1.2.2.1. Number of Value – added courses offered during the last five years

Course Content

विद्यया ऽ मृतमश्नुते

NCERT

Regional Institute of Education

(National Council of Educational Research and Training)

Bhubaneswar -751022, Odisha

1.2.2. COURSE CONTENT ALONG WITH CLOs OF THE VALUE ADDED COURSES

आचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

1

1.2.2. Value added Course Content

Ancient Indian Culture and Heritage (specific Khordha)

Introduction:

This course offers an exploration of India's rich historical tapestry, spanning thousands of years. Delve into a civilization that nurtured a diverse array of traditions, philosophies, and artistic marvels. Immerse self in the vibrant traditions of dance, music and storytelling, which have evolved over millennia. Journey through the ancient Indian past, where mythology, rituals, and the pursuit of enlightenment intertwine to create a vibrant cultural legacy that continues to inspire and captivate the world today.

Course Objectives:

- To develop the ability to observe and discern on the historical resources of the past
- To inculcate sensitivity and responsibility among students towards preservation and propagation of cultural heritage
- To develop understanding among prospective teachers about the linkages of to cultural capital of a region

Course Learning Outcomes:

- Understanding and Appreciation of Ancient Indian Art and Architecture.
- Narrating any one story selected from Unit-1 in own words; writing the summary of the story, extrapolation of the story; discussion on the ideas expressed

UNIT· I–Uniqueness and central points of Indian culture

- Concept of culture and its various components.
- Analysis of central tenets of Indian culture and their relevance in contemporary times
- Importance of preserving Indian culture and heritage
- Role of individual, communities, and government in the preservation of Indian culture.

UNIT: II- Ancient Indian culture and its influence on Khordha district

- Study of historical events and figures that shaped the cultural landscape of Khordha.

प्राचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

2

- Religious and philosophical systems in ancient India and their impact on Khordha's cultural fabric.
- Identifying the similarities difference between ancient Indian culture and the cultural practices in Khordha.
- Developing practical strategies to actively engage in preserving and promoting Indian culture and heritage in Khordha.

Assessment:
- Narrating any one story selected from observation of cultural site; writing the summary of the story, extrapolation of the story; discussion on the ideas expressed.
- Seminars and open forum for discussion based on themes related to Khordha

The Buddhist Heritage of Odisha

Introduction:

The course "The Buddhist Heritage of Odisha" explores into the rich historical and cultural significance of Buddhism in the state of Odisha, India. This course delves into the fascinating journey of Buddhism, tracing its evolution, influence, and contributions to the region. Students will embark on a comprehensive exploration of the Buddhist sites, relics, and artifacts scattered throughout Odisha, gaining a deep understanding of their architectural, artistic, and religious significance. Through a blend of lectures, field visits, and research, participants will unravel the teachings and philosophy of Buddhism, examining its profound impact on the cultural fabric of Odisha. This course offers a unique opportunity to uncover the hidden gems of Odisha's Buddhist heritage and to appreciate the interplay between Buddhism and the region's history.

Course Objectives:
- To gain knowledge about the history of Buddhism and its relevance to education.
- To understand the rich heritage of Buddhism in Odisha.
- Locate different popular Buddhist destinations present in Odisha.

Course Learning Outcomes:

आचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

3

- Analysis of the archaeological evidence, inscriptions, and historical accounts, students will acquire a deep appreciation for the impact of Buddhism.
- Appreciating the Art and Architecture of Buddhist Sites in Odisha

CONTENTS:

UNIT I: -Buddist reflections in Odisha

- History of Buddhism in Odisha, Comparison of Odia and Pali language
- Buddhist values and Utkaliya lifestyle
- Buddha's life in the Magadh, Timeline and chronological spread of Buddhism
- Role of Bali Jatra, transactional heritage between India and Indonesia
- Buddhist spectrums: Hinyana, Mahayana and Vajrayana; Origin and evolution: Role of Odisha

UNIT II: -PRACTICUM: The Buddhist heritage of Odisha

- Field visit and field notes: The golden triangle of Buddhism (Ratnagiri, Udaygiri and Lalitgiri), The Buddhist Heritage of Odisha and allied topics.

