

SIKKIM UNIVERSITY

(A Central University Established by an Act of Parliament of India, 2007)

LEARNING OUTCOME - BASED CURRICULUM

PH.D. EDUCATION

(Course Work)

(With effect from Academic Session 2023-24)



DEPARTMENT OF EDUCATION

SIKKIM UNIVERSITY

6TH MILE, TADONG - 737102

GANGTOK, SIKKIM, INDIA

VICE-CHANCELLOR'S MESSAGE

Sikkim University stands at the forefront of embracing the transformative National Education Policy (NEP) 2020. In alignment with NEP 2020's vision and the guidelines of the Learning Outcomes-based Curriculum Framework (LOCF) mandated by the UGC, we have undertaken a comprehensive revision of our curriculum across all departments. This initiative ensures a holistic educational experience that transcends traditional knowledge delivery, emphasizing the practical application of knowledge in real-world scenarios. The shift towards LOCF marks a pivotal change from teacher-centric to learner-centric education, fostering a more active and participatory approach to learning. Our updated curriculum clearly defines Graduate Attributes, Programme Learning Outcomes (PLOs), and Course Learning Outcomes (CLOs), setting clear objectives for our students to achieve. This revision is designed to enable a teaching-learning environment that supports the attainment of these outcomes, with integrated assessment methods to monitor and encourage student progress comprehensively.

A key innovation in our curriculum is the mandatory integration of Massive Open Online Courses (MOOCs) through the SWAYAM platform, enhancing accessibility and the breadth of learning opportunities for students. Our approach encourages multidisciplinary studies through the curriculum while allowing for specialization. The curriculum embodies the policy's core principle of flexibility by enabling mobility for students, thereby allowing the exit and entry of students in the program.

I extend my heartfelt gratitude to our faculty, the Head of the Department, the Curriculum Development Committee members, the NEP coordinators, and the dedicated NEP Committee of Sikkim University for their relentless dedication to updating our curriculum. I appreciate Prof. Yodida Bhutia, the Chairperson, and all dedicated NEP Committee members for their thorough review and integration of LOCF and NEP components into our curriculum.

To our students, I convey my best wishes as we embark on this journey with our updated and inclusive curriculum, aiming not only to enrich their academic knowledge but also to nurture their personal growth, critical thinking, and ability to adapt and innovate in an ever-changing world.

Best wishes,

Prof. Avinash Khare
Honourable Vice Chancellor
Sikkim University

PROGRAMME LEARNING OUTCOMES (PLO)

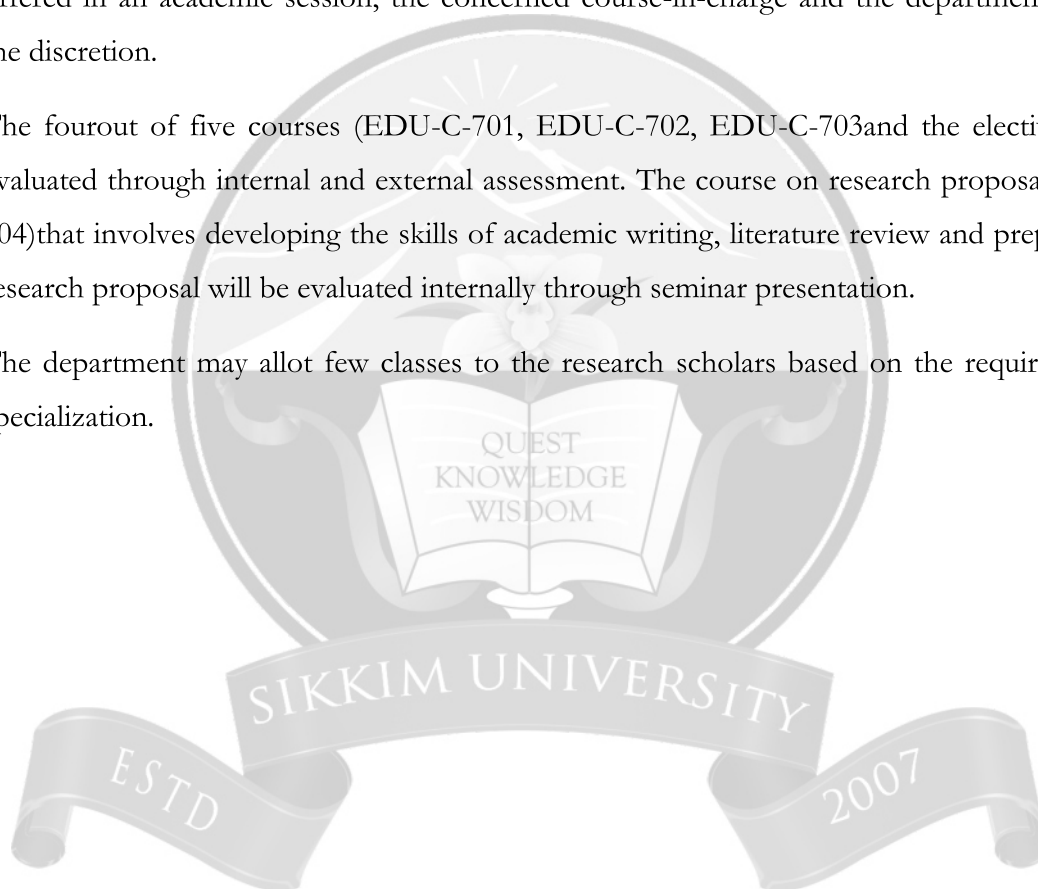
On successful completion of the Ph.D. Coursework, the research scholars will achieve following outcomes:

- **PLO1:** Demonstrate advanced knowledge and expertise in research methodologies including quantitative, qualitative and mixed methods in the field of education.
- **PLO2:** Demonstrate mastery of established research methods and techniques applicable in the field of education
- **PLO3:** Demonstrate ability to critically evaluate theories and frameworks, procedural knowledge to address complex educational challenges
- **PLO4:** Exhibit exceptional written and oral communication skill and technical skills required for performing and accomplishing complex task related to research in education and transdisciplinary research
- **PLO5:** Demonstrate the ability to apply acquired specialized, technical, theoretical knowledge as well as cognitive and practical skills to conduct research in order to solve the complex problems in education.
- **PLO6:** Demonstrate the ability to communicate in writing and orally the constructs and methodologies adopted for the studies by making coherent arguments to support the finding of the research in education.
- **PLO7:** Demonstrate the ability to produce high quality scholarly papers, reports and publications that adhere the standards of academic integrity and research ethics.
- **PLO8:** Demonstrate the ability to follow ethical practices in all aspects of research and development including avoiding practices such as fabrication, falsification and misrepresentation of data
- **PLO9:** Demonstrate the ability conduct research independently in education and manage the research endeavors.
- **PLO10:** Demonstrate the ability to produce quality research that makes original contribution in the field of education.

GUIDELINES FOR Ph.D. EDUCATION COURSE WORK:

The coursework is compulsory for all the Ph.D. Scholars. The courses prescribed for the Ph.D. scholars in Department of Education are as follows:

- The scholars must study a total of five courses out of which four are compulsory courses (EDU-C-701, EDU-C-702, EDU-C-703, EDU-S-704) and one is an elective course (any one course from EDU-E-705 to EDU-E-710).
- For the elective course, the scholars have an option to choose any one course out of six options given (EDU-E-705 to EDU-E-710). However, in selecting a particular elective course to be offered in an academic session, the concerned course-in-charge and the department will have the discretion.
- The four out of five courses (EDU-C-701, EDU-C-702, EDU-C-703 and the elective) will be evaluated through internal and external assessment. The course on research proposal (EDU-S-704) that involves developing the skills of academic writing, literature review and preparation of research proposal will be evaluated internally through seminar presentation.
- The department may allot few classes to the research scholars based on the requirement and specialization.



COURSE STRUCTURE OF PH.D. EDUCATION COURSE WORK

Course Code	Title of Course	L	T	P	Total Credit	Total Marks	FA	SA
EDU-C-701	Advanced Research Methodology in Education	3	1	0	4	100	50	50
EDU-C-702	Advanced Statistics in Educational Research	1	1	0	2	50	25	25
EDU-C-703	Research and Publication Ethics	1	1	0	2	50	25	25
EDU-S-704	Academic Writing, Review of Related Literature and Writing Research Proposal	0	0	4	4	100	100*	-
Area of Specialization (Select any one course from 705 to 710 for specialization)								
EDU-E-705	Teacher Education	3	1	0	4	100	50	50
EDU-E-706	Higher Education	3	1	0				
EDU-E-707	Advanced Educational Technology	3	1	0				
EDU-E-708	Women's Education	3	1	0				
EDU-E-709	Educational Administration and Management	3	1	0				
EDU-E-710	Curriculum, Pedagogy and Assessment	3	1	0				
TOTAL					16	400	250	150

C – Core; **E** – Elective; **S** – Skill Enhancement Courses.

FA: Formative Assessment; **SA**: Summative Assessment.

* Evaluated internally through seminar presentations.

EDU-C-701

ADVANCED RESEARCH METHODOLOGY IN EDUCATION

Course Level: 700

Total: 100 Marks

FA: 50 Marks

SA: 50 Marks

L+T+P: 3+1+0 = 4 Credits

Lecture: 45 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs = 60 Hrs

COURSE LEARNING OUTCOMES:

After completing the course, the students will be able to:

- CLO 1:** analyze the approaches to educational research and their applicability to different research questions in education
- CLO 2:** examine the various paradigms of educational research and their relevance to educational practice and research.
- CLO 3:** explain the concept and process of conducting quantitative research in education
- CLO 4:** select appropriate tools and techniques of data collection suitable for the research objectives in quantitative research
- CLO 5:** analyze the appropriateness of different quantitative research designs in education.
- CLO 6:** Select suitable qualitative research designs for addressing research questions in educational research
- CLO 7:** apply appropriate tools and techniques for collecting and analyzing the data in qualitative research
- CLO 8:** explain the concept, process and the philosophical assumptions that guide the mixed method research
- CLO 9:** assess the appropriateness of mixed method research designs for addressing research questions in educational research
- CLO 10:** explain the process of writing a research report in educational research following the appropriate citations and referencing styles.

