Curriculum / Scheme of Studies

of

Bachelor of Education (1.5 Years)

B.Ed. (1.5 Years)

(2023)

University of Education, Lahore

Table of Contents

042-99019000

GOVERNMENT OF THE PUNJAB
SCHOOL EDUCATION DEPARTMENT

SECTION (SE-I)

Dated Lahore, the 16th May, 2023

NOTIFICATION

NO.SO(SE-I)1-105/2023: Pursuant to the recommendations of Qualification Equivalence Determination Committee (QEDC) in its meeting dated 16.05.2023, it is notified that MA Education, M.Ed. and BS Education are equivalent degrees to B.Ed.(4 years) / B.Ed. (Hons), BS.Ed (4 years degree) B.Ed. 2.5 years (after 14 years qualification) and B.Ed 1.5 years (after 16 years qualification) for the purpose of recruitment and for promotion of teachers. All these disciplines / nomenclatures are Professional as well as Academic and Vice Versa. ***The committee unanimously decided that the said decision will be enforced with immediate effect i.e. from the date of commencement of this QEDC.***

SECRETARY SCHOOL EDUCATION

NO. & DATE EVEN.

A copy is forwarded for information and necessary action to:-

1. The Accountant General, Punjab.
2. The Director Public Instruction (SE/EE), Punjab,Lahore/South Punjab, Multan.
3. All Acting Chief Executive Officers (DEAs), Punjab.
4. All Deputy Commissioners, Punjab.
5. All District Education Officers (SE/EE-M/EE-W), Punjab/South Punjab.
6. All the District Accounts Officers in Punjab.
7. Director Monitoring, CMMF, School Education Department.
8. PS to Secretary & Special Secretary, School Education Department/Multan.
9. PS/PA to Additional Secretary (Schools)/DEA/General/B&P.
10. PSO to Secretary, Regulations Wing, S&GAD.
11. Director Recruitment, Punjab Public Service Commission Lahore.
12. Controller of Examination, Lahore College for Women University, Lahore
13. Director, Institute of Education & Research, University of Punjab.
14. Director/Dean, Faculty of Education, University of Education, Lahore
15. Chairman Science Education, Dean Faculty of Social Sciences, University of Lahore.
16. PA to Deputy Secretary (SE), SED.

16/5/23

(ALI ASADULLAH)
SECTION OFFICER (SE-I)

GOVERNMENT OF THE PUNJAB
SCHOOL EDUCATION DEPARTMENT

SECTION (SE-I)

042-99212080

Dated Lahore, the 18th October, 2021

NOTIFICATION

NO.SO(SE-I)1-58/2015: Pursuant to the recommendations of Qualification Equivalence Determination Committee (QEDC), in its meeting held on 30.09.2020, it is notified that the degree of M.A (Education) may be considered as Academic as well as professional qualification.

SECRETARY SCHOOL EDUCATION

NO. & DATE EVEN.

A copy is forwarded for information and necessary action to:-

1. The Accountant General, Punjab, Lahore
2. The Principal Secretary to Chief Minister, Punjab, Lahore
3. The Director Public Instructions (SE/EE), Punjab, Lahore / South Punjab, Multan
4. All the Deputy Commissioners, in Punjab
5. All the Acting Chief Executive Officers (DEA), in the Punjab
6. All the District Education Officers (SE/M-EE/W-EE), in the Punjab
7. All the District Accounts Officers, in the Punjab
8. Deputy Director Monitoring, CMMF, School Education Department
9. PSO to Minister, School Education Department
10. PS to Secretary, School Education Department
11. PS to Special Secretary, School Education Department
12. PA to Additional Secretary (Schools/DEA) / Deputy Secretary (SE/EE), School Education Department
13. Order file / Personal files.

(MUHAMMAD MAZHAR ALVI)
SECTION OFFICER (SE-I)

HIGHER EDUCATION COMMISSION
H-9, Islamabad (Pakistan)
Phone: (051) 90402122, Fax: (051) 90402102,
E-mail: rabeel@hec.gov.pk

Assistant Director (Curriculum)

No. 9-1 (BEd)/Acad (Curri)/HEC/2018/1919

January 30, 2018

Subject: **Relevancy/Equivalency of BS (Hons) in Education to BEd (Hons) and MA Education**

Dear Sir,

Reference your application on the subject cited above. Your request was forwarded to relevant expert for consultation who opined as below:

"BS (Hons) in Education, BEd (Hons) 4 years, MA Education and MEd are equal degrees in terms of credit hours completed and number of schooling years".

With Best Regards,

Yours sincerely,

(Rabeel Bhatti)

Ms. Maryam,
University of Gujrat,
Gujrat.

Copy to:

- APS to Director General Attestation & Accreditation, HEC

Introduction

The B.Ed. Secondary 1.5 Program is designed for the candidates who have a 16-years content degree in any school subject and want to join the teaching profession or aspire for career in the field of Education. This program has all the strengths of B.Ed. 4 years program. Further, program offers cutting-edge and develops professional having specialized knowledge, skills, and attitude to towards teaching learning both in the public and private sectors.

The University of Education ***Vision*** is:

> *The university envisions generating academically, intellectually and socially vibrant graduates dedicated to the holistic research and development of the country*.

The B.Ed. Secondary 1.5 years program has been designed in line with UE vision to prepare *academically, intellectually and socially vibrant* teachers and professionals.

The professional education needs lifetime commitment and intensive training. Keeping the standard of professional education in view, a new B.Ed. 1.5 years program is introduced and presented in the subsequent pages. This program offers in-depth knowledge, and intensive training in required professional skills to the prospective leaders/teachers, alongside the development of their professional attitude. This program fully appreciates the National Professional Standards for Teachers in Pakistan, and the world's best practices for the development of teachers and professionals in field of education in near future.

A classroom teacher needs to be competent in the content areas as well as in teaching strategies in order to ensure expected student learning outcomes. Like in any profession, teachers should be provided the opportunity to practice teaching through interacting with the school and community. In the clinical model of developing teachers as professionals, it is deemed important for prospective teachers to gain adequate insights into the ground realities of school and classrooms through their close bond with school and the respective community. This rich experience of practice enables prospective teachers to bring a positive attitude in the classroom teaching and better understanding of the plurality of cultures.

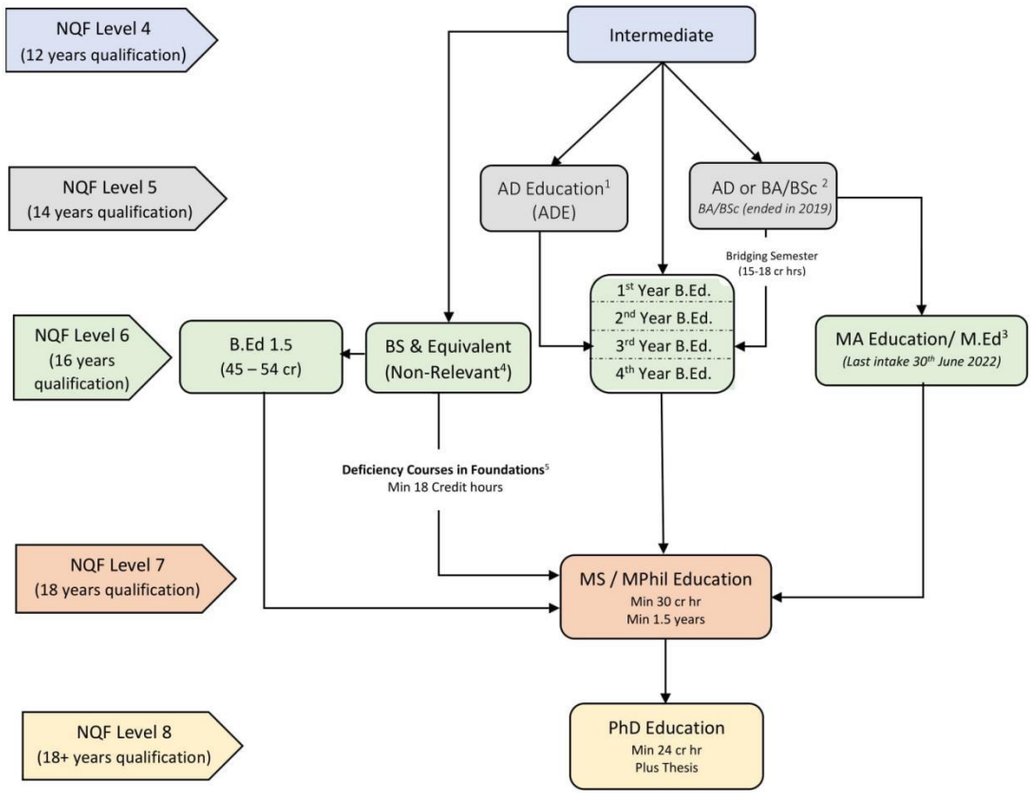
Practice teaching is the key joint responsibility of teacher training institutions, schools offering teaching practice to the prospective teachers, teacher educators, prospective teachers, and the school teachers. A short term teaching training will provide an opportunity to prospective teachers to extend their role in the school situation other than classroom teaching. During their teaching practice, prospective teachers, along with classroom teaching, can be engaged in administrative activities under the supervision of school management. These activities may include such as maintenance of school records and registers, management of laboratories and library, preparation of tests and assignments, admission and selection of students, and classroom management, etc.

Planning and carrying out an action research activity, engaging in courses like critical thinking and reflective practices, studying contemporary issues and trends in education and involvement of prospective teachers in practical/field work would greatly reduce isolation of the teacher and will develop the habit of inquiry into practice. This breakthrough is expected to facilitate the process of multiculturalism and pluralism in our education system to bring about social transformation in the society.

Hence, a blend of content (which the students already have – as they have 16-years degree in any school subject) and pedagogical courses, and courses focused on leadership and management has been provided in the scheme of study to prepare prospective teachers/leaders as professionals in education.

In addition, the program is based on the principal of choice and flexibility, as the program offers a range of major areas of specialization, so that students may choose major areas of their interest.

TEACHER EDUCATION ROADMAP



1. The candidates having Associate Degree in Education (ADE) are allowed to enroll in the 5th semester / third year of a four-year B.Ed. program.
2. The candidates having Associate Degree in disciplines other than that of Education or two-year erstwhile BA / BSc degrees (now defunct) shall be admitted in the 5th semester / third year of a four-year B.Ed. program after completing the deficiency courses (15-18 credit hours through a bridging semester) to be determined by the admitting university, on case to case basis.
3. **MA Education**, **M.Ed.** and **BS Education** are equivalent degrees to **B.Ed. 4 years / B.Ed. (Hons), B.Ed. 2.5** after 14 years qualification and **B.Ed. 1.5** after 16 years qualification for the purpose of employment and further education.
4. The graduates having sixteen (16) years or equivalent qualification in disciplines other than **Education** and desirous to acquire B.Ed. degree will be allowed for enrolment in B.Ed. 1.5 comprising of 45-54 credit hours course work.
5. The graduates having sixteen (16) years non-relevant qualification and desirous to acquire admission in MS/MPhil Education, shall be required to complete deficiency courses of minimum 18 credit hours as part of said degree program, to be determined by the admitting university, on case to case basis.
6. The nomenclature for Teacher Education Degrees shall **only** be **"Bachelor of Education (B.Ed.)"** from Fall 2023 onwards. The strands such as Early Childhood Education, Elementary and Secondary Education etc. and specializations like Curriculum, Assessment, Academic planning, Leadership, Guidance & Counseling, etc. shall be reflected on transcripts only and not on degrees.

HIDAYATULLAH KASI
Deputy Director
Higher Education Commission, Islamabad

Dated: December 30, 2022

Program Vision

The vision of B.Ed (1.5) years Program is to prepare outstanding future secondary school teachers, subject specialist for higher secondary classes.

The program vision is well aligned with the vision of UE, Lahore, which focuses *to prepare dynamic leaders and practitioners in teaching, research and management having content excellence, pedagogical competence, commitment, and integrity who may ensure quality and sustainable development at all tiers and sectors of education*. Overall, the program focusses to develop *academically, intellectually and socially vibrant graduates dedicated to the holistic research and development of the country.*

Program Mission

The mission of the B.Ed (1.5) Program is to produce elementary school teachers having content excellence, pedagogical competence, commitment, and integrity. More specifically, program focus is to prepare graduates having the knowledge, skills, and attitude to teach all subjects at elementary school, and pursue their career as professional in the fields of STEM Education, Educational Leadership and Management, Assessment and Evaluation, Curriculum and Instruction, Educational Psychology and Guidance, Child Devlopment and Early Childhood Education, Distance Learning and Non-Formal Education, and Educational Research Sustainable Devlopment through Education.

Program Objectives

The objectives of the B.Ed (1.5) years Program are in accordance with the university of Education goals and are focused to:

- Develop educational leaders and teaching practitioners who are critical thinkers, effective communicators, problem solvers, and lifelong learners.
- Prepare outstanding teachers who are capable to teach all elementary school subjects with the focus on excellence in content and pedagogy, commitment, and integrity.
- Develop visionary and dynamic educational leaders/managers for various school levels/roles who are competent enough to lead/manage the school effectively.
- Develop students as Instructional Leaders.
- Develop students' understanding of and attitude regarding the discipline of education as a lifelong learning process enabling them to devote time and energy to improve their knowledge and skills in the area.
- Enable the students to learn about modern instructional/assessment/management techniques and bring advancement in classroom practice.
- Enable the students to understand teacher education in global context.
- Provide equal learning opportunities to all students by offering an inclusive curriculum and learning environment.

- Enable students to learn conflict management, team building, and develop their personal leadership development plans.
- Produce specialized individuals expert in developing curriculum and evolving teaching strategies.
- Make students research oriented through involving them in teaching practice attached with an action research projects.
- Apply management skills in the classroom and institution.
- Select and use appropriate resource materials to make the learning context oriented and accessible to all students.
- Enable students to fulfill all disciplinary and practical learning requirements.
- Equip students with critical thinking, creative, and collaborative skills.
- Develop dynamic school teachers and leaders/managers capable to meet the 21st Century requirements at elementary school level.
- Enable graduates to uphold accountable and sustainable professional practices through observing moral behavior and civic responsibility.

Medium of Instruction and Examination

The medium of instruction will be English. All the students' assessments including Formative (Midterm Exams, Presentations, Assignments, Projects, etc.) and Summative (Final-term Exams, Final Projects), Research Projects will be designed and conducted in English. However the other language related subjects e.g. Urdu, Arabic, etc. that require instruction in language other than English would be taught/evaluated in the respective language.

Admission Requirements

16-year degree in any school subjects.

Degree Requirements

The B.Ed. (1.5 years) Program is comprised of three semesters. The students will be awarded the degree on completion of all the requirements that are mentioned in the assessment and examination regulations of the University of Education, Lahore.

Career Opportunities

The holders of this degree are able to serve as Secondary/Higher Secondary School Teachers, Head Teachers/Principals, Vice Principals, Section Heads, Education Officers, Coordinators, School Supervisors, and Educational Managers in public and private educational organizations. Further,

degree holders of this program would be able to serve as lecturers of Education at college level. Moreover, on the basis of this degree admission in M.Phil Education, M.Phil Educational Leadership and Policy Studies or in equivalent program may be secured.

The program is in accordance with the national and international standards with reference to the Pedagogy, Assessment, Teaching Practice, and number of Credit Hours. Therefore, holders of this degree are able to secure admission in Foreign Universities in the MS/M.Phil level degrees, and direct admission in Ph.D programs where Foreign Universities allow. Since, B.Ed (1.5) years Program is addition to their basic 16-years content degree, so these two degrees holders can apply for any post requiring 16-years general qualification in national and international organizations. There are good job prospect for this degree holders as teachers and academic leaders/managers at school level in the Middle East Countries. Because of rigorous focus on research in the program, this degree holders can secure the opportunities of assistant researchers/researchers in the research organizations at national and international level.

Teaching and Assessment Strategies

Faculty members are required to assess the students by following the University assessment and examination policy in true letter and spirit. However, faculty members can use different assessment techniques such as presentation, assignment, project, portfolio, action research, quiz, and informal assessment to achieve higher order learning according to the Bloom's Taxonomy to achieve the program objectives.

During teaching, faculty members are required to focus the constructivist approaches/student-centered approaches such as group work, project method, problem-solving, critical thinking, reflective thinking, self-directeded learning, discussion, fieldwork, case studies, creativity, inquiry-based learning to achieve the higher order learning according to Bloom's Taxonomy to achieve the program objectives.

Program Description (Major Area)		
Category	**No. of Courses**	**Credit Hours**
Professional Required Courses	10	30
Pedagogy Courses	02	06
Area of Specialization	03	09
Teaching Practice	02	06
Capstone Project	01	03
Total	**18**	**54**

MAJOR AREA

In this program General required courses, Allied or interdisciplinary courses are not the requirements thus only MAJOR area course are comprising of 18 courses relating to discipline and profession in field of education.

FIELD EXPERIENCE (9 Credit Hours)

The field experience is comprised of students spending time in the real classroom situation where they can observe the experience teachers and practice teaching in a supervised environment. The detail of the field experiences is detailed below

EDUC4114 Long Term Teaching Practice [6(0+6) Credit Hours]

This Teaching Practice will be organized for 8 weeks in the 8th semester of the program. The students will teach the classes under the supervision of school teacher. The assessment of Teaching Practice will comprise of classroom observations during the teaching practice. The weightage of the practice will be 6(0+6) credit hours and a maximum of 30 students will be assigned to a faculty member as Teaching Practice Supervisor.

CAPSTONE PROJECT (3 Credit Hours)

All students will complete a Capstone experience designed in consultation with their academic advisors. This could involve teaching as a guest or intern in K-12 schools, or as an undergraduate teaching assistant at UE; an internship at an NGO/ organization working in the field of education; developing educational materials; or research on learning and teaching, independently or as part of a faculty member's project. The weightage of the project will be 3(0+3) credit hours. The duration of the capstone project will be 6 weeks and offered in the 8th semester of the program. Along with this project graudate of this teacher education program will be required complete a certificate course of special education which will help in future for any inclusive teaching learning ste up.

MINOR (OPTIONAL)

In addition to a major, the minor is an option comprises of secondary concentration of courses, ordinarily in an academic discipline that complements the major. The students can opt for a minor in consultation with their Academic Advisor. The minor will be comprised of the courses of at least 12 credit hours. The students may opt for one or two minors keeping in the view their professional needs and interests.

Note: As minor the students may take any four courses of 3 credit hour each from any area of specialization (other than already chooses in Major Area).

SECOND MAJOR

In addition to the first major, the students can opt for a second major in consultation with their Academic Advisor. The second major will be comprised of the courses of at least 72 credit hours but not compulsory and may be offered on requirement of the student.

Professional Required Courses		
Course Code	**Course Title**	**Credit Hours**
EDUC3161	Assessment and Evaluation	3(3+0)
EDUC3111	Foundations of Education	3(3+0)

EDUC2118	Curriculum Design and Instruction	3(3+0)
EDUC3114	Educational Administration and Supervision	3(3+0)
EDUC3163	School and Classroom Management	3(3+0)
EDUC3112	Educational Psychology	3(3+0)
EDUC3164	Teaching Profession and Teachers' Professional Development	3(3+0)
EDUC3126	Research Methods in Education	3(3+0)
EDUC3165	Instructional and Communication Technology and Virtual teaching	3(3+0)
EDUC3146	Education for Sustainable Development	3(3+0)
	Total	**30**

Pedagogy Courses		
Course Code	**Course Title**	**Credit Hours**
EDUC2116	Teaching of General Science	3(3+0)
EDUC1113	Teaching of Social Studies	3(2+0)
EDUC2115	Teaching of English	3(3+0)
EDUC1114	Teaching of Urdu	3(2+0)
EDUC2111	Teaching of Mathematics	3(3+0)
EDUC3140	Methods of Teaching Islamic Studies	3(3+0)
	Total	**18**

List of Areas of Specialization

Study Tours:: *Depending upon the area of specialization students may visit any one or more than one institution/place to enhance their knowledge and gain real experience regarding different topics. This will give students the practical insight of the concepts they studied in the class and relate their knowledge with real practice. Students may visit on the below mentioned institutions/places or any other institution/place as decided jointlyby by the students, teacher, chairperson, and director with rationale:*

1. Institute of Policy Studies, Islamabad

2. Pakistan Institute of Education, Islamabad

3. National Parliament

4. Provincial Parliament

5. Higher Education Commission, Islamabad

6. National Accreditation Council for Teacehr Education, Islamabad

7. Punjab Higher Education Commission, Lahore

8. Higher Education Department, Lahore/Punjab Secreteriate

9. Punjab Education Foundation

10. Punjab Examination Commission

11. Quaid-e-Azam Academy for Educational Development, Lahore

12. National Academy of Higher Education, Islambad

13. Curricula and Textbook Board (CTB) - Curriculum Research and Development Centre (CRDC)/Punjab Textbook Board (PTB)

14. LUMS

15. GHQ Rawalpindi

1- STEM Education		
Course Code	**Course Title**	**Credit Hours**
EDUC3199	Growth Mindset for STEM Teachers	3(3+0)
EDUC3200	Instructional Scaffolding in STEM Education	3(3+0)
EDUC3201	Integrating STEM Education Methods	3(3+0)
EDUC3202	Introduction to STEM Education	3(3+0)
EDUC3203	Statistics for Teachers	3(3+0)
EDUC4152	Inquiry-Based Learning in STEM	3(3+0)
EDUC4153	STEM Curriculum Design and Instructional Materials	3(3+0)
EDUC4154	STEM Education Research and Trends	3(3+0)

2- Education Leadership and Management		
Course Code	**Course Title**	**Credit Hours**
EDUC3131	Introduction to Educational Leadership and Management	3(3+0)
EDUC3148	Instructional Leadership and Program Evaluation	3(3+0)
EDUC3166	E-Leadership and New Educational Trends	3(3+0)
EDUC4146	Organizational Behaviour in Education	3(3+0)

EDUC4124	Economics and Financing of Education	3(3+0)
EDUC4149	Quality Assurance in Education	3(3+0)
EDUC3151	Educational Law	3(3+0)
EDUC3194	Educational Policies of Pakistan	3(3+0)
EDUC3195	Educational Plans of Pakistan	3(3+0)
EDUC3196	Educational Policy Development	3(3+0)
EDUC3197	Policy Implementation in Education	3(3+0)

3- Assessment and Evaluation		
Course Code	**Course Title**	**Credit Hours**
EDUC5133	Theories and Models of Assessment and Evaluation	3(3+0)
EDUC5134	Test Development and Appraisal	3(3+0)
EDUC5135	Techniques of Formative Assessment in Education	3(3+0)
EDUC5136	Alternative Assessment	3(3+0)
EDUC5123	Standard Setting in Assessment	3(3+0)
EDUC4155	Dynamic Testing	3(3+0)
EDUC4156	Virtual, Blended, and Computer-Assisted Assessment	3(3+0)

4- Curriculum and Instruction		
Course Code	**Course Title**	**Credit Hours**
EDUC3174	Curriculum Development and Sustainable Education	3(3+0)
EDUC3175	Curriculum Development Designs and Models	3(3+0)
EDUC3176	Textbook and Instructional Materials Development	3(3+0)
EDUC3173	Curriculum Change and Innovation	3(3+0)
EDUC3177	Contemporary Issues in Curriculum and Practice	3(3+0)
EDUC4157	Curriculum Theories and Practices	3(3+0)
EDUC4158	Technology Integration in Curriculum Development	3(3+0)
EDUC4159	Interdisciplinary Approaches to Curriculum	3(3+0)
EDUC4160	Curriculum Evaluation and Revision	3(3+0)
EDUC4161	Designing for Diversity: Inclusive Curriculum Development	3(3+0)

5- Educational Psychology and Guidance		
Course Code	**Course Title**	**Credit Hours**
EDUC3168	Understanding learners' Psychology	3(3+0)
EDUC3169	Human Development	3(3+0)
EDUC3170	Learning theories and practices	3(3+0)
EDUC3171	Introduction to Cognitive Psychology	3(3+0)
EDUC3172	Psychology of Individual differences	3(3+0)
EDUC3185	Introduction to Guidance	3(3+0)
EDUC3186	Introduction to Counseling	3(3+0)
EDUC3187	Guidance and Counseling in Educational Institutions	3(3+0)
EDUC3188	Educational and Vocational Guidance and Counseling	3(3+0)
EDUC3189	Assessment of Individuals for Guidance and Counseling	3(3+0)

6- EARLY CHILDHOOD EDUCATION		
Course Code	**Course Title**	**Credit Hours**

EDCE1111	Language and Literacy Development in Early Years	3(2+1)
EDCE1112	Approaches to ECE Curriculum and Pedagogy	3(3+0)
EDCE1113	Play in Young Children Classroom	3(3+0)
EDCE1114	Math, Nature and Science in ECE Classroom	3(3+0)
EDCE1115	Arts in Young Children's Classroom	3(2+1)
EDCE1116	Cognitive Development in Young Children	3(2+1)
EDCE1117	Socio-Emotional Development of Children	3(2+1)
EDCE1118	Early Childhood Education Curriculum	3(3+0)
EDCE1119	Assessment for Young Children	3(3+0)
EDCE2111	Parenting and Children Growth and Development	3(2+1)

7- Distance Learning and Non-Formal Education		
Course Code	**Course Title**	**Credit Hours**
EDUC3204	The System of Distance and Non-Formal Education	3(3+0)
EDUC3205	Project Management for Online Learning	3(3+0)
EDUC3206	Digital Literacy and Information Skills	3(3+0)
EDUC3207	Practicum in Distance Education (Hands-on Experience and Application)	3(3+0)
EDUC3208	Trends and Innovations in Distance Learning	3(3+0)
EDUC4162	Designing a Distance or Non-Formal Education Program	3(3+0)
EDUC4163	Foundations of Distance Education	3(3+0)
EDUC4164	Educational Outreach And Community Engagement	3(3+0)
EDUC4165	Non-Formal Techniques and Tools	3(3+0)

8- Educational Research and Statistics		
Course Code	Course Title	**Credit Hours**
EDUC4121	Research Designs in Education	3(3+0)
EDUC4122	Qualitative Research Methods in Education	3(3+0)
EDUC4123	Research Instrument Development and Analysis	3(3+0)

EDUC3209	Quantitative Research Methods in Education	3(3+0)
EDUC3210	Mixed Methods Research in Education	3(3+0)
EDUC4166	Applied Statistical Procedures in Education	3(3+0)
EDUC4167	Research Writing and Publication in Education	3(3+0)
EDUC4168	Research Proposal Writing in Education	3(3+0)
EDUC4169	Experimental Designs in Educational Research	3(3+0)

9- Sustainable Development through Education		
Course Code	**Course Title**	**Credit Hours**
EDUC4132	Leadership and Sustainable Development	3(3+0)
EDUC4133	Peace Education for Sustainable Future	3(3+0)
EDUC4150	Active Citizenship and Cultural Preservation through ESD	3(3+0)
EDUC3116	Environmental Education and Sustainability	3(3+0)
EDUC3167	Teacher Education for Sustainable Development	3(3+0)
EDUC4170	Women Empowerment and Sustainable Development	
EDUC4171	Social Justice in Education	
EDUC4174	Economic Sustainability for a Changing World	

Semester Break Up

B.Ed 1.5 years

Semester-I			
Course Code	Course Name	Course Category	Credit Hours
EDUC3161	Assessment and Evaluation	Professional Required Course	3
EDUC3111	Foundations of Education	Professional Required Course	3
EDUC2118	Curriculum Design and Instruction	Professional Required Course	3
EDUC3114	Educational Administration and Supervision	Professional Required Course	3
EDUC3163	School and Classroom Management	Professional Required Course	3
EDUC3112	Educational Psychology	Professional Required Course	3
Total Credit Hours=18			

Semester-2			
Course Code	Course Name	Course Category	Credit Hours
EDUC3164	Teaching Profession and Teachers' Professional Development	Professional Required Course	3
EDUC3126	Research Methods in Education	Professional Required Course	3
EDUC3146	Education for Sustainable Development	Professional Required Course	3
	Instructional and Communication Technology and Virtual Teaching	Professional Required Course	3
EDUC4113	Capstone Project	To be credited in next semester	-
	Paedagogy-1		3
	Paedagogy-2		3
Total Credit Hours=18			

Semester-3			
Course Code	Course Name	Course Category	Credit Hours
	Area of specialization Course -1	Area of specialization	3
	Area of specialization Course -2	Area of specialization	3
	Area of specialization Course -3	Area of specialization	3
EDUC4173	Capstone Project		3
EDUC4114	Teaching Practice		6
Total Credit Hours=18			

Course Outlines

Professional Required Courses

Course Code	Course Title	Credit Hours
EDUC3161	**Assessment and Evaluation**	**3(3+0)**

Course Description

The objective of the Classroom Assessment course is to provide undergraduates with a comprehensive understanding of assessment practices and methodologies in the educational setting. This course analyzes the fundamental principles and practical strategies for conducting effective classroom assessments, with an emphasis on the assessment's role in supporting student learning and enhancing instruction.

Course Objectives

Prospective teachers will:

1. Understand the fundamental principles and purposes of assessment in the classroom, as well as its role in promoting student learning and enhancing instruction.
2. Recognize and differentiate between formative and summative assessment strategies, and select appropriate assessment methods based on specific learning outcomes.
3. Develop valid, reliable, and authentic assessments that are aligned with measurable learning goals.
4. Demonstrate expertise in developing various assessment tools, including rubrics, questionnaires, rating scales, and technology-based assessment tools.
5. Provide students with timely, constructive feedback to enhance their academic performance and learning experiences.
6. Utilize assessment data to inform instructional planning and decision-making by analyzing assessment data to identify teaching and learning trends, strengths, and opportunities for improvement.

Student Learning Outcomes

After completing this course successfully, the prospective teachers will be able to:

1. Elaborate the Role of Assessment in Teaching
2. Use a common classroom assessment procedure.
3. Construct selection and supply type test items
4. Create precise, measurable, and aligned learning objectives, and use them to inform the design of valid and reliable assessment instruments.
5. Construct a variety of instruments for measuring performance, including rubrics, questionnaires, rating scales, and technology-based assessments.
6. Offer students constructive and actionable feedback, along with suggestions for improvement, and foster a positive learning environment.
7. Analyze assessment data to identify student strengths and areas for improvement and use this information to inform instructional planning and adaptation.