Assessment:

- Choose a relevant topic related to Buddhism in the region, such as the architectural features of a particular Buddhist site, the influence of Buddhism on local art forms, or the role of Buddhist monastic institutions in Odisha's history and make a presentation.
- Site visit to a Buddhist monument or archaeological site in Odisha. After write a comprehensive report that includes observations, analysis, and reflections on the Buddhist heritage present at the site.

Introduction:

Theatre in Education is an innovative and interactive course that explores the powerful combination of theater and education. This course focuses on the use of theater techniques, performances, and creative activities to engage and educate learners. Through a dynamic blend of theory and practice, students will gain a comprehensive understanding of the principles and methodologies of using theater as a tool for learning and personal development. They will explore various aspects such as improvisation, storytelling, role-playing, and scriptwriting, while also examining the pedagogical theories and social issues underpinning Theatre in Education. By the end of the course, participants will be equipped with the skills and knowledge to design and deliver effective educational theater experiences that inspire, empower, and educate audiences.

COURSE OBJECTIVES:

- To increase skills of empathy, concentration, communication, self-confidence, collaboration, physical fitness, etc.
- To develop creativity among the students by providing scope of critical thinking and writing etc.

Learning Outcomes:

- Develop the skills to integrate theater techniques into educational settings to enhance learning and engagement.
- Gain an understanding of the pedagogical theories and social issues involved in using theater as a tool for education and personal development.

UNIT- I: Theatre: Origin and Evolution

- History of theatre, theatre as art and expression, aesthetics of theatre
- Western theatre and Oriental theatre, classical and folk forms of theatre, Bharatmuni's natyashastra
- Modern theatre, techniques and technology used in theatre

आचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

- Theatre and poetry, navrasa in theatre
- Forms, expressions and gestures in theatre, body movements
- Music and dance in theatre,

UNIT: II – Theatre as Learning

- Group work and solo activities, mime, skit, Rangmanch and Nukkad natak
- Choir, qawwali, demonstration and enacting
- Collaborative and cooperative learning through practicum
- Training programs for teachers and students
- Role of teachers (instructor/ participant/facilitator), students and parents
- Curricular challenges for theatre in education, Need
- Selection of lessons; Adaptation, strategies, execution and outcomes of theatre in education

Assessment:

- Written reflection or analysis of their creative choices, the impact of the performance on the audience, and the overall educational value of the project.

- Create a detailed lesson plan that incorporates theater techniques and activities to teach a specific topic or concept.

Story Telling and Science: Learning the nuance

Introduction:

The course "Storytelling and Science: Learning the Nuances" offers a unique exploration of the intersection between storytelling and scientific concepts. This course delves into the art of storytelling as a powerful tool for communicating complex scientific ideas in an engaging and accessible manner. Through a combination of theoretical discussions, practical exercises, and case studies, students will learn how to craft compelling narratives that effectively convey scientific concepts to diverse audiences. By understanding the nuances of storytelling techniques, students will enhance their ability to communicate scientific information, spark curiosity, and foster a deeper appreciation for the wonders of science. This course provides a platform for students to

develop their storytelling skills while exploring the dynamic relationship between storytelling and the world of science.

Course Objectives:

- To develop scientific attitude among children while developing their linguistic skills—of listening, speaking, reading and writing.
- To develop interest in students for scientific concepts and theories.
- To develop skills of prospective teachers to employ stories for teaching science.

Learning-Outcomes:

Integrate storytelling techniques with scientific concepts, enabling clear and engaging communication of complex scientific ideas to diverse audiences. Leverage storytelling as a powerful tool for sparking curiosity, fostering understanding, and promoting appreciation for scientific knowledge.

CONTENTS:

UNIT I: -Introduction to Storytelling in Science Education

- Storytelling in teaching and learning: Its significance.
- Historical and cultural significance of storytelling in science.
- Understanding Scientific Concepts and Narratives.
- Exploring scientific concepts and theories through storytelling.