UNIT-I: MEANING AND PARADIGMS OF EDUCATIONAL RESEARCH

- Methods of acquiring knowledge; Meaning, characteristics, assumptions and process of Scientific Inquiry; Education as a field of scientific inquiry and practice; Limitations of scientific inquiry.
- Meaning, nature, purpose and scope of educational research; Areas of educational research; Approaches of educational research; Education as an inter-disciplinary field.
- Paradigms of educational research with reference to its epistemology, ontology, axiology and methodology-I: Positivism, post-positivism, interpretivism.
- Paradigms of educational research with reference to its epistemology, ontology, axiology and methodology-II: Pragmatism, critical theory, post-modernism.

UNIT-II: QUANTITATIVE RESEARCH

- Meaning, nature and process of quantitative research; Sources and identification of research problem; Review of related literature; Concept and types of variables and hypothesis; Sampling: Concept, principles and types.
- Tools and techniques of data collection in quantitative research: Tests, scales, questionnaire, observation and interview; Construction and standardization of research tools in quantitative research; Concept and methods of establishing reliability and validity.
- Concept, nature, purpose, process of experimental research; Experimental designs in educational research: pre-experimental, quasi-experimental and true experimental designs.
- Concept, nature, purpose, process and types of descriptive research: Survey(longitudinal and cross-sectional), correlational research; Ex-post facto research designs (casual-comparative); Programme evaluation.

UNIT-III: QUALITATIVE RESEARCH

- Meaning, nature and process of qualitative research; Qualitative research designs: Historical research, phenomenology, ethnography, grounded theory, narrative enquiry, discourse analysis, policy research and case study.
- Methods and tools of data collection in qualitative research: Observation, interviews, focus group discussion (FGD), collection of archival (artifacts, documents) and visual data.
- Qualitative data analysis: Content analysis, document analysis, thematic analysis, discourse analysis and policy analysis.
- Evaluating qualitative research: Credibility, dependability, confirmability, transferability, inter-subjectivity, reflexivity; Challenges in conducting qualitative research.

UNIT-IV: MIXED METHOD RESEARCH

- Mixed method research: Concept, purpose and process; Philosophical assumptions; Emergence of mixed method approach in educational research.
- Research designs in mixed method research: Convergent parallel, explanatory sequential, exploratory sequential, embedded, multiphase and transformative.
- Methods of data collection and data analysis in mixed method research; Validity and reliability in mixed research; Triangulation of data in mixed method research.
- Writing of research report in educational research; Citations and referencing styles.

TEACHING LEARNING STRATEGIES:

Literature Reviews and Critiques, Research Seminars, Problem-Based Learning (PBL), Case Studies, Research Workshops, Peer Review Process, Guest Lectures and Expert Talks, ICT integrated teaching-learning, Conferences and Presentations, Reflective learning, Collaborative learning, Lecture cum discussion, Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 50	Class Test, Open Book Test, Self-Test, Online Test, Article Writing, Assignment, Annotated Bibliographies, Reports, Portfolios, Book Review, Article Review, Journal Writing	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Think-Pair-Share, Seminar	Presentation, Seminars, Field Assignments, Portfolios
Summative Marks: 50	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS:

- Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education (Tenth Edition)*. Cengage Learning.
- Bergin, T. (2018). *An Introduction to Data Analysis: Quantitative, Qualitative and Mixed Methods*. SAGE.
- Best, J. W., & Kahn, J. V. (2016). *Research in Education (Tenth Edition)*. Pearson Education India.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education (Eighth Edition)*. Routledge.
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative (Fourth Edition)*. Pearson.
- Creswell, J. W. (2017). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.
- Creswell, J. W. (2021). *A Concise Introduction to Mixed Methods Research*. SAGE publications.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. SAGE publications.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and Conducting Mixed Methods Research*. SAGE Publications.
- Denzin, N. K. (2013). *Collecting and Interpreting Qualitative Materials*. SAGE.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The SAGE Handbook of Qualitative Research*. SAGE.

- Flick, U. (2018). *An Introduction to Qualitative Research*. SAGE.
- Flick, U. (Ed.). (2013). *The SAGE Handbook of Qualitative Data Analysis*. SAGE.
- Gall, M. D., Borg, W. R., & Gall, J. P. (2003). *Educational Research: An introduction*. Longman Publishing.
- Hesse-Biber, S. N. (2010). *Mixed Methods Research: Merging Theory with Practice*. Guilford Press.
- Hesse-Biber, S. N., & Johnson, R. B. (Eds.). (2015). *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*. Oxford University Press.
- Johnson, R. B., & Christensen, L. B. (2016). *Educational Research: Quantitative, Qualitative, and Mixed Approaches (Sixth Edition)*. SAGE Publications.
- Koul, L. (2019). *Methodology of Educational Research. (Fifth Revised and Enlarged Edition)*. Vikas Publishing House Pvt. Ltd.
- Lochmiller, C. R., & Lester, J. N. (2015). *An Introduction to Educational Research: Connecting Methods to Practice*. SAGE Publications.
- Lodico, M. G., Spaulding, D. T., & Voegtler, K. H. (2010). *Methods In Educational Research: From Theory to Practice*. John Wiley & Sons.
- Mertler, C. A. (2021). *Introduction to Educational Research (Third Edition)*. SAGE publications.
- Mills, G. E., & Gay, L. R. (2019). *Educational research: Competencies for Analysis and Applications (Twelfth Edition)*. Pearson.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. Sage.
- Punch, K. F., & Oancea, A. (2014). *Introduction to Research Methods in Education*. SAGE Publications.
- Reason, P. & Bradbury, H. (Eds) (2006). *Handbook of Action Research*. Sage.
- Sanden, S., & Egbert, J. (2013). *Foundations of Education Research: Understanding Theoretical Components*. Routledge.
- Schreier, M., & Flick, U. (2014). *The SAGE Handbook of Qualitative Data Analysis*. SAGE Publications.
- Suter, W. N. (2011). *Introduction to Educational Research: A Critical Thinking Approach*. SAGE Publications.
- Yin, R. K. (2016). *Qualitative research from Start to Finish (Second Edition)*. Guilford publications.

EDU-C-702

ADVANCED STATISTICS IN EDUCATIONAL RESEARCH

Course Level: 700

Total: 100 Marks

FA: 25 Marks

SA: 25 Marks

L+T+P: 1+1+0 = 2 Credits

Lecture: 15 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs = 30 Hrs

COURSE LEARNING OUTCOMES:

After completing the course, the students will be able to:

- CLO 1:** apply suitable measures of central tendency, variability, relative positions and relationship for quantitative data in educational research
- CLO 2:** apply regression analysis to make appropriate predictions in educational research
- CLO 3:** apply the principles of normal probability distribution to interpret the quantitative data in educational research
- CLO 4:** explain the key concepts and terminologies of inferential statistics in educational research.
- CLO 5:** apply various parametric tests and non-parametric tests to make appropriate inferences about population parameters from sample data.
- CLO 6:** utilize various computer applications for data analysis, research writing and reference management.

UNIT-I: DESCRIPTIVE STATISTICS

- Concept of statistical analysis in educational research; Scales of measurement: Nominal, ordinal, interval and ratio; Types of data: Parametric and non-parametric
- Descriptive statistics: Meaning, nature and uses; Measures of central tendency, measures of variability, measures of relative positions.
- Concept of probability distributions; Normal and standard normal distribution; Normal probability curve: Properties and uses; Skewness and kurtosis.
- Measures of relationship: Meaning of correlation, correlation coefficient; Types of correlation based on the direction; Types of correlation based on the variables: Pearson's product moment, biserial, point biserial, tetra-choric, phi coefficient, Spearman's rank order, partial correlation and multiple correlation; Regression: Concept and types (Simple and multiple linear models).

UNIT-II: INFERENCE STATISTICS AND COMPUTER TOOLS IN RESEARCH

- Key concepts in inferential statistics: Parameter, statistics, sampling distribution, sampling error, and standard error, central limit theorem, levels of significance, confidence interval, degrees of freedom, Type-I and Type –II Errors, One-tailed and two-tailed tests, power analysis, statistical significance and effect size.

- Concept, assumptions and types of parametric tests: t-test, Z-test, Analysis of Variance (ANOVA): One-way and two-way, Multivariate Analysis of Variance (MANOVA), Analysis of Co-variance (ANCOVA), Multivariate Analysis of Covariance (MANCOVA); Factor analysis.
- Concept, assumptions and types of non-parametric tests: Chi-square test, sign test, Wilcoxon signed rank tests, Mann-Whitney U test, Kruskal-Wallis test, median test and Friedman test.
- Application of MS Office in data analysis and research writing; Bibliographic tools (widely used tools and software in education); Data analysis using software: SPSS (Statistical Package for the Social Sciences) and other widely used software for analyzing quantitative and qualitative data in education.

