

Course Title: Research Project
Course No. : Ed. 472
Level: Bachelor
Semester: Seven

Program: BICTE
Nature of course: Theory + Practical
Credit Hours: 3 (2T+1P)
Teaching hours: 64 Hours(32T+32P)

1. Course Description:

This course provides students with the foundational knowledge and practical skills needed to conduct a research project, culminating in a thesis. Students will learn how to design, conduct, and present research effectively. This course emphasizes critical thinking, methodological rigor, and the articulation of research findings.

2. Course Objectives:

- Develop knowledge and skills in research methodologies and approaches.
- Identify and formulate research questions and hypotheses.
- Conduct literature reviews and synthesize relevant information.
- Design and implement research methods appropriate for the project.
- Competency in collecting and analyzing data using appropriate tools and techniques.
- Write and present a coherent and well-structured research thesis.
- Develop skills in academic writing and formatting.
- Prepare and deliver effective presentations of research findings.

3. Course Details

To achieve the expected outcomes of the course, the contents are organized as follows:

Specific Objectives	Contents
<ul style="list-style-type: none">• Analyze the concept of research• Illustrate different research approaches and methodologies• Identify and apply research ethics• Finding and stating the research gap• Formulating research hypothesis/ research question	Unit 1. Introduction to Research Projects (8Hours) 1.1 Overview of research in academia. 1.2 Objectives of Research 1.3 Research Approaches 1.4 Research Methods versus Research Methodology 1.5 Importance of research ethics and integrity. (Ethics Considerations in Research) 1.6 Identifying research gaps and formulating research hypotheses/questions.
<ul style="list-style-type: none">• Develop a research proposal in a step-by-step manner in the chosen problem• State objective, formulate a hypothesis, and determine the methodology for the selected	Unit 2 Writing the Research Project Proposal (10 Hours) 2.1 Components of Research Project Proposal 2.2 Structuring a research proposal. 2.3 Develop objectives, hypotheses, and methodology. Practical Preparation of research project proposal for contemporary

<p>issue</p> <ul style="list-style-type: none"> • 	<p>issues such as social issues, circular economic issues, environmental issues, educational, cultural, technology etc.</p>
<ul style="list-style-type: none"> • Identify related literature • Evaluate the credibility and relevance of various sources • Write a review of related literature 	<p>Unit 3 Review of Related Literature (8 Hours)</p> <p>3.1 Conducting a literature review: Systematic review and Thematic review</p> <p>3.2 Developing conceptual framework</p> <p>3.3 Verification of authentic sources and integrating findings.</p> <p>Practical</p> <p>Review literature for the selected research topic minimum three including books, reports and articles using APA7th Edition.</p>
<ul style="list-style-type: none"> • Identify related research design for a specific topic. • Define the population and use the appropriate sampling technique • Adopt ethical acceptance in the research project • Select the appropriate data collection tool for collecting data <p>4.1 Apply suitable scales for measuring variables</p> <ul style="list-style-type: none"> • Explain the technique of analysis and interpretation of data • Interpret the fringing using the support of statistical tools • 	<p>Unit 4 Major Concepts Regarding Research Design (8 Hours)</p> <p>4.2 Qualitative vs. quantitative research methods.</p> <p>4.3 Population, Sampling procedure (sample size, techniques)</p> <p>4.4 Tools and techniques for data collection (surveys, interviews, experiments, questionnaires, and Checklist).</p> <p>4.5 Use of Statistical Measures (Central Tendency, Measures of Dispersion, and Measures of Relationship)</p> <p>4.6 Interpreting data (Frequency, Table, Charts, and graphs) and drawing conclusions</p> <p>4.7 Ethical considerations and obtaining approvals</p> <p>4.8 Finding and discussion</p> <p>Practical</p> <ul style="list-style-type: none"> ➤ Develop a research design based on a selected topic including methods, sampling (probability and non-probability). ➤ Develop a research tool and collect data for the selected topic using tools such as google form, ➤ Analysis of data and interpret using suitable tools such as SPSS, NVivo
<ul style="list-style-type: none"> • Apply the layout and structure of a research report • Develop effective writing skills in academic style with referencing and citations • Prepare and present research findings to peers and 	<p>Unit 5 Preparing and Presenting research report (18 hours)</p> <p>5.1 Layout of the Research Report</p> <p>5.2 Structure of a project report: introduction, literature review, methodology, results, discussion.</p> <p>5.3 Referencing and citations (APA 7th Editions)</p> <p>5.4 Finalizing the Research Report.</p>

instructors, incorporating feedback for improvement, and complete the final submission process	Project: <ul style="list-style-type: none"> ➤ Develop research project report incorporating unit 2,3,4 practical task and prepare and submit final report in concerned department. ➤ Student present their report. ➤ Peer and Instructor Evaluations. ➤ Reflection and Wrap-up.
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4. Instructional Techniques

The instructional techniques for this course are divided into two groups. The first group consists of general instructional techniques applicable to most units. The second group consists of specific instructional techniques applicable to particular units.

4.1 General Techniques

Reading materials will be provided to students in each unit. Lecture, Discussion, use of the multi-media projector, and brainstorming are used in all units.

4.2 Specific Instructional Techniques

A demonstration is an essential instructional technique for all units in this course during the learning process. Specifically, demonstration with practical works will be the specific instructional technique in this course. The details of suggested instructional techniques are presented below:

5. Evaluation

Evaluation of students' performance is divided into parts: Internal assessment (theory and practical and internal External examinations (theory and practical). The distribution of points is given below:

Internal Assessment Theory	Internal Assessment Practical	Semester Examination (Theoretical exam)	External Practical Exam/Viva	Total Points
25 Points	15 Points	40 Points	20 Points	100 Points

Note: Students must pass separately in the internal assessment, external practical exam, and semester examination.

5.1 Internal Assessment (25 Points) of Theoretical Part

Internal assessment will be conducted by subject teacher based on following criteria:

Attendance and learning Activities	5 points
First assignment (Written assignment)	5 points
Second assignment (Project work with presentation)	10 points
Third assignment/written examination	5 point
Total	25 points

5.2 Internal Assessment (15 Points) of the practical part

Internal practical assessment will be conducted by subject teacher based on following criteria:

Attendance and learning Activities	5 points
Practical work/project work/lab work	10 points
Total	15 points

5.3 Semester Final Examination (40 Points) Theoretical part

Examination Division, the Dean's office will conduct the final examination at the end of the semester.

Objective question (Multiple choice questions 10 x 1 point)	10 Points
Subjective questions (6 questions x 5 marks with 'OR' two questions)	30 Points
Total points	40

5.4 Practical Exam/Viva (20 Points)

Examination Division, Office of the Dean will appoint an external examiner for conducting the practical examination

Items	Points
Evaluation of Record Book	4
Project work/practical work presentation/skill test	10
Viva	6
Total	20

6. Recommended books and Reference materials (including relevant published articles in national and international journals)

Creswell, J.W. & Plano Clark, V,L (2011). *Designing and conducting mixed methods research*(2nd ed.)
Thousands Oak CA: Sage.

Good, C.V. 1996. *Essential of Educational research: Methodology and design*. New York: Appleton,
Century Crofts.

Gronlund, N.E. 1985. *Measurement and evaluation in testing* (6th edition)New York Colliner Macmillan
Publishers.

Kothari,C. R., *Quantitative Techniques*, 2nd edition., New Delhi:Vikas Publishing House Pvt. Ltd

Khanal P., *Research methodology in Education*, 2nd Edition,Sunlight Publication, Kathmandu.