UNIT II: - Crafting Engaging Science Stories

- Elements of effective storytelling (plot, characters, conflict, resolution)
- Techniques for developing engaging narratives in science education
- Incorporating real-life examples and analogies in science stories
- Aligning storytelling with curriculum standards and learning objectives
- Designing lesson plans that integrate storytelling and scientific inquiry
- Incorporating hands-on activities and experiments within storytelling lessons

Assessment:

- Develop the skills to effectively integrate storytelling techniques with scientific concepts, enabling clear and engaging communication of complex scientific ideas to diverse audiences.
- ability to leverage storytelling as a powerful tool for sparking curiosity, fostering understanding, and promoting appreciation for scientific knowledge.

Integrated Pedagogy: Reflecting on NEP 2020

Introduction:

The course "Art Integrated Pedagogy: Reflecting on NEP 2020" offers a comprehensive exploration of the intersection between art and education, with a specific focus on the implications of the National Education Policy (NEP) 2020. This course delves into the transformative potential of art in the classroom, exploring how it can enhance learning, foster creativity, and promote holistic development. Students will critically analyze the key principles and provisions of NEP 2020 and examine how art can be integrated effectively into pedagogical practices to align with its objectives. Through a blend of theoretical discussions, case studies, and practical exercises, participants will gain insights into innovative approaches, strategies, and assessment methods that support the implementation of art-integrated pedagogy. This course provides a platform for educators and education professionals to reflect on and enhance their teaching practices in light of the NEP 2020, leveraging the power of art to create dynamic and engaging learning environments.

Course Objective:

- Understands real world situations (negotiation, debate, teamwork, cooperation persuasion, etc.)
- Develop critical observation of peers.
- Demonstrates creative and innovative acting skills.

Learning Outcomes:

Develop the skills to integrate various forms of art into pedagogical practices to enhance student engagement, creativity, and holistic development, in alignment with the objectives of the National Education Policy (NEP) 2020.

Gain a deep understanding of the key principles and provisions of NEP 2020 and their implications for integrating art into education, allowing for critical reflection on existing pedagogical practices and the exploration of innovative approaches that support holistic learning.

CONTENTS:

UNIT I :-Introduction to role play and Nukkad Nataks

- Overview of role play and nukkad natak- Historical and cultural context- Examples and analysis of successful performances
- Exploring the historical and cultural significance of these forms of street theater.
- Techniques for developing compelling scripts for role plays and nukkad nataks.
- Understanding the elements of storytelling and dramatic structure.
- Incorporating social messages and themes into the scripts.

UNIT II: -Audience Interaction and engagement

- Strategies for engaging and involving the audience in role plays and nukkad nataks.
- Building rapport with spectators and adapting performances to different settings.
- Techniques for addressing social issues and creating awareness through interactive theater.
- Organizing and managing rehearsals for effective execution.
- Understanding the logistics of performing in public spaces.
- Dealing with challenges and adapting to unforeseen circumstances during performance.

Assessment

- assessed through a role play performance where they are required to enact a scenario or a series of scenarios, embodying different characters and exploring various perspectives
- address a social issue, engage the audience, and communicate a meaningful message through the performance.

आचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

Lit meets Cinema: A Pedagogic Initiative

Introduction:

"Lit Meets Cinema: A Pedagogic Initiative" is an innovative and immersive course that explores the intersection between literature and cinema as a powerful tool for learning and critical analysis. This course aims to bridge the gap between these two art forms, enabling participants to examine how literature is adapted and represented on the big screen. Through a combination of theoretical discussions, film screenings, and interactive workshops, students will delve into the nuances of storytelling, character development, visual interpretation, and thematic exploration. By critically analyzing literary adaptations in film, participants will gain a deeper appreciation for the creative choices made by filmmakers and the impact of cinematic techniques on the narrative. This course provides a platform for students to enhance their critical thinking, analytical skills, and understanding of the dynamic relationship between literature and cinema.

COURSE OBJECTIVES:

- To enable effective and joyful learning and of different disciplines through cinema.
- To develop analytical and critical thinking abilities of the learners.

Learning Outcomes:

- Develop critical analysis skills by examining the adaptation of literature into cinema, understanding the creative choices made in the process and evaluating the effectiveness of cinematic techniques in conveying the essence of the original literary work.

- Enhance appreciation for the interplay between literature and cinema, recognizing the unique contributions of each art form, and fostering a deeper understanding of storytelling, character development, and thematic exploration through the lens of literary adaptations in film.