TEACHING LEARNING STRATEGIES:

Problem-Based Learning (PBL), Group Discussion, Demonstration, Collaborative learning, Statistical Application, Scaffolded Learning, ICT integrated teaching-learning, Critique research studies, Project Method, Research Seminars, Case Studies, Research Workshops, Guest Lectures and Expert Talks, Conferences and Presentations, Reflective learning, Lecture cum discussion, Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 25	Class Test, Open Book Test, Self-Test, Online Test, Statistical Analysis, Assignment	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation, Seminars, and Field Assignments
Summative Marks: 25	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS:

- Abbott, M. L. (2014). *Understanding Educational Statistics Using Microsoft Excel and SPSS*. John Wiley & Sons.
- Adams, K. A., & Lawrence, E. K. (2018). *Research Methods, Statistics, and Applications*. SAGE Publications.
- Agresti, A. (2018). *An Introduction to Categorical Data Analysis*. John Wiley & Sons.
- Agresti, A. (2018). *Statistical Methods for the Social Sciences (Fifth Edition)*. Pearson.
- Bergin, T. (2018). *An Introduction to Data Analysis: Quantitative, Qualitative and Mixed Methods*. SAGE.
- Field, A. P. (2013). *Discovering statistics using SPSS (4th ed.)*. SAGE Publications.
- Garrett, H.E. (1973). *Statistics in Psychology and Education*. Vakils, Feiffer & Simon.

- Gould, R., Ryan, C. N., & Wong, R. K. (2017). *Essential Statistics: Exploring the World through Data*. Pearson.
- Hanneman, R. A., Kposowa, A. J., & Riddle, M. D. (2012). *Basic Statistics for Social Research*. John Wiley & Sons.
- Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applied Statistics for the Behavioral Sciences* (5th ed.). Longman.
- Jackson, S. L. (2015). *Research Methods and Statistics: A Critical Thinking Approach*. Wadsworth Cengage Learning.
- Levin, J., Fox, J. A., Forde, D. R. (2017). *Elementary Statistics in Social Research (Twelfth Edition)*. Pearson.
- Lynch, S. M. (2013). *Using Statistics in Social Research: A Concise Approach*. Springer.
- Murphy, K. R. & Myors, B. (2004). *Statistical Power Analysis: A Simple and General Model for Traditional and Modern Hypothesis Tests*. Lawrence Erlbaum Associates.
- Ott, R. L., & Longnecker, M. T. (2015). *An Introduction to Statistical Methods and Data Analysis (Seventh Edition)*. Cengage Learning.
- Pallant, J. (2020). *SPSS Survival Manual: A Step-by-Step Guide to Data Analysis Using IBM SPSS*. Routledge.
- Wagner III, W. E. (2019). *Using IBM® SPSS® Statistics for Research Methods and Social Science Statistics*. SAGE Publications.
- Zedeck, S. (Ed.). (2014). *APA Dictionary of Statistics and Research Methods*. American Psychological Association.



EDU-C-703

RESEARCH AND PUBLICATION ETHICS

Course Level: 700

Total: 50 Marks

FA: 25 Marks

SA: 25 Marks

L+T+P: 1+1+0 = 2 Credits

Lecture: 15 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs = 30 Hrs

COURSE LEARNING OUTCOMES:

After the completion of the course, the scholars will be able to:

- CLO 1:** examine the potential harm and consequences of misconducts along with the need for ethical considerations in educational research
- CLO 2:** discuss the ethical guidelines and regulations suggested by various academic organizations for research publication in educational research
- CLO 3:** critique the impacts of predatory publishers and journals on integrity and quality of research
- CLO 4:** apply online resources and software tools to check journal identifiers, copyright and predatory publishers
- CLO 5:** utilize plagiarism detection software and other open-source tools for ensuring research integrity.
- CLO 6:** explore various indexing and citation databases and metrics highlighting their role in education research.

UNIT I: THEORY (PHILOSOPHY, ETHICS, SCIENTIFIC CONDUCT AND PUBLICATION ETHICS)

- Philosophy and ethics: Introduction to philosophy: Definition, nature and scope, concept, branches; Ethics: definition, moral philosophy, nature of moral judgements and reactions.
- Scientific conduct: Ethics with respect to science and research; Intellectual honesty and research integrity; Scientific misconducts: falsification, fabrication, and plagiarism; Redundant publications: duplicate and overlapping publications, salami slicing; Selective reporting and misrepresentation of data.
- Publication ethics: Definition, concept and importance; Best practices/standards setting initiatives and guidelines: COPE, WAME, etc.; Conflicts of interest in research publication.
- Publication misconduct: Definition, concept, problems that lead to unethical behavior and vice versa, types; Violation of publication ethics, authorship and contributor ship; Identification of publication misconduct, complaints and appeals; Predatory publishers and journals.

UNIT-II: PRACTICE (OPEN ACCESS PUBLISHING, PUBLICATION MISCONDUCT, DATABASES AND RESEARCH METRICS)

- Open access publishing: Open access publications and initiatives; SHERPA/RoMEO online resource to check publisher copyright and self-archiving policies; Software tool to identify predatory publications developed by SPPU; Journal finder/ journal suggestion tools viz. JANE, Elsevier journal finder, springer journal suggester, etc.
- Publication misconduct: Group discussions of the following topics: Subject specific ethical issues, FFP, authorship; Conflicts of interest and complaints and appeals: examples and frauds from India and abroad.
- Software tools: Use of plagiarism software like Turnitin, Urkund (Original) and other open-source software tools.
- Databases and research metrics: Databases: Indexing databases; Citation databases: Web of science, Scopus, etc.; Research metrics: Impact factor of journal as per journal citation report, SNIP, SJR, IPP, cite score. Metrics: h-index, g index, i10 index, altmetrics.

TEACHING LEARNING STRATEGIES:

Research Ethics Discussions, Ethical Practices and dilemma, Critical Thinking, Reflective learning, Literature Reviews and Critiques, Research Seminars, Problem-Based Learning (PBL), Case Studies, Research Workshops, Peer Review Process, Guest Lectures and Expert Talks, ICT integrated teaching-learning, Use of plagiarism software, Conferences and Presentations, Collaborative learning, Lecture cum discussion, Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 25	Book Review, Article Review, Journal Writing, Class Test, Open Book Test, Self-Test, Online Test, Article Writing and Assignment,	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation and Seminars
Summative Marks: 25	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS

- Beall, J. (2012). Predatory Publishers are Corrupting Open Access. *Nature*, 489(7415), 179-179. <https://doi.org/10.1038/489179a>
- Bird, A. (2006). *Philosophy of Science*. Routledge.
- Bos, J. (2020). *Research Ethics for Students in the Social Sciences*. Springer Nature.

- Chaddah, P. (2021). Ethics in research publications: Fabrication, falsification, and plagiarism in science. *Academic Integrity and Research Quality*, 18.
- Comstock, G. (2012). *Research Ethics: A Philosophical Guide to The Responsible Conduct of Research*. Cambridge University Press.
- D'Angelo, J. (2018). *Ethics in science: Ethical misconduct in scientific research*. CRC Press.
- Dobrick, F. M., Fischer, J., & Hagen, L. M. (Eds.). (2017). *Research Ethics in the Digital Age: Ethics for the Social Sciences and Humanities in Times of Mediatization and Digitization*. Springer.
- Hammersley, M., & Traianou, A. (2012). *Ethics in qualitative research: Controversies and contexts*. SAGE.
- Indian National Science Academy (INSA). (2019). *Ethics in Science Education, Research and Governance*. http://www.insaindia.res.in/pdf/Ethics_Book.pdf
- Iphofen, R., & Tolich, M. (Eds.). (2018). *The SAGE Handbook of Qualitative Research Ethics*. SAGE.
- Koepsell, D. (2016). *Scientific Integrity and Research Ethics: An Approach from the Ethos of Science*. Springer.
- MacIntyre, A. (2003). *A short history of ethics: a history of moral philosophy from the Homeric age to the 20th century*. Routledge.
- Macrina, F. L. (2014). *Scientific Integrity: Text and Cases in Responsible Conduct of Research*. John Wiley & Sons.
- National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). *On Being a Scientist: A Guide to Responsible Conduct in Research (Third Edition)*. National Academies Press.
- Panicker, S., & Stanley, B. (2021). *Handbook of research ethics in psychological science*. APA Books.
- Shamoo, A. E., & Resnik, D. B. (2015). *Responsible Conduct of Research*. Oxford University Press.
- Whiteman, N. (2012). *Undoing Ethics: Rethinking Practice in Online Research*. Springer.

EDU-S-704

ACADEMIC WRITING, REVIEWS OF RELATED LITERATURE AND WRITING RESEARCH PROPOSAL**Course Level: 700****Total: 100 Marks****FA: 100 Marks****L+T+P: 0+0+4 = 4 Credits****Lecture: 0 Hrs + Tutorial: 0 Hrs + Practical: 120 Hrs****ACADEMIC WRITING (2 Credits)**

The course will provide comprehensive orientation to academic writing, equipping research scholars with essential skills for writing in academic purpose when research is essential. It covers fundamental aspects of research writing skills including: note taking, paraphrasing, summary, direct quotation, positioning, and applying APA style citation. Student will have an opportunity to write their own texts, critically review literature, improve texts, develop to identify important features in published articles and texts. Research scholars are required to submit the research work to their respective supervisors for feedback. The research scholars are required to give and get feedback to and from fellow research scholars for enhancing collaborative learning environment.

REVIEW OF RELATED LITERATURE AND WRITING A RESEARCH PROPOSAL (2 Credits)

The scholars are required to prepare a research proposal including a thorough review of literature on a topic of their choice in consultation with their respective supervisor(s) and present the same in a seminar during the course work examination. The research proposal shall be evaluated by the departmental committee.