Course Contents

1. The Role of Assessment in Teaching
1.1. The Bigger Picture Context of Classroom Assessment
1.2. Integrating Instruction and Assessment
1.3. Components of Classroom Assessment
1.4. Teachers' Classroom Assessment and Grading Practices Decision Making
2. Learning Targets
2.1. Taxonomies of Educational Objectives
2.1.1. Bloom’s Taxonomy of Objectives
2.1.2. Bloom’s Revised Taxonomy of Objectives
2.1.3. SOLO Taxonomy
2.2. Types of Knowledge Targets

11.1.2. Value Targets
11.1.3. Motivation Targets
11.1.4. Self-Concept Targets
11.1.5. Self-Efficacy Targets
11.2. Methods of Assessing Noncognitive Disposition and Skills
11.2.1. Teacher Observation
11.2.2. Teacher Interviews
11.2.3. Student Self-Report Questionnaire and Surveys
11.2.4. Student Self-Assessment
12. Grading and Reporting Student Performance
12.1. Functions of Marking and Grading
12.2. Approaches to Marking and Grading
12.2.1. Letter Grades
12.2.2. Percentage Correct
12.2.3. Rubrics/Checklist
12.2.4. Standards/Grades
12.2.5. Written Descriptions
12.3. Determining Report Card (Composite) Grades
12.4. Reporting Student Performance to Parents
12.4.1. Report Card
12.4.2. Progress Report
12.4.3. Parent-Teacher Conference
12.4.4. Student Led Conference

Teaching/Learning Strategies

1. Lecture method followed by discussion and question answer method.
2. Cooperative learning
3. Student course portfolio
4. Assignments and presentations / quizzes based on the content of the course outline and project
5. Field trips of Institutions related to Assessment like NACTE, BISE, PEC etc and diffirent schools in Public and Pvt sector. Students will observe their mechanisms, Organizartional Structure, Procedures etc, and submit their report at the end of semester for evalution. The Purpose of this trip is to get familar with the national institutions and their assessment procedures and tools and strategies.

Recommended Resources

1. McMillan, J. H. (2021). Classroom Assessment: Principles and Practice for Effective Standards-Based Instruction (6th ed.). Pearson.
2. Popham, W. J. (2019). Classroom Assessment: What Teachers Need to Know (8th ed.). Pearson.
3. Stiggins, R. J., Chappuis, J., & Arter, J. (2015). Classroom Assessment for Student Learning: Doing It Right - Using It Well (2nd ed.). Pearson.
4. Brookhart, S. M. (2018). How to Assess Higher-Order Thinking Skills in Your Classroom. ASCD.
5. Wormeli, R. (2018). Fair Isn't Always Equal: Assessing & Grading in the Differentiated Classroom (2nd ed.). Stenhouse Publishers.
6. Black, P., & Wiliam, D. (1998). Inside the Black Box: Raising Standards Through Classroom Assessment. Phi Delta Kappa Educational Foundation.
7. Guskey, T. R. (2015). On Your Mark: Challenging the Conventions of Grading and Reporting. Solution Tree.

8. Chappuis, J., Stiggins, R. J., Chappuis, S., & Arter, J. (2012). An Introduction to Student-Involved Assessment FOR Learning (7th ed.). Pearson.
9. Brookhart, S. M. (2019). How to Give Effective Feedback to Your Students (2nd ed.). ASCD.
10. Wiggins, G. (2012). Seven Keys to Effective Feedback. ASCD.

Course Code	Course Title	Credit Hours
EDUC3111	**Foundations of Education**	**3(3+0)**

Course Description

This course enables the students to describe the elements and process of education. The students will be able to comprehend education in philosophical, psychological, sociological, and economic perspectives. The course will also enable them to discuss the views of educational thinkers. It will help students to discuss the educational initiatives from 2002 to date.

Course objectives

After completion of this course, the students will be able to:

- understand and analyze the elements and the process of education
- comprehend the process of education in philosophical, psychological, sociological, and economical perspectives
- discuss the philosophical thoughts of educational thinkers
- discuss the significant educational initiatives from 2002 to date

Course Contents

1 Concept, Types and Process of Education
1.1 Concept of Education – Meaning, Scope and Importance
1.2 Modes of Education – Informal, Formal and Non-formal
1.3 Elements of the Process of Education
1.3.1 Aims and objectives
1.3.2 Curriculum
1.3.3 Pedagogy
1.3.4 Evaluation
2 Philosophical Perspective of Education
2.1 What is philosophy? Explaining Educational Philosophy
2.2 Branches of Philosophy
2.2.1 Ontology
2.2.2 Epistemology
2.3.1 Axiology
2.3. Styles of Philosophy
3 Educational Philosophies (Assumptions, curriculum, role of teacher and student, classroom management, and evaluation)
3.1 Perennialism
3.2 Progressivism
3.3 Essentialism
3.4 Social Reconstructionism
4 Psychological Perspective
4.1 Educational Psychology: Concept and meaning
4.2 Role of Psychology in Learning
4.3 Role of Psychology in Teaching
5 Socio-economic Perspective
5.1 Educational Sociology: Concept and meaning
5.2 Sociological Roles in Education (conservative, critical and creative)
5.3 Social functions of Education
5.4 Education as investment
5.5 Education and economic development

6. Historical Perspective
6.1 Education in Primitive Societies
6.2 Pioneers in Education
6.2.1 Friedrich Froebel
6.2.2 Herbert Spencer "
6.2.3 Maria Montessori
6.2,4 John Dewey
6.3 Muslim Educational Thinkers
6.3.1 Imam Ghazali
6.3.2 Ibn -e-Khaldun
6.3.3 Allama Muhammad Iqbal
6.4 Development of Education in British Period
6.5 Educational movements in history
7. Significant Educational Policies and Initiatives
7.1 National Educational Policies
7.2 Education Sector Reform
7.3 Current education status
7.4 Vision 2025
Teaching and Learning Strategies
• In general, collaborative, and interactive approaches. Discussion/assignments/ presentations, projects using "learner-centered" methods.
• "Reflective Journals" on each session
• Maintaining course portfolios.

Teaching and Learning Strategies

- In general, collaborative, and interactive approaches. Discussion/assignments/ presentations, projects using "learner-centered" methods.
- "Reflective Journals" on each session
- Maintaining course portfolios.
- Filed Trips related to relavent topics may be arranged and students may submit a report at the end of semester.

Suggested Readings

Bhatt, S. R. (2018). Philosophical Foundations of Education. In *Philosophical Foundations of Education* (pp. 17-23). Springer, Singapore.
Ornstein, A. C., Levine, D. U., Gutek, G., & Vocke, D. E. (2016). *Foundations of education*. Cengage Learning.
Chesky, N. Z., & Wolfmeyer, M. R. (2015). *Philosophy of STEM education: A critical investigation*. Springer.
Newell, T. (2014). *Five paradigms for education: Foundational views and key issues*. Springer.
Semel, S. F. (2010). Foundations of education: The essential texts. USA: Routledge
Provenzo, E. F., Renaud, J. P., & Provenzo, A. B. (Eds.). (2009). *Encyclopedia of the Social and Cultural Foundations of Education: AH; 2, IZ; 3, Biographies, visual history, index* (Vol. 3). Sage.
Goldblatt, P.F., & Smith, D. (2005). Cases for teacher development. New York: Sage Publications.
Gutek, G. L. (2004). Philosophical and Ideological Voices in Education. Boston: Pearson.

Course Code	Course Title	Credit Hours
EDUC2118	Curriculum Design and Instruction	3(3+0)

Course Description

This course is intended to orient the prospective teachers about the principle, process and procedure of curriculum design and development. The participants will be informed about various foundations on which the curriculum is based, defining, and delineating the objectives, selection of content, its scope and outcomes, teaching strategies, curriculum evaluation, design of instructional materials. This course will also include various factors that affect the process of curriculum development and implementation. Students will be provided exposure to various curriculum development models and theories to enhance their understanding. The course will be delivered within the context of existing curriculum and the bodies and procedures adopted for curriculum development process in Pakistan.

Learning Outcomes

At the end of the course, the students will be able to:

- Comprehend the elements of curriculum
- Understand various process and models of curriculum development
- Analyze the patterns of curriculum organization
- Know the Process of curriculum change
- Understand the process of curriculum development in Pakistan at different stages.
- Evaluate the curriculum and instruction

Course Outline

1. Concept of Curriculum

1.1 Definition of curriculum

1.2 Relationship between curriculum and instruction

1.3 Curriculum, syllabus, textbooks

2. Foundations of Curriculum Development

2.1 Philosophical

2.2 Psychological

2.3 Sociological

2.4 Historical

3. Models of Curriculum Development

3.1. The Tyler Model

3.2. The Wheeler Model

3.3. Lawton's Model

4. Process of Curriculum Development

4.1 Formulating educational objectives

4.1.1 Aims, goals, and objectives

4.1.2 Bloom's Taxonomy

4.1.3 Solo Taxonomy

4.1.4 Criteria for selection of Educational Objectives
4.2 Content / Subject Matter Selection

4.2.1 Criteria for content selection

4.2.2 Methods of content selection

4.3 Content organization

4.4 Teaching Methodology

4.5 Curriculum Evaluation
4.5.1 Formative evaluation

4.5.2 Summative evaluation

5. Patterns of Curriculum
5.1 Child-centered Curriculum

5.2 Subject-centered Curriculum

5.3 Core curriculum

5.4 Integrated Curriculum

5.5 Hidden Curriculum

6. Curriculum Development in Pakistan

6.1. At Elementary level

6.2. At Secondary level

6.3. At Higher education level

6.4. Role of Ministry of Education, Curriculum Wing, and Textbook Boards

6.5. Role of HEC in Curriculum Development

7. Role of Teacher in Curriculum Implementation

8. Trends in Curriculum Development

9. Issues and Problems of Curriculum Development in Pakistan

Teaching and Learning Strategies

- In general, collaborative, and interactive approaches. Discussion/assignments/ presentations, projects using "learner-centered" methods.
- "Reflective Journals" on each session
- Maintaining course portfolios.
- Filed Trips related to relevant topics may be arranged and students may submit a report at the end of the semester. The objective of the field trip to a local elementary school is to provide students with an immersive and practical experience in observing, analyzing, and understanding the application of curriculum design and instructional strategies in an authentic educational setting. Students may visit various offices such as ministry of education, curriculum wing, text book board and HEC for better understanding of their roles.

Recommended Books

Adeoye, E. A. (2007). Curriculum development: Theory and practice. Lagos: National Open University of Nigeria.

Bharvad, A. J. (2010). Curriculum evaluation, International Research Journal, 1, 72–74.

McKimm, J. (2007). Curriculum design and development.

Nunan, D. (2000). Syllabus design. Oxford: Oxford University Press.

Oliva, P. F. (2009). Developing the curriculum (7th Ed.). Boston: Allyn & Bacon Boyle, B., &

C, harles .M (2019) **Curriculum Development: A Guide for Educators** (Ist Ed.). New York: Sage Publications.

Wiles, J. W. & Bondi, J. C. (2011). Curriculum development: A guide to practice (8th Ed.). Boston: Allyn & Bacon.

Course Code	Course Title	Credit Hours
EDUC3114	Educational Administration and Supervision	3(3+0)

Course Objectives

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

- Understand the importance of administration in the overall efficiency of the institution.
- Select and adopt effective and efficient strategies for performing administrative functions
- Provide guidance in instructional as well as non-instructional tasks.
- Explain the meaning and concept of classroom management
- Apply various management techniques to assist learners to be responsible for their classroom behavior
- Analyze classroom situations to minimize behavioral problems
- Organize learning within a classroom environment to maximize available resources and space according to a variety of ages and grade levels of learners
- Maintain an effective teaching-learning environment.

Course Contents

1 Introduction

1.1 Concept of Administration and management
1.2 Understanding the concept of Educational Administration and management
1.3 Need, rationale and significance of Educational Administration and Management
1.4 Difference between Educational Administrator and Educational Manager
1.5 Understanding the Management theories for better management
1.6 Understanding the management and Administrative Process

2 **Features of Educational Administration (Instructional and Organizational Tasks)**

2.2 Needs Identification and Analysis
2.3 Goals and Objectives
2.4 Environment for learning
2.5 Planning for improvements
2.6 Classroom Management
2.7 Managing School Environment
2.8 Managing time- table
2.9 Managing staff
2.10 Managing School Records
2.11 Interpersonal Relationship
2.12 Managing School Discipline
2.13 Observing professional ethics
2.14 Structuring Personnel Function
2.15 School Facilities
2.16 Operations and Services
2.17 Budgeting and Financing
2.18 Evaluation and Accountability

3 Educational Leadership

3.1 The nature of leadership
3.2 Types of Leadership in administration
3.2.1 Authoritarian/ Task centered
3.2.2 Democratic *I* people centered
3.2.3 Laissez- faire
3.2.4 Islamic concept
3.3 Leadership styles

4 Concept of Leadership

4.1. Leadership defined
4.2. Ways of conceptualizing leadership
4.3. Definition and components
4.4. Leadership described
4.5. Trait versus process leadership
4.6. Assigned versus emergent leadership
4.7. Leadership and power
4.8. Leadership and coercion
4.9. Leadership and management

5 Theories of Leadership and Management

5.1 Trait Approach

5.2 Skill Approach

5.3 Behavioral Approach

5.4 Situational Approach

5.5 Content and process theories of motivation

6 Careers in Educational Administration

6.1 The concept of career

6.2 Career stages (Apprentice, independent contributor, Mentor, sponsor)

6.3 Managing career stress

6.4 Career Development

Teaching Strategies

- Lecture method followed by discussion
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline.
- Students may plan and execute various co-curricular activites that are held at school level. Such as organize a cultural event, debates, drama, mushaira, Seerat Conference, Educational Trips of historical places such as Harapa, Muhinjodaro, Badshahi Mosque, Meusums etc relevant to the schools syllabus od secondary and elementary level. A visit of Local schools may also be arraganeged to take filed notes and classroom observations to promote research, critical thinking, scientific enquiry and observational skills

Suggested Readings

Bovee, L.C and others (1993) *Managem*ent .New York: McGraw Hill Inc

Bulin, G.J. (2001). *Supervision: Skills for Managing Work and Teaching People* Delhi: AITBS Publishers.

Burden, P(1995).*Classroom Management and Discipline*. New York: Longman.

Hoy , W.K.& Miskel, G.C. (1996)*Educational Administration, Theory, Research & Practice*. New York: McGraw Hill Inc.

Lunenberg, F. C., & Ornstein, A. C (1996) *Educational Administration*. Beltmore: Wadsworth Publishing Company

Nolan, J. and Hoover, L.A.(. 2005) *Teacher Supervision and Evaluation: Theory into Practice*, New York: John Wiley & Sons

Garrett, Tracey. (2014). Effective Classroom Management-The Essentials. NewYork: Teachers College Colombia University

Harry,K,Wong & Romerry, T, Wong. (2018). The Classroom Management 2nd Ed. USA: Harry.K.Wong Publications.

Robbins, S.P.(1996)*The Administrative Process*. Sydney: Prentice Hall

Charles.H. J.& Lotus. D.C. (2007) Educational Administration and Supervision: Harvard university , Warwick & York Publishers Limited

Herman . C. G. (2007) School Administration and Supervision: University of California, Garcia R.P. Publishers Ltd.

Amadi-Eric.C. (2008) Introduction to Educational Administration: A Module: Rivers State University of Science and technology, Harey Publications Port Harcourt

Course Code	Course Title	Credit Hours
EDUC3163	School and Classroom Management	3(3+0)

Course Description

This course focuses on developing effective elementary school leaders. The aim of the course is to make prospective teachers well acquainted with the process of running school and classroom in effective and efficient manner besides being well versed with the duties and responsibilities of the head teachers. The course covers knowledge about school and management and organization; function of head teachers, record keeping and school-community relations related matters.

Learning Outcomes

After completing this course prospective teachers will be able to:

- Manage and plan school academic matters effectively
- Manage and plan school budget matters effectively
- Manage and plan students affairs related to co-curricular activities
- Manage library and instructional material related matters
- Manage and plan school – communication and community relationship activities within and outside the school.
- Maintenance and management of school infrastructure and programs.
- Explain the meaning and concept of classroom management
- Demonstrate the establishment of a constructive classroom learning environment
- Apply various management techniques to assist learners to be responsible for their classroom behavior
- Demonstrate classroom organization to increase student motivation
- Analyze classroom situations to minimize behavioral problems
- Organize learning within a classroom environment to maximize available resources and space according to a variety of ages and grade levels of learners and

Course outline:

Unit 1: Introduction

1.1 Definition and concept of organization, administration and management
1.2 Importance and impact of effective management
1.3 Elements of management

Unit 2: Role of Head Teacher as Manager

2.1 Head teacher and children
2.2 The head teacher and teachers
2.3 Working with parents
2.4 Head teacher and supporting staff
2.5 Developing and planning yearly calendar for school activities
2.6 Assigning roles to staff
2.7 Monitoring and supervising curriculum
2.8 Curriculum revision
2.9 Planning activities to promote health and safety measures
2.10 Planning and aligning co-curricular activities with yearly calendar

Unit 3 Management structure and Communication in schools

3.1 Management arrangement
3.2 Collective responsibility
3.3 A senior management team
3.4 The deputy heads
3.5 The art of delegation
3.6 Appraisal criteria
3.7 Meetings in school (preparation, conduct and recording the proceedings)

3.8 Establishing a communication network

Unit 4: Record keeping in schools

4.1 Attendance record
4.2 Enrollment record
4.3 Examination record
4.4 Financial records
4.5 Maintaining stock registers
4.6 School registers

Unit 5: Day to day concerns

5.1 School day activities
5.2 Arranging the classes
5.3 Staffing arrangement
5.4 In time directions to address day needs
5.5 Conflict management
5.6 Maintenance of building
5.7 maintenance of Library
5.8 maintenance of play ground
5.9 maintenance of horticulture

Unit 6: Introduction to Classroom Management

6.1 Elements of "classroom management" in the context of elementary education
6.2 Variety of roles of the teacher in managing the elementary classroom
6.3 Impact/outcomes of various kinds of classroom organization on student behavior
6.4 Classroom activity for managing learning
6.5 Organizing and managing field trips and class visits
6.6 Record-keeping systems: their establishment and maintenance

Unit 7: Effective Learning Classroom

7.1. Identifying resources for learning
7.2. Using displays and visuals for enhancing the learning environment in the classroom
7.3. Seating arrangements for learning experiences
7.4. Physical facilities to enhance the learning environment
7.5. Evaluating the effective learning classroom
7.6. Managing the overcrowded classroom
7.7. How to maximize student success and minimize behavioral problems in the classroom
7.8. Incentive systems in the classroom setting
7.9. Creating a positive classroom environment for student responsibility
7.10. Strategies for managing potential disciplinary issues before they become problems

Teaching Strategies

- Lecture method followed by discussion
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline.
- Students may plan and execute various co-curricular activites that are held at school level. Such as organize a cultural event, debates, drama, mushaira, Seerat Conference, Educational Trips of historical places such as Harapa, Muhinjodaro, Badshahi Mosque, Meusums etc relevant to the schools syllabus od secondary and elementary level. A visit of Local schools may also be arraganeged to take filed notes and classroom observations to promote research, critical thinking, scientific enquiry and observational skills

Recommended Books:

Burden, P. (1995) *Classroom Management and Discipline*. New York: Longman.
Hoy, W.K. & Miskel, G.C (1996) *Educational Administration*: Theory Research and Practice, (5th ed.) New York: McGraw Hill Inc.

Lunenburg & Ornstein,(2004) *Educational Administration: Concepts and Practices Tony Bush: Theories of Educational management*.
Robbins, S.P. (1996). *The Administrative Process*. Sydney: Prentice Hall.

http://712educators.about.com/od/discipline/tp/disciplinetips.htm
Top Ten Tips for Classroom Discipline and Management
http://www.adprima.com/managing.htm
Effective Praise Guidelines

Course Code	Course Title	Credit Hours
EDUC3112	Educational Psychology	3(3+0)

The purpose of this course is to develop understanding of pre-service teachers to use suitable teaching strategies to address learners' needs. These psychological principals help pre-service teachers to understand the different psychological concepts to cater the needs of the learners. This course concentrates on core concepts and principles of psychology to cater the needs of the learners by keeping in mind their unique characteristics.

Learning Outcomes

By the end of the course students should be able to:

- Describe in detail the psychological principals to facilitate students in the learning process.
- Explain basic learning theories derived from psychology to understand the learning needs of the learners.
- Develop child-centered approach to teach students with diverse needs.
- Understand the concept of guidance and counselling and its application
- Understand the basics of educational psychology

Course Outline

1. Introduction to Psychology

1.1. Introduction to Psychology
1.2. Nature and functions of Educational Psychology

2. Introduction to Growth and Development

2.1. Overview of Growth and Development
2.2. Nature and Nurture controversy
2.3. General Principles of Human Development
2.4. Factors influencing Child Development
2.5. Piaget's and Vygotsky's views on Cognitive Development
2.6. Erikson's theory of Psycho-social development
2.7. Kohlberg's theory of Moral Development

3. Learning Theories and its Applications

3.1. Definition of learning, scope and concept
3.2. Learning theories (Cognitive, Behaviorist, Humanistic and Constructivist Approach).
3.3. Application of learning theories in education
3.4. Factor influencing learning

4. Individual Differences

4.1. Understanding the Individual Differences in relation to Heredity and Environment.
4.2. Children with special needs.
4.3. Teaching Strategies to deal with individual differences of learners.

5. The Cognitive Processing

5.1. The information processing Approaches
5.2. Memory and Forgetting
5.3. Methods to improve memory
5.4 Complex cognitive processes
5.5. Transfer of Learning

6. Motivation

6.1. Definition and Types of Motivation
6.2. Role of Motivation in the learning process
6.3. Factors Influencing Motivation
6.4. Maslow Hierarchy of Needs
6.5. Motivational Techniques in teaching

7. Intelligence

7.1. Concept of intelligence
7.2. Theories of intelligence
7.3. Individual differences in intelligence

8. Guidance and Counseling in Education

8.1. Concept of Guidance and Counseling
8.2. Need of Guidance and Counseling in Schools
8.3. Types of Guidance (Educational, Vocational and Personal)
8.4. Principles of Guidance and Counseling
8.5. Difference between Guidance and Counseling

Recommended Books

Duchesne, S., McMaugh, A. & Mackenzie, E. (2022) *Educational Psychology: For Learning and Teaching*. Melbourne: Cengage.

Anita Woolfolk, (2018) *Educational Psychology,* 14th edition. Pearson.

Tinega, C. (2021). *Guidance and Counselling: A Handbook for Teachers and Students*. Nsemia Incorporated.

Santrock, J.W. (2015) "*Educational Psychology*", 5th edition. Boston: McGraw Hill.

Jeane, (2010) *Educational Psychology: Developing Learners*: Pearson

Cook, J., & Cook. (2010). *"The World of Children"*, 2nd edition. Boston, M A. Parson Education Inc.

Course Code	Course Title	Credit Hours
EDUC3164	Teaching Profession and Teachers' Professional Development	3(3+0)

Course Description

The purpose of this course is to develop teaching skills with flexible continuing professional development (CPD) techniques to teachers. By developing understanding about professional development theories pre-service teachers can prepare themselves according to the future teaching into diverse context. This course will enable the preservice teachers to extend their professional affiliation with professional teaching bodies to learn new avenues of learning.

Learning outcomes

By the end of the course the pre service teachers will be able to:

- Display an understanding of the teaching profession as unique, definite, and essential social service
- Recognize it a mark of learned profession which emphasizes both duties and rights of the teacher
- Adapt change in behavior and attitudes towards successful teaching-learning process
- consider that without extensive education there is no respected profession
- Develop, on the whole, a firm commitment that teaching profession is responsible for the quality of its unique, definite, and essential social service and for the enforcement of standards in the continuous performance of the teachers
- Understand the professional development concepts in the teaching profession.
- Explore the trends of professional development in the teaching
- Investigate the avenues of professional development for their personal growth
- Determine the role of effective professional development associations in terms of professional trainings and professional growth.

Unit 1 Teaching Profession: An Introduction

1.1 Education
1.2 Teaching
1.3 Profession
1.4 Teaching profession
1.5 Teaching as a discipline
1.6 Professionalism
1.7 Teaching as a profession

Unit 2 Characteristics of Teaching Profession

2.1 Characteristics of a profession
2.2 Characteristics of teaching profession
2.3 Professional responsibilities
2.4 Ways for fulfillment of responsibilities

Unit 3 Characteristics, Duties and Rights of Teachers

3.1Teacher's Role as a Practitioner, Researcher, Mentor

Unit 4

4.1 Concept of Professional Development for Teachers

4.2 Types of Professional Development
4.3 Ways to make Teacher Professional Development effective
4.4 Platforms of Professional development of Teachers

Unit 5 Teacher-Centered Professional Development

5.1 Models/Practices of Teacher-Centered Professional Development
5.2. Activities to enhance teacher's professional development
5.3. Refresher Courses to enhance teachers' professional development
5.4. Role of Training, workshops, seminars to address professional development

Unit 6 Trends in Teacher Professional Development

6.1. Global trends in teacher professional development
6.2. Role of Pakistan Teacher Associations
6.3. NGOs' and Private organization role for teachers' training.
6.4. Online/ Virtual platforms for teachers' professional development

Unit 7 Professional Standards for Teachers

7.1. Concept of Professional Standards for Teachers
7.2. Creating Evidence-Based Activities to implement the areas of professional standards
7.3. Role Play to address the Professional Standards for Teachers
7.4. Integrating Professional Standards with content-based activities

Unit 8. National Accreditation Council for Teacher Education, NACTE Pakistan

8.1. National Standards for Accreditation of Teacher Education Programs.
8.2. Accreditation Standards and Procedures for Quality Assurance in Teacher Education.
8.3. Accreditation for Quality Assurance in Teacher Education.
8.4. Understanding about the International NECTE, USA, UK, Canada, Australia

Unit 9. Seminar on Professional Development issues in Pakistan

9.1. Professional Development of Teachers at University level
9.2. Professional Development of Teachers at College level.
9.3. Professional Development of Teachers at School level.
9.4. Global Professional Development Trends of teachers
9.5. Role of Professional Development Bodies and Associations

Teaching Strategies

- Lecture method followed by discussion
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline.

References

National Accreditation Council for Teacher Education, NACTE Pakistan.

Professional standards for Teachers. Ministry of Education, Government of Pakistan.

Dede, C., Jass Ketelhut, D., Whitehouse, P., Breit, L., and McCloskey, E. (2006). *Research Agenda for Online Teacher Professional Development.* Cambridge, MA: Harvard Graduate School of Education.

National Research Council. (2006). *Linking Mandatory Professional Development with High Quality Teaching and Learning*. Proceedings and Transcripts from a Workshop. National Academies Teacher Advisory Council.

Course Code	Course Title	Credit Hours
EDUC3126	**Research Methods in Education**	**3(3+0)**

Course Description

This course is designed for B.Ed. candidates to prepare them to situate themselves as researching professionals and at the same time enhance their own professional practice. Students will engage in a critical analysis of different research work and relate it to their own context. The units provide students with the opportunity to engage with the research literature and to establish how different researchers' techniques help improve the overall classroom situation

Course Outcomes

At the end of the course, the learners will be able to

- Discuss the meaning, nature & scope of research in education
- Situate themselves as researching professionals
- Conduct research in different educational settings
- Write research report and present it effectively

Course Outline

Knowledge & Knowledge Generation

1. Sources of knowledge
1.1. knowledge via authority
1.2. knowledge via tenacity
1.3. knowledge via rationalism
1.4. knowledge via superstition
1.5. knowledge via intuition
1.6. Knowledge via empiricism
1.7. knowledge via science
1.8. Scientific method
1.9. Theory Development
1.10. Research, Derivative & Literal Meanings of Research
1.11. Paradigms of Research
2. The Nature of Educational Research
2.1. Definitions of Educational Research
2.2. Scope and importance
2.3. Types of Research
2.3.1 By purpose
2.3.2 By method and technique
2.3. Qualitative versus Quantitative research
3. Quantitative Methods of Educational Research (in detail)
3.1. Descriptive Research
3.2. Experimental Research
3.3. Historical Research
3.4. Case Study

3.4. Action Research
4. Qualitative Research Methods in Education (brief description)
4.1 Narrative Research
4.2 Case Study Research
4.3 Ethnography Research
4.4 Phenomenology
4.5 Grounded Theory Research
5. Research Problem
5.1. Selection and statement
5.1.1. Selection/Criteria
5.1.2. Sources
5.1.3. Purpose Statement
6. Review of Related Literature
6.1. Need and significance
6.2. Sources (Primary & Secondary)
6.3. Note taking techniques
6.4. Organizing and citation
7. Formulation and Statement of Hypotheses
7.1 Definition and purpose
7.2 Types of hypotheses
7.3 Stating the hypotheses
7.4 Testing the hypotheses
8. Selection of Sample
8.1 Sampling: definition, purpose
8.2 Definition of population
8.3 Probability Sampling
8.3.1 Random sampling
8.3.2 Stratified sampling
8.3.3 Cluster sampling
8.3.4 Systematic sampling
8.3.5 Double sampling
8.4 Non-probability sampling
8.4.1 Convenience sampling
8.4.2 Purposive sampling
8.4.3 Quota sampling
8.4.4 Snowball sampling
9. Types of Instruments
9.1 Tests
9.2 Questionnaire
9.3 Interview Schedule
9.4 Observation Schedule
9.5 Rating Scales and other Instruments
9.5.1 Nominal Scale
9.5.2 Ordinal Scale
9.5.3 Interval Scale
9.5.4 Ratio Scale
9.6 Criterion for the Selection of Instruments
10. Data collection Procedures
11. Data Analysis Procedures

11.1. Descriptive
11.2. Inferential
11.3 Using Computer for Data Analysis
12. Report Writing
12.1. Writing formats & Presentation
12.2. Referencing and APA
12.3. Academic honesty and Research Ethics

Teaching Strategies

- Lecture method followed by discussion
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline.
- Students may visit various schools, college, universities in rular and urban areas to apply research techniques such as survey, interview, observations, field notes etc

References Books

Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education. London: Routledge.

Creswell, J. W (2014). Research Design 4th Ed, London: Sage Publications Inc. 101

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2014). How to design and evaluate research in education (Vol. 7). New York: McGraw-Hill.

Neuman. W.L. (2006). Social Research Methods: Quantitative and qualitative approaches 6th Ed. USA: Pearson Education Inc.

L.R. Gay. (2018). Educational Research 12th Ed. USA: Pearson Education Inc.

Course Code	Course Title	Credit Hours
EDUC3165	Instructional and Communication Technology and Virtual teaching	3(3+0)

Introduction

Modern instructional and communication technologies in education have revolutionized the post-COVID educational landscape. Students will start the course with a solid understanding of educational technology, including how to use computers, how to access and evaluate information on the Web. This course is designed for pre-service teacher training that will train prospective teachers how to use and effectively integrate instructional technology in the 21st Century classroom. Assistive technologies will also be introduced to make our education inclusive. It would be desirable that B.Ed. students are computer and technology literate to the extent that they can benefit from it while teaching in future. This course will enable them to integrate and utilize instructional and communication technologies effectively to address the problems of virtual teaching and learning.