10

CONTENTS:

UNIT I :-Interrelation of Literature and Cinema

- Forms and projections
- Characteristics and limitations
- Comparative analysis of literature writing and cinema making
- Cinema on literature: From abstract to concrete
- Principles and technological advancements
- Philosophical approach, aesthetic representation

UNIT II: -History of Indian Cinema

- Issues related to education raised in Indian cinema: Taare Zameen Par/English Vinglish/Hindi medium/3 Idiots/Hichki
- Case study of cinema based on Hindi literature: Umrao Jaan/Sadgati/Rui Ka Bojh/Damul/Teesri Qasam/Shatranj Ke Khiladi
- Case study of cinema based on English literature: Life of Pi/The fault in our stars/The hound of the Baskervilles/The Canterville Ghost/Room, etc
- Case study of cinema based on Bangla literature: Chokher Bali/Shonar Kella/Nouka dubi/Devdas/Parineeta

Assessment:

- critically analyze and compare elements such as storytelling techniques, character portrayal, visual interpretation, and thematic representation between the original text and its film adaptation.
- evaluate their ability to effectively convey the core themes and elements of the literature through the film adaptation, as well as their proficiency in utilizing cinematic techniques.

11

Learning to Make Surveys Online

Introduction:

The Workshop on Making of Learning Resources through Waste Materials represents a significant academic endeavor dedicated to exploring innovative approaches in educational resource development. By harnessing the potential of waste materials, this interdisciplinary platform seeks to revolutionize the way we create and utilize learning materials. Drawing upon the principles of sustainability and resourcefulness, this workshop aims to foster a comprehensive understanding of waste materials as valuable educational assets. Through engaging discussions, collaborative activities, and practical demonstrations, participants will delve into the realms of upcycling, repurposing, and transforming waste into effective learning tools. This workshop offers a unique opportunity to explore the intersection of education, sustainability, and creative resourcefulness in the pursuit of a greener and more inclusive learning environment.

Course Objective:

- Understands about making online surveys.
- List the benefits of online surveys over offline one.

Learning Outcomes:

- Understand the principles and techniques of creating surveys online.

- Develop skills in designing effective survey questions and formats.

- Learn how to administer and analyze surveys using online survey platforms.

- Gain knowledge of best practices for maximizing response rates and data quality in online surveys.

CONTENTS:

UNIT: I.- Introduction to Online Surveys

- Understanding the purpose and benefits of online surveys - Exploring different types of online survey platforms - Identifying key considerations for survey design.

- Defining survey objectives and target audience - Establishing the scope and goals of the survey - Identifying the information to be collected through survey.
- Understanding the importance of clear and concise survey questions - Avoiding bias and leading questions in survey design.

UNIT: II.- Question Types, Structure and Data Collection

- Exploring different question types (multiple-choice, open-ended, Likert scale, etc.) - Determining the appropriate question type for specific information needs - Organizing and sequencing survey questions for optimal flow.
- Developing clear, specific, and unambiguous survey questions - Using appropriate language and tone in survey questions - Pretesting and refining survey questions for clarity and understanding.
- Designing response options that capture meaningful data.
- Creating visually appealing and user-friendly survey interfaces - Optimizing survey accessibility and usability for different devices.
- Exploring various methods of distributing online surveys (email, social media, website) - Implementing survey distribution strategies to maximize response rates - Ensuring data security and privacy in survey collection.
- Understanding data analysis techniques for survey data - Analyzing quantitative and qualitative survey responses - Interpreting survey results and drawing meaningful conclusions.

Assessment:

- Evaluate participants' ability to create well-designed surveys with clear objectives and appropriate question types.
- Assess participants' proficiency in using online survey platforms to administer and collect data.
- Analyze participants' understanding of data analysis techniques and their ability to interpret and draw meaningful insights from survey results.