TEACHING-LEARNING STRATEGIES:

Literature Reviews and Critiques, Academic writing workshops and seminars, problem-based learning (PBL), case studies, peer review process, guest lectures and expert talks, ICT integrated teaching-learning, conferences and presentations, reflective learning, collaborative learning, lecture cum discussion, self-study and initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 100	Article Review and Journal Writing, Article Writing, Test, Open Book Test, Self-Test, Online Test and Assignment	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation and Seminars

EDU-E-705**TEACHER EDUCATION****Course Level: 700****Total: 100 Marks****FA: 50 Marks****SA: 50 Marks****L+T+P: 3+1+0 = 4 Credits****Lecture: 45 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs****COURSE LEARNING OUTCOMES:**

On completion of the course, the students will be able to:

- CLO 1:** explain the concept, historical development and bases of teacher education
- CLO 2:** evaluate the different types of teacher education and its implications on the professional development of teachers in India.
- CLO 3:** analyse the theories of teaching and learning and their implications for teacher education
- CLO 4:** evaluate the roles of various advisory and statutory bodies in the development of teacher education
- CLO 5:** analyse the recommendations of various committees, commissions, policy documents and curriculum frameworks on teacher education in India
- CLO 6:** analyse the major issues, concerns and mechanisms for maintaining quality and standards in teacher education institutions in India.
- CLO 7:** explain the significance of the integration of technology in teacher education.
- CLO 8:** evaluate different innovative approaches and classroom practices in teacher education and its implications for teacher development
- CLO 9:** explain the concept, assumptions, and process of S-STTEP, recognizing its significance in enhancing teaching effectiveness through personalized reflection and improvement
- CLO 10:** explore diverse paradigms for researching teaching their implications for teacher education and classroom practices.

UNIT-I: UNDERSTANDING TEACHER EDUCATION

- Meaning, nature and scope of teacher education; Historical overview of teacher education as a field of study; Philosophical, psychological, sociological bases of teacher education.
- The synergy between school education, higher education and teacher education; Aims and objectives of teacher education at elementary, secondary and senior secondary levels.
- Teaching as a profession; Pre-service and In-service teacher education: Concept, types, objectives, process, methods and evaluation at various levels (Elementary, secondary and senior secondary); Professional development of teachers in higher education (Induction, orientation, refresher, FDP, Human Resource Development Centers (HRDC)).
- Critical analysis of theories of teaching-learning: Behaviourist, cognitivist and constructivist.

UNIT-II: POLICY PERSPECTIVES ON TEACHER EDUCATION

- Role of various advisory and statutory bodies in teacher education (NCTE, NCERT, SCERT, UGC, NIEPA, NAAC), Inter-University Centre for Teachers Education (IUCTE).
- Development of teacher education in India before and after Independence through the lens of various committees and commissions on teacher education.
- NPE1986, Revised NPE, 1986 (1992) and POA 1992, NCF2005, National Curriculum Framework for Teacher Education (NCFTE)2009, NEP2020.
- Integrated Teacher Education Programme (ITEP); Multiple entry and exit system and its implications for teacher education.

UNIT-III: QUALITY ASSURANCE AND CRITICAL ISSUES IN TEACHER EDUCATION

- Maintaining the quality and standards in teacher education: Quality assurance and accreditation in teacher education institutions; Unregulated growth of teacher education institutions in India.
- Recruitment of teacher educators, Performance Based Appraisal System (PBAS) for teachers in universities and colleges; National Professional Standards for Teachers (NPST) and teacher education.
- Practicing theory and theorizing practice in teacher education: Bridging the gap between theory and practice in teacher education (Micro teaching, teaching skills, pedagogical content knowledge, internship and field-based activities); Assessment and evaluation of various processes and practices in teacher education.
- Professionalism, academic freedom, accountability, and autonomy of teachers; Issues related to enhancing teacher competence; Teacher education in the neoliberal context.

UNIT-IV: EMERGING TRENDS AND RESEARCH IN TEACHER EDUCATION

- ICT in teacher education; TPACK(Technological Pedagogical Content Knowledge) framework in teacher education; E-Portfolio; AI tools and teacher education.
- Innovative approaches to teacher education and classroom practices:E-teacher education, value-based teacher education, competency-based teacher education; cooperative and collaborative teaching and learning, reflective teaching, culturally responsive pedagogy, gender-sensitive pedagogy; Duoethnography as a pedagogical tool.
- Researching teaching through pedagogy, collaboration and context; Self-Study of Teaching and Teacher Education Practices (S-STTEP):Concept, assumptions, process and importance in teacher education.
- Paradigms for research on teaching; Critical approaches to research in teacher education (Critical theory, critical pedagogy, feminism and post-modernism).

TEACHING LEARNING STRATEGIES:

Lecture cum discussion, Document analysis, Policy discussion and Analysis, Literature Reviews and Critiques, Workshops and Seminars, Problem-Based Learning (PBL), Case Studies, Peer Review Process, Guest Lectures and Expert Talks, ICT integrated teaching-learning, Conferences and Presentations, Reflective learning, Collaborative learning, Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 50	Class Test, Article Review, Article Writing, Test, Open Book Test, Self-Test, Online Test and Assignment	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation and Seminars and Field Based Assignment
Summative Marks: 50	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS:

- Achinstein, B., Adams, K., Athanases, S. Z., Bang, E., Bleeker, M., Carver, C. L., ... & Youngs, P. (2010). *Past, present, and future research on teacher induction: An anthology for researchers, policy makers, and practitioners*. R&L Education.
- Brandenburg, R., & McDonough, S. (2019). *Ethics, Self-Study Research Methodology and Teacher Education*. Springer.
- Caggart, G.L. (2005). *Promoting Reflective Thinking in Teachers*. Crowin Press.
- Clandinin, D. J., & Husu, J. (Eds.). (2017). *The SAGE handbook of research on teacher education*. Sage.
- Cochran-Smith, M., & Zeichner, K. M. (Eds.). (2009). *Studying teacher education: The report of the AERA panel on research and teacher education*. Routledge.
- Colgan, A. D., & Maxwell, B. (Eds.). (2020). *The importance of philosophy in teacher education: Mapping the decline and its consequences*. Routledge.
- Darling-Hammond, L., & Bransford, J. (Eds.). (2007). *Preparing teachers for a changing world: What teachers should learn and be able to do*. John Wiley & Sons.
- Down, B., & Smyth, J. (Eds.). (2012). *Critical voices in teacher education: Teaching for social justice in conservative times*. Springer Science & Business Media.
- Doyle, W. (1977). Paradigms for research on teacher effectiveness. *Review of Research in Education*, 5, 163–198. <https://doi.org/10.2307/1167174>
- Govt. of India (1966). *Reports of the education Commission 1964-1966*. Ministry of Education, Govt. of India.

- Govt. of India (2020). *National Education Policy 2020*. Ministry of Human Resource Development.
- Groenke, S. L., & Hatch, J. A. (Eds.). (2009). *Critical pedagogy and teacher education in the neoliberal era: Small openings* (Vol. 6). Springer Science & Business Media.
- Heilbronn, R., & Foreman-Peck, L. (Eds.). (2015). *Philosophical perspectives on teacher education*. John Wiley & Sons.
- Kitchen, J., Berry, A., Bullock, S., Crowe, A., Taylor, M., Guojonsdottir, H., & Thomas, L. (2020). *Second International Handbook of Self-Study of Teaching and Teacher Education Practices*. Springer
- Lampert, M. (2001). *Teaching problems and the problems of teaching*. Yale University Press.
- Loughran, J. & Hamilton, M. L. (Eds.) (2016). *International handbook of teacher education* (Vol. 2). Springer Science and Business Media.
- Loughran, J. (2007). Researching teacher education practices: Responding to the challenges, demands, and expectations of self-study. *Journal of teacher education*, 58(1), 12-20.
- Loughran, J. J., Hamilton, M. L., LaBoskey, V. K., & Russell, T. L. (Eds.). (2007). *International handbook of self-study of teaching and teacher education practices* (Vol. 12). Springer.
- Lunenberg, M., Korthagen, F., & Zwart, R. (2011). Self-study research and the development of teacher educators' professional identities. *European Educational Research Journal*, 10(3), 407-420.
- Martin, C., & Polly, D. (Eds.). (2016). *Handbook of research on teacher education and professional development*. IGI Global.
- Martin, D. J., & Loomis, K. S. (2013). *Building teachers: A constructivist approach to introducing education*. Cengage Learning.
- NCERT (2005). *National Curriculum Framework*. NCERT.
- NCERT (2006). *Teacher Education for Curriculum renewal*. NCERT.
- NCTE (1998). *Perspectives in Teacher Education*. NCTE.
- NCTE (2009). *National Curriculum Framework for Teacher Education Towards Preparing Professional and Humane Teacher*. NCTE.
- NCTE (2014). *NCTE New Norms and Regulations, 2014*. NCTE.
- Peters, M. A., Cowie, B., & Menter, I. (Eds.). (2017). *A companion to research in teacher education*. Springer.
- Pollard, A. (2002). *Reflective Teaching: Effective and Evidence informed Professional Practice*. Continuum
- Saha, L.J. & Dworkin, A.G. (Ed.) (2009). *International Handbook of Research on Teachers and Teaching*, Vol. I & II. Springer.
- Setty, R., Iyengar, R., Witenstein, M. A., Byker, E. J., & Kidwai, H. (Eds.). (2019). *Teaching and teacher education: South Asian perspectives*. Springer Nature.

- Shulman, L. S. (1986). Paradigms and research programs in the study of teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd edition) (pp. 3–66). Macmillan
- Singh, L.C. (1990). *Teacher Education in India: A Resource Book*. NCERT.
- Wiseman, A. W., & Kumar, P. (2021). *Building Teacher Quality in India: Examining Policy Frameworks and Implementation Outcomes*. Emerald Publishing Limited.