Learning Outcomes

After the completion of this course, the students will be able to:

1. understand the meaning, concept, and importance of instructional technology and use of media in educational process (Comprehension)
2. understand the characteristics of the 21st century learner (comprehension)
3. select and use appropriate learning strategies, technologies, media, models and materials to achieve 21st century learning in different school environments (application)
4. understand the concept of distance education and how it can facilitate student learning (comprehension)
5. model effective use of instructional and communication technologies to locate, analyze, create, and evaluate information resources to support teaching and learning process (integration)
6. Utilize different instructional and communication technologies for virtual teaching (application).
7. develop e-portfolio to an advanced level (integration)

CONTENTS

1. Learning Productivity Tools

1.1. Basics of Software (System Vs Application Software)
1.2. MS Office (Word, Excel, Power Point, etc.)
1.3. Concept/Mind Mapping

2. Exploring 21st Century Learning

2.1. Framework for 21st century learning
2.2. Technology gaps in today's Primary, Secondary and Higher Secondary Schools
2.3. Technology vs media in education
2.4. Basic categories of media
2.5. Types of instruction in the classroom continuum

2.6. Copyright laws for educational uses

3. Understanding 21st Century Learners

3.1. Characteristics of the 21st century learner

3.2. Learning theories

3.3. Principles of effective instruction, technology and media for the 21st century learner

3.4. Advantages and limitations of integrating text into learning.

4. Integrating Technology and Media into Instruction: The Assure Model

4.1. Types of learner analysis criteria

4.2. Systematic planning process for learning

4.3. Rationale and purposes of learning objectives

4.4. Procedures for selecting, modifying, and designing instructional materials

4.5. Utilizing technology, media, and materials

4.6. Methods for using technology and media during instruction.

4.7. Techniques for evaluating student achievement, technology, media, strategies, and the instruction.

5. Achieving 21st Century Learning Environments

5.1. Teacher-centered and student-centered learning strategies

5.2. Advantages and limitations of learning strategies

5.3. Technology and media facilitating learning experiences

5.4. Types of learning environments

5.5. Advantages and limitations of integrating free and inexpensive materials into instruction.

6. Engaging Learners with Computers

6.1. Strategies of integrating computer resources into the curriculum

6.2. Types of software for the classroom

6.3. Advantages and limitations of using computer resources in learning

6.4. Differences among a one-computer classroom, a multiple-computer classroom, laptop carts, and computer laboratories in terms of setups and uses

6.5. Instructional situation for using computer resources to support student learning

7. Connecting Learners with Web 2.0 and Web 3.0 Tools

7.1. Cyberlearning & Cyberlearning literacy

7.2. Web 2.0/3.) resources

7.3. Social networking issues

7.4. Social–ethical issues

8. Using Multimedia to Engage Learners

8.1. Media literacy

8.2. Consuming and Producing media

8.3. Advantages, limitations, and instructional applications of multimedia in learning

8.4. Types of learning centers

8.5. Instructional applications appropriate for manipulatives

8.6. Advantages and limitations of various types of display surfaces

8.7. Instructional applications appropriate for field trips, displays, and dioramas.

9. Enhancing learning with visuals, audios and videos

9.1. Visual, audio and video literacies

9.2. Types of visuals, audio and videos
9.3. Roles of visuals, audios and videos in learning
9.4. Methods of using visuals, audios and videos in the classroom
9.5. Advantages, limitations, and integration of visuals, audios and videos
9.6. Techniques for creating visuals, audios and videos by students and teachers

10. Preparing for Tomorrow's Challenges

10.1. Characteristics of a 21st century teacher
10.2. Technology for inclusion
10.3. Online and virtual education
10.4. Types of technology grants available for 21st century learning

11. The Changing Face of Education — Teaching Online

11.1. A Moment in History
11.2. Distance Education
11.3. The K-12 eLearning Environment
11.4. Growth of Online Schools and Programs
11.5. Transitioning to Teaching Online
11.6. Readiness for virtual teaching
11.7. Tools for Online Learning
11.8. Assessing Online Learning
11.9. Putting It All Together: National and International Virtual Schools
11.10. A World without Wires — Tablets, Apps, and More
11.11. Implications for Education

12. Evaluating Instructional Technology and Integration Strategies

12.1. Evaluating Instructional Technology
12.2. Evaluating the Effectiveness of Technology Integration
12.3. Integration Strategies
12.4. Curriculum Integration Activities
12.5. Finding Funds to Support Classroom Technology Integration

13. Latest Technology Trends in Education

13.1. Artificial Intelligence in Education
13.2. Gamification
13.3. MOOCs , Blended MOOC, and OERs
13.4. VR, AR, XR
13.5. Mentoring
13.6. Blended Learning
13.7. Flipped Classroom
13.8. Makification

14. Security Issues and Ethics in Education

14.1. Computer Security: Risks and Safeguards
14.2. Ethics and the Information Age
14.3. Internet Ethics and Objectionable Materials
14.4. Green Computing
14.5. Health Issues

14.6. The Changing Classroom

Teaching Strategies

Hands-on trainings and workshops Assignments (as per instructions)

TedTalk like Presentations (as per instructions)

Text Books

Beekman, B., & Beekman, G. (2011). *Digital Planet: Tomorrow's Technology and You, Introductory*. Pearson Higher Ed.

Gunter, G. A., & Gunter, R. E. (2014). *Teachers discovering computers: Integrating technology in a changing world*. Nelson Education.

Melton, B., Dodge, M., Swinford, E., Couch, A., Legault, E., Schorr, B. M., & Rusen, C. A. (2013). *Microsoft Office Professional 2013 step by step*. Redmond, WA: Microsoft Press.

Vermaat, M., Sebok, S. L., Freund, S. M., Frydenberg, M., & Campbell, J. T. (2016). *Enhanced Discovering Computers© 2017*. Nelson Education.

Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2014). *Instructional technology and media for learning.* (11th Ed.). Pearson, USA.

SOME SUGGESTED READINGS:

Branch, R. M., & Kopcha, T. J. (2014). Instructional design models. In Handbook of research on educational communications and technology (pp. 77-87). Springer New York.

Cruse, E. (2006). Using educational video in the classroom: Theory, research and practice. *Library Video Company*.

Driscoll, M., Carliner, S. (2005) Advanced Web-Based Training: Adapting Real World Strategies in Your Online Learning, Pfeiffer. ISBN 0787969796

Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications*. Boston: Pearson.

Groff (2013). *Technology-rich innovative learning environments*.

Gustafson, K. L., & Branch, R. M. (2002). What is instructional design? *Trends and issues in instructional design and technology*, 16-25.

Johnston, J., & Barker, L. T. (2002). *Assessing the impact of technology on teaching and learning. A sourcebook for evaluators.*

Keegan, D. (1993). (Edited). Theoretical Principles of Distance Education. North Yorkshire: Routledge.

Lever-Duffy, J., McDonald, J., & Mizell, A. (2002). *The 21st-Century Classroom: Teaching and Learning with Technology*. Addison-Wesley Longman Publishing Co., Inc.

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-Learning, online learning, and distance learning environments: Are they the same? . *The Internet and Higher Education*, *14*(2), 129-135.

Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: a review of the literature, Journal of Information Technology for Teacher Education, 9:3, 319-342, DOI: 10.1080/14759390000200096.

Muth, K. D., & Alvermann, D. E. (1999). *Teaching and learning in the middle grades*. Allyn and Bacon.

Newby, T. J., & Stepich, D.,. Lehman, J., Russell, J. D., &Leftwich, A. T. (2010). *Educational technology for teaching and learning*. (4th Ed.). Pearson.

Roblyer, D. M. (2006). Integrating educational technology into teaching. Pearson/Merrill Prentice Hall.

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, *2*(1), 3-10

Siemens, G., & Tittenberger, P. (2009). *Handbook of Emerging Technologies for Learning.* Retrieved from, http://elearnspace.org/Articles/HETL.pdf

USAID. *Technology teaching and learning Material*.

Wickersham, L. E., & Chambers, S. M. (2006). E Portfolios: Using technology to enhance and assess student learning. *Education-Indianapolis Then Chula Vista-*, *126*(4), 738.

Course Code	Course Title	Credit Hours
EDUC3146	Education for Sustainable Development	3(3+0)

Course Discription

The course aims to give an introduction to the components of sustainable development and their integration to Education for Sustainable Development (ESD) primarily in the context of Pakistan. This course is addressing the essential ways to learn the new avenues to become responsible citizens to contribute an active role to make the society sustainable.

As a result of completing this course students will be able to:

- Perform constructive activities to promote education for the sustainable development in the context Pakistan.
- Accept others belonging to different ethnic groups, religions, political parties for developing the sense of unity.
- Give respect to all students irrespective of their disability.
- Contribute an active responsible citizen role to make the society peaceful and harmonious.
- Learn effective pedagogies and strategies to promote sustainability in education for sustainable development.

Course Contents

1. Introduction: The nature of sustainable development

1.1 Sustainable Development: Concept, Purpose and characteristics
1.2 Goals of Sustainable Development and preparation to meet the target
1.3 The United Nations Decade of Education for Sustainable Development (DESD)
1.4 Assess the significant roles of different institutions and groups to achieve sustainable development in the Asian context
1.5 Education for Sustainable development : Challenges in Pakisrtan

2 Sustainable leadership in school

2.1 sustainable leadership
2.2 concept of school, community and culture
2.3 Education, cultural diversity and social interaction
2.4 Principals of sustainable leadership in school community and culture
2.5 Critical analysis of educational institutions in socialization of educational stakeholders
2.6 Technological changes promote effective teaching and learning process

3 Essential Elements of Sustainable Development

3.1 Economic Component
3.2 Ecological component
3.3 Human component
3.4 Social component
3.5 Education for sustainable development

3.6 Elements of Education for sustainable development
3.7 A New Paradigm of Education Towards Sustainable Development

4. Social Tolerance through Education for sustainable development

4.1 Aims of Education for Sustainable Development
4.2 Education for Sustainable Development: Challenges, Strategies and Practices in a Globalizing World
4.3 Social Tolerance: Definition, Concept, significance and need for the current scenario
4.4 Important factors that shapes people's social tolerance /attitudes
4.5 Social tolerance and education
4.6 Promotion of Social Tolerance through effective interventions among students
4.7 Creating Dialogues, Debates and Discussions to demonstrate tolerant behavior in the universities

5 Peace Promotion through Education for Sustainable Development

5.1 Peace: Concept, Significance and characteristics and need for the current scenario.
5.2 Peace Education as an essence of ESD
5.3 Dimensions of peace education
5.4 Role of Education in Promoting Peace, Sustainable Development and Global Citizenship
5.5 Conflict Resolution, strategies to resolve conflicting situations.
5.6 Creating Dialogues, Debates and Discussions to demonstrate peaceful behavior in the universities.

6. Inclusion through Education for Sustainable Development

6.1 Inclusive Education, meaning, concept, scope, and significance
6.2 Historical processes of exclusion and the struggle for inclusion in education
6.3 The development of ESD materials for inclusive education in curriculum
6.4 inclusive education strategies to teach children with diverse needs
6.5 'H Theory' to promote inclusion: Head, Heart and Hands to prepare teachers to use inclusive practices.
6.6 ABCs of inclusive Education:Creating inclusive learning environment

7. Environmental Education and Sustainable Development
7.1 Historical perspective of environmental education in School
7.2 Analyse the discrepancy among sustainability concepts, EE and ESD

8. Teacher education for sustainable development
8.1 Contemporary Society: Transformative role of Education
8.2 Preservation of Pakistani ideologies, beliefs, Values, traditions, culture, languages.
8.3 Interdisciplinary approach to promote peace, tolerance and inclusion in universities.
8.4 Critical thinking and problem- solving techniques to address conflict arising situation in Pakistani society.
8.5 Role of Teacher education programs to promote sustainability through co-curricular activities such as drama, debates, discussion, dialogues and essay writing competitions.
8.6 Ways to discourage 'Hate speech' and avoiding personal biases, prejudice in the society through teaching strategies.

8.7 Developing an ESD action plan with Community Participation for solving insustainability issues
8.8 Integrating ESD in the School subjects (social studies, Islamic studies, Science).
8.9 Stakeholders mapping as a co-agents of change
8.10 Role of teachers' competencies for developing professionalism in teacher education

9. Life skills

9.1 Mobile navigation, tracking
9.2 Driving and parking sense
9.3 Cleanness /waste management
9.4 Traffic Rules
9.5 Public Dealing
9.6 Personal safety and reporting rescue/police
9.7 Personal rights and others' rights

Teaching strategies

Lecture Method, Discussion Method, Collaborative learning, Field Trips, Project method, problem solving method. Field trips for environmental education provide students with firsthand experiences to deepen their understanding of ecological principles and sustainable practices. Whether exploring botanical gardens/safari parks/zoo/fruit farms/parks to appreciate biodiversity, visiting waste management facilities to comprehend responsible waste disposal, or participating in beach cleanups to witness the impact of pollution on aquatic ecosystems, these field trips aim to connect theoretical knowledge with real-world applications. By engaging with nature reserves, renewable energy facilities, and local farms with sustainable practices, students not only gain ecological awareness but also develop a sense of environmental stewardship. These experiences foster a holistic understanding of the interdependence between human activities and the environment, encouraging responsible and informed decision-making for a sustainable future.

Assignments

Students will conduct Case Study of any issue and prepare the action plan to solve that issue.
Students will be suppose to go for community service and marks will be given on their community service in their sessional
Students can design project on a problematic situation that exit in the society and suggest the intervention strategies to overcome that situation.
Creating panel talks to discuss the conflicting situation in the society and suggest the solutions.
Preparing Presentation to promote peace, tolerance and inclusion in the society.

Suggested readings

Allen, W (2007). Learning for Sustainability: Sustainable Development

Elliott, J.H. (2013). An Introduction to Sustainable Development. New York: Routledge.

McKeown, R (2002). Education for Sustainable Development Toolkit. Center for Geography and Environmental Education University of Tennessee 311 Conference Center Bldg. Free copy can be downloaded from http://www.esdtoolkit.org

Midgley, J. (1995). Social Development: The Developmental Perspective in Social Welfare.

London: Sage.
https://www.futurelearn.com/info/courses/sustainable-business/0/steps/78337
Sadker Marya Pollack and David Miller Sadker (2003). Teachers' School and Society. (6th Ed) McGraw Hill Book Company New York USA.
Andy Hargreaves, D. F. (2012). Sustainable Leadership.
Kanaujia, R. N. (2017). Reorienting Educational Efforts for Sustainable Development. Experiences from South Asia.
Lisa A. W. Kensler, C. L. (2017). Leadership for Green Schools.
Malgorzata Kossowska, E. S. (2020). The Psychology of Tolerance in Times of Uncertainty.
Nastasia Nikolopoulou, T. A. (2010). Education for Sustainable Development.
Vogt, W. P. (2006). Social Tolerance and Education. The Review of Education.
Wahyudin, D. (2018). PEACE EDUCATION CURRICULUM IN THE CONTEXT OF EDUCATION. Journal of Sustainable Development Education and Research | JSDER Vol. 2, No.1, 2018, pp. 21-32.

Course Code	Course Title	Credit Hours
EDUC3211	**Arts and Crafts for teaching**	**3(1+2)**

Course Description

The course is meant to empower future teachers with the knowledge, skills, and creative strategies necessary to effectively incorporate art and craft activities into their teaching practices and making the teaching-learning process more successful and interesting

Course Objectives

At the end of this course the prospective teachers will be able to:

- Relate the ancient art history to the recent time
- Work on the basic drawing techniques of making art and crafts
- Describe the importance of art & craft in society & culture
- Improve their esthetic sense
- Work with cheap materials like paper
- Recycle the waste material into a useful one
- Apply the crafts of Pakistan in an easy manner in the classroom make teaching learning aids using cheap material

Course Outline: (40%)

Theoretical

1. Elements and Principles of art
2. History of art (Cave art)
3. Famous Artists
   - Pablo Picasso
   - Vincent Van Gogh
   - Leonardo Da Vinci
   - Michelangelo
4. The Art of Ancient Egypt
5. Greek Art
6. Abstract art

Practical (60%)

The practical aspect will comprise such projects that students assessment will show their

1. Proficiency in different color-making using primary colors.
2. Uniqueness of idea for making AV AIDS
3. One-point and two-point perspective
4. Sense of dimensions of any object by drawing it
5. Art Techniques
   - Pencil drawing (still life)
   - Pencil color art
   - Pestel art
   - Mosaics with paper

- Pointillism with acrylic (landscape)
- Op art
- Watercolor art
- 3D art with paper or cardboard (Three-dimensional projects of paper. (Boxes, origami, etc.)
- Poster making
- Stamping & Stenciling
- Collage with waste material
- Pot painting

Suggested Readings/ Helping sources

- Itten, J. (1970). *The elements of color* (Vol. 4). John Wiley & Sons.
- Lorblanchet, M., & Bahn, P. G. (2017). *The first artists: In search of the world's oldest art*. Thames & Hudson Limited.
- Arnheim, R. (1954). *Art and visual perception: A psychology of the creative eye*. Univ of California Press.

Pedagogy Courses

Course Code	Course Title	Credit Hours
EDUC2116	**Teaching of General Science**	**3(3+0)**

Course Description

The study of General Science in Primary and Secondary school is linked to National prosperity and economic development. The course is designed for the effective interactive ways of teaching science. The courses will highlight the power of observation and inquisitiveness in general sciences studies. It will also focus on how to relate facts, concepts, theories to every day experience.

Learning Outcome

At the end of the course the learners will be able to teach General Science effectively at elementary level in an innovative and creative manner

Specific Objectives of course

The course will enable learners to;

1. Understand scientific concepts
2. Differentiate between scientific products and scientific processes
3. Understand the underlying principle of science education
4. Apply appropriate methods and techniques for effective learning in Science

Course outline

1. **Developing Context**

1.1 Past: How Maths and Science Power Nations

1.2 Present: The State of Maths and Science in Schools

1.3 Future: A Roadmap for Maths and Science Education

2. Nature of Science

2.1 Definition of science

2.2 Science as a process: Scientific Method

2.3 Science as a product: Scientific Knowledge

3. Aims / Objectives Teaching General Sciences

3.1 History of Science Education

3.2 Aims / Objectives of teaching General Science at Elementary and secondary level

4. Methods of Teaching General Science

4.1 Demonstration cum-lecture

4.2 Discovery Learning

4.3 Problem/Project-based Learning

4.4 Inquiry-based Learning

5. Approaches of Teaching General Science

5.1 Teaching approach

5.1.1 Problem solving

5.1.2 Inquiry techniques

5.1.3 Exploration

5.1.4 Observation

5.1.5 Experiment

5.2 Teaching Strategies

5.2.1 Scope & propose of practical activities

5.2.2 Science laboratory

5.2.3 Safety measure in laboratory

6. Teaching Aids

6.1 Need & importance of teaching aids

6.2 Types of teaching aids

6.3 Principles of using teaching aids

6.4 Using low cost teaching aids

7. Characteristics of Effective Science Teaching

7.1 Characteristics of lesson planning

7.2 Characteristic qualities of science teacher

7.3 Effective questioning

8. Evaluation

8.1 Designing a test

8.2 Administering & scoring a test

8.3 Interpreting test results

9. Trip to Science Museum Lahore

Recommended Books:

Lawson, Anton. E. (1995). "*Science teaching and development of thinking*". California: Wadsworth publishing company Rehman Mehmooda (1999). "*Teaching of science and mathematics*". Peshawar: Ijaz printer, Pakistan

Course Code	Course Title	Credit Hours
EDUC1113	**Teaching of Social Studies**	**3(3+0)**

Objectives

After completion of the course, the prospective teachers will be able to:

- Describe the social studies concepts, scope and nature as an integrated nature subject.
- Describe the objectives of Social studies and its needs and importance of social studies.

- Describe the themes/concepts of different subjects included in social studies
- Enable the students the express the good citizenship behavior.
- Learn the history through observations and field visits
- Evaluate the achievement/performance of students in social studies.
- Understand modern trends in Social Studies and scenario rapidly changing socio- political life on global level
- Learn how to think plan and work independently, critically, and nationally

Contents

1 Meaning, Nature and Scope

1.1 1ntroduction

1.2 Meaning and Definition of Social Studies

1.3 Nature and Scope of Social Studies

1.4 Relation of Social Studies with other School Subjects

1.5 Importance & need of teaching of Social Studies

2 Contents of Social Studies

2.1 Historical Development

• The Medieval Period (pre Pakistan 712-1947)

• The Modern Period (post Pakistan 1947-1999)

• Some Aspects of Our Cultural Heritage

2.2 Themes in geography

2.3 Developing a national and a global sense of citizenship.

2.4 Learning about economics

2.5 Environmental education

2.6 Teaching about social issues

3 The Social Studies Laboratory, Library and Museum

3.1 Social Studies Laboratory

3.2 Need for Social Studies Laboratory

3.3 Social Studies Library

3.4 Social Studies Museum

4 Lesson Planning in Social Studies

4.1 Steps in lesson planning

4.2 Design a specimen for lesson plan

4.3 Development of at least 30 lesson plans from the textbooks of social studies

5 Teaching Methods for Social Studies

5.1 Characteristics of a good teaching strategy/ method in Social Studies

5.2 National Curriculum 2006 for Social studies recommended following teaching

Methods for teaching of social studies

Lecture, Discussion, Role Playing, watching movies, Story -telling, problem solving, cooperative learning, and activity based teaching and project method

5.3 Teaching of Historical, cultural political and industrial topics through observational visits of museums, historical buildings and industries.

5.4 Skills for teaching of geography

6 Teaching Aids and Resources in Social Studies

6.1 Classification of Teaching Aids

6.2 Importance of Teaching Aids

6.3 Some Important Teaching Aids included;

Use of Computer and multi – media presentations, Guest Speakers, videos, maps globes Tress chars, Radio Tape recorder and Television Graphs, Circle graphs time lines and comparative time lines charts etc

6.4 Proper Use of A.V.Aids

7 Evaluation in Social Studies

7.1 Meaning of Evaluation

7.2 Techniques of Evaluation as per recommendation curriculum of social studies 2006

7.3 Tools for evaluation of social studies as per recommendation curriculum of social studies 2006

Teaching Strategies and Practical work.

Lecture method followed by discussion Cooperative learning

Assignments and presentation Preparing course portfolios, Teacher would conduct at least 5 quizzes on general knowledge on current issues. Moreover, he would ensure that prospective teachers might use the skills of navigation. Study tours on historical places would be an essential part

Suggested Readings

Wilma R. Melendex, V. B. & Melba Fletcher. (2000). Teaching Social Studies in Early Education. Africa, xvii, 299p.

Wilma Robles de Melendez, Vesna Beck and Melba Fletcher. (2000). Teaching Social Studies in Early Education. United Kingdom: Delmar

Kelly, N. (2004) The history and culture of Pakistan, London, Peak Publishing

Rao, M. P. (2005) Teaching of social studies, Delhi, Dominant Publis

National Curriculum of social studies 2006

Course Code	Course Title	Credit Hours
EDUC2115	Teaching of English	3(3+0)

COURSE DESCRIPTION:

This course will equip prospective teachers with knowledge and skills to teach English in grades I through VIII. They will become familiar with the English curriculum and expected student learning outcomes. Prospective teachers will learn the use of different language skills to enhance variety of instructional methods that promote active learning of English, including making and using teaching and learning materials. They will plan English lessons and activities.

COURSE LEARNING OBJECTIVES:

- At the end of the course, the prospective teachers are expected to be:
- Familiar with the four language skills - Listening, Speaking reading and writing
- Identify and prepare activities for developing four skills
- Apply modern methods and approaches in teaching of English
- Prepare lesson plans of Prose, Poetry, Composition and Grammar
- Effective use of audio visual aids.
- Measure and evaluate the students‘ progress during teaching of English as a foreign I second language

COURSE REQUIREMENTS:

In this course, the students are expected to:

- Attend all class sessions for requisite number of hours and actively participate in all class activities.
- Complete all assignments in time
- Respect and benefit from the criticism offered by the instructor and peers
- unannounced/ pop quizzes
- Make use of a dictionary, take notes, and raise questions in reading assignments
- Fully participate in class discussions and help in fostering a discourse community by listening to the peers’ views and articulating their own in effective manner.
- Academic honesty is assumed. University policy regarding plagiarism can be consulted for the purpose.

TEACHING-LEARNING METHODOLOGY:

English development exercises, talk show, seminar, group discussion, lectures, reading material, handouts, reference books, accuracy and fluency exercises, projects and research works will be used depending on the topic.

SUGGESTED READINGS:

Cook V. (1991). Second Language Learning and Language Teaching, 2nd ed. London, Arnold

Mohammad. T. (1998). Modern Approaches to the Teaching of English as Second Language, Lahore: Majeed Book Depot.

Murcia, M.C. (1991), Teaching English as a Second Foreign Language, 2nd Ed. New Bury House: A Division of Harper Collins Publishers.

Rob Nohand (1993). Conversation, London: Oxford University Press.

Sheikh. N. A. (1998). Teaching of English as a Second Language. Lahore: Carvan Book House.

ASSESSMENT AND EVALUATION:

Class Participation	05%
Quizzes:	05 %

Assignments:	05%
Project Presentation:	05 %
Mid Term:	20 %
Final Exam:	60 %
Total	**100**

Course Outline: Teaching of English

Week #	Topics/Themes	Class Activities	Assignments/ Quizzes
1	**Ice Breaker** ▪ Introduction to course outline ▪ Common practices of teachers	Discussion as a warm up will be introduced.	
2	**Four Language Skills: Listening & Speaking Skill** ▪ Techniques of developing listening ability ▪ Using different language software to improve listening skill ▪ Active and reflective listening ▪ Introduce micro teaching lessons on ○ How to use videos (listen to the video and take notes) ○ How to use radio broadcasts ○ How to create podcasts	Through micro-teaching, students will make videos and podcasts proceeded by review session by all students for improvement	**Quiz 1**
3	**Four Language Skills: Reading & Writing Skill** ▪ How to read (silent & loud) and comprehend the text ▪ How to write letters and applications using different templates ▪ How to write creatively (story and essay) using different strategies and outlines	Practice two lessons from the 8th grade English textbook	
4	**Teaching English to Inclusive Students** How to Record for the Blind & Dyslexic How to provide Audio Access to textbooks and learning materials for blind How to build Assistive Technology Network for differently-abled students ▪ How to use text-to-speech readers ○ Reading on your desktop computer or laptop (Natural reader, TalkButton, Browsealoud, ReadSpeaker)	Equip the teacher to meet inclusive student body needs	**Assignment 1**

	○ Reading on your mobile device (Voice Dream reader, Captura Talk)		
5	**Teaching English Textbook I** ▪ Teaching of prose ▪ Teaching of poems	Use any three prose and poem units from the text book to demonstrate micro-teaching as model lesson plans	**Quiz 2**
6	**Teaching English Textbook II** ▪ Teaching of composition ▪ Teaching of vocabulary ▪ Teaching of pronunciation	Use any three prose and poem units from the text book to demonstrate micro-teaching as model lesson plans	**Assignment 2**
7	**How to Create a Productive Environment in English Classes** ▪ Equip with tactics to reduce anxiety and stress in language learning ▪ How to merge traditional and modern methods for maximum benefit	Use micro-teaching lessons to develop competency in the pedagogical delivery	
8	**MID TERM**		
9	**Teaching of Grammar** ▪ Functional approach towards grammar teaching ▪ How to teach grammar with conceptual clarity of rules than rote-learning	Practice integrating technology with the teaching of grammar from the textbook	
10	**Teaching Interdisciplinary Approach** ▪ How to use English Language skills in other subjects ▪ Interactive activities in other subject areas	Introduce collaborative activities	**Assignment 3**
11	**A.V. Aids in Teaching of English** ▪ Need and importance ▪ Charts, Models, Pictures, role plays, Flash Cards, Toys and Real Objects ▪ Radio, Cassette player, Language Laboratory ▪ Television, VCR, Movies	Hands-on practice	

	▪ Slides, Filmstrip, OHP, multimedia Projector		
12	**Lesson Planning I** ▪ Importance of activities in all kinds of lessons ▪ Value of different steps in lesson planning. ▪ New teaching approaches; activity based.	Hand-on practice taking the lessons from 8th grade English Textbook	**Quiz 3**
13	**Lesson Planning II** ▪ Planning Structural lessons ▪ Planning a Prose and Poetry lesson ▪ Planning a Paragraph, a Story, and an Essay ▪ Planning a Grammar lesson	Hand-on practice taking the lessons from 8th grade English Textbook	**Assignment 3**
14	**Assessment I** ▪ Assessment for learning ▪ Assessment of learning ▪ Peer assessment for learning	Practice will be provided based on the text books of English (Grade: 6,7,8)	**Quiz 4**
15	**Assessment II** ▪ How to design assessments ○ Construction of Objective type test ○ Construction of subject type test	Practice will be provided based on the text books of English (Grade: 6,7,8)	
16	**Project Presentation** Teaching Practice in real life classroom		Project Paper will be submitted
17	**FINAL TERM EXAM**		

Course Code	Course Title	Credit Hours
EDUC1114	Teaching of Urdu	3(3+0)

کورس کے مقاصد:

تدریس اردو کے اس کورس کو پڑھنے کے بعد زیر تربیت اساتذہ اس قابل ہو جائیں گے:

1. اردو زبان (لسانیات) کے اجزا ارکان بیان کر سکیں
2. اردو زبان کی بنیادی مہارتوں کے ذریعے درست اظہار خیال کی صلاحیت پیدا کر سکیں
3. تدریس اردو میں استعمال ہونے والے طریقہ ہائے تدریس کی مدد سے اردو کی تدریس کو مو ثر بناسکیں۔
4. تدریس تدابیر اور زرائع کی مددسے تدریس اردو کو دلچسپ بنا سکیں
5. نظم ونثر کی سبقی منصوبہ بندی کر سکیں
6. جائزہ اور پیمائش کی اقسام اور ان کی تمام اقسام کا استعمال کر سکیں

نصابی عنوانات

1. اردو زبان وادب کی تفہیم
2. حروف تہجی سکھانے کے طریقہ ہائے تدریس

جانوروں اور پرندوں کی آوازیں سنا کر فرق کرنا ٹیپ ریکارڈ کی مدد سے
حروف تہجی کی آواز کی پہچان کی سرگرمیاں
1- بین وگو (دیکھو اور بو لو)
2- تحلیلی طریقہ (الفاظ کو حروف میں توڑنا)
3- ترکیبی طریقہ (حروف کو الفاظ میں جوڑنا)
3- مخلوط طریقہ (تحلیلی اور ترکیبی دونوں کو ملا کر)
4- پستالوزی کا ابجدی طریقہ
5- حروف تہجی کے اعتبار سے الفاظ ترتیب دینا۔

3. ذولسانی طریقے سے آواز وں کی پہچان
4. زبان دانی کی مہارتیں اور ان کی سرگرمیاں

1- سننا سکھانے کی سر گرمیاں (طلباء کو ویڈیو اور ٹیلی ویژن کی نشریات سنائی جائیں)
طریقہ (قدرتی، تلازمی، تکراری، حکمیہ، پیامی، سمعی و بصری معاونات)
2- بولنا سکھانے کی سرگرمیاں (ریڈیو/ٹیلی ویژن پروگراموں پر تبصرہ اور گفتگو کرائی جائے)
3- پڑھنا سکھانے کی سر گرمیاں
4- لکھنا سکھانے کی سر گرمیاں