प्राचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

Workshop on Making of Learning Resources through Waste Materials

Introduction:

The Workshop on Making of Learning Resources through Waste Materials represents a significant academic endeavor dedicated to exploring innovative approaches in educational resource development. By harnessing the potential of waste materials, this interdisciplinary platform seeks to revolutionize the way we create and utilize learning materials. Drawing upon the principles of sustainability and resourcefulness, this workshop aims to foster a comprehensive understanding of waste materials as valuable educational assets. Through engaging discussions, collaborative activities, and practical demonstrations, participants will delve into the realms of upcycling, repurposing, and transforming waste into effective learning tools. This workshop offers a unique opportunity to explore the intersection of education, sustainability, and creative resourcefulness in the pursuit of a greener and more inclusive learning environment.

Course Objectives:

- To develop the ability to think creatively and turn waste materials to useful learning resources.
- To inculcate sensitivity and responsibility among students towards environmental issues and concerns.
- To develop understanding among prospective teachers about the learning requirements of children.

Course Objectives:

- To develop the ability to think creatively and turn waste materials to useful learning resources.

- To inculcate sensitivity and responsibility among students towards environmental issues and concerns.

- To develop understanding among prospective teachers about the learning requirements of children.

प्राचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

14

CONTENTS:

UNIT: I- Exploring the World of Waste in Education

- The concept of waste materials, its place and importance.
- Advantages of using waste materials as learning resources.
- Identifying suitable waste materials for learning resources.
- Principles of effective teaching and learning resources design.
- Techniques and strategies for transforming waste materials into educational resources.

UNIT: II- Design Principles for Teaching Learning Resources

- Concept of effective teaching learning resource design.
- Educational values developed through resource creation.
- Development of learning resources using waste materials; collection, preparation and maintenance.
- Role of teachers and parents in shaping student's attitude towards utilization of waste materials.

15

Open Ended Project Work

Introduction:

The introduction to open-ended project work within the academic realm embodies a dynamic and flexible approach that fosters student-centered learning, critical thinking, and problem-solving skills. This pedagogical framework encourages learners to engage in autonomous exploration and inquiry-based investigations, where the project's scope, methodology, and outcomes are not predetermined but rather emerge through iterative processes. By embracing this constructivist approach, students are empowered to articulate research questions, conduct extensive literature reviews, collect and analyze data, and synthesize findings into coherent scholarly outputs. Open-ended project work offers a fertile ground for creativity, interdisciplinary collaboration, and the development of higher-order cognitive abilities, providing a rich and immersive learning experience that prepares students for complex real-world challenges.

Course Objective:

- Relates the real life problems with the practical solutions.
- Develops creative and innovative skills to solve problems.
- Develops ability of abstract thinking and logical reasoning.

Learning Outcomes:

- Promote autonomous exploration, inquiry-based investigations, and research question formulation.
- Enhance literature review, data collection, analysis, and synthesis skills.

UNIT-I: Introduction to Open-ended Project Work

- Defining project objectives and outcomes   - Creating project plans, timelines, and milestones - Setting personal and project-related goals.

आचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

16

- Conducting background research on project topics - Collecting and evaluating relevant information and resources - Applying critical thinking and analysis to complete project work.

- Developing project proposals, including scopes and objectives - Defining project parameters, limitations and constraints - Creating a project design that aligns with goals and resources.
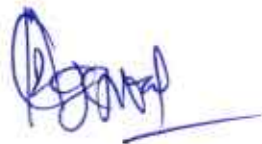
UNIT: II.- Project Execution and Implementation

- Managing project tasks, schedules, and resources- Employing effective project management techniques - Refining project work based on feedback and reflection.

- Engaging in collaborative work with peers or mentors- Establishing effective communication channels within project teams- Developing interpersonal and teamwork skills for successful collaboration.

- Identifying appropriate methods for data collection - Gathering and analyzing data relevant to the project - Utilizing data to inform decision-making and project outcomes.

- Applying creative thinking and problem-solving strategies to generating innovative solutions. – Overcoming obstacles and challenges.

- Reflecting on project progress and learning experiences- Identifying areas for improvement and refinement - Revising project work based on feedback and reflection.

Assessment:

- Evaluate students' ability to formulate and refine research questions, demonstrating critical thinking and problem-solving skills.

- Assess the quality and depth of data collection, analysis, and synthesis, evaluating students' research skills and ability to draw meaningful conclusions.