EDU-E-706**HIGHER EDUCATION****Course Level: 700****Total: 100 Marks****FA: 50 Marks****SA: 50 Marks****L+T+P: 3+1+0 = 4 Credits****Lecture: 45 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs****COURSE LEARNING OUTCOMES:**

After completing the course, the students will be able to:

- CLO 1:** explain the concept, classification and emergence of higher education as a field of study
- CLO 2:** critically examine the different theoretical approaches to higher education.
- CLO 3:** analyze the policy perspectives on higher education in India, including the reports of various commissions and committees.
- CLO 4:** analyze the sources, process and issues in financing of higher education in India.
- CLO 5:** analyze the governance and management of higher education in India.
- CLO 6:** examine the institutional accreditation mechanisms, performance indicators and their implications for quality assurance in higher education.
- CLO 7:** analyze the curriculum, teaching-learning processes, evaluation methods, and professional development opportunities for teachers in higher education.
- CLO 8:** analyze the emerging trends, contemporary issues, problems and challenges in higher education.
- CLO 9:** analyze the impact of globalization and internationalization on higher education in India.
- CLO 10:** analyze the emerging research trends in higher education.

UNIT-I: UNDERSTANDING HIGHER EDUCATION

- Concept, nature, aims and functions of higher education; Higher education and socio-economic development.
- Emergence of higher education as a field of study; Higher education as an economic good (public good, merit good, non-merit good and private good).
- Theoretical approaches to higher education: Market-based approach, human rights-based approach, critical approaches; The triple helix model in higher education.

- Classification of higher education in India(Funding, management, purpose and structure).

UNIT-II: POLICY PERSPECTIVES ON HIGHER EDUCATION

- Development of higher education in pre- and post-independence period through the lens of various commissions and committees.
- Policy perspectives of higher education in India: NPE 1968, 1986 and POA 1992, NEP 2020.
- Learning Outcome-based Curriculum Framework (LOCF) in higher education.
- Financing of higher education: Sources (public, private and PPP); Higher education in five-year plans;Mobilization of non-governmental resources for financing higher education, Emerging trends in financing of higher education.

UNIT-III: GOVERNANCE AND MANAGEMENT OF HIGHER EDUCATION

- Governance of higher education in India: Variety of educational institutions and their administration and governance; Governance of collegiate system, Structure and process of university governance, Governance of institutes of national importance;Recommendations of NEP on governance and managements of higher education.
- Role of different bodies in the university governanceand their implications for state and institutional level of educational administration: MOE, UGC, AICTE, NCTE, NIEPA, AIU.
- Quality assurance and institutional accreditation; Performance indicators and institutional frameworks: NIRF, NAAC, NBA, NRF and IQAC. Performance Based Appraisal System (PBAS) and its implications for quality assurance in higher education.
- Curriculum, teaching-learning, and evaluation in higher education; Professional development of teachers in higher education:Role of HRDCs, PMMMNMTT scheme and other schemes.

UNIT-IV:EMERGING TRENDS AND RESEARCH IN HIGHER EDUCATION

- Contemporary issues and problems in higher education: Access, equity, quality, affordability, accountability,funding, autonomy, academic freedom, political interference, discipline, employabilityand research outcome.
- Challenges to massification of higher education; Higher education and the knowledge economy, Higher education and skill development, Blended and hybrid learning in higher education (MOOCs and OERs).
- Globalization and internationalization of higher education,GATS and higher education, Entry of foreign universities in India, entrepreneurial university.
- Self-study in higher education, comparative research in higher education, critical approaches to higher education research.

TEACHING LEARNING STRATEGIES:

Lecture cum discussion, Document analysis, Policy discussion and Analysis, Literature Reviews and Critiques, Workshops and Seminars, Problem-Based Learning (PBL), Case Studies, Peer Review Process, Guest Lectures and Expert Talks, ICT integrated teaching-learning, Conferences and

Presentations, Reflective learning, Collaborative learning, Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 50	Class Test, Article Review, Article Writing, Test, Open Book Test, Self-Test, Online Test and Assignment	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation and Seminars and Field Based Assignment
Summative Marks: 50	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS:

- Agarwal, P. (2009). *Indian Higher Education: Envisioning the Future*. Sage Publication
- Agarwal, P. (2012). *A Half Century of Indian Higher Education; Essays by Phillip G. Altbach*. Sage Publications.
- Bhandari, L., Kale, S., & Mehra, C. S. (2019). *Higher Education in India: A Data Compendium*. Routledge.
- Arya, P.P. (2006). *Higher Education and Global Challenges Systems and Opportunities*. Deep & Deep Publication Pvt. Ltd.
- Chalam, K.S. (2005). *Challenges of Higher Education*. Anmol Publication.
- Chowdhury, S. R. (2017). *Politics, policy and higher education in India*. Springer.
- Choudhury, P. K., & Suresh Babu, G. S. (Eds.). (2021). *Contextualising Educational Studies in India: Research, Policy and Practices*. Taylor & Francis.
- Jalote, P. (2020). *Building Research Universities in India*. Sage Publications Pvt. Limited.
- Dhir, R.N. (2002). *Higher Education in the New Millennium*. Abhishek Publication.
- Kotzmann, J. (2018). *The human rights-based approach to higher education: Why human rights norms should guide higher education law and policy*. Oxford University Press.
- Martínez-Alemán, A. M., Pusser, B., & Bensimon, E. M. (Eds.). (2015). *Critical approaches to the study of higher education: A practical introduction*. JHU Press.
- Mathew, A. (2016). *Reforms in higher education in India: A Review of recommendations of commissions and committees on education*. CPRHE research paper 2. CPRHE, NUEPA.
- Naik, J.P. (1965). *Education Planning in India*. Allied Publishers.
- Narullah, S., & Naik, J.P. (1972). *A Student History of Education in India*. MacMillan.

- Panigrahi, J. (2017). *Resource allocation and innovative methods of financing higher education in India (CPRHE Research Papers 6)*. CPRHE, NUEPA.
- Panikkar, K.N., & Nair, M. B. (2012). *Globalization and Higher Education in India*. Pearson Education.
- Powar, K.B. (2002). *Indian Higher Education*. Concept Publishing Company.
- Ram, M. (2004). *Universalization of Higher Education - Some Policy Implication*. Sarup & Sons.
- Tilak, J. B. (2011). *Trade in higher education: The role of the General Agreement on Trade in Services (GATS)*. UNESCO.
- Tilak, J. B. (2017). *Higher Education, Public Good and Markets*. Routledge.
- Tilak, J. B. (2018). *Education and development*. Academic Foundation.
- Tilak, J. B. (Ed.). (2021). *Education in India: Policy and Practice*. Sage Publications Pvt. Limited.
- Varghese, N. V. (2015). Challenges of massification of higher education in India. *CPRHE research papers, 1*. CPRHE, NUEPA.
- Varghese, N. V., & Malik, G. (Eds.). (2015). *India higher education report 2015*. Routledge.
- Varghese, N.V., Sabharwal, N. S., & Malish, C.M. (Eds.). (2017). *India higher education report 2016: Equity*. Sage.
- Varghese, N. V., Pachauri, A., & Mandal, S. (Eds.). (2018). *India Higher Education Report 2017: Teaching, Learning and Quality in Higher Education*. SAGE Publications.
- Varghese, N. V., & Panigrahi, J. (Eds.). (2019). *India Higher Education Report 2018: Financing of Higher Education*. SAGE Publications.
- Varghese, N. V., & Malik, G. (Eds.). (2020). *India Higher Education Report 2019: Governance and Management of Higher Education in India*. Sage Publications Pvt. Limited.
- Varghese, N. V., & Khare, M. (Eds.). (2021). *India Higher Education Report 2020: Employment and Employability of Higher Education Graduates in India*. Taylor & Francis.
- Varghese, N. V., & Panigrahi, J. (Eds.). (2022). *India Higher Education Report 2021: Private Higher Education*. Taylor & Francis.
- Varghese, N. V., & Sabharwal, N. S. (Eds.). (2023). *India Higher Education Report 2022: Women in Higher Education*. Taylor & Francis.

EDU-E-707

ADVANCED EDUCATIONAL TECHNOLOGY

Course Level: 700

Total: 100 Marks

FA: 50 Marks

SA: 50 Marks

L+T+P: 3+1+0 = 4 Credits

Lecture: 45 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs

LEARNING OUTCOMES:

On completion of the course, the students will be able to:

- CLO 1:** explain the concept, significance, approaches and the historical development of educational technology.
- CLO 2:** explain the concept, types, merits and limitations of e-learning in education.
- CLO 3:** analyze the process of integrating multimedia in education and implications for teaching learning.
- CLO 4:** analyse the process of effective classroom communication and implications for teaching learning.
- CLO 5:** analyse different modalities and strategies of technological integration in teaching and learning and its implications for educational practices.
- CLO 6:** analyse the different models of teaching and its implications for instructional practices.
- CLO 7:** explore the uses and significance of various digital resources and platforms for facilitating effective teaching learning process and assessment in education.
- CLO 8:** analyse the emerging research trends in educational technology.

UNIT-I: FUNDAMENTAL CONCEPTS OF EDUCATIONAL TECHNOLOGY

- Educational technology: Concept, nature, scope and significance; Technology in education and technology of education and their role in modern educational practices.
- Historical development of educational technology, basics of information and communication system.
- Approaches of ET: Hardware, software and system approach.
- E-Learning: Definitions, characteristics, merits and limitations; Types of e-learning: TBL, CBT, WBT; Modes: Synchronous, asynchronous and blended.

UNIT-II: MULTI MEDIA AND ICT IN EDUCATION

- Multimedia approach in educational technology: Concept, nature and uses.
- Concept and importance of ICT; Difference between E.T. & ICT; Classification of audiovisual aids.

- Approaches and implications of multimedia in education: Concept and technology; Application of multimedia; Media selection: Integration and evaluation; Factors affecting media selection.
- Effective classroom communication: Cycle, modes, process & barriers.