5. جملے بنانا اور جملوں کی اقسام

الفاظ کا جملوں میں استعمال
جملوں کی اقسام

6. تدریس قوائد اور اس کے طریقے
6.1 قوائد کی تعریف اور اہمیت
6.2 تدریس قوائد کے طریقے
6.3 روایتی طریقے/ منطقی یا استخراجی طریقہ تدریس
6.4 جدید طریقہ/استقرائی/عملی طریقہ تدریس
6.5 امتزاجی/مخلوط طریقہ تدریس
7. تدریس نظم اور اسکے طریقے
7.1 نظم خوانی کی سرگرمیاں-(استاد اور طلباء کی شرکت سے)
7.2 تمہید
7.3 شاعر اور نظم کا مختصر تعارف
7.4 اعلان سبق- نظم کا عنوان- نظم کا عمومی تاثر
7.4.1 نظم کی تفہیم
7.4.2 استاد کی نظم خوانی
7.4.3 طلباء کی نظم خوانی
7.4.4 اصلاح تلفظ
7.4.5 الفاظ/معنی

7.4.6 اشعار کی تشریح و تفہیم/تلخیص
7.4.7 نظم کا مرکزی خیال، خلاصہ
7.4.8 نظم کا استحسان/نظم خوانی کے مقابلے کرانا
7.4.9 نظم کا اعادہ
7.5 نظم/غزل کی تدریس کی منصوبہ بندی کا خاکہ
.8 نثر کے طریقہ ہائے تدریس
8.1.2 قصبے کہانیاں سنانا
8.1.3 تقریری طریقہ
8.1.4 تمثیل کاری
8.1.5 قلمی دوستی خطوط نویسی سکھانے کے لیے طلبا سے قلمی دوستی کے زریعے سکھایا جائے طلبا سے اپنے دوستوں کو خطوط لکھوائے جائیں
8.1.6 تحریری مقابلے کرانا
8.1.7 مباحثہ آمزاکرہ
8.1.8 تعلیمی دورے: طلبا کو تحریک پاکستان میں علامہ اقبال اور قائداعظم کی خدمات سے آگاہی کے لیے نظریہ پاکستان ، ٹرسٹ علامہ اقبال میوزم اور سائیس میوزم کا مشاہداتی دورہ کرایا جائے
8.1.9 درسی کتب کا مو ثر استعمال (مزاحیہ خاکے، مضمون نویسی اور خوش خطی کے مقابلے
8.1.10 علمی البم تیار کرانا (تصاویر، تراشے کارٹون اور معلومات کا ذخیرہ کرتے ہوئے)
.9 تدریسی معاونات اور تدابیر/وسائل
9.1 تختہ سیاہ
9.1.1 تصاویر/ماڈل/چارٹ/نقشے/گراف
9.2 ریڈیو/ٹیلی ویژن/ٹیپ ریکارڈر
9.3 کتب خانہ/لائبریری کا استعمال (طلبا کو کسی لائبریری کا ٹور کرایا جائے اور کتب کا انتخاب کرنا سکھایا جائے
9.4 لغت کا استعمال طلبا عملی طورلغت کا استعمال سکھایا جائے
9.5 ہوم ورک/گھر کا کام (طلبا کو باقاعدگی سے گھر کا کام دیا جائے اور اس پر ان کی باقاعدگی سے اصلاع کی جائے
9.6 امتحانات اور مشقی کام
9.6.1 نشری سبق کی منصوبہ بندی کے اقدامات
9.6.2 نمونہ کا سبقی خاکہ برائے نثر
9.7 درسی کتب سے طلبہ کو نظم اور نثری اسباق کے 30 اسباق کی منصوبہ بندی کرائی جائے اور استاد ان پر باقائدگی سے اصلاح کریں
.10 آزمائش () کے طریقے
11.1 موضوعی/مضمون پر مبنی/آزمائش
11.2 معروضی یا جدید قسم کی آزمائش
11.3 معروضی آزمائشوں کی اقسام
11.3.1 کثیر انتخابی سوالات
11.3.2 مختصر سوالات
11.3.3 غلط صیحیی
11.3.4 تکمیلی سوالات

کتب برائے مطالعہ

.1 سفینہ اردو (قواعدوانشاء) طاہر شادانی
.2 تدریس اردو مولوی عبدالحق
.3 تدریس اردو ڈاکٹر فرمان فتح پوری
.4 اردو زبان وادب، پروفیسر اشرف علی انصاری

Course Code	Course Title	Credit Hours
EDUC2111	**Teaching of Mathematics**	3(3+0)

Course Description

This course will equip prospective teachers with knowledge and skills to teach math in grades I through VIII. They will become familiar with the math curriculum and expected student learning outcomes. Prospective teachers will learn to use a variety of instructional methods that promote active learning of math, including making and using teaching and learning materials. They will plan math lessons and activities and practice teaching math with peers.

Learning Outcomes

At the end of the course, the prospective teachers will be able to:

- Describe the **nature**, **history** and **development** of mathematics at elementary and secondary levels in Pakistan
- Acquire the **skills and competencies** required for the teaching of mathematics at elementary and secondary levels
- Apply effectively the **various methods** of teaching mathematics
- know and use **techniques and strategies** of teaching mathematics at elementary and secondary levels
- Make and use teaching aids and lesson plans effectively

Course outline

SECTION I Developing Context

2. Past: How Maths and Science Power Nations
3. Present: The State of Maths and Science in Schools
4. Future: A Roadmap for Maths and Science Education

SECTION II Teaching Mathematics: Foundations and Perspectives

5. Teaching Mathematics in the 21st Century
6. Exploring What It Means to Know and Do Mathematics
7. Teaching through Problem Solving
8. Planning in the Problem-Based Classroom
9. Creating Assessments for Learning
10. Teaching Mathematics Equitably to All Children
11. Using Technological Tools to Teach Mathematics

SECTION III Development of Mathematical Concepts and Procedures (Class I-V)

12. Developing Early Number Concepts and Number Sense
13. Developing Meanings for the Operations
14. Developing Basic Fact Fluency
15. Developing Whole-Number Place-Value Concepts
16. Developing Strategies for Addition and Subtraction Computation
17. Developing Strategies for Multiplication and Division Computation
18. Developing Fraction Concepts
19. Developing Concepts of Decimals and Percents

20. Developing Concepts of Ratios and Proportions
21. Developing Measurement Concepts
22. Developing Algebraic Concepts
23. Developing Geometric Concepts
24. Data Handling

SECTION IV Development of Mathematical Concepts and Procedures (Class VI-VIII)

25. Understanding Mathematical Thinking
26. Developing Fraction Operations
27. Ratios, Proportions, and Proportional Reasoning
28. Algebraic Thinking, Equations, and Functions
29. Geometric Thinking and Geometric Concepts
30. Developing Concepts of Data Analysis
31. Exploring Concepts of Probability
32. Developing Concepts of Exponents, Integers, and Real Numbers

Recommended Text:

Van de Walle, Karp & Bay-Williams (2016). Elementary and Middle School Mathematics: Teaching Developmentally. 9th Edition: Pearson

Reference Books:

Fauvel, John & Jeremy Gray (1990). *The History of Mathematics:* A Reader: London: Macmillan Press Ltd.

Greer, Brian and Gerry Mulhern, (1989). *New Directions in Mathematics Education.*

New York: Routledge.

Lacombe, Antony. (1985) *Mathematical Learning Difficulties in the Secondary School:*

Pupils' needs and Teacher's Role. England: Milton Keynes,

Leon, Burton & Jaworski, Barbara (Editors) (1995). *Technology in Mathematics Teaching*, Chartwell.

Orton, Anthony Wain Geoffrey (Editors) (1994), *Issues in Teaching of Maths*, London: Cassell Villiers House.

Course Code	Course Title	Credit Hours
EDUC3140	**Methods of Teaching Islamic Studies**	**3(3+0)**

COURSE OBJECTIVES

After completion of this course students will be able to:

- Explain / discus the importance of Islamic beliefs (Islamic Aqaid) as code for practical life.
- Use lecture method for effective teaching of Islamic studies.
- Explanation/ use various methods of teaching i.e. translation, discussion, Question and answer, storytelling methods.
- Use the exemplification, project method and Jigsaw techniques.
- Use audio visual aids i.e. charts, computer, Multimedia etc.
- Use other modern methods/ techniques audio, video lecture of scholars.
- Relate the subject of Islamic studies to other subjects.
- Use modern methods of Assessment of Evaluation of Students in Subject of Islamic Studies.

COURSE CONTENTS

1. Introduction of importance of teaching of Islamic studies.

1.1. Islamic studies as a subject

1.2. Importance of teaching of Islamic studies for Pakistani society

1.3. Nature/ Status of Islamic Studies in Schools

2. Teaching system in Islam

2.1. Foundation of Islamic Education System

2.2. Characteristics of Islamic Education System

2.3. Teaching Strategy in the light of Quran

2.4. Hazrat Muhammad S.W as a Teacher

3. Role of Islamic Studies' Teacher

3.1. Teacher as mentor

3.2. Teacher s Role model for Students

4. Teaching Methods for teaching of Islamic Studies

4.1. Lecture Method

4.2. Discussion/ Jigsaw

4.3. Translation Method

4.4. Project Method

4.5. Drill and Practice

4.6. Demonstration method

4.7. Story Telling Method

4.8. Text Book

5. A.V Aids for Teaching of Islamic Studies

5.1. Projected Aids (Projector, multimedia, Over head projector

5.2. Non Projected Aids

5.3. Lesson plans

6. Assessment And Evaluation in Islamic Studies

6.1. Meaning and Concept of Assessment and Evaluation

6.2. Types of Evaluation

6.2.1. Formative

6.2.2. Summative

6.3. Test and Examination in Islamic Studies

6.3.1. Subjective

6.3.2. Objective, Short Answer, MCQs, True Fall etc.

6.3.3. Oral and written tests

TEACHING STRATEGIES

The assignments and projects will be based on the content of course outline.

Both preparation and presentation of assignments and presentations will be given due weightage in

terms of classroom discussion and assessment.

SUGGESTED READINGS

Sadar uden Islahe, Islam aik Nazar Men,

Dr. Liaqat Ali Khan Niazi, Islam ka Nizam-e- Hayat, Lahore, Sang-e- Mel Publications

Tadrees-e- islamyat B.Ed, Muzamal Ahsan Shaikh , Lahore, Mujeed Book Depo

Dinyaat , Molana Abu Ila Ali Mawdawe

Area of Specialization

1- STEM Education		
Course Code	**Course Title**	**Credit Hours**
EDUC3199	Growth Mindset for STEM Teachers	3(3+0)
EDUC3200	Instructional Scafolding in STEM Education	3(3+0)
EDUC3201	Integrating STEM Education Methods	3(3+0)
EDUC3202	Introduction to STEM Education	3(3+0)
EDUC3203	Statistics for Teachers	3(3+0)
EDUC4152	Inquiry-Based Learning in STEM	3(3+0)
EDUC4153	STEM Curriculum Design and Instructional Materials	3(3+0)
EDUC4154	STEM Education Research and Trends	3(3+0)

Course Code	Course Title	Credit Hours
EDUC3199	Growth Mindset for STEM Teachers	3(3+0)

Course Description

This course is designed to equip teacher educators with the knowledge and skills necessary to cultivate a growth mindset in themselves and their students within the context of STEM education. Participants will explore the concept of growth mindset, its impact on teaching and learning, and strategies for fostering a growth mindset in both teachers and students. The course will also focus on integrating growth mindset principles into STEM education practices to promote engagement, resilience, and problem-solving skills among learners.

Course Objectives

Prospective teachers will

- Understand the concept of growth mindset and its relevance to STEM education.
- Identify the impact of growth mindset on teaching and learning in the STEM field.
- Analyze the challenges and barriers that hinder the development of a growth mindset in teachers and students.
- Implement effective strategies to cultivate a growth mindset in teacher educators.
- Apply growth mindset principles to STEM education practices to enhance student engagement, resilience, and problem-solving abilities.
- Create a supportive and inclusive learning environment that fosters a growth mindset in both teachers and students.
- Evaluate the effectiveness of growth mindset interventions in the context of STEM education.

Student Learning Outcomes

After completing this course successfully, the prospective teachers will be able to

- Demonstrate a comprehensive understanding of the concept of growth mindset and its significance in the context of STEM education.
- Recognize and assess the influence of a growth mindset on the teaching and learning processes within the STEM field.
- Identify and critically analyze the obstacles and challenges that may impede the development of a growth mindset among teachers and students in STEM education.
- Utilize effective and evidence-based strategies to foster a growth mindset among teacher educators, promoting a positive impact on their teaching practices.
- Apply growth mindset principles and techniques to STEM education, resulting in increased student engagement, resilience, and problem-solving abilities.
- Create an inclusive and supportive learning environment that nurtures a growth mindset among both teachers and students, cultivating a positive learning atmosphere.
- Evaluate and assess the effectiveness of growth mindset interventions in the context of STEM education, employing appropriate methods and tools to measure their impact.

Course Contents

1. Introduction

1.1. Definition and characteristics of growth mindset
1.2. Distinction between growth mindset and fixed mindset
1.3. Research on the impact of growth mindset in education
1.4. The role of teacher educators in promoting a growth mindset

2. Barriers to Developing a Growth Mindset

2.1.1. Identifying common challenges and misconceptions related to growth mindset
2.1.2. Overcoming stereotypes and biases in STEM education
2.1.3. Strategies for addressing resistance to growth mindset development

3. Strategies for Cultivating a Growth Mindset in Teacher Educators

3.1.1. Self-reflection and self-awareness for promoting a growth mindset
3.1.2. Providing feedback and fostering a growth-oriented classroom culture
3.1.3. Encouraging risk-taking and embracing failures as opportunities for growth mindset

4. Integrating Growth Mindset into STEM Education Practices

4.1.1. Designing growth mindset-oriented lesson plans
4.1.2. Incorporating growth mindset language and activities in STEM instruction
4.1.3. Promoting problem-solving and critical thinking skills through growth mindset approaches

5. Creating a Supportive Learning Environment

5.1.1. Building positive teacher-student relationships
5.1.2. Cultivating collaboration and peer learning opportunities
5.1.3. Establishing inclusive practices for diverse learners in STEM education

6. Assessing and Tracking Growth Mindset Development

6.1.1. Effective assessment methods for growth mindset
6.1.2. Monitoring and tracking progress in developing a growth mindset
6.1.3. Using data to inform instructional decisions and interventions

7. Reflecting on Growth Mindset in Teacher Education

7.1.1. Analyzing the impact of growth mindset interventions
7.1.2. Sharing best practices and success stories
7.1.3. Addressing ongoing challenges and refining strategies for future implementation

8. Final Projects and Conclusion

8.1.1. Presenting and sharing final projects
8.1.2. Reflecting on personal growth mindset development as teacher educators

Teaching/Learning Strategies

Lecture method followed by discussion and question answer method
Cooperative learning
Student course portfolio
Assignments and presentations / quizzes based on the content of the course outline and project

Recommended Resources

1. Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random house.
2. Dweck, C. S., & Molden, D. C. (2000). *Self-theories*. London.

Course Code	Course Title	Credit Hours
EDUC3200	**Instructional Scaffolding in STEM Education**	**3(3+0)**

Course Description:

The course "Instructional Scaffolding in STEM Education" offers an in-depth exploration of the role of instructional scaffolding in facilitating effective STEM learning experiences. The course delves into problem-centered instructional approaches and their connection to scaffolding strategies. It covers the historical development of instructional scaffolding, emphasizing its foundational elements, such as dynamic assessment, providing appropriate support, and fostering intersubjectivity. Various forms of scaffolding, including one-to-one scaffolding, peer scaffolding, and computer-based scaffolding, are examined, with a focus on the theoretical bases of computer-based scaffolding, such as Activity Theory, ACT-R, and Knowledge Integration. The interplay between computer-based and one-to-one scaffolding is explored to understand how these approaches complement each other in enhancing STEM education.

Course Objectives:

3. Explore the role of instructional scaffolding in problem-centered instructional approaches within STEM education.
4. Understand the historical development and foundational elements of instructional scaffolding, including dynamic assessment and appropriate support.
5. Evaluate different forms of scaffolding, such as one-to-one, peer, and computer-based scaffolding, and their effectiveness in various STEM disciplines and grade levels.
6. Apply theoretical frameworks, including Activity Theory, ACT-R, and Knowledge Integration, to design computer-based scaffolding strategies.
7. Analyze the interplay between computer-based and one-to-one scaffolding in enhancing STEM learning experiences.
8. Identify context-specific factors, including STEM discipline, student demographics, and instructional models, influencing the use of computer-based scaffolding.
9. Design and implement computer-based scaffolding strategies to achieve targeted learning outcomes, emphasizing higher-order thinking skills and deep understanding of STEM content.

Student Learning Outcomes:

Upon successful completion of the course, students will be able to:

- Analyze the role of instructional scaffolding in problem-centered instructional approaches within the context of STEM education.
- Describe the historical development and foundational elements of instructional scaffolding, including dynamic assessment and providing appropriate support.
- Evaluate various forms of scaffolding, including one-to-one, peer, and computer-based scaffolding, and understand their effectiveness in different STEM disciplines and grade levels.
- Apply theoretical frameworks, such as Activity Theory, ACT-R, and Knowledge Integration, to design computer-based scaffolding.
- Demonstrate an understanding of the interplay between computer-based and one-to-one scaffolding in enhancing STEM learning experiences.
- Identify context-specific factors, including STEM discipline, student demographics, and instructional models, that influence the use of computer-based scaffolding.

Course Content:

1. **Introduction**
   - Problem-Centered Instructional Approaches and STEM
   - Role of Scaffolding
2. **Instructional Scaffolding: Foundations and Evolving Definition.**
   - Historical Definition
   - Scaffolding Elements
   - Dynamic Assessment
   - Providing Just the Right Amount of Support
   - Intersubjectivity
   - Scaffolding Forms
   - One-to-One Scaffolding
   - Peer Scaffolding
   - Computer-Based Scaffolding
   - Considerations as the Instructional Scaffolding Metaphor was Applied to Computer Tools
   - Theoretical Bases of Computer-Based Scaffolding
   - Activity Theory
   - ACT-R
   - Knowledge Integration
   - Comparison of Theoretical Foundations
   - Design of Computer-Based Scaffolding
   - Interplay Between Computer-Based and One-to-One Scaffolding
3. **Context of Use of Computer-Based Scaffolding**

STEM Discipline

   - Student Demographics
   - Instructional Model with Which Scaffolding is Used
   - Problem-Based Learning
   - Case-Based Learning
   - Design-Based Learning
   - Inquiry-Based Learning
   - Project-Based Learning
   - Other Instructional Approaches
4. **Intended Learning Outcomes and Assessment of Computer-Based Scaffolding**
   - Targeted Learning Outcomes of Scaffolding
   - Higher-Order Thinking Skills
   - Ill-Structured Problem-Solving Ability
   - Argumentation Ability
   - Self-Directed Learning Ability
   - Alignment with NGSS
   - Learning Content Deeply
5. **Computer-Based Scaffolding Strategy**
   - Scaffolding Function
   - Conceptual Scaffolding
   - Strategic Scaffolding
   - Metacognitive Scaffolding
   - Motivation Scaffolding
   - Results from the Meta-Analysis
   - Context Specificity
   - Customization Presence or Absence
   - Customization Basis
   - Scaffolding's Effectiveness in Different STEM Disciplines

- Scaffolding's Effectiveness by Grade Level

Required Text:

- Belland, B. R. (2017). *Instructional scaffolding in STEM education: Strategies and efficacy evidence* (p. 144). Springer Nature.

References:

- Chang, H.-Y., & Linn, M. C. (2013). Scaffolding learning from molecular visualizations. Journal of Research in Science Teaching, 50(7), 858–886. http://doi.org/10.1002/tea.21089.
- Engeström, Y. (2009). The future of activity theory: A rough draft. In A. Sannino, H. Daniels, & K. D. Gutiérrez (Eds.), Learning and expanding with activity theory (pp. 303–328). Cambridge, UK: Cambridge University Press
- Greeno, J. G., & van de Sande, C. (2007). Perspectival understanding of conceptions and conceptual growth in interaction. Educational Psychologist, 42(1), 9–23. http://doi. org/10.1080/00461520709336915.
- Jonassen, D. H. (2011). Learning to solve problems: A handbook for designing problem-solving learning environments. New York: Routledge
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge, UK: Cambridge University Press
- Leont'ev, A. N. (2009). Activity and consciousness. Pacifica, CA, USA: Marxists Internet Archive. http://www.marxists.org/archive/leontev/works/activity-consciousness.pdf
- Lin, T.-J., Jadallah, M., Anderson, R. C., Baker, A. R., Nguyen-Jahiel, K., Kim, I. H., Kuo, L. J., Miller, B. W., Dong, T., & Wu, X. (2014). Less is more: Teachers' influence during peer collaboration. Journal of Educational Psychology, 107, 609. http://doi.org/10.1037/a0037758.
- Mortimer, E. F., & Wertsch, J. V. (2003). The architecture and dynamics of intersubjectivity in science classrooms. Mind, Culture, and Activity, 10(3), 230–244. http://doi.org/10.1207/ s15327884mca1003_5.
- Rogoff, B., & Toma, C. (1997). Shared thinking: Community and institutional variations. Discourse Processes, 23(3), 471–497. http://doi.org/10.1080/01638539709545000.
- Van de Pol, J., Volman, M., & Beishuizen, J. (2012). Promoting teacher scaffolding in small-group work: A contingency perspective. Teaching and Teacher Education, 28(2), 193–205. http://doi. org/10.1016/j.tate.2011.09.009.
- Wertsch, J. V. (1991). Voices of the mind: A sociocultural approach to mediated action. Cambridge, MA, USA: Harvard University Press.
- Wertsch, J. V., & Kazak, S. (2005). Intersubjectivity through the mastery of semiotic means in teacher-student discourse. Research and Clinical Center for Child Development Annual Report, 27, 1–11.
- Wood, D. (2003). The why? What? When? and How? of tutoring: The development of helping and tutoring skills in children. Literacy Teaching and Learning, 7(1), 1–30.
- Zhang, M., & Quintana, C. (2012). Scaffolding strategies for supporting middle school students' online inquiry processes. Computers & Education, 58(1), 181–196. http://doi.org/10.1016/j. compedu.2011.07.016.

Course Code	Course Title	Credit Hours
EDUC3201	Integrating STEM Education Methods	3(2+1)

Course Description

This course focuses on the methods of instruction for integrated STEM (Science, Technology, Engineering, and Mathematics) education at the K-8 level. This class will focus on essential elements/techniques of integrated STEM education in order to deepen student understanding of each discipline by contextualizing concepts and increase student interest in STEM disciplines through exposure to socially and culturally relevant STEM contexts.

Objectives

Upon completing this course, the students will be able to

- Discuss trends and issues in integrated STEM education.
- Create an integrated STEM lesson plan with a focus on engineering design, mathematical modeling, and technology integration.
- Demonstrate application of the materials and resources available for implementing an integrated STEM approach to the teaching and learning of STEM.
- Create effective integrated STEM lessons that respect the diversity of backgrounds in a classroom.
- Demonstrate a positive and professional attitude toward the teaching and learning of STEM education.
- Synthesize theoretical research and application literature into models of effective STEM education teaching.

Learning Outcomes

- Discuss trends and issues in integrated STEM education.
- Create an integrated STEM lesson plan with a focus on engineering design, mathematical modeling, and technology integration.
- Demonstrate application of the materials and resources available for implementing an integrated STEM approach to the teaching and learning of STEM.
- Create effective integrated STEM lessons that respect the diversity of backgrounds in a classroom.
- Demonstrate a positive and professional attitude toward the teaching and learning of STEM education.
- Synthesize theoretical research and application literature into models of effective STEM education teaching.

ASSIGNMENTS

Integrated STEM lessons and peer feedback: Students will develop three lessons with a focus of mathematical modeling, engineering design, and technology integration. Students will be given and provide peer feedback for the lessons and then make revisions. If a lesson is an application of content knowledge, then the prior lessons to develop the content knowledge should be summarized. If a lesson is a formative assessment, then the subsequent lessons to build on the student understanding should be summarized.

Annotated Bibliography and topic paper: Students will read 6 practitioner articles connected Integrated STEM education. (National Council of Teachers of Mathematics, Association of Science Teacher Education, or National Science Teacher Association articles) Students will create an annotated bibliography from the articles with a minimum two paragraph summaries of each article. Students will then write a minimum 4 page paper with the following sections.

Introduction

--4 things I learned

--3 ideas that supported my teaching beliefs

--2 questions that I still have or want more information about
--1 idea that will directly affect my teaching in the future.
The paper should include a reference list, appropriate APA citations, and be free from grammar mistakes.

Reflection paper
Drawing on class discussions, readings, and class assignments at the conclusion of the semester students will write a three page double-spaced reflection paper that demonstrates understanding of the following:

This class will focus on essential elements/techniques of integrated STEM education in order to (a) deepen student understanding of each discipline by contextualizing concepts and (b) increase student interest in STEM disciplines through exposure to socially and culturally relevant STEM contexts.

Lesson plan presentation
Students will develop an integrated STEM lesson that is aligned to mathematics and/or science standards. Each student will present the lesson to the class as if the class was the elementary/middle school class for which the lesson was designed. Each student will be expected to hand-in a word-processed lesson plan. A lesson plan format will be provided.

Course Contents
1. Class introduction/Integrated STEM overview
2. Frameworks for Integrated STEM instruction
3. Engineering design
4. Mathematical modeling
5. Technology integration
6. Topic paper sharing/Technology integration
7. Lesson plan presentation

Recommended Readings
Honey, M., Pearson, G. (2014). STEM Integration in K-12 Education: Status, Prospects, and an Agenda for Research. National Academic Press
Adams, D. and Hamm, M. (2020) Shaping the Future with STEM Instruction: Integrating Science, Technology, Engineering, Mathematics. Rowman & Littlefield Publishers
Truesdell, P. (2014). Engineering Essentials for STEM Instruction: How do I infuse real-world problem solving into science, technology, and math? ASCD
Jolly, A. (2017) . STEM by Design Strategies and Activities for Grades 4-8. Routledge

Course Code	Course Title	Credit Hours
EDUC3202	Introduction to STEM Education	3(3+0)

Cours Description

This course provided an introduction to foundations of STEM education discipline and the strategies used to deliver integrative STEM education in the school setting. The nature of STEM education disciplines, STEM pedagogy, teaching strategies, integrative STEM learning, STEM careers and problem-centered instructions are addressed.

Course Objectives

Prospective teachers will

- Explore the nature of STEM education disciplines
- Learn about STEM pedagogy and teaching methodologies
- Examine integrative STEM learning approaches
- Gain insights into STEM careers and problem-centered instruction
- Develop knowledge, skills, and competencies to promote STEM thinking
- Utilize personal technologies and scientific thinking strategies in education
- Apply STEM cognitive tools to address real-world problems
- Foster problem-solving abilities in elementary or secondary education
- Analyze and engage with real-world data and STEM-related resources
- Assess strengths and weaknesses of STEM programs, initiatives, and policies at various levels
- Contribute to the advancement of STEM education in diverse educational contexts.

Student Learning Outcomes

After completing this course successfully, the prospective teachers will be able to

- Demonstrate a strong understanding of the foundational principles and concepts of STEM education.
- Apply effective strategies for integrating STEM education into school settings.
- Identify and explain the nature of different STEM education disciplines.
- Utilize appropriate STEM pedagogy and teaching methodologies.
- Implement integrative STEM learning approaches in educational contexts.
- Describe various STEM career paths and their significance.
- Engage in problem-centered instruction to foster critical thinking and problem-solving skills.
- Demonstrate proficiency in utilizing personal technologies and scientific thinking strategies in educational settings.
- Apply STEM cognitive tools, such as scientific models and design loops, to address real-world challenges.
- Foster problem-solving abilities in elementary or secondary students through STEM education.
- Analyze and interpret real-world data and STEM-related resources to address relevant issues.
- Evaluate the strengths and weaknesses of STEM programs, initiatives, and policies at local, state, and national levels.

- Advocate for advancements and improvements in STEM education practices based on critical assessments.

Course Outline:

1. Background and history of the STEM movement
- 1.1.1. What is the role of science, mathematics, technology, and engineering?
- 1.1.2. What is the difference between science and technology?
- 1.1.3. Why is STEM important?
  - 1.1.3.1. The demand for skills
  - 1.1.3.2. National rankings and current trends
  - 1.1.3.3. The elementary gap
- 1.1.4. How is STEM different than traditional science and math
- 1.1.5. The role of problem solving and design
- 1.1.6. Barriers to STEM education
- 1.1.7. Strategies for effective STEM education
- 1.1.8. Problem-based learning
- 1.1.9. Performance based Teaching and Learning

2. The power and promise of STEM education
- 2.1.1. Active learning and engagement
- 2.1.2. The role of the standards
- 2.1.3. Understanding by design--backwards design
- 2.1.4. STEM and 5E teaching
- 2.1.5. The relationship between the standards and engineering
- 2.1.6. Delivering the standards through engineering and design
- 2.1.7. Using standards to develop curriculum

3. Science as a way of knowing
- 3.1.1. Inquiry-based teaching and learning
- 3.1.2. How does science work
- 3.1.3. Position of science in the modern world
- 3.1.4. History and nature of science
- 3.1.5. Unifying concepts f.
- 3.1.6. Science, Technology and Engineering

4. Mathematics as a way of knowing
- 4.1.1. Position of mathematics in the modern world
- 4.1.2. Mathematics as a way of knowing
- 4.1.3. Mathematical focal points
  - 4.1.3.1. Mathematical thinking
  - 4.1.3.2. Mathematical importance
  - 4.1.3.3. Mathematical fit
  - 4.1.3.4. Mathematics Connection

5. Technology and engineering
- 5.1.1. Foundational concepts
- 5.1.2. The engineering design loop
- 5.1.3. Adhering to design parameters and constraints
- 5.1.4. Technological assessment

6. Integrative STEM
- 6.1.1. Disciplinary, interdisciplinary, and trans-disciplinary strategies b.
- 6.1.2. Questioning/clarifying the problem
- 6.1.3. Identifying constraints/limitations
- 6.1.4. Gathering research

6.1.5. Quantifying/mental modeling
6.1.6. Visioning and graphic representation
6.1.7. Drawing and modeling (including Software usage)
6.1.8. Prototyping and assessment
6.1.9. Artifact development
6.1.10. Communicating the results of engineering/design

7. Teaching integrative STEM

7.1.1. Teaching with the end in mind
7.1.2. The role of design and engineering in the classroom
7.1.3. Curricular assessment procedures, tools, and techniques
7.1.4. Developing curriculum and activities
7.1.5. Instructional methods for teaching STEM
7.1.6. Collaboration strategies and resources

Course Resources:

- International Technology Education Association. (2000). *Standards for technological literacy: Content for the study of technology*. Reston, VA: Author.
- Arthur, W. B. (2009). *The nature of technology: What it is and how it evolves*. New York, NY: Free Press.
- Brett, D. (2003). *Tales from the Blue Ox: A hands-on manual of traditional skills from the Blue Ox Millworks Historic Park*. Lakeville, MN: The Astragal Press.
- Britton, E., De Long-Cotty, B., & Levenson, T. (2005). *Bringing technology education into K-8 classrooms: A guide to curricular resources about the designed world*. Thousand Oaks, CA: Corwin Press.
- National Research Council. (2001). *Educating teachers of science, mathematics, and technology: New practices for the new millennium*. National Academies Press.
- Francis, D. (Ed.). (1994). *Technology—a curriculum profile for Australian schools*. Carlton South Vic, Australia: Curriculum Corporation.
- Gotimer, K. K. (Ed.). (1993). *Impacts of technology*. Paramus, NJ: Globe Book Company.
- Hazen, R. M. & Trefil, J. (2009). *Science matters: Achieving scientific literacy*. New York, NY: Doubleday.