Self and SWOT Analysis

Introduction:

The course on "Self and SWOT Analysis" delves into the realm of introspection and strategic self-assessment through the lens of academic scholarship. Grounded in theoretical frameworks of personal development and organizational behavior, this course examines the intricacies of the SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis as a powerful tool for self-reflection and strategic planning. Participants will explore concepts such as self-awareness, self-efficacy, and self-regulation while applying rigorous analytical techniques to evaluate their personal strengths, weaknesses, and the external factors that influence their trajectory. By engaging in this intellectual journey, participants will gain valuable insights into their professional identity and chart meaningful pathways for personal growth and success.

Course Objectives:

- Develop self -awareness about one's abilities and opportunities to develop self-independent thinking, critical thinking and creative thinking, decision making, problem solving and goal setting.
- Develop objective view of beliefs, prejudices and stereotypes to liberate from irrational tendencies.
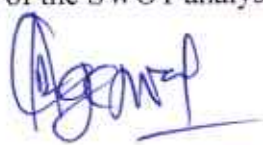
Learning Outcomes:

- Develop self-awareness and understanding of personal strengths and weaknesses.
- SWOT analysis to evaluate opportunities and threats in personal and professional contexts.
- Enhance strategic planning abilities for effective goal-setting and personal development.
- Cultivate a deeper understanding of organizational behaviour and its impact on personal growth and success.

CONTENTS:

UNIT: I.- Introduction to self and SWOT Analysis

- Understanding the importance of self-awareness and self-assessment - Understanding the components of the SWOT analysis - Exploring the concept and purpose of SWOT

analysis- Identifying the benefits of applying SWOT analysis to personal or professional contexts.

- Techniques for self-reflection and introspection - Assessing personal values, interests, and goals - Identifying personal strengths, weaknesses, opportunities, and threats.

UNIT: II.- Personal and Professional Goal Setting

- Setting SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals - Aligning goals with SWOT analysis findings- Creating action plans to achieve identified goals.

- Developing strategic plans based on SWOT analysis - Identifying key actions and milestones for implementation- Monitoring progress and making necessary adjustments.

- Enhancing communication skills to convey strengths and value proposition - Developing a personal identity that aligns with personal goals and SWOT analysis - Strategies for effectively showcasing strengths and managing weaknesses in personal identity building.

- Assessing progress and outcomes based on defined goals- Reflecting on the effectiveness of the SWOT analysis process- Identifying areas for future development.

Assessment:

- Evaluate the depth and accuracy of students' self-reflection and identification of personal strengths and weaknesses.

- Assess students' ability to conduct a comprehensive SWOT analysis, considering relevant internal and external factors.

- Evaluate the quality of students' strategic planning and goal-setting based on the outcomes of the self and SWOT analysis.

- Assess students' understanding of the concepts of self-awareness, personal development, and their application in real-world contexts.

Research Methodology and Analytical Techniques (Advanced)

Introduction:

The course on "Research Methodology and Analytical Techniques in Education" provides a comprehensive exploration of theoretical frameworks, methodologies, and analytical techniques essential for conducting rigorous educational research. Rooted in the scholarly traditions of the field, this course equips participants with the necessary tools to design, implement, and analyze educational studies. From understanding different research paradigms to mastering data collection and analysis methods, participants will develop a strong foundation in conducting empirical research in the realm of education. Through engaging discussions, practical exercises, and critical evaluations of published studies, this course empowers participants to contribute to the advancement of educational knowledge and evidence-based practices.

Course Objectives:

- To develop skills in qualitative and quantitative data analysis.
- To develop advanced critical thinking skills in the researchers.
- To enable the researchers to know about the different technicalities involved in research from the time of its initiation to its completion.

LEARNING OUTCOMES:

- Develop skills in designing and conducting empirical studies in the field of education.
- Enhance abilities to collect, analyze, and interpret data using appropriate analytical techniques.
- Foster critical evaluation of published studies and the ability to apply research findings to inform evidence-based educational practices.

प्राचार्य/ PRINCIPAL
क्षेत्रीय शिक्षा संस्थान
Regional Institute of Education
भुवनेश्वर / Bhubaneswar-751022

UNIT: I.- Introduction to Research Methodology

- Differentiating between quantitative and qualitative research.

- Formulating research questions and objectives.

- Selecting appropriate research designs (experimental, correlational, etc.).

