to guide curricula development and ensure that students achieve requisite competencies. Through diligent mapping, assessment, and improvement, IET Bhaddal, Ropar commits to providing high-quality education that meets industry and societal needs.

Procedure

PO's are already established by AICTE whereas PO-CO mapping for each subject has been defined by BOS of PTU. In the absence of PO-CO correlation, these to be build by the academic affairs committee.

Mapping Factor (Correlation Level)

It indicates to what extent a certain component (either assessment method to CO or CO to PO or PO to PEO &PSO

3-indicates Substantial (high) mapping (high contribution towards attainment)
2-indicates Moderate (medium) mapping (medium contribution towards attainment)
1-indicates Slight (low) mapping (some contribution towards attainment)

Setting CO Attainment Targets

Same target is identified for all the COs of a course.
For example the target can be "the class average marks ≥ 50 marks**"**

Level of attainment

Here 3 levels of attainment is taken as 1-Low; 2-medium;3-High
3 levels of attainment can be defined as
Level 3: Students scoring >70% of max marks allocatedto CO
Level 2: Students scoring >60% to 70% of max marks allocated to CO
Level 1: Students scoring >= 50% to 60% of max marks allocated to CO

Attainment of Cos

Attainment of COs can be measured directly**.** Direct attainment of COs can be determined from the performances of students in all relevant assessment instruments.

Direct CO attainment from CIE

Continuous Internal Evaluation (CIE) is conducted and evaluated by the Department itself. Thus, institutions have access to question-wise marks in all assessment instruments in CIE.

When questions are tagged with relevant COs, the department has access to performances of students with respect to each CO. Hence, computing the direct attainment of Cos from CIE is straight forward for Tier2 institutes.

Direct CO attainment from SEE

However, Semester End Examination (SEE) is conducted and evaluated by the University for Tier2 institutes. Thus the departments in Tier2 institutes get only total marks scored in SEE and not question-wise .marks. As a consequence, department's inTier2 institutes have no means of computing the direct attainment of individual COs from SEE. However SEE performance cannot be ignored. The only possible solution, though not satisfactory is to treat the average marks in SEE as the common attainment of all COs.