Course Code	Course Title	Credit Hours
EDUC3203	**Statistics for Teachers**	**3(3+0)**

Course Description

Developing quantitative skills in statistics is important for future teachers. This course is design to facilitate prospective teachers to develop their skills in collecting, analyzing, interpreting and presenting data. This will allow them to understand student performance using descriptive statistics, spot trends in student performance using data visualization and allow allows educators to compare different teaching methods using hypothesis tests.

Course Objectives

Prospective teachers will

- develop an understanding of what is statistics and how it it used in everyday life
- explore statistical terms
- use common statistical measures
- deal with using frequency tables and graphs
- connect probability and histograms
- describe various distributions
- engage in hypothesis testing
- explore the concept of correlation and prediction

Student Learning Outcomes

After completing this course successfully, the prospective teachers will be able to

- describe key terms in statistics
- use common statistical measures in their classroom
- use frequency tables and graphs to display their students data
- demonstrate the application of descriptive and inferential statics
- apply the concept of hypothesis testing using *t-test*
- draw the inferences from the data given in numeric, graphs, tables and functions

Course Contents

1. Introduction
- 1.1.1. Statistics in everyday life
- 1.1.2. Some key terms in statistics

2. Common Statistical Measures
- 2.1.1. Measures of central tendency
  - 2.1.1.1. The mean,
  - 2.1.1.2. The mode
  - 2.1.1.3. The median
- 2.1.2. Measures of variability
  - 2.1.2.1. The range
  - 2.1.2.2. The standard deviation
- 2.1.3. Some measures of an individual in a population
  - 2.1.3.1. *z*-scores
  - 2.1.3.2. Percentile rank and percentiles
  - 2.1.3.3. Quartiles
- 2.1.4. Rates

3. Frequency Tables and Graphs
- 3.1.1. Organizing the data
  - 3.1.1.1. Stem-and-leaf graph
  - 3.1.1.2. Frequency tables
  - 3.1.1.3. Bar graphs and histograms
  - 3.1.1.4. Reading histograms
- 3.1.2. Percentile rank, *z*-scores and graphs

4. Probability
- 4.1.1. Probability
- 4.1.2. Probability and histograms

5. The Binomial Distribution
- 5.1.1. Variables
- 5.1.2. Binomial random variable

6. The Normal Distribution
- 6.1.1. Binomial histograms
- 6.1.2. The theoretical normal curve
  - 6.1.2.1. Use of normal curve tables
  - 6.1.2.2. The normal curve tables and raw scores

7. Approximation of Binomial Distribution by Use of the Normal Distribution
- 7.1.1. The normal approximation to binomial distribution
- 7.1.2. Conditions for approximating a binomial distribution by use of a normal distribution

8. Hypothesis Testing: One Sample Test of Percentages in Binomial Distribution
- 8.1.1. Statistical Hypothesis
  - 8.1.1.1. Testing the null hypothesis
  - 8.1.1.2. One-tail and two-tail alternative hypothesis
  - 8.1.1.3. Decision rules
- 8.1.2. Statistical Errors
- 8.1.3. Hypothesis Testing Procedures

9. Hypothesis Testing: Two Sample Test of Percentages in Binomial Distribution
- 9.1.1. Symbols for estimates
- 9.1.2. A distribution of differences
- 9.1.3. Two-sample binomial hypothesis tests

10. Hypothesis Testing with Sample Means: Large Samples
- 10.1.1. Sample means
  - 10.1.1.1. Theoretical distribution of sample means
  - 10.1.1.2. Central Limit Theorem
  - 10.1.1.3. Estimating the standard deviation of a distribution of sample means
- 10.1.2. Two-sample tests of means – large samples

11. Hypothesis Testing with Sample Means: Small Samples
- 11.1.1. Student's t- Distribution
- 11.1.2. Two sample t-tests
- 11.1.3. A test for paired differences, matched pair design

12. Confidence Intervals
- 12.1.1. Confidence intervals for proportions in binomial experiments
- 12.1.2. Confidence interval for means based on large samples
- 12.1.3. Confidence interval for means based on large samples
- 12.1.4. Two sample confidence intervals for differences
  - 12.1.4.1. Difference between two proportions
  - 12.1.4.2. Difference between two means

13. Correlation and Prediction
- 13.1.1. Correlation co-efficients
- 13.1.2. Testing the significance of *r*
- 13.1.3. Prediction based on linear correlation
- 13.1.4. The coefficient of determination

Teaching/Learning Strategies

- Lecture method followed by discussion and question answer method
- Cooperative learning
- Student course portfolio
- Assignments and presentations / quizzes based on the content of the course outline and project
- Field trips

Recommended Resources

1. Naiman, A., Rosenfeld R. & Zirkel G. (1995). Understanding statistics (4th edition). McGraw-Hill, USA
2. Field, A. (2017). Discovering statistics using IBM SPSS (4th edition). SAGE Publications Ltd

SOME SUGGESTED READINGS:

Branch, R. M., & Kopcha, T. J. (2014). Instructional design models. In Handbook of research on educational communications and technology (pp. 77-87). Springer New York.

Cruse, E. (2006). Using educational video in the classroom: Theory, research and practice. *Library Video Company*.

Driscoll, M., Carliner, S. (2005) Advanced Web-Based Training: Adapting Real World Strategies in Your Online Learning, Pfeiffer. ISBN 0787969796

Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications*. Boston: Pearson.

Groff (2013). *Technology-rich innovative learning environments*.

Gustafson, K. L., & Branch, R. M. (2002). What is instructional design? *Trends and issues in instructional design and technology*, 16-25.

Johnston, J., & Barker, L. T. (2002). *Assessing the impact of technology on teaching and learning. A sourcebook for evaluators.*

Keegan, D. (1993). (edited). Theoretical Principles of Distance Education. North Yorkshire: Routledge.

Lever-Duffy, J., McDonald, J., & Mizell, A. (2002). *The 21st-Century Classroom: Teaching and Learning with Technology*. Addison-Wesley Longman Publishing Co., Inc.

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same?. *The Internet and Higher Education*, *14*(2), 129-135.

Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: a review of the literature, Journal of Information Technology for Teacher Education, 9:3, 319-342, DOI: 10.1080/14759390000200096.

Muth, K. D., & Alvermann, D. E. (1999). *Teaching and learning in the middle grades*. Allyn and Bacon.

Newby, T. J., & Stepich, D.,. Lehman, J., Russell, J. D., &Leftwich, A. T. (2010). *Educational technology for teaching and learning*. (4th Ed.). Pearson.

Roblyer, D. M. (2006). Integrating educational technology into teaching. Pearson/Merrill Prentice Hall.

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, *2*(1), 3-10

Siemens, G., & Tittenberger, P. (2009). *Handbook of Emerging Technologies for Learning.* Retrieved from, http://elearnspace.org/Articles/HETL.pdf

USAID. *Technology teaching and learning Material*.

Wickersham, L. E., & Chambers, S. M. (2006). ePortfolios: Using technology to enhance and assess student learning. *Education-Indianapolis Then Chula Vista-*, *126*(4), 738.

Course Code	Course Title	Credit Hours
EDUC4152	**Inquiry-Based Learning in STEM**	**3(3+0)**

Course Description:

The "Inquiry-Based Learning in STEM" course is designed to provide aspiring educators with a deep understanding of inquiry-based learning approaches in STEM education. The course emphasizes the use of hands-on experiments, problem-solving activities, and real-world applications to engage students in the process of scientific discovery and critical thinking. Participants will explore effective strategies for designing and implementing inquiry-based lessons, fostering students' curiosity, and promoting collaboration and communication skills in STEM subjects.

Course Objectives:

- Understand the principles and benefits of inquiry-based learning in STEM education.
- Explore various models and frameworks for implementing inquiry-based approaches in the classroom.
- Design and develop inquiry-based lesson plans aligned with STEM content standards.
- Utilize hands-on experiments, problem-solving activities, and real-world applications to engage students in scientific discovery.
- Foster students' critical thinking, creativity, and communication skills through inquiry-based learning.
- Assess and evaluate student learning outcomes in inquiry-based STEM lessons.
- Incorporate technology tools and resources to support inquiry-based learning in STEM subjects.

Course Outline:

1. Introduction to Inquiry-Based Learning in STEM Education

- Definition and characteristics of inquiry-based learning
- Benefits and challenges of inquiry-based approaches in STEM education
- Role of the teacher in facilitating inquiry-based learning experiences

2. Models and Frameworks for Inquiry-Based Learning

- 5E model (Engage, Explore, Explain, Elaborate, Evaluate)
- Question-Driven Inquiry (QDI)
- Problem-Based Learning (PBL)
- Project-Based Learning (PBL)
- Case-Based Learning (CBL)

3. Designing Inquiry-Based Lessons

- Setting learning objectives and aligning with STEM content standards
- Developing essential questions and guiding inquiries
- Selecting appropriate resources and materials for inquiry-based activities
- Sequencing activities and managing the inquiry process
- Differentiating instruction to meet diverse student needs

4. Hands-on Experiments and Scientific Discovery

- Planning and conducting hands-on experiments in STEM subjects
- Facilitating student-led investigations and data collection
- Analyzing and interpreting experimental results
- Drawing conclusions and making connections to real-world applications

5. Promoting Critical Thinking and Communication in Inquiry-Based Learning

- Encouraging higher-order thinking skills in STEM inquiries
- Facilitating scientific discourse and collaborative learning
- Using questioning strategies to guide student thinking and reflection
- Incorporating oral and written communication tasks in inquiry-based activities

6. Assessment and Evaluation in Inquiry-Based STEM Lessons

- Formative and summative assessment strategies for inquiry-based learning
- Designing rubrics and criteria for evaluating student work
- Providing constructive feedback to support student growth
- Assessing student process skills and scientific reasoning abilities

7. Integrating Technology in Inquiry-Based STEM Learning

- Exploring digital tools and resources for inquiry-based activities
- Using simulations, virtual labs, and data analysis software
- Incorporating online collaboration platforms and multimedia presentations

Assessment Methods:

- Participation in class discussions and activities
- Development and presentation of inquiry-based lesson plans
- Implementation and reflection on inquiry-based lessons
- Assessment of student work and portfolios
- Written assignments and reflections

Textbooks:

1. Bell, R. L., Smetana, L. K., & Binns, I. C. (2020). Simplifying inquiry instruction. National Science Teachers Association (NSTA) Press.
2. Keeley, P. (2015). Science formative assessment: 75 practical strategies for linking assessment, instruction, and learning. Corwin.

Reference Books:

1. National Research Council. (2012). A framework for K-12 science education: Practices, crosscutting concepts, and core ideas. National Academies Press.
2. Windschitl, M., Thompson, J., & Braaten, M. (2018). Ambitious science teaching. Harvard Education Press.

Websites:

1. National Science Teaching Association (NSTA) - www.nsta.org
   - Provides resources, articles, and lesson plans on inquiry-based learning in STEM education.
2. Understanding Science – www.undsci.berkeley.edu
   - Offers interactive resources and teaching materials to support inquiry-based science education.
3. Next Generation Science Standards (NGSS) - www.nextgenscience.org
   - Provides standards-aligned resources and instructional support for inquiry-based teaching.
4. TeachEngineering - www.teachengineering.org
   - Offers a collection of engineering-focused, inquiry-based lesson plans and activities.

Blogs:

1. Edutopia - www.edutopia.org

- Features blog posts on inquiry-based learning in STEM education, along with practical tips and classroom examples.

2. Cult of Pedagogy - www.cultofpedagogy.com
- Provides articles and blog posts on effective teaching strategies, including inquiry-based approaches.

3. STEM Teaching Tools – www.stemteachingtools.org
- Offers a blog with insights and resources for implementing inquiry-based learning in STEM subjects.

4. TeachThought - www.teachthought.com
- Features blog posts on inquiry-based teaching practices, including strategies for STEM education.

Articles:

1. Johnson, E., & Smith, M. (2020). The impact of inquiry-based learning on student engagement in science education. Journal of Research in Science Teaching, 57(6), 747-769.
2. Lee, S., & Choi, K. (2019). Inquiry-based learning in mathematics: A meta-analysis. Educational Research Review, 27, 181-196.
3. Schwartz, R., Lederman, N., & Crawford, B. (2020). Developing inquiry-based pedagogy and content knowledge in science teacher education. Journal of Science Teacher Education, 31(7), 801-817.
4. Hofstein, A., & Rosenfeld, S. (2019). Bridging STEM education research and school practice: The need for multiple evidence-based approaches. International Journal of STEM Education, 6(1), 1-11.
5. Sadler, T. D. (2015). The next generation science standards: Integrating the engineering design process. Science Teacher, 82(2), 8-10.
6. Windschitl, M., & Thompson, J. (2018). Integrating the practices: Learning to think and think to learn. Science and Children, 55(3), 74-79.

Please note that the above resources are provided as examples and it is recommended to further explore and evaluate them based on their relevance and suitability for the specific context and requirements of the course.

Course Code	Course Title	Credit Hours
EDUC4153	**STEM Curriculum Design and Instructional Materials**	**3(3+0)**

Course Description:

This course provides an in-depth exploration of STEM curriculum design and the development of instructional materials. It focuses on essential elements of curriculum development, including backward design, curriculum mapping, learning outcome development, and the selection of appropriate resources and materials for effective STEM instruction.

Course Objectives:

1. Understand the principles and theories of STEM curriculum design.
2. Apply backward design principles to develop STEM curricula.
3. Create curriculum maps that align with STEM learning outcomes.
4. Select and evaluate instructional materials for STEM education.
5. Design engaging and effective instructional materials for STEM instruction.

Course Outline:

1. **Introduction to STEM Curriculum Design**
- Principles and theories of STEM curriculum design
- Importance of backward design in curriculum development

2. **Backward Design Process**
- Identifying desired STEM learning outcomes
- Developing essential questions and enduring understandings
- Designing performance tasks and assessments

3. **Curriculum Mapping in STEM**
- Aligning curriculum with learning outcomes
- Mapping STEM concepts across grade levels
- Ensuring coherence and progression in STEM curricula

4. **Selecting Instructional Materials for STEM Education**
- Evaluating the quality and effectiveness of instructional resources
- Incorporating technology tools and resources in STEM instruction
- Adapting and customizing materials for diverse learners

5. **Developing Instructional Materials for STEM Instruction**
- Designing hands-on activities and experiments
- Creating project-based learning resources
- Integrating technology tools in instructional materials

Assessment Methods:

- Written assignments: Students will complete written assignments that demonstrate their understanding of STEM curriculum design principles and their ability to develop instructional materials.
- Project-based assessment: Students will design and develop instructional materials for a specific STEM topic or concept.
- Class discussions and presentations: Students will actively participate in class discussions and present their work to the class.

Textbooks:

1. Beane, J. A. (2018). Curriculum Integration: Designing the Core of Democratic Education. Teachers College Press.
2. Grant, M. M., & Fisher, D. (2018). Design, Make, Play: Growing the Next Generation of STEM Innovators. Routledge.

Reference Books:

1. Wiggins, G., & McTighe, J. (2005). Understanding by Design. ASCD.
2. Latta, M., & Beals, D. (2019). STEM Lesson Essentials, Grades 3-8: Integrating Science, Technology, Engineering, and Mathematics. Heinemann.

Websites:

1. Next Generation Science Standards - www.nextgenscience.org: Provides resources and standards-aligned materials for STEM curriculum design.
2. National Science Teaching Association (NSTA) - www.nsta.org: Offers articles, resources, and professional development opportunities related to STEM curriculum design.

Blogs:

1. TeachEngineering - www.teachengineering.org: Provides a collection of engineering-focused lessons and activities for STEM education.

2. STEM Education Insights - www.stem-inventions.com: Offers insights, ideas, and best practices for STEM curriculum design and instructional materials.

Articles:

1. Bybee, R. W. (2013). The Case for STEM Education: Challenges and Opportunities. NSTA Press.
2. Honey, M., Pearson, G., & Schweingruber, H. (Eds.). (2014). STEM Integration in K-12 Education: Status, Prospects, and an Agenda for Research. National Academies Press.
3. Bybee, R. W. (2014). STEM Education for the 21st Century: A Visionary Plan for Science, Technology, Engineering, and Mathematics Education. NSTA Press.
4. Bell, R. L., Smetana, L., & Binns, I. (2015). Simplifying Inquiry Instruction. The Science Teacher, 82(2), 54-59.
5. Koehler, M. J., & Mishra, P. (2015). Teachers Learning Technology by Design. Journal of Computing in Teacher Education, 31(3), 77-82.
6. National Academies of Sciences, Engineering, and Medicine. (2017). Seeing Students Learn Science: Integrating Assessment and Instruction in the Classroom. National Academies Press.
7. Bybee, R. W. (2019). The BSCS 5E Instructional Model: Personal Reflections and Contemporary Implications. Science & Children, 56(1), 10-14.
8. Moore, T. J., Stohlmann, M. S., Wang, H. H., Tank, K. M., Glancy, A. W., & Roehrig, G. H. (2014). Implementation and Integration of Engineering in K-12 STEM Education. In Handbook of Research on K-12 Engineering Education (pp. 151-180). Springer.
9. Nadelson, L., & Seifert, A. (Eds.). (2019). The Palgrave Handbook of Research in K-12 STEM Education. Palgrave Macmillan.
10. Honey, M., Pearson, G., & Schweingruber, H. (Eds.). (2022). STEM Integration in K-12 Education: Learning Science, Technology, Engineering, and Mathematics. National Academies Press.

Course Code	Course Title	Credit Hours
EDUC4154	STEM Education Research and Trends	3(3+0)

Course Description:

The "STEM Education Research and Trends" course is designed to engage educators in research and exploration of emerging trends in STEM education. Participants will have the opportunity to delve into current research, innovative practices, and emerging technologies in STEM education. The course will provide a platform for investigating topics such as educational robotics, data-driven instruction, and emerging trends in science and technology.

Course Objectives:

1. Explore current research in STEM education and its implications for classroom practice.
2. Examine innovative practices and emerging technologies in STEM education.
3. Analyze the impact of educational robotics on student learning and engagement.
4. Investigate the use of data-driven instruction in STEM subjects.
5. Stay updated with the latest trends and advancements in science and technology education.

Course Outline:

1. Introduction to STEM Education Research

- Importance of research in STEM education
- Understanding research methodologies and design

2. Emerging Trends in STEM Education

- Overview of current trends and developments
- Exploring the impact of emerging technologies

3. Innovative Practices in STEM Education

- Case studies of innovative STEM teaching methods
- Examining the effectiveness of project-based learning and inquiry-based instruction

4. Educational Robotics in STEM Education

- Introduction to educational robotics
- Exploring the benefits and challenges of integrating robotics in the classroom

5. Data-Driven Instruction in STEM Subjects

- Understanding data-driven instruction and its application in STEM
- Analyzing student data to inform instruction and support student success

6. Emerging Trends in Science and Technology Education

- Exploring advancements in science and technology fields
- Investigating the integration of emerging technologies in science education

Assessment Methods:

- Research papers or projects exploring a specific topic in STEM education
- Reflective journals or blogs on course readings and discussions
- Presentations or multimedia projects showcasing emerging trends in STEM education

Textbooks:

- Banks, F. (2016). Teaching STEM in the Early Years: Activities for Integrating Science, Technology, Engineering, and Mathematics. Routledge.
- Honey, M., & Kanter, D. E. (Eds.). (2013). Design, Make, Play: Growing the Next Generation of STEM Innovators. Routledge.

Reference Books:

- Finson, K. D. (Ed.). (2015). Visual Data and Their Use in Science Education. Springer.
- Bybee, R. W. (Ed.). (2015). The NSTA Reader's Guide to a Framework for K-12 Science Education. NSTA Press.

Websites:

- National Science Foundation (NSF) - www.nsf.gov : Provides resources and funding opportunities for STEM education research.
- STEM Education Coalition - www.stemedcoalition.org: Offers news, reports, and advocacy efforts related to STEM education.

Blogs:

- STEM Education Insights - www.stemeducationinsights.com: Provides insights and analysis of current research and trends in STEM education.
- The STEM Classroom - www.thestemclassroom.com: Offers practical ideas, tips, and resources for STEM educators.

Articles:

- Bell, S., & Linn, M. (2020). Designing and Evaluating the Impact of Technology-Rich STEM Learning Environments: A Decade of Progress. Journal of Science Education and Technology, 29(1), 1-10. doi: 10.1007/s10956-019-09800-6
- Honey, M., Pearson, G., & Schweingruber, H. (Eds.). (2014). STEM Integration in K-12 Education: Status, Prospects, and an Agenda for Research. National Academies Press.
- Bell, P., Lewenstein, B. V., Shouse, A. W., & Feder, M. A. (Eds.). (2009). Learning Science in Informal Environments: People, Places, and Pursuits. National Academies Press.
- Baram-Tsabari, A., & Segev, E. (2017). Scientific Storytelling in Science Education: Exploring the Untapped Potential of Narrative. Studies in Science Education, 53(2), 169-197. doi: 10.1080/03057267.2017.1352618
- Moore, T. J., Stohlmann, M. S., Wang, H.-H., Tank, K. M., Glancy, A. W., & Roehrig, G. H. (2014). Implementation and Integration of Engineering in K-12 STEM Education. In Engineering in Pre-College Settings (pp. 127-160). Springer.
- Stohlmann, M., Moore, T. J., & Roehrig, G. (2012). Considerations for Teaching Integrated STEM Education. Journal of Pre-College Engineering Education Research, 2(1), 28-34. doi: 10.5703/1288284314653
- Linn, M. C., Palmer, E., Baranger, A., Gerard, E., & Stone, E. (2015). Undergraduate Research Experiences: Impacts and Opportunities. Science, 347(6222), 1261757. doi: 10.1126/science.1261757

- Please note that the publication dates of the articles may vary within the specified range of 2013 to 2023. It is recommended to verify the exact publication dates of the articles for academic referencing.

2- Education Leadership and Management		
Course Code	**Course Title**	**Credit Hours**
EDUC3131	Introduction to Educational Leadership and Management	3(3+0)
EDUC3148	Instructional Leadership and Program Evaluation	3(3+0)
EDUC3166	E-Leadership and New Educational Trends	3(3+0)
EDUC4146	Organizational Behaviour in Education	3(3+0)
EDUC4124	Economics and Financing of Education	3(3+0)
EDUC4149	Quality Assurance in Education	3(3+0)
EDUC3151	Educational Law	3(3+0)
EDUC3194	Educational Policies of Pakistan	3(3+0)
EDUC3195	Educational Plans of Pakistan	3(3+0)
EDUC3196	Educational Policy Development	3(3+0)
EDUC3197	Policy Implementation in Education	3(3+0)

Course Code	Course Title	Credit Hours
EDUC3131	Introduction to Educational Leadership and Management	3(3+0)

Objectives:

After completion of the course, the students will:

- Develop an understanding of the issues related to organizational leadership
- Explore competing rationales relating to the nature and purpose of education
- Review decision-making practices
- Develop skills in strategic analysis and strategy development
- Develop the presentation skills required to effectively communicate
- Recommendations to important stakeholders.

Contents

1. Leading and Managing People: Setting the Scene

1.1 The Context for Leadership and Management in Education

1.2 Leading and Managing People for Performance

1.3 The Importance of Support Staff in Schools and Colleges

2. Key Concepts Understanding Educational Leadership

2.1 Organizational Cultures

2.2 Organizational Structures and Roles

2.3 Staff Motivation and Job Satisfaction

2.4 Leading and Managing for Equal Opportunities

2.5 Leading and Managing through Teams

3. The Nature of Leadership

3.1 Defining Leadership

3.2 Leadership at different Levels

3.3 How thinking about leadership has developed

4. Leadership and Management

4.1 Distinguishing leadership from other roles

4.2 Leadership and management

4.3 Transactional and Transformational Leadership

4.4 Characteristics of transformational leaders

4.5 Mavericks and corporate

5. Leadership Qualities

5.1 Lists of qualities

5.2 Charismatic leadership

5.3 The working leader

5.4 The psychopathology of leadership

6. Leader Behavior

6.1 The view of practitioners

6.2 A cognitive approach to leadership

6.3 The “vision thing”

6.4 Forthright leadership

6.5 Legitimizing leadership

6.6 How leader behavior influences corporate culture.

6.7 Prescription

7. Styles of Leadership

7.1 Autocratic and democratic styles

7.2 Tannenbaum and Schmidt

7.3 Consideration and initiation of structures

7.4 The managerial grid

7.5 Reddin’s 3D theory

7.6 Rensis Likert

7.7 Fred Fiedler and Contingency Theory

7.8 Situational Leadership

7.9 Style and personal philosophy

7.10 Two contrasting leadership styles

8. Leading and Managing Key Processes

8.1 Staff Recruitment and Selection

8.2 Induction and Retention

8.3 Mentoring and Coaching

8.4 Performance Appraisal and Review

8.5 Staff and Organizational Learning

9. The Development Process

9.1 Can leadership be taught?

9.2 The research finding

9.3 Self-development

9.4 Derailment

9.5 Issues and problems in the management of high-flyers

9.6 Coping with stress

10. Cultural Differences and Diversity

10.1 Dimensions of cultural differences.

10.2 A comparative study of attitudes to leadership-myth or reality?

10.3 Three European cultures

10.4 Leading International teams

10.5 Competencies of global leaders

10.6 Developing global leaders

10.7 Gender differences

10.8 Role models

11. The New Leadership

11.1 The end of the hero?

11.2 White water leadership

11.3 The leader as coach and developer

11.4 Leader/Learner

11.5 Stewardship

11.6 The servant leader

11.7 The fifth disciple

11.8 The leader as educator

12. Summing up

12.1 The main findings of leadership research.

Teaching Strategies

Lecture method followed by discussion

Cooperative learning

Assignments and presentation

Preparing course portfolios

Suggested Readings

Bush, T., and Middlewood, D. (2006). Leading and Managing People in Education.

London: Sage Publications.

Gardner, J.W. (1990) On Leadership. New York: Free Press, 1990.

Razik.T.A & Swanson, A.D. (1995). Fundamental Concepts of Educational Leadership and Management. New Jersey: Prentice Hall.

Sadler P. (2005) Leadership. New Delhi: Kogan Page India Private Limited

Course Code	Course Title	Credit Hours
EDUC3148	Instructional Leadership and Program Evaluation	3(3+0)

Objectives

After completion of the course, students will:

- Understand the concepts and methods of instructional supervision in education.
- Examine recent school improvement research and explore its implications for the supervision of educational personnel.
- Understand the importance and place of educational supervision and evaluation at secondary school level
- Define and describe various concepts related to educational supervision and evaluation at secondary school level
- Use various type of supervision techniques in accordance with the course objectives and nature of content
- Understand the importance and place of evaluation at secondary school level

Contents

1. Introduction to Educational Supervision
- 1.1 Meaning and concept
- 1.2 Functions, process and skills
- 1.3 Nature, objectives and scope
- 1.4 Components, functions, types and methods

2. Understanding the Components of Supervision and Evaluation
- 2.1 Teacher Supervision and Evaluation: Historical Roots.
- 2.2 Teacher Supervision and Evaluation: Separate, Essential, Complementary and Function
- 2.3 Criteria for High-Quality Supervision and Evaluation Systems
- 2.4 Classroom-based Supervision and Coaching Strategies
- 2.5 Key Concepts and Skills in Classroom Supervision
- 2.6 Peer Coaching

3. Differentiated Supervision Strategies
- 3.1 Self-Directed Teacher Growth
- 3.2 Action Research
- 3.3 Collegial Development Groups

4. Basic Supervisory Skills
- 4.1 Supervising in a changing environment
- 4.2 Solving problems and making decision
- 4.3 Communicating effectively
- 4.4 Motivation, Participatory Management, and Leadership
- 4.5 Working with groups and teams.

5. Special Cases in Supervision and Evaluation
- 5.1 Supervision and Evaluation of the Pre-service Teachers
- 5.2 Supervision and Evaluation of the Novice Teachers
- 5.3 Supervision and Evaluation of the In-service Teachers

6. Supervising in a Changing Environment
- 6.1 The internal environment

6.2 The supervisor's role in the organization
6.3 Supervisors as leaders and managers.
6.4 The changing environment
6.5 Managing diversity

7. Supervision, Evaluation and Renewal

7.1 Classroom Supervision and Evaluation
7.2 Usin g Standards in Supervision.
7.3 Supervision as professional development
7.4 Clinical Supervision
7.5 Supervisory options for teachers.
7.6 Supervision and summative evaluation.

8. Providing Leadership

8.1 Motivation, satisfaction and teacher's work place.
8.2 School climate, culture and change
8.3 Supervision and the Renewal of School

9. Appraising Performance

9.1 Performance appraisal systems
9.2 Steps in performance appraisal process
9.3 Problems with performance appraisal

10. Evaluation in the Improvement Program

10.1 Purpose of Evaluation.
10.2 Evaluating the total teaching-learning situation
10.3 Self evaluation
10.4 Evaluation of the improvement process
10.5 Evaluating instructional leadership
10.6 Principles of evaluation

Teaching Strategies

Lecture method followed by discussion

Cooperative learning

Assignments and presentation

Preparing course portfolios

Suggested Readings

Glickman, C. D., Gordon, S. P. and Ross-Gordon, J. M. (1998). The supervision of instruction. 4th edition.

Glickman, C., Gordon, S. & Ross-Gordon, J. (2001). Supervision and instructional leadership: A developmental approach (5th Ed). Needham Heights, MA: Allyn and Bacon.

Sergiovanni, T. & Starratt, R. (2002). Supervision: A redefinition (7th Ed.). Boston, MA: McGraw Hill.

Bulin, J.G (2001) Supervision. Delhi: AITBS Publishers. India

Course Code	Course Title	Credit Hours
EDUC3166	**E-Leadership and New Educational Trends**	**3(3+0)**

Objective

- This course is aimed to provide an opportunity to develop awareness about E-leadership in educational organization. Through this course the student has an exploration of use of latest technologies.
- This course has not only a theoretical perspective, it has some practical aspects as well like how practically LMS works, how virtual activities influence teaching and learning processes, and how digital environment enhances effectiveness.
- Understand digital disruption and its impact, opportunities, and emerging technologies and current trends
- Understand what is required to become a future E-leader
- Gain a clear picture of Digital Transformation and common myths and is understandings
- Learn the tools needed to help teaching, learning and management functions that lead digitally within educational organization

Course Contents

1. Introduction
- 1.1.1 Leadership and its relationship with technologies
- 1.1.2 Evolution of e-leadership
- 1.1.3 Emergence of e-leadership in educational organizations
- 1.1.4 E-leadership and school education

2. E-Leadership and Education
- 2.1.1 ICT and educational leadership styles
- 2.1.2 Elements of E-leadership
- 2.1.3 Management functions in e- environment
- 2.1.4 Technological effective tools for educational context
- 2.1.5 Theories and models of e-leadership
- 2.1.6 What is missing in e-leadership studies in education?