- Considerations for sampling and data collection methods.

- Quantitative research methods - Surveys and questionnaires: design and administration - Experiments and quasi-experiments: design and analysis.

- Qualitative research methods- Interviews: design, data collection, and analysis - Observations and case studies: design and analysis.

UNIT II: - Data Collection Techniques and Analysis

- Primary data collection methods (surveys, interviews, observations).

- Secondary data collection methods (existing datasets, literature reviews).

- Descriptive statistics: measures of central tendency and variability.

- Inferential statistics: hypothesis testing and significance testing.

UNIT III: - Statistical Analysis Techniques

- Parametric tests (t-tests, ANOVA, correlation, regression).

- Non-parametric tests (Mann-Whitney U, Kruskal-Wallis, chi-square).

- Qualitative Data Analysis Techniques - Qualitative coding and categorization - Thematic analysis and content Analysis-Interpretative phenomenological analysis (IPA) and grounded theory.

- Mixed Methods Research - Integration of qualitative and quantitative research approaches - Sequential and concurrent mixed methods designs   - Analyzing and interpreting mixed methods data.

- Effective data visualization techniques (charts, graphs, diagrams).

- Interpreting and presenting research findings accurately.

UNIT IV: - Research Validity and Reliability

- Ensuring internal and external validity of research findings.

- Assessing reliability and consistency of data and measurements.

- Strategies for enhancing research validity and reliability.

Assessment

- Assess the quality and rigor of students' research designs, including sampling, data collection instruments, and ethical considerations.

- Analyze students' proficiency in applying analytical techniques to accurately analyze and interpret research data.

Research paper Writing and Presentation

Introduction:

The course on "Research Paper Writing and Presentation" provides a comprehensive exploration of the scholarly processes involved in producing high-quality research papers. Grounded in academic rigor, this course delves into the intricacies of literature review, research design, data analysis, and effective communication of research findings. Participants will learn how to critically evaluate existing literature, formulate research questions, apply appropriate methodologies, analyze data using statistical techniques, and craft coherent research papers. Through interactive workshops and constructive feedback, participants will enhance their academic writing and presentation skills, ensuring their research contributions meet the standards of scholarly excellence and effectively disseminate knowledge within their field of study.

Course Objectives:

- To develop understanding of students about the technicalities of report writing—like review of literature, synopsis, etc.

- To develop competency and skills of students for writing research paper and presenting it eloquently.

Learning Outcomes:

- Develop proficiency in conducting literature reviews and critically evaluating existing research.

- Acquire skills in formulating research questions, designing rigorous methodologies, and analyzing data using appropriate statistical techniques.

- Enhance academic writing and presentation skills to effectively communicate research findings in a scholarly manner.

CONTENTS:

UNIT I:- Types of Research—types; sources of information, research review

- Role and purpose of research designs.
- Defining and differentiating research: Descriptive research; Analytical research; Applied research; Fundamental research; Quantitative research; Qualitative research.
- Finding/Gathering information for research through various sources; use of information; use of research tools; use of library and e-databases.
- Literature review: meaning and need; Steps of writing literature review; Reviewing skills; Literature search and evaluation; Methods of conducting literature review; Organizing a literature review.

UNIT II: - Research paper—Writing, Refining and Editing Research proposal; Citing in research; Ethical issues

- Writing a Research proposal; Developing objectives of Research topic.
- Development of logical research statements and hypotheses.
- Editing and proofreading techniques; Revision of a research paper.
- Referencing and in-text citations; Styles of referencing.
- Paraphrasing and summarizing.

- Citing sources; Developing Academic honesty (Accuracy; Credibility; Confidentiality; Transparency; Honesty; Originality; Protecting; Authenticity; Plagiarism).

- Ethics; Stakeholders in research.

- Ethical issues concerning participants (Seeking consent; Providing incentives; Confidentiality).

- Bias, Incorrect reporting.

- Issues with sponsoring organizations.

Assessment:

- Evaluate the quality of literature reviews and critical evaluation of existing research. - Assess the clarity and coherence of research questions, methodologies, and data analysis techniques employed.

- Analyze the effectiveness of research paper writing and presentation skills in communicating research findings in a scholarly manner.