UNIT-III: BEHAVIOURAL AND INSTRUCTIONAL TECHNOLOGY

- Modalities and strategies of teaching and learning, Edgar Dale's cone of experience, Technological Pedagogical Content Knowledge (TPACK) framework and blended learning.
- Modification of teaching behaviour: Micro-teaching and simulation.
- Models of teaching: Characteristics of a teaching model, elements of a teaching model; Philosophical teaching models (Plato, John Locke, Kent); Psychological model of teaching (Robert Glaser, N.A. Flander, Daniel Davis); Modern teaching models (Joyce and Weil, Eggen, Kauchar and Harder (1979)).
- Individualized instruction: Programmed Instruction: Origin, types (linear and branching), Keller plan, PSI, CAI, CMI & PLM.

UNIT-IV: RESOURCES AND EMERGING TRENDS IN EDUCATIONAL TECHNOLOGY

- Audio, radio broadcast, video, educational television and CCTV; Online teaching tools: Concept, applications and limitations.
- EDUSAT and animation; Education films: Its uses for the development of children imagination (teaching and learning).
- Teleconferencing, video conferencing, learning resource centers; Social networking tools (Chat-boats), MOOCS, SWYAM, social networking, models, online examinations platforms, Learning Management Systems (LMS).
- Research trends in educational technology: Virtual reality, (VR) Augmented Reality (AR), Artificial Intelligence (AI), big data analytics, mobile learning, interactive technologies and new learning spaces.

TEACHING LEARNING STRATEGIES:

ICT integrated teaching-learning, Blended Learning, Flipped Classroom, AI integrated teaching, Use of LMS in teaching and learning, Lecture cum discussion, Literature Reviews and Critiques, Workshops and Seminars, Problem-Based Learning (PBL), Case Studies, Peer Review Process, Guest Lectures and Expert Talks, Conferences and Presentations, Reflective learning, Collaborative learning, , Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 50	Online Test, Assignment, Use of LMS, Class Test, Article Review, Article Writing, Test, Open Book Test, Self-Test,	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation and Seminars and Field Based Assignment
Summative Marks: 50	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS

- Andrews, R., & Haythornthwaite, C. (Eds.). (2007). *The Sage handbook of e-learning research*. Sage.
- Bharikhok, D. (2000). *Fundamentals of Information Technology*. Pentagon Press.
- Cennamo, K., Ross, J., & Ertmer, P. A. (2013). *Technology integration for meaningful classroom use: A standards-based approach*. Cengage Learning.
- Chen, N. S., & Fang, W. C. (2013). Grand challenges and research directions in e-learning of the 21st century. *Educational Technology & Society*, 16(2), 1-2.
- Conole, G., & Oliver, M. (Eds.) (2006). *Contemporary perspectives in e-learning research: themes, methods and impact on practice*. Routledge.
- Goodyear, P. M., Banks, S., Hodgson, V., & McConnell, D. (Eds.). (2006). *Advances in research on networked learning* (Vol. 4). Springer Science & Business Media.
- Hunter, J. (2015). *Technology integration and high possibility classrooms: Building from TPACK*. Routledge.
- Iskander, M. (Ed.). (2008). *Innovative techniques in instructional technology, e-learning, e-assessment and education*. Springer.
- Jesson, J., & Peacock, G. (2012). *The Really Useful ICT Book: A practical guide to using technology across the primary curriculum*. Routledge.
- Njenga, J. K., & Fourie, C. H. (2010). The myths about e-learning in higher education. *British Journal of Educational Technology*, 41(2), 199-212.
- Pelgrum, W. J., & Law, N. (2003). *ICT in Education around the World-Trends, Problems and Prospects*. UNESCO.
- Pitler, H., Hubbell, E. R., & Kuhn, M. (2012). *Using technology with classroom instruction that works*. Association for Supervision and Curriculum Development (ASCD).
- Solomon, G., & Schrum, L. (2014). *Web 2.0 how-to for educators*. International Society for Technology in Education.
- UNESCO (2018). *UNESCO ICT competency framework for teachers*. UNESCO.
- Vanaja, M. & Rajsekar, S. (2014). *Educational Technology & Computer Education*. Neelkamal.

EDU-E-708

WOMEN'S EDUCATION

Course Level: 700

Total: 100 Marks

FA: 50 Marks

SA: 50 Marks

L+T+P: 3+1+0 = 4 Credits

Lecture: 45 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs

LEARNING OUTCOMES:

The scholars will be able to:

- CLO 1:** analyse the historical development of women's movements in the 19th and 20th centuries examining their contributions to feminism
- CLO 2:** analyse the different feminist theories and its implications for gender equality and social justice.
- CLO 3:** analyse the social construction of gender roles and the visual and textual representation of gender and its role in shaping the gender perception and stereotypes.
- CLO 4:** examine the intersectionality of gender with other axes of stratification to highlight gender inequality and discrimination prevailing in the society.
- CLO 5:** analyse the programs, schemes and the recommendations of various commissions and committees on women's education in post-independent India.
- CLO 6:** analyse various acts and reports related to prevention and redressal of crimes against women and their implications for ensuring a safe environment for women.
- CLO 7:** explain the need and importance of gender-based analysis and the tools used in such analysis.
- CLO 8:** analyse principles, types, and challenges of feminist research methods in addressing the gender related research questions.
- CLO 9:** analyse feminist approaches to research focusing on sexism in research, linguistics and semiotics in feminist research and interdisciplinary research.
- CLO 10:** examine the principles and practices of feminist pedagogy in promoting inclusive learning environment.

UNIT-I: THEORIES OF WOMEN STUDIES

- History of women movements; Emergence of women studies as an academic discipline.
- Feminist theories: Formative feminism (liberal, radical, socialist and Marxist); Feminism and psycho analysis, post-colonial feminism, postmodern feminism, disability and feminism; Dalit feminism, Black feminism and eco-feminism.
- Philosophical background to women ideologies; Moral theory, normative theory, vulnerability, human rights, equity and equality.
- Ideology, discourse and gender: Althusser, Bakhtin, Derrida, Foucault.

UNIT II GENDER PERSPECTIVES AND WOMEN

- Gender and institutions: Work, family and marriage, law (legal institutions).
- Gender and literature: Ways of reading and interpreting, ways of writing, critical approaches, tracing gender in post-modern writings (refiguring history).
- Visualising gender and women in print media, television and cyber space.
- Intersectionality of gender and class, caste, tribe, religion and politics.

UNIT-III: COMMISSIONS, COMMITTEES ON WOMEN'S EDUCATION AND ACTS ON SEXUAL HARASSMENT

- Recommendations by commissions and committees on women's education in post-independent India.
- Programmes and schemes on women education.
- Education for disadvantaged women: Socio economic deprived, physical- mental challenged, women and Right to Education (RTE) Act 2009.
- Protection of Women from Domestic Violence Act, 2005, Justice Verma Committee Report, 2012, Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal Act) 2013, Nirbhaya Act (Criminal Law (Amendment) Act, 2013).

UNIT-IV: EMERGING TRENDS IN FEMINIST AND GENDER-BASED RESEARCH

- Gender based analysis: Need and importance, scope and tools used in gender-based analysis.
- Feminist research methods: Principles, types and challenges in feminist research methods.
- Feminist approaches to research: Sexism in research, linguistics, semiotics and feminist in research, gender and inter disciplinary in research
- Gender and inter-disciplinarity, feminist pedagogy.

TEACHING LEARNING STRATEGIES:

Gender inclusive pedagogy, culturally responsive pedagogy, Feminist Pedagogy, Orientation to gender sensitivity and intersectionality, Reflective writing, integration of technology and policy analysis, mentoring and peer support and inclusive dialogue, ICT integrated teaching-learning, Lecture cum discussion, Literature Reviews and Critiques, Workshops and Seminars, Problem-Based Learning (PBL), Case Studies, Guest Lectures and Expert Talks, Conferences and Presentations, Reflective learning, Collaborative learning, , Self-study and Celebration of women's achievement and talks by women more knowledgeable other (MKO)

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 50	Test, Assignments, Article Review, Article Writing, Open Book Test and Self-Test	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation and Seminars and Field Based Assignment
Summative Marks: 50	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS:

- Acker, S. (Ed.). (1994). *Gendered education: Sociological reflections on women, teaching and feminism*. Open University Press
- Anagol, P. (Ed.). (2006). *Emergence of feminism in India, 1850-1920*. Ashgate
- Beasley, C. (1999). *What is feminism? An introduction to feminist theory*. Sage
- Bhasin, K. (1993). *What is patriarchy?* Kali for Women
- Bhasin, K. (2000). *Understanding gender*. Kali for Women
- Bhasin, K., & Khan, N. S. (1999). *Feminism and its relevance in South Asia* (Revised ed.). Women Unlimited
- Bhog, D. (2007). Textbooks and gender sensitivity. In S. C. Jakka (Ed.), *Textbooks & the school curriculum: A report of the Sir Ratan Tata Trust colloquium on education, 2004*. Comet Media Foundation (pp. 68-77)
- Bryson, B., & Bennet-Anyikwa, V. A. (2003). The Teaching and Learning Experience: Deconstructing and Creating Space Using a Feminist Pedagogy. *Race, Gender & Class*, 10(2), 131-146. <http://www.jstor.org/stable/41675079>
- Chakravarti, U. (2018). *Gendering caste: Through a feminist lens* (revised ed.). Sage
- Channa, S. M. (2013). *Gender in South Asia: Social imagination and constructed realities*. Cambridge University Press.
- Chow, E. N.L., Fleck, C., Fan, G.H., Joseph, J., & Lyter, D. M. (2003). Exploring Critical Feminist Pedagogy: Infusing Dialogue, Participation, and Experience in Teaching and Learning. *Teaching Sociology*, 31(3), 259-275. <https://doi.org/10.2307/3211324>
- Dawar, T., & Anand, S. (2017). Gender Bias in Textbooks across the World. *International Journal of Applied Home Science*, 4(3&4), pp. 224-235.
- Dube, L. (1997). *Women and kinship: Comparative perspectives on gender in South and South-East Asia*. UNU Press.