3. Digital Environment After Covid-19 Pandemic
- 3.1.1 E-Leadership Analysis during Pandemic
- 3.1.2 Education and The Most Important Present and Future Trends in ICT
- 3.1.3 The dimensions of Technological Leadership
- 3.1.4 Monitoring in school education before and after COVID-19
- 3.1.5 Comparison of communication and e-communication in educational environment
- 3.1.6 Role of instant data on decision-making
- 3.1.7 Data-Driven Education System

4. Learning management system
- 4.1.1 Reality of educational software
- 4.1.2 Developing stages of management systems
- 4.1.3 Management system and school leadership
- 4.1.4 Types and Formation of Learning Management System
- 4.1.5 Practical functioning of world famous LMS

5. Paradigm shift, E-leadership and Virtual Environment
- 5.1.1 From Metadata to Ontologies
- 5.1.2 From Information to Knowledge

5.1.3 E-skills of E-Leader
5.1.4 E-Leadership versus Virtual Team (e-Team)
5.1.5 Virtual Learning Environments
5.1.6 E-Leadership and The Challenges of Leading E-Teams

6. E-Leadership, LMS and Learning theories

6.1.1 LMS and the traditional pedagogy
6.1.2 LMS and the Behaviorism
6.1.3 LMS and Cognitivism
6.1.4 LMS and the Social Constructivism
6.1.5 LMS and Connectivism

7. E-Leadership and School Effectiveness

7.1.1 Factors of an effective school
7.1.2 School Effectiveness and School Efficiency
7.1.3 School Effectiveness and Multiple Functions of LMS
7.1.4 Models of School Effectiveness and E-leadership

Suggested Reading;

Books

Garland, V., & Tadeja, C. (2013) Educational Leadership and Technology Preparing School administrators for a Digital Age.

Bansel, M. (2010) E-Leadership: A New Paradigm.

Wang, V. (2011) Encyclopedia of E-Leadership, Counseling, and Training. Florida Atlantic University, USA.

Annunzio, S. (2001) E-Leadership: Proven Techniques for Creating an Environment of Speed and Flexibility in the Digital Economy Kindle Edition.

Weisband, S. P. (2008) Leadership at a Distance Research in Technologically-Supported Work. University of Arizona.

Mohiuddin, M,. Bilal Khalid, B., Azad, S., & Ed-dafali, S (2011) Leadership in a Changing World Edited by Muhammad Mohiuddin, Bilal Khalid, Md. Samim Al Azad and Slimane Ed-dafali.

Articles:

Abu-Shawar. B., & AL-SADI, J. (2010). Learning Management Systems: Are They Knowledge Management Tools? *International Journal of Emerging Technologies in Learning (IJET)· 5*(1): 4 -10. Doi: 10.3991/ijet.v5i1.887.

Avolio, J., & Kahai, S. (2003). Adding the "E" to E-Leadership: How it May Impact Your Leadership. *Organizational Dynamics*, *31*(4), 325-328. http://www.Science direct.com/science/article/pii/S009026160200133X

Chatterjee, C. & Prakasha, G. (2017).School Management and Teachers Perspective on Learning Management System." IOSR Journal Of Humanities And Social Science (IOSR-JHSS), vol. *22(*12), pp. 23-27. DOI: 10.9790/0837-2212012327.

Chua, Y. P., & Chua, Y. P. (2017). How are e-leadership practices in implementing a school virtual learning environment enhanced? A grounded model study. *Computers & Education*. 109 *(2).* 109-121.

Das-Gupta, P. (2011). Literature review: *E-leadership. Emerging Leadership Journeys*, *4*(1), 1-36. Retrieved from: https://www.regent.edu/acad/global/publications/ elj/vol4iss 1/ dasGupta_V4I1_pp1-36.pdf.

Demir, k. (2006). School Management Information Systems in Primary Schools. *The Turkish Online Journal of Educational Technology. 5*(2), 1303-6521. Retrieve on 21st November 2016. http://files.eric.ed.gov/fulltext /EJ1 102477.pdf .

Gurr, D. (2000) How Information and Communication Technology is changing the Work of Principals. International Congress of School Effectiveness and Improvement, Hong Kong.

Jameson, J. (2013). E-Leadership in Higher Education: The Fifth "Age" of Educational Technology Research. British Journal of Educational Technology, 44(6), 889–915.

Jetton, R. C. (1997). The impact of the principal's attitudes toward the implementation of computer-related technology and restructuring as perceived by Texas high school principals in the Region IV Service Center area. Doctorate Thesis. Texas A&M University.

Mohammed Sani, I., Ahmad Zabidi, A., & Husaina Banu, K. (2013). Smart principals and smart schools. *Procedia - Social and Behavioral Sciences, 103*, 826–836. https://doi.org/10.1016/j.sbspro.2013.10.404

Mohamad Mohsin, S. F. A., Hassan, R., & Ariff, A. F. (2014). The amalgamation of Dale's Cone of Experience, Bloom's Taxonomy and 21st Century Skills Through Virtual Learning Environment. *Journal of Contemporary Management Sciences*, 3(7), 88–99.

Oh, Siew Pei & Chua, Yan Piaw. (2018). An Explorative Review of E-Leadership Studies. International Online Journal of Educational Leadership. 2. 4-20. 10.22452/iojel.vol2no1.2. doi: DOI: 10.22452/iojel.vol2no1.2

Oliveira, P. C., Cunha, C. J. C. de A., & Nakayama, M. K (2016). Learning Management Systems (LMS) and E-Learning Management: An Integrative Review and Research Agenda. *JISTEM - Journal of Information Systems and Technology Management: 13*(2), 157-180. DOI: 10.4301/S1807-17752016000200001.

Course Code	Course Title	Credit Hours
EDUC4146	**Organizational Behaviour in Education**	**3(3+0)**

Objectives

After completion of the course, the student will:

- Analyze theories of organizational behavior and translate these into practice;
- Gain an appreciation of the ambiguity and complexity of organizational reality;
- Evaluate the usefulness of a range of ways of analyzing organizational problems of educational institutions
- Describe organizational power and politics, and explain how to use them to achieve desirable organizational goals.
- Demonstrate skills in researching, and recommending solutions for organizational problems of major relevance to human resource specialists

Contents

1. The Challenge of Managing People and Organizations
- 1.1 What is organizational behavior?
- 1.2 Managerial roles and functions for organization
- 1.3 Organizations as systems and the contingency Approach
- 1.4 Major challenges for today's organizations
- 1.5 Research methods in organizational behavior

2. Organizational Environment
- 2.1 Defining the Environment
- 2.2 Environmental uncertainty and complexity
- 2.3 Organizational technologies
- 2.4 Mission, Goals, and Strategy
- 2.5 Management of Organizational strategies

3. Managing Organization's Structure
- 3.1 Concept of organizational chart
- 3.2 Basic elements of structure
- 3.3 Organic and Mechanistic organizations
- 3.4 Types of structures in educational organizations
- 3.5 Managing organizational culture and ethics

4. Understanding and Managing Individual Differences
- 4.1 Determinants of Individual Differences
- 4.2 Understanding Personality Dimensions
- 4.3 Organizational value system
- 4.4 Work-related Attitudes
- 4.5 Staff 's social Perceptions

5. Managing Motivation and Performance
- 5.1 Motivation and Motivational Theories
- 5.2 Techniques for Job Designs
- 5.3 Job satisfaction and Work Relationship
- 5.4 Concept of Equity
- 5.5 Feedback Processes

6. Organizational Reward Systems

7. Behaviour Modification and Self Management
7.1 Concept of behavior modification
7.2 Models for modifying job behavior
7.3 Behavioral self management
7.4 Managerial implications

8. Group and Social Processes

8.1 Individual and group decision making
8.2 Dynamics of decision making
8.3 Group decision making
8.4 Organizational creativity and innovation
8.5 Organizational group dynamics
8.6 Organizational influence empowerment and politics
8.7 Teamwork in organizations
8.8 Management of conflicts and negotiations

9. The Future Organizations

9.1 Organizational effectiveness and threats of declines
9.2 Shapes of tomorrow's Organizations
9.3 Organizational change and development
9.4 Learning Organization

Teaching Strategies

Lecture method followed by discussion

Cooperative learning

Assignments and presentation

Preparing course portfolios

Suggested Readings

Hanson, E.M., (1996). Educational administration and organizational behavior (4th edition). Needham Heights, MA: Allyn & Bacon.

Kreitner,R. and Kinicki , A (2001) Organizational Behavior. (5th ed.) Boston:Irwin McGraw- Hill, Inc.

Nahavandi, A. and Malekzada, A.R. (1999) Organizational behavior :The Person- Organization fit .New Jersey: Prentice-Hall, Inc.

Owens, R.G. (2001). Organizational behavior in education: Instructional leadership and school reform (7th ed.). Boston: MA: Allyn & Bacon

Course Code	Course Title	Credit Hours
EDUC4124	**Economics and Financing of Education**	**3(3+0)**

Objectives

After completion of this course, the students will:

- Define and describe the economics and various theories of economics
- Understanding the nature, scope and significance of economics of education
- Understand the individual demand for education focusing compulsory and noncompulsory education, cost benefit analysis
- Understand the social rate of return approach as a guide for policy-making costs and benefits criticism of social rate of return as policy indicator
- Understand the man power-requirements approach to educational planning and methods of manpower forecasting
- Describe the various outputs of school/college/university education
- Understand and describe the cost-effective analysis in education and its application as base of investment on any project
- Understand the process/techniques of costing educational projects in Pakistan context
- Financing of education in Pakistan with reference to models of financial decision- making
- Budgeting in education focusing training sector (with reference to allocation made in different 5-years plans
- Understand the migration and brain drain, economics of life long and vocational versus academic education

Contents

1. **Introduction to Economics**
   - 1.1. Definition of economics and its major modes - macro and microeconomics
   - 1.2. Need and importance of studying economics
   - 1.3. Classical, neo-classical and modern school of thoughts in economics
2. **Economics of Education**
   - 2.1. Meaning and definition
   - 2.2. Need, nature and scope
   - 2.3. The economic value of education
   - 2.4. Brief overview of investment mechanism
   - 2.5. Brief overview of various concepts and assumptions in economics of education
   - 2.5.1. Economics of education and human capital theory
   - 2.5.2. Efficiency, inter, external, and financial
   - 2.5.3. Equity
   - 2.5.4. The macro and micro economic analysis
   - 2.5.5. Education: A black box
   - 2.5.6. Opportunity cost
3. **The Individual Demand for Education**
   - 3.1. The concept of demand in economics and education
   - 3.2. Factors determining the demand of compulsory education
   - 3.2.1. Demography
   - 3.2.2. Migration
   - 3.2.3. Legal and social conditions
   - 3.3. 3.3 The demand for non-compulsory schooling / tertiary education

3.3.1. Income
3.3.2. Personal preferences
3.3.3. Education as Investment
3.3.4. Trend
3.4. Cost-benefit analysis concepts
3.4.1. Meaning the costs and benefits
3.5. 3.5 The social rate of return approach
3.5.1. Introduction and social rate of return as a guide to policy-making
3.5.2. Identifying the costs and benefits
3.5.3. Some criticisms of social rate of returns and policy indicators
3.6. The manpower-requirements approach to educational planning
3.6.1. Introduction
3.6.2. Methods manpower forecasting

4. **Educational Outputs**
4.1. Meaning and concept
4.2. School outputs
4.3. Cognitive and non-cognitive outputs
4.4. The different outputs of higher education
4.5. Educational costs, meaning/ concept
4.6. Private and social costs

5. **Cost-Effective Analysis in Education**
5.1. Introduction and description
5.2. The use of cost-effective analysis in education
5.3. Relating output measures to cost
5.4. Cost effective analysis case studies of various institutions
5.5. Costing of educational projects
5.5.1. Techniques for costing educational projects
5.5.2. Costing projects in Pakistan along with use of project-appraisal techniques

6. **Financing Education in Pakistan**
6.1. Introduction to financing and budgeting
6.1.1. Who pays for education?
6.1.2. Institutions or individuals
6.2. Levels of decision-makers for financing education
6.3. Sources of educational financing in Pakistan
6.4. Models of financing for allocation to primary, secondary or higher education
6.5. Budgeting in Pakistan
6.5.1. Concepts, role, purpose of budgeting
6.5.2. Phases of budgeting
6.5.3. Types of budgets
6.5.4. Developmental and non-develop mental budget
6.5.5. Glossary of budget terms

7. **Migration and Brain Drain**
7.1. Introduction of migration and brain drain
7.2. Migration and it various types
7.3. The effects of migration and brain drain

8. **Economics of Life long Education**
8.1. Introduction
8.2. Difference between life long and adult education
8.3. Historical background with reference to foreign countries

8.4. Lifelong education in Pakistan

9. **Vocational Versus Academic Education**

9.1. Introduction

9.2. Development of vocational education in Pakistan with reference to education policies and five years plans

9.3. Manpower planning and vocational education

Teaching Strategies

- Lecture method followed by discussion
- Cooperative learning
- Assignments and presentation
- Preparing course portfolios

Suggested Readings

Blaug, M. (1978). Education and the Employment Problem in Developing

Countries. Switzerland, Geneva: International Labor Office.

Government of Pakistan (1983). Action Plan for Educational Development, 1983-88. Islamabad: Ministry of Education.

Government of Pakistan (1984). Project Synopsis for Educational Development, 1983-88. Islamabad: Ministry of Education.

Government of Pakistan (1983). The Sixth Five Year Plan. Islamabad: Planning Commission.

Mir, M.A. (1985). Themes in Technical Education. Karachi: Sindh Board of Technical Education.

UNESCO (1981). Vocational and Technical Education. Bangkok APEID.

Bukhari, M.A. (1985). Problems of Plan Implementation in Pakistan. Islamabad: Allama Iqbal Open University.

Veitch, M.D. (1984). Budget Functions, Structure of Budget, Formulation of Annual Development Plan for the Province of Punjab, Pakistan. (A case study, Papers for training course at P.P.C., January, Bradford, UK.

Zulkaif, A. (1985). Financing of Education in Pakistan and Budgeting.

Roe-Lyell, J. (1982). The Economic and Financing of Education. Prentice Hall College Division

Course Code	Course Title	Credit Hours
EDUC4149	**Quality Assurance in Education**	**3(3+0)**

Objectives:

After completion of this course the students will:

- Understand the importance of quality in education.
- Know the methods to ensure the quality management in schools.
- Able to implement the procedures to improve the standards of schools.
- Know the parameters and tools to assess the institutes in terms of quality.
- Understand the ways to manage and motivate the staff to get maximize and quality output from them.
- Able to design ideal model for educational institutes.
- Able to take effective decisions to ensure quality standards in education and then implementing them.

Course Outline:

1. **Introduction**

1.1. Quality in Education

1.2. Total Quality Schools and Model

1.3. What makes a school successful

1.4. Principles of Quality (Dr. W. Edward)

1.5. Quality Management Issues

2. **Total Quality Management in Education**

2.1. Characteristics of Total Quality Schools

2.2. School Improvement Process

2.3. Implementing Quality in Educational Institutions

2.3.1. Classroom Design

2.3.2. Curriculum Issues

2.3.3. Evaluation Process

2.3.4. Discipline of Teacher

2.3.5. Parental Involvement

3. **Organizing for Quality**

3.1. Requirements for success

3.2. Quality Steering Committee

3.3. Creating Quality Task Teams

4. **Assessment of Institutions**

4.1. Parameters of Assessment

4.2. Tools of Assessment

4.3. Qualitative Methods: SWOT Analysis

4.4. Participants in institutional assessment

5. **Human Resource Development for Quality Institutions**

5.1. Staff Selection and Placement

5.2. HRD Strategies for TQM

5.3. Commitments and Motivation

6. **Strategic Planning for TQM**

6.1. Strategic Planning

6.2. Model for Educational Institutes

7. **Decision-Making for Quality Management**

7.1. 7.1. Decision Situations

7.2. 7.2. Rational Decision Making

7.3. 7.3. Decisions based on facts

7.4. 7.4. Steps to gather data for effective decisions

7.5. 7.5. Ethics in Decision Making

8. **Implementing TQM**

8.1. Managing Change

8.2. Adaptation of Innovation

8.3. Resistance to Change

Compulsory Reading:

Mukhopadhyay, Marmar (2006). Total Quality Management in Education: SAGE Publications

Arcaro, Jerome S. (2006). Quality in Education: An implementation handbook: Pentagon Press Further Readings:

Joyce (1999). The new Structure of School Improvement: Open University Press

Schenkal, Randy. Quality Connections: Transforming Schools Through Total Quality Management: ASCD

Course Code	Course Title	Credit Hours
EDUC3151	**Educational Law**	**3(3+0)**

Objectives

After completion of the course, the student will:

- Demonstrate an understanding of basic principles of law related to education;
- Examine legal roles of federal, state, local government & autonomous bodies in the operation of education institutions;
- Interpret tension between governmental controls and the exercise of protected individual rights within the school setting;
- Analyze legal rights and responsibilities of school management, administrators, teachers, other educational personnel, students, and parents;
- Apply selected legal principles to the formulation of educational policies and procedures;
- Demonstrate the ability to understand legal terminology, read and interpret case law, and use selected legal information sources.

Contents

1. **What is Law?**
2. **Types and Basis of Law**
3. **Benefits of Law**
4. **Different Terms: Constitution, Policy, Jurisprudence, Rules and Regulation, Statutes**
5. **Educational Law in Educational Administration, Legal System to Education**
6. **Some examples of Educational Law from other countries**
7. **Various Rules and Regulations in Pakistani Educational Institutes**

7.1. Education Code

7.1.1. General Rules

7.1.2. Building,

7.1.3. Fees

7.1.4. Scholarship

7.2. Handbook of Circulars

7.3. Leave Rules and Study Leave Rules, Employment Types & Issues

7.3.1. Casual leave

7.3.2. Earned leave

7.3.3. Medical leave

7.3.4. Maternity leave

7.3.5. Extraordinary leave

7.3.6. Study leave

7.4. Pension Rules & Gratuity

7.5. Civil Service Rules (1962)

7.5.1. Appointment

7.5.2. Promotion

7.5.3. Seniority

7.5.4. Confirmation

7.5.5. Termination

7.6. Registration and Recognition of Private Educational Institutions

7.7. Efficiency and Discipline Rules for Educational Employees

7.8. Financial Rules

7.9. Benevolent Fund

7.10. Group Insurance and Advances

7.11. TA / DA (transfer and official visits)

7.12. University Calendar

7.12.1. Service Structure

7.12.2. Different bodies (i.e. Senate, Syndicate, Academic Council, BOS, BASR, Various Committees)

7.13. Budget Manual, PC-I, SNE

7.14. Delegation of Powers (Purchase, Appointment, Pay Scales for Teachers, Move over)

7.15. School Funds, Income Tax, GP Fund

7.16. Registers Forms and Other Record in Educational Institutions

7.17. Legal Problems in our Educational Institutions / Offices

Teaching Strategies

- Lecture method followed by discussion
- Cooperative learning
- Assignments and presentation
- Preparing course portfolios

Suggested Readings

CSR 1981

Punjab ESTA Code 2007

Punjab Education Code

University Calendar 2007-08, UE, Lahore

Course Code	Course Title	Credit Hours
EDUC3194	**Educational Policies of Pakistan**	3(3+0)

COURSE DESCRIPTION

This introductory course on education policy has been designed in keeping view the historical perspective of education policy in Pakistan. The course readings provide national and international literature that discuses Pakistan education policy and its salient features. The students will have in depth understating of all the previous education policies and the environment and situations when they were announced. The course encompasses how the policies addressed the educational challenges present in our educational setting and how the policies recommended policy actions to cope these challenges. The students will also understand the decentralization system of education in Pakistan and their implementation. The course will also encompass the role of millennium development goals and their impact on education.

COURSE OBJECTIVES

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

- Understand history of education in Pakistan
- Comprehend history of policy making in the country
- Compare different policy statements given in various policies on same issues such as language, quality education, and funds allocation etc.
- Compare millennium development goals achieved by Pakistan

COURSE CONTENTS

1. History of education in Pakistan
2. History of policy making

2.1. First educational conference (1947)
2.2. National commission on education (1959)
2.3. New education policy (1970)
2.4. The education policy (1972)
2.5. National education policy (1979)
2.6. National education policy (1992)
2.7. National education policy (1998-2010)
2.8. National education policy (2009)
2.9. Current national education policy
2.10. Education sector reforms
2.11. Decentralization in education
2.12 Latest Education Policy

TEACHING STRATEGIES

Throughout the courses, lecture and cooperative learning method will be used. Students will work in small groups, discuss class readings, emphasize interaction with ideas, and come up with questions that will lead the discussion toward deeper understanding of the readings.

ASSESSMENT CRITERIA

Student evaluation criteria will be followed as per university rules.

REQUIRED TEXTS

Ali, J. H. (2007). Education in Pakistan. A white paper. (Revised). Retrieved from http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan%20National%20Education%20Policy%20Review%20WhitePaper.pdf

Bengali, K. (1999). History of educational policy making and planning in Pakistan. A publication of the Sustainable Development Policy Institute (SDPI). Retrieved from

Course Code	Course Title	Credit Hours
EDUC3195	Educational Plans of Pakistan	3(3+0)

COURSE DESCRIPTION

This introductory course on education plans has been designed in keeping view the historical perspective of educational plans in Pakistan. The course readings provide national and international literature that discuses Pakistan education plan and its salient features. The students will have in depth understating of all the previous education plans and the environment and situations when they were announced. The course encompasses how the plans addressed the educational challenges present in our educational setting and how they inform actions to cope with these challenges. The course will also encompass the role of millennium development goals and their impact on education.

COURSE OBJECTIVES

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

- Understand history of education in Pakistan
- Comprehend history of plan development in the country
- Understand various education plans
- Compare different aspects of the educational plans
- Compare millennium development goals achieved by Pakistan

COURSE CONTENTS

1. Introduction to the Educational Plan
2. Five-year development plans for education
3. Different bodies of education planning
4. First five-year plan (1955-60)
5. Second five-year plan (1960-65)
6. Third five-year plan (1965-70)
7. Fourth five-year plan (1970-75)
8. Fifth five-year plan (1978-83)
9. Sixth five-year plan (1983-88)
10. Seventh five-year plan (1988-93)
11. Eighth five-year plan (1993-98)
12. Ninth five-year plan (1998-2003)
13. National plan of action (2013-16)
14. Latest Educational plan and its need
14. Pakistan sustainable development goals

TEACHING STRATEGIES

Throughout the courses, lecture and cooperative learning method will be used. Students will work in small groups, discuss class readings, emphasize interaction with ideas, and come up with questions that will lead the discussion toward deeper understanding of the readings.

ASSESSMENT CRITERIA

Student evaluation criteria will be followed as per university rules.

REQUIRED TEXTS

Ali, J. H. (2007). Education in Pakistan. A white paper. (Revised). Retrieved from http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan%20National%20Education%20Policy%20Review%20WhitePaper.pdf

Bengali, K. (1999). History of educational policy making and planning in Pakistan. A publication of the Sustainable Development Policy Institute (SDPI). Retrieved from Page | 10

https://www.sdpi.org/publications/files/W40-History%20of%20Educational%20Policy%20Making.pdf
Education for All: Retrieved from http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan%20EFA%20NPA%202003.pdf
Education Sector Reforms: Retrieved from http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan%20Education%20Sector%20Reform%202002-2006.pdf. Also http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan%20EFA%20NPA%202003.pdf
Khan, A. H. (1997). Education in Pakistan. Fifty years of Neglect. *The Pakistan Development Review*. *36*(4), 647-667. Retrieved from http://www.pide.org.pk/pdf/PDR/1997/Volume4/647-667.pdf
Khan, A. M., & Mirza, M. S. (2011). Implementation of Decentralization in Education in Pakistan: Framework, Status and the Way forward. *Journal of Research*, *5*(2), 146-169. Retrieved from http://ue.edu.pk/jrre/articles/52005.pdf
Ali, S. (2012). *Education policy borrowing in Pakistan: Public-private partnerships*. In G. Donn & Y. A. Manthri (Eds.), Education in the broader Middle East: Borrowing a baroque arsenal (pp. 23-40). Oxford: Symposium Books. Retrieved from http://ecommons.aku.edu/cgi/viewcontent.cgi?article=1123&context=book_chapters
Government of Pakistan. (1988). *The seventh five year plan (1988-93)*. Islamabad: Planning Commission.
Government of Pakistan. (1994). *The eighth five year plan (1993-98)*. Islamabad: Planning Commission.
Government of Pakistan. (1998). *The ninth five year plan (1998-2003)*. Islamabad: Planning Commission.
Government of Pakistan. (2004). *The tenth five year plan (2004-05-2008-09)*. Islamabad: Planning Commission.
Government of Pakistan. (2006). *Pakistan Economic Survey 2006-07*. Islamabad: Planning Commission.
Pakistan Economic Survey. (2014-15). Education in Pakistan. Retrieved from http://www.finance.gov.pk/survey/chapters_15/10_Education.pdf
Government of Pakistan. Pakistan Millennium development goals. Retrieved from http://pc.gov.pk/PMDGR-2013/PMDGR2013_Summary.pdf

Course Code	Course Title	Credit Hours
EDUC3196	**Educational Policy Development**	**3(3+0)**

COURSE DESCRIPTION

This course has been designed to provide students deeper understanding of the issues in the developing as well as developed countries. A comparative understanding of the higher education policies in various countries would provide the students deeper understating of the contextual situations of higher education in the countries and how they focus on various kind of education aspects through their policies. The course also introduces Higher Education Policy in Pakistan and discusses how the Higher Education Commission is committed to bring quality in curriculum, research, and evaluation.

OBJECTIVES

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

- Understand basics of comparative education policy
- Comprehend factors that influence educational policies
- Understand methods of comparative education policy studies
- Compare education policies of some of the Asian countries
- Understand higher education policy
- Compare higher education policies in various developed countries
- Understand higher education policy in Pakistan and the role of HEC

COURSE CONTENTS

1. Introduction to policy development:

1.1. Basics of policy development

1.2. Factors effecting policy development

1.3 Challenges of policy development

2. School education policy development in Pakistan

2.1. Context of school education policy

2.2. Importence of school education policy

2.3 Role of different stake holder in school education policy development

2.4 Elements of school education policy development

2.5 Factor effecting the school education policy development

2.6 Challenges of school education policy development

2.7 Process of school education policy development

3. Higher education policy development in Pakistan

2.1. Context of higher education policy

2.2. Importence of higher education policy

2.3 Role of different stake holder in higher education policy development

2.4 Elements of higher education policy development

2.5 Factor effecting the higher education policy development

2.6 Challenges of higher education policy development

2.7 Process of higher education policy development

4. Policy development in International context

4.1 Higher education policy in Germany

4.2 Higher education policy in USA

4.3 Higher education policy in Bangladash

4.4 Higher education policy in UK

4.5 Higher education policy in Finland

4.6 Higher education policy in China

4.7 Higher education policy in India

ASSIGNMENTS

You are required to review at least two articles taken from the peer reviewed journals. The list of some of the journals is given below. The instructor will provide you a rubric showing procedure of article review. You are required to write a final paper/ literature review to demonstrate your mastery of the course content. The application will be specific to a topic in which you are interested, within the domain of this subject. Your paper should be 5-10 pages in length and follow the guidelines described by the instructor. You will present a presentation on any topic, related to this course, which must be chosen outside of your course readings. Note: Follow APA style (6th Edition) for all of your assignments. (http://www.apa.org/)

TEACHING STRATEGIES

Throughout the courses, lecture and cooperative learning method will be used. Students will work in small groups, discuss class readings, emphasize interaction with ideas, and come up with questions that will lead the discussion toward deeper understanding of the readings.

ASSESSMENT CRITERIA

Student evaluation criteria will be followed as per university rules.

REQUIRED & SUGGESTED TEXTS Kaiser, F., Maassen, P., Meek, L., van Vught, F., de Weert, E., & Goedegebuure, L. (Eds.). (2014). Higher education policy: An international comparative perspective. Elsevier. Higher Education in Pakistan. (Retrieved from http://prr.hec.gov.pk/chapters/575s-5.pdf) Country summary of Higher Education (Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1121703274255/1439264-1193249163062/Pakistan_countrySummary.pdf Higher Education Policy in Turkey. Retrieved from https://www.yok.gov.tr/documents/10348274/10733291/TR'de+Y%C3%BCksek%C3%B6%C4%9Fretim+Sistemi2.pdf/9027552a-962f-4b03-8450-3d1ff8d56ccc Higher Education Policy in

China. Retrieved from https://www.britishcouncil.in/sites/default/files/higher_education_system_of_china.pdf Higher Education in India. Retrieved from https://www.britishcouncil.org/sites/default/files/understanding_india_report.pdf

PEER REVIEWED JOURNALS

Academic Exchange Quarterly Active Learning in Higher Education Assessment & Evaluation in Higher Education British Educational Research Journal British Journal of Educational Studies Canadian Journal of Higher Education

Course Code	Course Title	Credit Hours
EDUC3197	**Policy Implementation in Education**	**3(3+0)**

COURSE DESCRIPTION

This course is designed to prepare students to critically analyze the process of policy implementation in education and to understand the ways in which outcomes align with the goals of policymakers. This course starts from the premise that a deep understanding of research on education policy implementation is essential for students who are concerned about educational improvement. The course provides rigorous understanding of what is policy implementation, what gets implemented, and why understanding implementation process important to educational improvement. The course provides literature related to good evidence of policy implementation and informs about implementation analyses and policy recommendation.

COURSE OBJECTIVES

This course aims to strengthen students' ability to:

- Use research on policy implementation to assess implementation opportunities and pitfalls in complex organizational settings
- Understand teacher's role in policy implementation
- Role of language in policy implementation
- Understand critical, economic, and social capital approaches to policy implementation
- Collect and use evidence about policy implementation to develop policy recommendations
- Speak and write knowledgably and well about current education policy topics

COURSE CONTENTS

1. Challenges and opportunities in policy implementation
2. Successful implementation of policy initiatives
3. Teacher role in policy implementation
4. Policy implementation and cognition
5. Role of language in policy implementation
6. Policy implementation as political phenomenon
7. Building policy from practice
8. Critical approach to education policy implementation
9. Economic approach to policy implementation
10. Social capital and the problem of implementation
11. Implementation research in education

ASSIGNMENTS

You are required to review at least two articles (or a book) taken from the peer reviewed journals. The list of some of the journals is given below. The instructor will provide you a rubric

showing procedure of article review. You are required to write a final paper/ literature review to demonstrate your mastery of the course content. The application will be specific to a topic in which you are interested, within the domain of this subject. Your paper should be 5-10 pages in length and follow the guidelines described by the instructor.

TEACHING STRATEGIES

Throughout the courses, lecture and cooperative learning method will be used. Students will work in small groups, discuss class readings, emphasize interaction with ideas, and come up with questions that will lead the discussion toward deeper understanding of the readings.

ASSESSMENT CRITERIA

Student evaluation criteria will be followed as per university rules.

REQUIRED TEXT

Honig, M. I. (2006). New directions in education policy implementation: Confronting complexity. Albany, NY: State University of New York Press.

SUGGESTED READINGS

McDonnell, L. M., & Elmore, R. F. (1987). Getting the job done: Alternative policy instruments. Educational Evaluation and Policy Analysis 9(2), 133-152.

Schneider, A. & Ingram, H. (1990). Behavioral assumptions of policy tools. Journal of Politics, 52, 510-529. Retrieved from http://jgarand.lsu.edu/Readings%20for%20POLI%207961%20(Fall%202005)/Week%209/Schneider%20and%20Ingram%20(JOP%201990).pdf

Commonwealth of Australia. (2014). Successful Implementation of Policy Initiatives. Retrieved from http://www.anao.gov.au/~/media/Files/Better%20Practice%20Guides/ 2014%202015/A NAO%20-%20BPG%20Policy%20Implementation.pdf

Bhuyan, A., Jorgensen, A., and Sharma. S. (2010). Taking the Pulse of Policy: The Policy Implementation Assessment Tool. Washington, DC: Futures Group, Health Policy Initiative, Task Order 1.

PEER REVIEWED JOURNALS

Education Policy, Management and Quality

Educational Research For Policy and Practice Educational Evaluation and Policy Analysis

Higher Education Management and Policy Higher Education Policy

International Journal of Child Care and Education Policy

International Journal of Education Policy and Leadership

3- Assessment and Evaluation		
Course Code	**Course Title**	**Credit Hours**
EDUC5133	Theories and Models of Assessment and Evaluation	3(3+0)
EDUC5134	Test Devlopment and Appraisal	3(3+0)
EDUC5135	Techniques of Formative Assessment in Education	3(3+0)
EDUC5136	Alternative Assessment	3(3+0)
EDUC5123	Standard Setting in Assessment	3(3+0)
EDUC4155	Dynamic Testing	3(3+0)
EDUC4156	Virtual, Blended, and Computer-Assisted Assessment	3(3+0)

Course Code	Course Title	Credit Hours
EDUC5133	**Theories and Models of Assessment and Evaluation**	**3(3+0)**

Course Objectives

At the end of the course students will be able to:

- understand the importance of theoretical base for the test development
- understand different theories of test development
- appreciate the difference among various test development theories
- apply the methods learned in theories to improve the test development
- conceptualize and use statistical techniques used in different theories for better theoretical understanding of test development

Course Contents

1. The Psychometric Process

1.1 Psychometric inferences
1.2 Psychometric Theories
1.3 Some common educational measurement issues.

2. Random sampling theory

2.1 Classical theory
2.2 The true score models
2.3 Reliability estimation
2.4 Assumption of independence
2.5 Parallel tests assumptions
2.6 Error variance and standard error of measurement
2.7 Estimation of true score
2.8 Conceptual and practical implications of classical theory

3. Generalizability theory: conceptual framework

3.1 The Nature of score variances
3.2 Types of variances
3.3 True and Error Variances
3.4 Design consideration
3.5 Object of measurement
3.6 Facets of Measurement
3.7 Random versus fixed facets

4. Conventional item analysis

4.1 Probability of guessing
4.2 Item difficulty
4.3 Item discrimination
4.4 Analysis of distracters
4.5 Item reliability

5. Basic concepts of Item response theory

5.1 Limitations of random sampling theory
5.2 Item characteristic curve
5.3 Item Parameters and ability scale
5.3.1 Item parameters
5.3.2 Ability Scale indeterminacy
5.3.3 Normal Ogive function
5.4 Logistic Models
5.5 Choice of model
5.6 Information functions

6. Alternative View of educational Evaluation

6.1 Diverse conceptions of educational evaluation
6.2 Difference between evaluation assessment and measurement

6.3 Philosophical and ideological differences
6.3.1 Objectivist and subjectivist epistemology
6.3.2 Utilitarian versus Intuitionist-Pluralist Evaluation
6.3.3 The impact of philosophical difference
6.4 Methodological Background and differences
6.4.1 Quantitative versus Qualitative evaluation
7. Approaches and Models of Evaluation
7.1 The Tylerian Evaluation Approach
7.2 Metfessel and Micheal's Evaluation Paradigm
7.3 Hammond's Evaluation approach
7.4 Provus's Discrepancy Evaluation Model
7.5 The CIPP Evaluation Model
7.6 The UCLA Evaluation Model

Suggested Readings

Suen, H. K. (1990). Principles of Test Theories. New Jersey: Lawrence Eribaum Associates, Inc; Publishers.
Brenan R.L. (2001) Generalizability theory. New York: Springer-Verlag
Trevor G.B & Christine M.F (2001) Applying the Rasch Model. New York: Springe Van der L. Hambleton, R.K. (eds.) (1997)
Worthen, B. R. & Sanders, J. R. (1987). Educational Evaluation Alternative Approaches and Practical Guidelines. New York:Longma

Course Code	Course Title	Credit Hours
EDUC5134	**Test Development and Appraisal**	**3(3+0)**

Course Description

The course will equip prospective teachers and future educators and professionals with the essential knowledge and skills to create effective and meaningful tests. This comprehensive course focuses on developing a deep understanding of test principles and techniques enabling them to design tests that accurately measure student learning and inform instructional decisions.

Course Objectives

Prospective teachers will

- understand the uses of testing and assessment
- choose and plan for an appropriate type of test
- construct objective items
- measure complex achievement
- uses portfolios as testing technique
- understand alternative assessment techniques

Student Learning Outcomes

After completing this course the prospective teachers will be able to

1. Plan for effective classroom tests
2. Construct simple form of assessment items
3. Construct complex learning test items
4. Appraise the test
5. Use alternative assessment techniques
6. Report and grade testing
7. Use testing results

Course Contents

1. Planning Class Room Test and Assessments
1.1. Purpose of Classroom Testing and Assessment
1.1.1. Developing Class Room Testing and Assessment
1.1.2. Developing Specifications for Tests and Assessment
1.1.3. Selecting appropriate Types of Items and Assessment Task
2. Constructing Objective Test Items
2.1. Simple Forms
2.1.1. Short Answers
2.1.2. True-False Or Alternative Forms
2.1.3. Matching Exercise
2.2. Multiple Choice
2.2.1. Characteristics of Multiple Choice
2.2.2. Uses of Multiple-choice Items
2.2.3. Advantages and limitations of MCQs
2.2.4. Suggestion for constructing Multiple MCQs
3. Measuring Complex Achievement
3.1. Interpretive Exercise
3.2. Essay Questions
3.3. Performance-Based Assessment
4. Portfolio
4.1. Purpose of Portfolio
4.2. Characteristics / Strengths and Weaknesses of Portfolio
4.3. Guidelines for Portfolio Entries

5. Scales / Tests used for Hidden Personality Traits
5.1. Intelligence test
5.2. Attitude scale
5.3. Interest Inventory
5.4. Developing checklists
5.5. Observational Techniques, Peer Assessment, and Self Reporting
6. Achievement Test
6.1. Standardized Achievement Test
6.2. Comparison between Standardized and Informal Classroom Test
7. Aptitude Tests
7.1. Achievement and Aptitude test
7.2. Scholastic Aptitude and Learning Ability
7.3. Group Test Vs Individual tests
7.4. Interpreting aptitude tests results
7.5. Cultural context and aptitude testing

8. Assembling and Administering the Achievement Test
8.1. Assembling the classroom test
8.2. Administering and scoring
8.3. Item bank
9. Appraising the Achievement Test
9.1. Pilot Testing
9.2. Validation of Test
9.3. Reliability of Test
9.4. Item Analysis
9.4.1. Difficulty index
9.4.2. Discrimination index
9.4.3. Distractor analysis
10. Grading and Reporting
10.1. Types of grading and reporting
10.2. Functions of grading
10.3. Record Keeping
10.4. Feed back to stakeholder

Teaching/Learning Strategies
6. Lecture method followed by discussion and question-answer method
7. Cooperative learning
8. Student course portfolio
9. Assignments and presentations/quizzes based on the content of the course outline and project
10. Field trips

Recommended Resources

3. Miller, M. D., Linn, R. L., & Gronlund, N. E. (2009). *Measurement and assessment in teaching*. United States: Pearson Educational International.

4. Reynolds, C. R., Livingston, R. B., Willson, V. L., & Willson, V. (2010). *Measurement and assessment in education*. Upper Saddle River: Pearson Education International.

Course Code	Course Title	Credit Hours
EDUC5135	Techniques of Formative Assessment in Education	3(3+0)

Course Objectives

After going through this course graduates will be able to:

- understand the nature and importance of formative assessment.
- utilize the power of formative assessment to improve student's learning
- learn the types and techniques of formative assessment
- identify student learning difficulties and needs
- apply the techniques of formative assessment in classroom
- devise innovative techniques through practice and reflection

Course Contents

1. Assessment in education

1.1. Concept nature and need of formative assessment

1.2. Purpose and significance of formative assessment

1.3. Power of Formative Assessment for students" learning

1.4. Formative assessment: Assessment FOR learning

1.5. Difference between formative and summative assessment

1.6. What research and experts say about formative assessment

1.7. Validity of formative assessment

2. Learning targets and Standards

2.1. Goals and Objectives of Education

2.2. Standards, Benchmarks and Student Learning Outcomes (SLOs)

2.3. Ensuring SLOs through formative assessment

3. Techniques of Formative assessment

3.1. Informal observation

3.1.1. Assessing nonverbal behavior

3.1.2. Facial Expression

3.1.3. Gestures

3.2. Assessing voice related cues

3.3. Sources of Error in informal observation

4. Using oral questioning to assess students' progress

4.1. Purpose of questioning

4.2. Characteristics of effective questioning to assess student's progress

4.3. Feedback on answers to oral questions

4.4. Advantages and drawbacks of oral questioning

5. Using Homework, In-class assignments and quizzes

5.1. The purpose, need and rationale for students" Homework

5.2. Characteristics of realistic and effective homework

5.3. Feedback on homework

5.4. In-class assignments, activities

5.5. Utility of Quizzes to know students' progress

6. Selected Response tests

6.1. Multiple choice items

6.2. Binary choice items matching items

6.3. What do classroom teachers need to know?

7. Constructed Response tests

7.1. Short answer items

7.2. Essay type questions

7.3. What do classroom teachers need to know?

8. New visions, New Tools: Feedback and Self-Assessment

8.1. Need and importance of feedback on students' performance

8.2. Characteristics of effective feedback

8.3. Characteristics of effective praise

8.4. Students self-assessment

8.4.1. Tools for self-assessment

8.5. Encouraging student's self-assessment

8.6. Using student's self-assessment to identify their learning difficulties

9. Portfolio assessment

9.1. The nature and scope of portfolio

9.2. Essentials of portfolio

9.3. Utility of portfolio assessment

9.4. Feedback on portfolio

9.5. What do classroom teachers really need to know about portfolio assessment?

Suggested Readings

Broadfoot, P. (2007). An introduction to assessment. New York: Continuous Int.publications.

Macmillan J.H (2007). Classroom Assessment. New York: Pearson Education Inc.

Course Code	Course Title	Credit Hours
EDUC5136	**Alternative Assessment**	**3(3+0)**

Course Objectives

After going through this course graduates will be able to:

- understand the difference between traditional and non-traditional assessment.
- Understand the importance of alternative assessment for authentic assessment of student's learning
- Practice the techniques of alternative assessment
- devise innovative techniques through practice and reflection

Course Contents

1. Tradition and Non-Traditional Assessment
2. Taxonomy of Assessment Approaches
2.1 Alternative Assessment
2.1.1 Definition
2.1.2 Rationale
2.1.3 Limitation of conventional assessment
2.2 Common characteristics of Alternative Assessment
2.3 Process of Development for Alternative Assessment
2.4 Principles of Alternative Assessment
2.5 Principles for choosing an assessment Task
2.6 Three Models of Alternative Assessment
2.6.1 Authentic assessment
2.6.2 performance-based assessment
2.6.3 Constructivist assessment: Developmental Assessment
2.7 Authentic VS Performance Based Vs Constructivist assessment
3. Classification of approaches of Alternative assessment
3.1 Content Acquisition:
3.2 Procedural Knowledge
3.3 Cognitive Change
4. Some alternative assessments
4.1 Concept Mapping
4.2 Think Aloud Protocol,
4.3 Interviews
4.4 Observation,
4.5 Portfolio
4.6 Checklist
4.7 Rating Scales
5. Alternative Assessments: Portfolios
5.1 What qualifies as a Portfolio of students Work
5.2 Strength and Weakness of Portfolios
5.3 Guidelines for Portfolio Entries
5.4 Guidelines and students Role in selection of Portfolios
5.5 Evaluation Criteria
5.6 Using Portfolio in instruction and Communication
6. Alternative Assessment: Observational Techniques
6.1 What are class room observations?
6.2 Uses of class room observations
6.3 Types of observations

7. Alternative Assessment: Interviews

7.1 Types of Interviews
7.2 Guidelines to develop an interview protocol

8. Alternative Assessment: Rating Scales

8.1 Type of rating scales
8.2 Uses o rating scale

9. Alternative e-assessment approaches

9.1 Open book test/exam/quiz
9.2 Oral Exams
9.3 Online Discussions
9.4 Written or Visual Assignments
9.5 Performances/Presentations
9.6 Electronic journal

10. Forces Constraining the Use of Alternative Assessment

10.1 Time Constraints
10.2 Monetary Constraints
10.3 Knowledge Constraints
10.4 Difficulty in Creating Authentic T
10.5 Validity and Reliability Issues
10.6 Potential for Bias

Suggested Readings

McLoughlin, C., & Luca, J. (2006). Alternative approaches to assessment with online technologies: Integrating process and product outcomes. In B. Mann (Ed.), Selected Styles in Web-Based Educational Research. Hershey, PA: Information Science Publishing

Macmillan J.H (2007). Classroom Assessment. New York: Pearson Education Inc.
Broadfoot, P. (2007). An introduction to assessment. New York: Continuous Int.publications

Banks, S.R. (2005).*Classroom assessment issues and practices.* Boston:Pearson Lindquist,

Course Code	Course Title	Credit Hours
EDUC5123	**Standard Setting in Assessment**	**3(3+0)**

COURSE DESCRIPTION

The purpose of this course is to broaden the vision of the students on standard setting in assessment. It covers the basic elements in setting performance standards, methods of standard setting focusing Angoff method, scheduling standard setting, and future challenges in standard settings. They will be assumed to apply these concepts in the context of Pakistan.

COURSE OBJECTIVES

After successful completion of this course, the students will:
- Comprehend the concept of standard setting
- Critically examine the standard setting method
- Compare Angoff method of standard setting with other methods
- Understand the concept of vertically-moderated standardized testing (VMSS)
- Apply VMSS
- Use multiple methods of standard setting
- Explore practical issues in SS on Computerized Adaptive Tests
- Understand psychometric theory and the validation of performance standards
- Explore challenges and future directions of standard setting

COURSE CONTENTS

1. Concept of standard setting
1.1. Definitions of standard setting
1.2. Standard setting: an enduring need
1.3. General approaches to standard setting
1.4. Standard setting: policy issues, item scoring criteria and total test performance standards
1.5. Benefits of standard setting

2. Common elements in setting performance standards
2.1. Purpose
2.2. Choosing a standard setting method
2.3. Performance level labels and descriptions
2.4. Key conceptualizations
2.5. Selecting and training participants
2.6. Professional guidelines for standard setting
2.7. Evaluating standard setting
2.8. Providing feedback to participants

3. Standard setting methods
3.1. The Nedelsky method
3.2. The Ebel method
3.3. The Angoff method
3.4. The direct consensus method
3.5. The contrasting groups and borderline group methods3.6. The bookmark method
3.7. The item descriptive method
3.8. The Hofstee and Beuk method
3.9. The body of work method

3.10. Other holistic methods

4. Scheduling standard setting
4.1. Scheduling standard setting
4.2. Scheduling standard setting for educational assessment

5. Future challenges in vertically-moderated standard setting (VMSS)
5.1. History of VMSS
5.2. Approaches to VMSS
5.3. Application of VMSS
5.4. Alternative procedures and limitations

6. Alternate assessment and challenges of standard setting
6.1. Standard setting on alternate assessments
6.2. The unique challenges of alternate assessments
6.3. Necessary conditions for alternate assessment
6.4. Limitations of alternate assessment

7. Future directions and other challenges of standard setting
7.1. Rounding and methods of adjusting cut-scores
7.2. Deciding how to incorporate uncertainty
7.3. Generalizability of standards
7.4. Using multiple methods of standard setting
7.5. Legal issues in standard setting (national/international perspectives)

TEACHING STRATEGIES
- The assignments and projects will be based on the content of course outline.
- The students will also be asked to:

a) Critique two research studies/articles
b) Develop a research proposal preferably in the area of interest

- Both preparation and presentation of assignments and presentations will be given due weightage in terms of classroom discussion and assessment.

SUGGESTED READINGS
Cizek, G. J. and Bunch, M. B. (2007) *A guide to establishing and evaluating performance standards on tests.*
Cizek, G. J. and Sternberg, R. J. (2001) *Setting performance standards: Concepts, methods, and perspectives.* Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
ADDITIONAL READINGS
Camilli, G., Cizek, G. J. and Lugg, C. A. (___) *Psychometric theory and the validation of performance standards: History and future perspectives.*
Ricker, K. L. (2006) Setting cut scores: Critical review of Angoff and Modified Angoff Method (Available online at: http://www.education.ualberta.ca/educ/psych, retrieved on 15 January 2007.

Course Code	Course Title:	Credit Hours:
EDUC4156	**Virtual, Blended, and Computer-Assisted Assessment**	**3(3+0)**

Course Description: An introduction to the theoretical and practical components of "Virtual, Blended, and Computer Assisted" course will engage the imminent teachers to apply the learnt knowledge efficiently. Aspiring student teachers will develop a range of practical assessment skills to be used in the classroom with students of different ages, grades and subjects.

Learning Outcomes: Through the application of course content, and the related assessment techniques, learners are expected to reflect on computer literacy skills that will support the learners' ability to integrate technology into their future teaching practice by having basic knowledge about computer technology. The course would also emphasize learners' communication skills that will encourage their ability to communicate ideas and opinions clearly and concisely using written, spoken, visual, or computer-based formats and media appropriate to the situation and audience needs.

Course outline:

1. Introduction to Virtual/Online Assessment

1.1 Use of Virtual Technology in Assessment

1.2 Principles of Effective Virtual Assessment

1.3 Policing Approach and Preventative Approach in Virtual Assessment

1.4 Virtual Classroom Assessment Techniques (CAT)

1.5 Virtual Formative Assessment

1.6 Academic Integrity in Virtual Environment

2. Blended Vs. Traditional Assessment

2.1 Exams

2.2 Quizzes

2.3 E Portfolios

2.4 Self-Assessment

2.5 Rubrics

2.6 Collaborative Activities

2.7 Blogs

2.8 Benefits and challenges

3. Assessment Practices for the Blended Classroom

4.1 Formative Assessment Practices for the Blended Classroom

4.2 Summative Assessment Practices for the Blended Classroom

4. Models of Blended Learning

4.1 Face-to-Face Driver Model

4.2 Rotation Model

4.3 Flex Model

4.4 Online Lab Model

5. Computer-Assisted Assessment (CAA)

5.1What is Computer-Assisted Assessment

5.2 Why Assess Students?

5.3 What are the Justifications for using CAA?

5.4 Pedagogical Advantages of CAA

5.5 Document Problem Solution through Case Study

Teaching Learning Strategies:

- Lecture method followed by discussion and question answer method
- Cooperative learning
- Assignments and presentations / quizzes based on the content of the course outline and project using "do-it-yourself"

Assessment Plan:

1. Assessment must encourage and reinforce learning.
2. Assessment must enable robust and fair judgments about student performance.
3. Assessment practices must be fair and equitable to students and give them the opportunity to demonstrate what they have learned.
4. Assessment must maintain academic standards.

Suggested Readings:

'Using computers in assessment' (1997) in G. Brown with J. Bull and M. Pendlebury, Assessing Student Learning in Higher Education, Routledge, London, pp. 202–21.D. Stephens and J. Bull (1998)

'Computer-assisted assessment: suggested guidelines for aninstitutional strategy', Assessment and Evaluation in Higher Education, vol. 23, no. 3, pp.283–94. J. Harvey and N. Mogey (1999)

'Pragmatic issues when integrating technology into theassessment of students', in S. Brown, J. Bull and P. Race (eds), Computer-assisted Assessment inHigher Education, Kogan Page, London.http://caacentre.lboro.ac.uk/resources/faqs/fqgen9.shtml

Reg Dennick, Simon Wilkinson, Nigel Purcell. (2009) Online eAssessment: AMEE Guide No. 39. Medical Teacher 31:3, pages 192-206.

Andrew Boyle, Dougal Hutchison. (2009) Sophisticated tasks in e-assessment: what are they and what are their benefits?. Assessment & Evaluation in Higher Education 34:3, pages 305-319.

Stephen George-Williams, Mary-Rose Carroll, Angela Ziebell, Christopher Thompson, Tina Overton. (2019) Curtailing marking variation and enhancing feedback in large scale undergraduate chemistry courses through reducing academic judgement: a case study. Assessment & Evaluation in Higher Education 44:6, pages 881-893.

H Jiao. (2015) Enhancing students' engagement in learning through a formative e-assessment tool that motivates students to take action on feedback. Australasian Journal of Engineering Education 20:1, pages 9-18.

Riley,J.E.,Gardner,C.,Cosgrove,S.,Olitsky,N.,O'Neil,C.,andDu,C.(2014).Implementationofblend edlearningfortheimprovementofstudentlearning,InA.Picciano,C.Dziuban,andC.Graham(Eds.),Ble ndedlearning:Researchperspectives,volume2.NY:Routledge.

Benson, A.D. (2003). Assessing participant learning in online environments. New Directions for Adult

and Continuing Education, 100, 69-7

4- **Curriculum and Instruction**		
Course Code	**Course Title**	**Credit Hours**
EDUC3174	Curriculum Development and Sustainable Education	3(3+0)
EDUC3175	Curriculum Development Designs and Models	3(3+0)
EDUC3176	Textbook and Instructional Materials Development	3(3+0)
EDUC3173	Curriculum Change and Innovation	3(3+0)
EDUC3177	Contemporary Issues in Curriculum and Practice	3(3+0)
EDUC4157	Curriculum Theories and Practices	3(3+0)
EDUC4158	Technology Integration in Curriculum Development	3(3+0)
EDUC4159	Interdisciplinary Approaches to Curriculum	3(3+0)
EDUC4160	Curriculum Evaluation and Revision	3(3+0)
EDUC4161	Designing for Diversity: Inclusive Curriculum Development	3(3+0)

Course Code	Course Title	Credit Hours
EDUC3174	Curriculum Development and Sustainable Education	3(3+0)

Course Objectives

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

- Understand the concept, meaning and scope of Sustainable development
- know the aims of Education for Sustainable Development (ESD)
- critique on ESD
- know the characteristics of SD
- establish a link between education and SD
- understand the process of curriculum development in relation to sustainable dimensions
- identify the challenges in ESD and also find their possible solutions

Course Contents

1 Introduction: The nature of sustainable development

1.1 Sustainable development: concept, meaning, nature, purpose
1.2 Scope of sustainable development
1.3 Principles of sustainable development
1.4 Understand various interpretations of sustainable development
1.5 Demand of sustainability
1.6 Development in globalization Era, challenges and opportunities
1.7 Dimension of Sustainability

2 Education, sustainable development and sustainability Education

2.1 What is Education, sustainable development and Education for sustainable development (ESD)?
2.2 Function of Education and role of education in Sustainability
2.3 Contribution of sustainable development in education
2. 4 Aims of ESD
2.4.1 Improving basic education
2.4.2 Reorienting Existing Education
2.4.3 Public Understanding and Awareness
2.4.4 Formal, Non-formal, and Informal Education
2.5 Core characteristics of ESD

3 Sustainability Education Curriculum

3.1 Various Meanings of Curriculum
3.1.1 Curriculum as a Lesson Plan
3.1.2 Curriculum as a Learning Experience
3.1.3 Curriculum as a Plan for Learning
3.2 Various Views on Curriculum
3.2.1 Humanistic Curriculum
3.2.2 Curriculum as a Social Reconstruction
3.2.3 Curriculum as Technology
3.2.4 Academic Curriculum
3.3 Relationship between Curriculum and Teaching

4 Competencies, standards, benchmarks, design of lessons and curricula

4.1 Definition of competencies
4.2 Selection of competencies
4.3 Fundamentals of a model of competencies for ESD
4.4 Core competencies of ESD
4.5 Standards: definition, purpose
4.6 Benchmark: definition, types
4.7 Designing learning units
4.8 Guidelines for creating curricula

4.9 Types of curriculum

5 Procedures of Curriculum Development
5.1 Sustainability Education Curriculum Framework
5.2 The Design of Curriculum
5.3 Components of Curriculum (objectives, contents, Organization and method, evaluation)
5.4 Systematic approach to Curriculum Development
5.4.1 Meaning of System
5.4.2 System Design in Curriculum Development
5.5 The Steps in Curriculum Development
6 Curriculum Objectives
6.1 The Goals of Education
6.2 Development of Multiple Dimensions of Intelligence
6.3 School objectives and Curriculum Objectives
6.3.1 The Taxonomy of objectives
6.3.2 Sources for Objective Formulation
6.3.3 Development of Curriculum Objective
6.4 Formulating Sustainability Curriculum Objectives
7 Curriculum Evaluation
7.1 Principles of Curriculum Evaluation
7.2 Models of Curriculum Evaluation
7.2.1 Bradley Model
7.2.2 Tyler Model
7.2.3 Stufflebeam Model
7.2.4 Scriven Model
7.2.5 Stake Model
7.2.6 Eisner Model
7.3 Forms of Curriculum Evaluation
7.4 Techniques of Evaluation
8 Teacher education for sustainable development
8.1 What should people learn? And how could they be taught?
8.2 Pedagogies and didactics for ESD
8.2.1 Interdisciplinary approach
8.2.2 Critical thinking and problem solving
8.2.3 Multi-method (word art, drama, debate, life experience etc)
8.2.4 Participatory decision-making
8.2.5 Applicability
8.3 Create and implement a plan to reduce personal/ school ecological footprints
8.4 Identify and compare strategies to influence behavioral change
8.5 Create or continue to implement an action plan/ activity to make schools and/or communities more sustainable
8.6 Identify resources and organizations to help bring about environmental change in schools and communities
9 Challenges and Barriers to ESD
9.1 Challenges of SD & Sustainable Solutions
9.2 Promoting sustainability in Education

Suggested Readings

Allen, W (2007). *Learning for Sustainability: Sustainable Development* Ali, M. Sustainability Education.

Elliott, J.H. (2013). *An Introduction to Sustainable Development*. New York: Routledge.

Laboy-Nieves, E.N., Schaffner, F.C., Abdelhadi, A.H. and Goosen, M.F.A. (2009).

Environmental Management. London: CRC Press.

McKeown, R (2002). *Education for Sustainable Development Toolkit*. Center for Geography and Environmental Education University of Tennessee 311 Conference Center Bldg. Free copy can be downloaded from http://www.esdtoolkit.org

Midgley, J. (1995). *Social Development: The Developmental Perspective in Social Welfare*.

London: Sage.

Mohamed Salih, M.A. (2002). *Globalization, sustainable development and environment: A balancing act*. In F.J. Schuurman (Ed.), *Globalization and Development Studies:*

Challenges for the 21st Century. New Delhi: Vistaar Pub.

Munasinghe, M. (2009). *Sustainable Development in Practice*. New York: Cambridge.

Obrecht, A., Pham, M., Spehn, E., Payne, D., Brémond, A. C., Altermatt, F., ... & Geschke, J.

E. (2021). Achieving the SDGs with biodiversity. Akademie der Naturwissenschaften Schweiz (SCNAT), Forum Biodiversität Schweiz. https://boris.unibe.ch/156991/1/SDG_Factsheet_E_DEF.pdf

Print, M. (2021). *Curriculum Development and Design*. Taylor & Francis.

Rieckmann, M. (2017). *Education for sustainable development goals: Learning objectives*.

Unesco Publishing.

Schmandt, J. and Ward, C.H. (eds.) (2012) *Sustainable Development: The Challenge of Transition*. Cambridge: Cambridge University Press

Schreiber, J. R., & Siege, H. (2016). *Curriculum framework: Education for sustainable development*. Engagement global, Bonn.

Scott, W & Gough, S (2003). *Sustainable development and learning: framing the issues*. Routledge Falmer:USA

UNESCO. (2015). Sustainable Development. Retrieved 6 September 2021.

https://en.unesco.org/themes/education-sustainable-development/what-is-esd/sd

UNESCO. (2018) Guidebook on education for sustainable development for educators: effective teaching and learning in teacher education institutions in Africa. Paris, France.

Course Code	Course Title	Credit Hours
EDUC3175	**Curriculum Development Designs and Models**	**3(3+0)**

Course Objectives

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

- Acquire the knowledge of nature and scope of curriculum.
- Understand the curriculum development process and its phases.
- Analyze the designs and approaches of curriculum development.
- Recognize models of curriculum development.
- Analyze the contemporary issues regarding curriculum development in Pakistan.

- **Course Contents**

1. Curriculum Development
i. Concept and Nature of Curriculum
ii. Principles of Curriculum Development
2. Foundations of Curriculum Development
i. Philosophical
ii. Psychological
iii. Sociological
3. Process of Curriculum Development
i. Phases of Process of Curriculum Development
ii. Need Assessment
iii. Formulation of Aims, Goals and Objectives
iv. Selection of Content
v. Selection of Learning Experience
vi. Organization of Content and Learning Experience
vii. Evaluation
4. Curriculum Design
i. Components of Curriculum Design
ii. Curriculum Design's relationship with its Components
iii. Sources of Curriculum Design
5. Vertical and Horizontal Articulation of the Curriculum
6. Design Dimensions Considerations
i. Scope
ii. Integration
iii. Sequence iv. Articulation
v. Balance
vi. Continuity
7. Approaches and Designs of Curriculum Development
i. Subject-Centered Design ii. Learner-Centered Design

iii. Problem-Centered Design

8. Models of Curriculum Development
i. The Objectives model
ii. The Process model
iii. Hilda Taba's model

iv. Tyler's model
v. Wheeler's model
vi. Kerr's model
9. Curriculum Development in Pakistan
i. Issues and Problems of Curriculum Development in Pakistan
ii. Role of Teacher in Curriculum Implementation
iii. Trends in Curriculum Development

Suggested Readings:

Hunkins, F. P., & Ornstein, A. C. (2016). Curriculum: Foundations, principles, and issues.