- Fonow, M. M., & Cook, J. A. (Eds.). (1991). *Beyond methodology: Feminist scholarship as lived experience*. Indiana University Press
- Geetha, V. (2002). *Gender: Theorizing feminism*. STREE
- Geetha, V. (2007). *Patriarchy*. STREE
- Hamilton, R. (1993). *Feminist theories, Left history: An interdisciplinary journal of historical inquiry and debate*, 1(1), pp. 9-33
- John. M. E. (Ed.). (2008). *Women's studies in India: A reader*. Penguin Books
- Rao, A. (2018). *Gender, caste and the imagination of equality*. Women Unlimited
- Ray, R. (Ed.). (2012). *Handbook of gender*. OUP
- Roberts, K. M. (2021). Integrating Feminist Theory, Pedagogy, and Praxis into Teacher Education. *SAGE Open*, 11(3). <https://doi.org/10.1177/21582440211023120>
- Saraswathi, T.S. (Ed.). (1999). *Culture, Socialization and Human Development*. Sage
- Tong, R. (1989). *Feminist thought: A comprehensive introduction*. Westview Press
- Wigginton, B., & Lafrance, M. N. (2019). Learning critical feminist research: A brief introduction to feminist epistemologies and methodologies. *Feminism & Psychology*. <https://doi.org/10.1177/0959353519866058>



EDU-E-709

EDUCATIONAL ADMINISTRATION AND MANAGEMENT

Course Level: 700

Total: 100 Marks

FA: 50 Marks

SA: 50 Marks

L+T+P: 3+1+0 = 4 Credits

Lecture: 45 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs

COURSE LEARNING OUTCOMES:

On completion of the course, the students will be able to:

- CLO 1:** analyse the different approaches to management and administration and their implication in educational context.
- CLO 2:** analyse the trends of new public management and their implications for educational administration and management.
- CLO 3:** analyse various theories and trends of educational administration and their implications for educational leadership and management.
- CLO 4:** examine the process of federalism and the implications of centre-state relationships in educational administration.
- CLO 5:** analyse the different models of educational management including their strength and limitations.
- CLO 6:** explore the importance of human relations and scientific principles of management in fostering conducive work culture and collaborative environment.
- CLO 7:** analyse the issues of transparency and accountability in educational administration to enhance the quality and ethical practices in decision making.
- CLO 8:** examine the problems of political interference, issues of vertical and horizontal linkages and its impact on policy implementation in educational institutions
- CLO 9:** analyse the issues in the management of public institutions in India for effective educational management and administration

UNIT-I: INTRODUCTION TO EDUCATIONAL ADMINISTRATION, MANAGEMENT AND GOVERNANCE

- Conceptual dimensions: Educational administration, management and governance.
- Approaches in educational management and administration.
- Centralization and decentralization in educational administration and management at different levels: Elementary, secondary and higher education.
- Trends in educational governance: New public management, network governance, PPP model.

UNIT-II: DEVELOPMENTAL PROCESS OF EDUCATIONAL ADMINISTRATION

- Theories of educational administration: Classical organisational theory, critical educational administration theory, behavioural science approach theory, post behavioural science approach theory.
- Specific trends in educational administration: Decision making, organizational climate, organizational change, organizational compliance, organizational development, Management by objectives (MBO), PERT(Programme, Evaluation and Review Technique).
- Federalism and centre-state relationships in educational administration.
- Educational administration at the centre, state and sub-state levels: Structures, functions and processes.

UNIT-III: DEVELOPMENTAL PROCESS OF EDUCATIONAL MANAGEMENT

- Models of educational management: Formal, collegial, political and subjective.
- Development of modern concept of educational management: Management as process, management as bureaucracy, delegation of authority, control.
- Human relations to management: Communication, direction, coordination and unity of command.
- Scientific principles of management: Critical Path Method (CPM), Planning Programming Budgeting System (PPBS), Total Quality Management (TQM), Six Sigma in education.

UNIT-IV: EMERGING TRENDS AND RESEARCH IN EDUCATIONAL ADMINISTRATION & MANAGEMENT

- Issues of transparency and accountability in educational administration.
- Problems of political interference, issues of vertical and horizontal linkages between structures of educational administration.
- Issues in the management of public institutions.
- Problems and solutions of educational management in India.

TEACHING LEARNING STRATEGIES:

Lecture cum discussion, Document Analysis, ICT integrated teaching-learning, Literature Reviews and Critiques, Workshops and Seminars, Problem-Based Learning (PBL), Case Studies, Peer Review Process, Guest Lectures and Expert Talks, Conferences and Presentations, Reflective learning, Collaborative learning, Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

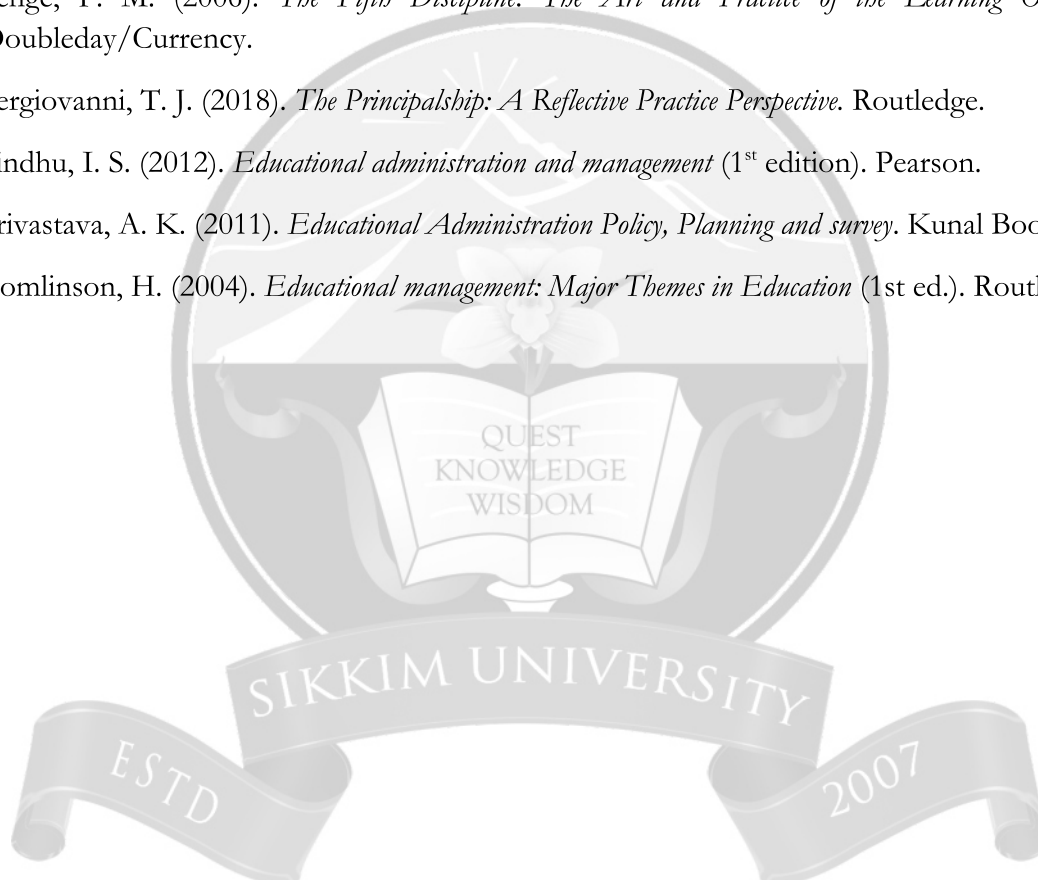
ASSESSMENT FRAMEWORK

Modes	Written	Oral	Integrated
Formative Marks: 50	Class Test, Open Book Test, Self-Test, Online Test, Article Writing, Assignment, Annotated Bibliographies, Reports, Document Review, Article Review and Journal Writing	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share, Seminar	Presentation, Seminars, and Field based Assignments
Summative Marks: 50	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS

- Bhargava, R., & Bhargava, V. K. (2014). *Educational Administration: Concepts and Practices*. Vikas Publishing House Pvt Ltd.
- Bush, T., & Bell, L. (2002). *The principles and practice of educational management*. SAGE.
- Bush, T., Bell, L., & Middlewood, D. (2019). *Principles of Educational leadership & management*. SAGE Publications Limited.
- Coleman, M., & Glover, D. (2010). *Educational leadership and management: Developing Insights and Skills*. Open University Press.
- Glatthorn, A. A., & Jailall, J. N. (2014). *Making the Principalship Work: A Study of Leadership Roles in Secondary Schools*. Rowman & Littlefield.
- Gupta, A. (2015). *Educational Administration and Management*. S. Chand & Company Ltd.
- Hoy, W. K., & Miskel, C. G. (2012). *Educational administration: Theory, research, and practice*. McGraw-Hill Education.
- Ladd, H. F., & Goertz, M. E. (Eds.). (2014). *Handbook of research in education finance and policy*. Routledge.
- Leithwood, K., & Riehl, C. (Eds.). (2005). *What We Know About Successful School Leadership*. Teachers College Press.
- Lunenberg, F. C. (2021). *Educational administration: Concepts and practices (7th ed.)*. Sage Publication.
- Lunenburg, F. C., & Ornstein, A. (2020). *Educational Administration: Concepts and Practices*. Sage Publications.
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School Leadership That Works: From Research to Results*. ASCD.
- Mehta, D. (2019). *Educational Administration and Management*. Prentice Hall of India.
- Mercer, J., Barker, B., & Bird, R. (2010). *Human resource management in education: Contexts, Themes, and Impact*. Taylor & Francis.

- Mukhopadhyay, M. (2005). *Total quality management in education*. Sage Publications.
- NCSL (National College for School Leadership). (2006). *Distributed Leadership: A Handbook for Primary Heads*. NCSL.
- Northouse, P. G. (1997). *Leadership: Theory and Practice*. SAGE Publications.
- Pandya, S.R. (2011). *Administration and Management of Education*. Himalaya Publishing House.
- Samier, E., & Bates, R. J. (2006). *Aesthetic dimensions of educational administration and leadership*. Routledge.
- Sayeed, O. B., & Pareek, U. (2000). *Actualizing managerial Roles*. Tata McGraw-Hill Publishing Company Limited.
- Senge, P. M. (2006). *The Fifth Discipline: The Art and Practice of the Learning Organization*. Doubleday/Currency.
- Sergiovanni, T. J. (2018). *The Principalship: A Reflective Practice Perspective*. Routledge.
- Sindhu, I. S. (2012). *Educational administration and management* (1st edition). Pearson.
- Srivastava, A. K. (2011). *Educational Administration Policy, Planning and survey*. Kunal Books.
- Tomlinson, H. (2004). *Educational management: Major Themes in Education* (1st ed.). Routledge.



EDU-E-710

CURRICULUM, PEDAGOGY AND ASSESSMENT

Course Level: 700

Total: 100 Marks

FA: 50 Marks

SA: 50 Marks

L+T+P: 3+1+0 = 4 Credits

Lecture: 45 Hrs + Tutorial: 15 Hrs + Practical: 0 Hrs

COURSE LEARNING OUTCOMES:

On completion of the course, the student will be able to:

- CLO 1:** analyse the foundations, historical perspectives, approaches, policy perspectives and the different theories of curriculum along with their implications for curriculum planning and development.
- CLO 2:** analyse different models of curriculum planning and development along with its strengths, limitations and implications.
- CLO 3:** analyse the different approaches and strategies to curriculum transaction and their implications in teaching and learning process
- CLO 4:** analyse the different critical issues in curriculum transaction for suggesting measures to address these issues
- CLO 5:** explain the key concepts of assessment and their relevance in education.
- CLO 6:** analyse the role of assessment in realizing curricular objectives and the relationship between curriculum, pedagogy, and assessment.
- CLO 7:** analyse various alternative assessment modes and emerging trends in assessment for ensuring effective and inclusive practices.
- CLO 8:** propose strategies for addressing various concerns, challenges, issues and problems related to the different aspects of curriculum, pedagogy and assessment.

UNIT-I: CURRICULUM PLANNING AND DEVELOPMENT

- Curriculum: Meaning, definitions, nature and scope; Historical perspectives on curriculum (differentiated curriculum, liberal curriculum, vocational curriculum, academic subject-based curriculum, mass curriculum, progressive curriculum, imperial curriculum).
- Approaches to curriculum: Behavioural, managerial, systems, academic, humanist and reconceptualization; Policy perspectives on curriculum: NPE1986 & 1992, NCF2005, NCFTE2009 and NEP2020.
- Curriculum theories: Structure-oriented, value-oriented, content-oriented, process-oriented; Basic principles of curriculum planning and curriculum construction; Foundations of curriculum development: Philosophical, socio-cultural and psychological.
- Models of curriculum planning and development: Technical-scientific models (Tyler Model & Taba Model), non-technical and non-scientific models, inter-personal relation (Carl Roger's) model, Deliberation Model.

UNIT-II: CURRICULUM TRANSACTION AND PEDAGOGY

- Approaches to curriculum transaction: Behaviourist approach, cognitivist approach, constructivist approach (Situating learning, cognitive apprenticeship, social mediation, negotiation and scaffolding); criteria for selecting a pedagogical strategy.
- Creating various learning situations and contexts: Inquiry based, discovery, discussions, explorative field-based activities, experiential learning, learning episodes, concept learning, concept mapping reflective learning, self-learning strategies.
- Cooperative and collaborative learning: Meaning and its role in curriculum transaction; Group learning, learning through projects and activities; Curriculum transaction in multicultural and multilingual classrooms.
- Transaction of critical issues: Social sensitivity, environmental concerns, gender concerns, attitudes and values, discrimination and social justice, developing critical thinking; Critical pedagogy: Meaning, nature, principles and transactional modalities.

UNIT-III: ASSESSMENT IN EDUCATION

- Assessment: Concept, nature and importance; Meaning of assessment in different contexts (behaviouristic and constructivist context); Differentiating test, examination, measurement, assessment and evaluation.
- Assessment for learning, assessment of learning and assessment as learning; Relationship between curriculum, pedagogy and assessment; Concept of authentic assessment.
- Role of assessment in realizing the curricular objectives; Use of assessment results as feedback in improving learners' performance, teaching performance, redesigning the instructional inputs, resources and learning environment.
- Assessing the learning of children with special needs; Alternative assessment modes (Performance-based assessment: Port-portfolio, rubrics, reflective diary, self-assessment and peer assessment); New trends in learning assessment.

UNIT-IV: ISSUES IN CURRICULUM, PEDAGOGY AND ASSESSMENT

- Centralized vs decentralized curriculum, concept and issues of common curriculum, Curriculum for the students with disabilities and special children: Issues and concerns.
- Problem related to curriculum load; Issues related to addressing the multicultural needs of children through curriculum.
- Pedagogical issues in addressing different levels of learning abilities; Problems related to lack of infrastructure, resources, and issues related to the pedagogical competencies of teachers.
- Issues and concerns related to assessment (continuous comprehensive evaluation, school-based assessment, board examination, grading system, quality of testing instruments, problems in e-assessment, and improper assessment practices etc.).

TEACHING LEARNING STRATEGIES:

Lecture cum discussion, Literature Reviews and Critiques, Research Seminars, Problem-Based Learning (PBL), Case Studies, Peer Review Process, Guest Lectures and Expert Talks, ICT integrated teaching-learning, Conferences and Presentations, Reflective learning, Collaborative learning, Self-study and Initiation of the dialogue by the More Knowledgeable Other (MKO).

ASSESSMENT FRAMEWORK

Assessment	Written Modes	Oral Modes	Integrated Modes
Formative Marks: 50	Class Test, Open Book Test, Self-Test, Online Test, Article Writing, Assignment, Reports, Portfolios, Article Review and Journal Writing	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Think-Pair-Share and Seminar	Presentation, Seminars, Field Assignments and Portfolios
Summative Marks: 50	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

SUGGESTED READINGS:

- Arora, G.L. (1984). *Reflections on Curriculum*. NCERT.
- Astin, A. W. (2012). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Rowman & Littlefield Publishers.
- Au, W. (2012). *Critical curriculum studies: Education, consciousness, and the politics of knowing*. Routledge.
- Compayré, G., & Payne, W. H. (2015). *The history of pedagogy*. Routledge.
- Dewey, John. (1966). *The Child and the Curriculum*. The University of Chicago Press.
- Erickson, H.L. (2002). *Concept-based Curriculum and Instruction*. Crown Press Inc.
- Freire, P. (1993). *Pedagogy of the oppressed: New revised 20th anniversary edition*. Continuum.
- Hart, D. (1994). *Authentic Assessment: A Handbook for Educators. Assessment Bookshelf Series*. Dale Seymour Publications.
- Henderson, J. (2015). *Reconceptualizing curriculum development*. Routledge.
- Igwebuike, T. B. (2014). *Curriculum planning and development: principles and practice*. Createspace Independent Pub.
- Joseph, P. B. (Ed.). (2011). *Cultures of curriculum*. Routledge.
- Kellaghan, T., & Greaney, V. (2001). *Using assessment to improve the quality of education*. UNESCO, International Institute for Educational Planning.
- Leighton, J., & Gierl, M. (Eds.). (2007). *Cognitive diagnostic assessment for education: Theory and applications*. Cambridge University Press.

- Malewski, E. (Ed.). (2009). *Curriculum studies handbook: The next moment*. Routledge.
- McKernan, J. (2007). *Curriculum and Imagination: Process, Theory, Pedagogy and Action Research*. Routledge.
- Murphy, P., Hall, K., & Soler, J. (Eds.). (2012). *Pedagogy and Practice: Culture and Identities*. Sage.
- NCERT (1998). *National Curriculum for Elementary and Secondary Education - A Framework*, NCERT.
- NCERT (2005). *National Curriculum Framework 2005*. NCERT.
- NCERT (2005). *Position paper on Teacher Education for Curricular Renewal*. NCERT.
- NCTE (2009). *National Curriculum Framework for Teacher Education 2009*. NCTE.
- Pirbhai-Illich, F., Pete, S., & Martin, F. (Eds.). (2017). *Culturally responsive pedagogy: Working towards decolonization, indigeneity and interculturalism*. Springer.
- Ridgway, J., McCusker, S., & Pead, D. (2004). *Literature review of e-assessment*. Future Lab.
- Taba Hilda (1962). *Curriculum Development: Theory and Practice*. Harcourt Brace, Jovanovich Inc.
- Turner, R. B. (2013). *Expert teaching: Knowledge and pedagogy to lead the profession*. David Fulton Publishers.
- Tyler, R. W. (2013). *Basic principles of curriculum and instruction*. University of Chicago press.
- UNESCO (2006). *Teachers and Educational Quality: Monitoring Global Needs for 2015*. UNESCO Publication.
- Wiles, J.W. & Joseph Bondi (2006). *Curriculum Development: A Guide to Practice*. Pearson Publication.
- Wyse, D., Hayward, L., & Pandya, J. (Eds.). (2015). *The SAGE handbook of curriculum, pedagogy and assessment*. Sage.