Kelly, A. V. (2009). *The curriculum: Theory and practice*. Sage.

Kolomitro, K., Inglese, J., & Idzikowski, M. (2017). Curriculum Design Handbook. *Centre for Teaching and Learning*.

Pillai, S. S. (2017). Curriculum design and development. *Retrieved August*, *17*.

Print, M. (2021). *Curriculum Development and Design*. Taylor & Francis.

Seel, N. M., Dijkstra, S. (2004). Curriculum, Plans, and Processes in Instructional Design: International Perspectives. Routledge.

Course Code	Course Title	Credit Hours
EDUC3176	Textbook and Instructional Materials Development	3(3+0)

COURSE DESCRIPTION

The development of quality textbooks contributes to the implementation of a number of international instruments that have been ratified by governments to guarantee freedom, equality and non-discrimination. It aims at contributing to the attainment of SDG4 by promoting the quality textbooks and learning resources that reflect values such as diversity and international understanding. It is intended to orientate the prospective teachers and curriculum specialists with the development, distribution and use of textbooks and learning resources with the necessary tools to enhance their quality and relevance.

Course Objectives:

Through this course, the students will be able to:

- Know about the field of textbook development.
- Distinguish between an ordinary book and a textbook in its true sense.
- Establish textbook designing as a specific field of technology.
- Become specialist of textbook authoring, selection, evaluation and testing of the teaching material.
- Specialize specific discipline textbooks as a developer and designer
- Develop relevant and effective instructional materials/resources

Course Contents:

Concept and Scope of Textbook

- Definitions
- The need and scope of textbooks
- History of textbook
- Textbook development (steps and models)

Textbook Development and Mapping the Curriculum

- Planning a textbook
- Analyzing and structuring
- Text organizers tutorials

Textbook Publishing and Policy

- Need of a publishing culture
- Public and private publishing
- The textbook production and management
- Textbook publishing in Pakistan

Textbook Writing and Validation

- The challenges of writing process

- Tryout of textbooks

Illustration and Layout Aspect

- Enhancing textbook effectiveness through pictures
- Design for Diagrams and Charts

Textbook Review and Evaluation

Principles of Enhancing Learning Through Textbooks and Learning Resources

- Principle 1: Enhancing the quality of education for all learners
- Principle 2: Promoting values, attitudes and skills
- Principle 3: Enabling learners to reflect, think and build peace internationally **Strategies for Enhancing Learning Through Textbooks**

- Overarching strategies
- Strategies for achieving accessibility
- Strategies for achieving quality
- Strategies for achieving efficacy as tools for peace and global citizenship

Suggested Readings:

Durrani, A. (1997). The Development Points and Steps for the Textbook Development, "Taleem-1-Musalsal", Islamabad, No.24.

Global Education Monitoring Report Team. (2020). Textbooks and inclusive education. Available online at https://unesdoc.unesco.org/ark:/48223/pf0000373693

Herliby, John G. (1992). The Textbook Controversy, Issues, Aspects, Perspectives, Ablex Publishing Co., Norwood, Newjersey.

Lepionita, Allen, M. (2003). *Writing and Developing your College Textbook.* Prentice Hall.

Reviser, Robert A. and John V. Dempsey (2006). (eds.). Trends in Instructional Design and Technology 2nd Ed., Prentice Hall.

UNESCO (2014). Textbooks and learning resources: guidelines for developers and users. Available online at https://unesdoc.unesco.org/ark:/48223/pf0000226135_eng

UNESCO (2014). Textbooks and learning resources: a global framework for policy development.

Course Code	Course Title	Credit Hours
EDUC3174	Curriculum Development and Sustainable Education	3(3+0)

Course Objectives

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

- Understand the concept, meaning and scope of Sustainable development
- know the aims of Education for Sustainable Development (ESD)
- critique on ESD
- know the characteristics of SD
- establish a link between education and SD
- understand the process of curriculum development in relation to sustainable dimensions
- identify the challenges in ESD and also find their possible solutions

Course Contents

1 Introduction: The nature of sustainable development

1.1 Sustainable development: concept, meaning, nature, purpose

1.2 Scope of sustainable development

1.3 Principles of sustainable development

1.4 Understand various interpretations of sustainable development

1.5 Demand of sustainability

1.6 Development in globalization Era, challenges and opportunities

1.7 Dimension of Sustainability

2 Education, sustainable development and sustainability Education

2.1 What is Education, sustainable development and Education for sustainable development (ESD)?

2.2 Function of Education and role of education in Sustainability

2.3 Contribution of sustainable development in education

2. 4 Aims of ESD

2.4.5 Improving basic education

2.4.6 Reorienting Existing Education

2.4.7 Public Understanding and Awareness

2.4.8 Formal, Non-formal, and Informal Education

2.5 Core characteristics of ESD

3 Sustainability Education Curriculum

3.1 Various Meanings of Curriculum

3.1.1 Curriculum as a Lesson Plan

3.1.2 Curriculum as a Learning Experience

3.1.3 Curriculum as a Plan for Learning

3.2 Various Views on Curriculum

3.2.1 Humanistic Curriculum

3.2.2 Curriculum as a Social Reconstruction

3.2.3 Curriculum as Technology

3.2.4 Academic Curriculum

3.3 Relationship between Curriculum and Teaching

4 Competencies, standards, benchmarks, design of lessons and curricula

4.1 Definition of competencies

4.2 Selection of competencies

4.3 Fundamentals of a model of competencies for ESD

4.4 Core competencies of ESD

4.5 Standards: definition, purpose

4.6 Benchmark: definition, types

4.7 Designing learning units

4.8 Guidelines for creating curricula

4.9 Types of curriculum

5 Procedures of Curriculum Development

5.1 Sustainability Education Curriculum Framework

5.2 The Design of Curriculum

5.3 Components of Curriculum (objectives, contents, Organization and method, evaluation)

5.4 Systematic approach to Curriculum Development

5.4.3 Meaning of System

5.4.4 System Design in Curriculum Development

5.5 The Steps in Curriculum Development

6 Curriculum Objectives

6.1 The Goals of Education

6.2 Development of Multiple Dimensions of Intelligence

6.3 School objectives and Curriculum Objectives

6.3.1 The Taxonomy of objectives

6.3.2 Sources for Objective Formulation

6.3.3 Development of Curriculum Objective

6.4 Formulating Sustainability Curriculum Objectives

7 Curriculum Evaluation

7.1 Principles of Curriculum Evaluation

7.2 Models of Curriculum Evaluation

7.2.1 Bradley Model

7.2.2 Tyler Model

7.2.3 Stufflebeam Model

7.2.4 Scriven Model

7.2.5 Stake Model

7.2.6 Eisner Model

7.3 Forms of Curriculum Evaluation

7.4 Techniques of Evaluation

8 Teacher education for sustainable development

8.1 What should people learn? And how could they be taught?

8.2 Pedagogies and didactics for ESD

8.2.6 Interdisciplinary approach

8.2.7 Critical thinking and problem solving

8.2.8 Multi-method (word art, drama, debate, life experience etc)

8.2.9 Participatory decision-making

8.2.10 Applicability

8.7 Create and implement a plan to reduce personal/ school ecological footprints

8.8 Identify and compare strategies to influence behavioral change

8.9 Create or continue to implement an action plan/ activity to make schools and/or communities more sustainable

8.10 Identify resources and organizations to help bring about environmental change in schools and communities

9 Challenges and Barriers to ESD

9.1 Challenges of SD & Sustainable Solutions

9.2 Promoting sustainability in Education

Suggested Readings

Allen, W (2007). *Learning for Sustainability: Sustainable Development* Ali, M. Sustainability Education.

Elliott, J.H. (2013). *An Introduction to Sustainable Development*. New York: Routledge.

Laboy-Nieves, E.N., Schaffner, F.C., Abdelhadi, A.H. and Goosen, M.F.A. (2009). *Environmental Management.* London: CRC Press.

McKeown, R (2002). *Education for Sustainable Development Toolkit*. Center for Geography and Environmental Education University of Tennessee 311 Conference Center Bldg. Free copy can be downloaded from http://www.esdtoolkit.org

Midgley, J. (1995). *Social Development: The Developmental Perspective in Social Welfare*. London: Sage.

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Mohamed Salih, M.A. (2002). *Globalization, sustainable development and environment: A balancing act*. In F.J. Schuurman (Ed.), *Globalization and Development Studies: Challenges for the 21st Century*. New Delhi: Vistaar Pub.

Munasinghe, M. (2009). *Sustainable Development in Practice*. New York: Cambridge.

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Print, M. (2021). *Curriculum Development and Design*. Taylor & Francis.

Rieckmann, M. (2017). *Education for sustainable development goals: Learning objectives*. Unesco Publishing.

Schmandt, J. and Ward, C.H. (eds.) (2012) *Sustainable Development: The Challenge of Transition*. Cambridge: Cambridge University Press

Schreiber, J. R., & Siege, H. (2016). *Curriculum framework: Education for sustainable development*. Engagement global, Bonn.

Scott, W & Gough, S (2003). *Sustainable development and learning: framing the issues*. Routledge Falmer:USA

UNESCO. (2015). Sustainable Development. Retrieved 6 September 2021. https://en.unesco.org/themes/education-sustainable-development/what-is-esd/sd

UNESCO. (2018) Guidebook on education for sustainable development for educators: effective teaching and learning in teacher education institutions in Africa. Paris, France.

Course Code	Course Title	Credit Hours
EDUC3177	**Contemporary Issues in Curriculum and Practice**	**3(3+0)**

Course Description

This course bridges educational theory and practice for teachers by providing a forum in which to critically, reflectively and analytically engage issues of contemporary educational practice and policy with regard to curriculum and its implementation. Issues include but are not limited to demographic changes, education/curricula policy change, school improvement and reform initiatives and programs, emerging new technologies and globalization. It also shed light onto the support structures required for effective curriculum management and implementation.

Course Objectives

This course aims to enable students to:

- Understand the curricular policies and policy-making processes.
- Critically explore the social, economic, and political contexts of education and schooling and curriculum.
- Examine, how curricular activities are developed and impacted by legislative, and socio-political forces.
- Demonstrate cultural literacy and global citizenship

Course Contents

1 Curriculum: Conflicting visions and enduring concerns

2 Demographic changes

3 Policy changes

4 Emerging new technologies

5 Globalization

6 Refugee and immigration issues

7 Political dimension of curriculum

8 Support structures for curriculum management and implementation

9 Skills necessary for effective curriculum implementation

Reference Books

OECD (2020). *Implementing Education Policies Achieving the New Curriculum for Wales*. OECD Publishing.

Darmann-Finck, I., Reiber, K. (2021). *Development, Implementation and Evaluation of Curricula in Nursing and Midwifery Education.* Springer Nature.
Glatthorn, A. A. Boschee, B. F., Whitehead, B. M. (2012). Curriculum Leadership:

Strategies for Development and Implementation. SAGE.

Course Code	Course Title	Credit Hours
EDUC4157	Curriculum Theories and Practices	3(3+0)

Course Description

This course explores a variety of viewpoints that have influenced educational practice as it dives into the theoretical underpinnings of curriculum development. In order to analyze and evaluate important curriculum theories, their historical settings, and implications for instructional design, students will use reliable reference materials. The purpose of the course is to promote a thorough understanding of the fundamental ideas that guide the creation and use of curricula.

Course Objectives

1. Examine and compare various curriculum theories and their philosophical underpinnings.
2. Analyze the historical development and evolution of curriculum theories.
3. Evaluate the relevance and applicability of different curriculum theories in contemporary educational contexts.
4. Synthesize curriculum theories to inform instructional design and teaching practices.
5. Critically assess the impact of cultural, social, and political factors on curriculum theories.
6. Engage in scholarly discussions and debates related to curriculum theories.
7. Apply insights from curriculum theories to advocate for inclusive and student-centered education.
8. Reflect on the ethical dimensions of curriculum theories and their implications for educational equity.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

1. Describe the foundational principles and assumptions of major curriculum theories.
2. Analyze the historical context and key figures associated with each curriculum theory.
3. Compare and contrast different curriculum theories in terms of their focus, goals, and approaches.
4. Apply curriculum theories to design instructional strategies that align with specific educational objectives.
5. Critically assess the cultural and societal influences shaping curriculum theories and practices.
6. Engage in thoughtful discussions and debates about the strengths and limitations of various curriculum theories.
7. Develop a curriculum proposal informed by insights from multiple curriculum theories.
8. Reflect on personal and professional values in relation to curriculum theories and their implications.

Course Outline:

Unit 1: Introduction to Curriculum Theories

1.1 Theoretical Foundations of Curriculum Studies

1.2 Nature of Curriculum Theories: Philosophical Perspectives

1.3 Historical Evolution of Curriculum Theories

Unit 2: Traditional Curriculum Theories

2.1 Essentialism: Back to Basics

2.2 Perennialism: Enduring Ideas and Great Works

2.3 Progressivism: Learner-Centered and Experiential Learning

Unit 3: Societal and Cultural Influences on Curriculum

3.1 Social Reconstructionism: Curriculum for Social Change

3.2 Cultural Transmission and Curriculum: The Dominant Culture Debate

3.3 Critical Pedagogy: Empowerment and Social Justice

Unit 4: Cognitive and Constructivist Curriculum Theories

4.1 Cognitive Development Theories and Implications for Curriculum

4.2 Constructivism: Knowledge Construction and Meaning-Making

4.3 Connectivism: Learning in the Digital Age

Unit 5: Postmodern and Postcolonial Curriculum Theories

5.1 Postmodernism and Curriculum: Deconstruction and Pluralism

5.2 Postcolonial Curriculum: Decolonizing Knowledge and Narratives

5.3 Ecological Curriculum: Sustainability and Global Citizenship

Unit 6: Curriculum Integration and Transdisciplinary Approaches

6.1 Integrative Curriculum: Interdisciplinary and Intrapersonal Connections

6.2 Transdisciplinary Curriculum: Crossing Boundaries and Complex Problem-Solving

6.3 Curriculum Innovation: Designing for the Future

Unit 7: Curriculum Theories and Educational Policy

7.1 Standards-Based Curriculum: Accountability and Assessment

7.2 Hidden Curriculum: Unintended Messages and Social Reproduction

7.3 Globalization and Curriculum: Cultural Exchange and Homogenization

Unit 8: Ethical Considerations in Curriculum Theories

8.1 Ethics of Curriculum Selection and Representation

8.2 Equity and Social Justice: Addressing Disparities in Curriculum

8.3 Personal Values and Ethical Responsibility in Curriculum Development

Teaching and Learning Strategies

- In general, collaborative, and interactive approaches. Discussion/assignments/ presentations, projects using “learner-centered” methods.
- “Reflective Journals” on each session
- Maintaining course portfolios.

Assessment

As per University of Education Rules and Regulations.

References:

- Pinar, W. F. (Ed.). (2014). International Handbook of Curriculum Research. Routledge.
- Ornstein, A. C., & Hunkins, F. P. (2017). Curriculum: Foundations, Principles, and Issues. Pearson.

- Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (2009). Understanding Curriculum: An Introduction to the Study of Historical and Contemporary Curriculum Discourses. Peter Lang.
- Schiro, M. S. (20121). Curriculum Theory: Conflicting Visions and Enduring Concerns. Sage Publications.
- Connelly, F. M., He, M. F., & Phillion, J. (Eds.). (2016). The SAGE Handbook of Curriculum and Instruction. Sage Publications.
- Apple, M. W., Au, W., & Gandin, L. A. (Eds.). (2020). The Routledge International Handbook of Critical Education. Routledge.
- Giroux, H. A. (2010). Lessons from Paulo Freire. Teachers College Press.
- Kumashiro, K. K. (2009). Against Common Sense: Teaching and Learning Toward Social Justice. Routledge.

Course Code	Course Title	Credit Hours
EDUC4158	Technology Integrating in Curriculum Development	3(3+0)

Course Description

This course investigates how to better teaching and learning experiences by integrating technology into curriculum development. Students will investigate various methods, tactics, and tools for successfully integrating technology across disciplines through real-world reference books. The purpose of the course is to give students the information and abilities necessary to create a technology-infused curriculum that fosters critical thinking, teamwork, and digital literacy.

Course Objectives:

By the end of this course, students will be able to:

1. Understand the theoretical foundations of technology integration in curriculum development.
2. Analyze the impact of technology on pedagogy, learning outcomes, and student engagement.
3. Design technology-enhanced learning experiences that align with curriculum objectives.
4. Evaluate and select appropriate technology tools and resources for different subject areas.
5. Integrate digital assessment methods to measure student progress and achievement.
6. Foster a culture of innovation and digital citizenship within educational settings.
7. Collaborate effectively with colleagues to develop interdisciplinary technology-integrated units.
8. Reflect on ethical considerations and challenges associated with technology integration.

Learning Outcomes:

Upon successful completion of this course, students will be able to

1. Explain the rationale and benefits of integrating technology in curriculum development.
2. Analyze the interplay between technology, pedagogy, and content knowledge.
3. Design technology-infused learning objectives aligned with instructional activities.
4. Select and implement appropriate technology tools to enhance teaching and learning.
5. Develop formative and summative assessments utilizing digital platforms.
6. Create technology-enhanced curricula that promote critical thinking and problem-solving skills.
7. Collaborate with peers to design interdisciplinary projects that leverage technology.
8. Reflect on ethical and privacy considerations in using technology for educational purposes.

Course Outline:

Unit 1: Introduction to Technology Integration in Curriculum

1.1 Theoretical Foundations of Technology Integration
1.2 SAMR Model: Substitution, Augmentation, Modification, Redefinition
1.3 TPACK Framework: Technological Pedagogical Content Knowledge

Unit 2: Technology-Enhanced Pedagogy and Learning Theories

2.1 Constructivist Learning and Technology Integration
2.2 Connectivism and Digital Learning Environments
2.3 Flipped Classroom and Blended Learning Models

Unit 3: Designing Technology-Infused Learning Objectives

3.1 Writing Measurable and Attainable Technology-Enhanced Learning Outcomes

3.2 Taxonomies for Technology-Integrated Learning Objectives
3.3 Backward Design Approach for Technology Integration
Unit 4: Selecting and Integrating Technology Tools
4.1 Interactive Whiteboards and Visual Learning Tools
4.2 Learning Management Systems and Online Collaboration Platforms
4.3 Educational Apps and Gamification in Curriculum Design
Unit 5: Digital Assessment and Feedback
5.1 Formative Assessment with Technology: Quizzes, Polls, and Surveys
5.2 Digital Portfolios and Reflection Journals
5.3 Rubrics and Automated Grading Tools

Unit 6: Fostering Digital Citizenship and Ethical Use of Technology

6.1 Digital Footprint and Responsible Online Behavior

6.2 Copyright, Fair Use, and Creative Commons in Educational Settings
6.3 Cybersecurity and Privacy Considerations in Educational Technology
Unit 7: Interdisciplinary Technology-Integrated Projects
7.1 Collaborative Project-Based Learning with Technology
7.2 Integrating Technology Across Subjects: STEAM and Beyond
7.3 Virtual Reality and Simulation in Interdisciplinary Learning

Unit 8: Innovation and Future Trends in Technology-Enhanced Curriculum
8.1 Emerging Technologies: AI, AR, VR, and Beyond
8.2 Design Thinking and Innovation in Curriculum Development
8.3 Creating a Technology-Infused Professional Development Plan

Teaching and Learning Strategies

- In general, collaborative, and interactive approaches. Discussion/assignments/ presentations, projects using "learner-centered" methods.
- "Reflective Journals" on each session
- Maintaining course portfolios.

Assessment

As per University of Education Rules and Regulations.

References:

- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. Teachers College Record, 108(6), 1017-1054. Puentedura, R. R. (2014). SAMR: A Brief Introduction. Hippasus.
- Bonk, C. J., & Zhang, K. (2008). Empowering Online Learning: 100+ Activities for Reading, Reflecting, Displaying, and Doing. John Wiley & Sons.
- Bates, A. W., & Sangrà, A. (2011). Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning. John Wiley & Sons.
- Hattie, J., & Donoghue, G. M. (2016). Learning Strategies: A Synthesis and Conceptual Model. npj Science of Learning, 1(1), 16013.
- Siemens, G. (2005). Connectivism: A Learning Theory for the Digital Age. International Journal of Instructional Technology and Distance Learning, 2(1), 3-10.
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- Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2015). NMC Horizon Report: 2015 K-12 Edition. The New Media Consortium.

Course Code	Course Title	Credit Hours
EDUC4159	Interdisciplinary Approaches to Curriculum	3(3+0)

Course Description

The theory and practice of transdisciplinary curriculum design and implementation are examined in this course. Students will investigate the advantages, difficulties, and approaches of merging various disciplines to produce meaningful and comprehensive learning experiences, drawing on reliable reference materials. The goal of the course is to give students the knowledge and abilities to create interdisciplinary curriculum units that foster critical thinking, teamwork, and problem-solving in a variety of subject areas.

Course Objectives:

By the end of this course, students will be able to:

1. Understand the theoretical foundations and key concepts of interdisciplinary education.
2. Analyze the benefits and challenges of interdisciplinary curriculum approaches.
3. Design interdisciplinary curriculum units that integrate multiple subjects and perspectives.
4. Evaluate and select appropriate interdisciplinary teaching methods and assessment strategies.
5. Collaborate effectively with colleagues to create interdisciplinary learning experiences.
6. Foster creativity, critical thinking, and innovation through interdisciplinary education.
7. Apply ethical considerations to interdisciplinary curriculum design and implementation.
8. Reflect on the impact of interdisciplinary education on student learning and engagement.

Learning Outcomes:

1. Upon successful completion of this course, students will be able to:
2. Define and explain the principles and goals of interdisciplinary education.
3. Analyze the potential advantages and barriers of interdisciplinary approaches.
4. Develop interdisciplinary curriculum units that align with educational objectives.
5. Apply diverse teaching methods to engage students in interdisciplinary learning.
6. Design authentic assessments that measure interdisciplinary understanding and skills.
7. Collaborate with peers to create interdisciplinary projects and activities.
8. Evaluate the ethical implications of interdisciplinary curriculum decisions.
9. Reflect on the personal and professional growth gained from interdisciplinary education.

Course Outline:

Unit 1: Introduction to Interdisciplinary Education

1.1 Defining Interdisciplinary Education: Concepts and Terminology
1.2 Theoretical Foundations of Interdisciplinary Curriculum
1.3 Historical Evolution of Interdisciplinary Approaches

Unit 2: Benefits and Challenges of Interdisciplinary Learning

2.1 Advantages of Integrating Multiple Disciplines
2.2 Addressing Challenges in Interdisciplinary Curriculum Design
2.3 Interdisciplinary Education and Real-World Problem-Solving

Unit 3: Designing Interdisciplinary Curriculum Units

3.1 Identifying Connections Between Disciplines: Themes and Concepts
3.2 Interdisciplinary Learning Objectives and Outcomes
3.3 Scaffolded Curriculum Design: From Exploration to Integration

Unit 4: Integrating Teaching Methods and Assessment Strategies

4.1 Inquiry-Based Learning in Interdisciplinary Contexts
4.2 Project-Based Learning Across Disciplines
4.3 Formative and Summative Assessment in Interdisciplinary Education

Unit 5: Collaboration and Team Teaching
5.1 Collaborative Curriculum Planning: Roles and Responsibilities
5.2 Effective Communication and Teamwork in Interdisciplinary Education
5.3 Co-Teaching Strategies for Interdisciplinary Learning
Unit 6: Fostering Creativity and Critical Thinking
6.1 Creative Problem-Solving and Innovation Across Disciplines
6.2 Cultivating Critical Thinking Skills through Interdisciplinary Learning
6.3 Artistic Expression and Interdisciplinary Exploration
Unit 7: Ethical Considerations in Interdisciplinary Curriculum
7.1 Ethical Dilemmas in Cross-Disciplinary Exploration
7.2 Cultural Sensitivity and Inclusivity in Interdisciplinary Education
7.3 Social Responsibility and Ethical Decision-Making
Unit 8: Reflecting on Interdisciplinary Education
8.1 Student Reflections on Interdisciplinary Learning Experiences
8.2 Teacher Reflections on Collaborative Interdisciplinary Curriculum
8.3 Personal and Professional Growth Through Interdisciplinary Education

Teaching and Learning Strategies

- In general, collaborative, and interactive approaches. Discussion/assignments/ presentations, projects using "learner-centered" methods.
- "Reflective Journals" on each session
- Maintaining course portfolios.

Assessment

As per University of Education Rules and Regulations.

References:

- Beane, J. A. (1997). Curriculum Integration: Designing the Core of Democratic Education. Teachers College Press.
- Jacobs, H. H. (1989). Interdisciplinary Curriculum: Design and Implementation. Association for Supervision and Curriculum Development.
- Fogarty, R. (1991). Mindful Learning: Teaching Self-Discipline and Academic Achievement. National Education Association.
- Palmer, P. J. (2017). To Know as We Are Known: Education as a Spiritual Journey. HarperOne.
- Klein, J. T. (2017). Interdisciplining Digital Humanities: Boundary Work in an Emerging Field. University of Michigan Press.
- Steen, L. A. (Ed.). (2001). Math and Science Across Cultures: Activities and Investigations from the Exploratorium. Jossey-Bass.
- Kieran, C. (Ed.). (1994). Mathematics Education Across Cultures: Proceedings of the Twenty-Eighth Annual Conference of the Mathematics Education Research Group of Australasia. Mathematics Education Research Group of Australasia.

Course Code	Course Title	Credit Hours
EDUC4160	Curriculum Evaluation and Revision	3(3+0)

Course Description
This course offers a thorough examination of the theories, procedures, and practices involved in curriculum evaluation in the area of education. The process of evaluating the efficacy and applicability of educational initiatives will be covered by students, with an emphasis on raising the standard of instruction and the success of student learning. The course places a strong emphasis on the use of data-driven decision-making and ongoing curriculum design and implementation improvement.

Course Objectives:
- To introduce students to the theoretical foundations of curriculum evaluation in education.
- To develop skills in designing and implementing effective curriculum evaluation strategies.
- To analyze various assessment methods and tools used in curriculum evaluation.
- To foster an understanding of how curriculum evaluation informs instructional improvement.
- To promote critical thinking and problem-solving abilities in addressing curriculum challenges.
- To enhance students' capacity to communicate and collaborate effectively in curriculum evaluation processes.

Learning Outcomes:
By the end of the course, students will be able to:
- Explain key theories and concepts related to curriculum evaluation.
- Design and implement comprehensive curriculum evaluation plans.
- Select and apply appropriate assessment methods for curriculum evaluation.
- Analyze and interpret curriculum evaluation data to inform decision-making.
- Propose evidence-based recommendations for curriculum enhancement.
- Collaborate with stakeholders to communicate evaluation findings and recommendations effectively.
- Critically reflect on ethical considerations in curriculum evaluation practices.

Course Outline:
Unit 1: Introduction to Curriculum Evaluation
1.1 Definition and Importance of Curriculum Evaluation
1.2 Historical Perspectives on Curriculum Assessment
1.3 Role of Curriculum Evaluation in Educational Improvement
Unit 2: Designing Curriculum Evaluation Plans
2.1 Needs Assessment for Curriculum Evaluation
2.2 Setting Clear Learning Objectives and Outcomes
2.3 Developing Evaluation Criteria and Indicators
2.4 Formulating Evaluation Questions and Hypotheses
Unit 3: Assessment Methods in Curriculum Evaluation
3.1 Formative and Summative Assessment Approaches
3.2 Quantitative and Qualitative Data Collection Methods
3.3 Surveys, Interviews, and Focus Groups in Curriculum Evaluation
3.4 Portfolio Assessment and Authentic Performance Tasks
Unit 4: Data Analysis and Interpretation

4.1 Quantitative Data Analysis Techniques
4.2 Qualitative Data Analysis and Interpretation
4.3 Triangulation and Mixed Methods Analysis
4.4 Reporting Evaluation Findings and Recommendations

Unit 5: Using Evaluation Results for Improvement

5.1 Feedback and Reflection in Curriculum Enhancement
5.2 Collaborative Decision-Making in Curriculum Revision
5.3 Incorporating Evaluation Findings into Professional Development
5.4 Monitoring and Sustaining Continuous Curriculum Improvement

Unit 6: Ethical Considerations in Curriculum Evaluation

6.1 Ethical Guidelines for Curriculum Evaluation
6.2 Ensuring Equity and Inclusion in Evaluation Practices
6.3 Addressing Bias and Validity in Assessment
6.4 Transparency and Accountability in Reporting Evaluation Results

Unit7: Communication and Stakeholder Engagement

7.1 Effective Communication of Evaluation Findings
7.2 Engaging Teachers, Administrators, and Parents in the Evaluation Process
7.3 Advocacy for Evidence-Based Curriculum Changes
7.4 Building a Collaborative Curriculum Evaluation Culture

Unit 8: Curriculum Evaluation Models

8.1 Bradley's Effectiveness Model
8.2 Tyler's Objectives-Centered Model
8.3Tyler's Objectives-Centered Model
8.4 Scriven's Goal-Free Model
8.5 Scriven's Goal-Free Model

Teaching and Learning Strategies

- In general, collaborative, and interactive approaches. Discussion/assignments/ presentations, projects using "learner-centered" methods.
- "Reflective Journals" on each session
- Maintaining course portfolios.

Assessment

As per University of Education Rules and Regulations.

References

1. Wiggins, G., & McTighe, J. (2005). Understanding by Design. Association for Supervision and Curriculum Development.
2. Stake, R. E. (2010). Qualitative Research: Studying How Things Work. The Guilford Press.
3. Madaus, G. F., Scriven, M., & Stufflebeam, D. L. (Eds.). (1983). Evaluation Models: Viewpoints on Educational and Human Services Evaluation. Kluwer-Nijhoff.
4. Guskey, T. R. (2002). How's My Kid Doing? A Parent's Guide to Grades, Marks, and Report Cards. Jossey-Bass.
5. Cohen, L., Manion, L., & Morrison, K. (2017). Research Methods in Education. Routledge.

Course Code	Course Title	Credit Hours
EDUC4161	Designing for Diversity: Inclusive Curriculum Development	3(3+0)

Course Description

The principles and techniques for developing inclusive and culturally sensitive curricula that cater to the various learning requirements of students are explored in this course. To learn how to plan and carry out inclusive educational experiences, students will read real texts and participate in hands-on activities. The course places a strong emphasis on the value of equity, representation, and critical thought in the creation of curricula.

Course Objectives:

1. To introduce students to the concepts of diversity, equity, and inclusion in curriculum development.
2. To analyze authentic literature on inclusive pedagogy and curriculum design.
3. To develop practical skills in designing curriculum that caters to diverse learners.
4. To promote critical reflection and self-awareness in addressing bias and exclusion.
5. To explore strategies for fostering an inclusive and respectful learning environment
6. To enhance students' ability to communicate and collaborate in diverse educational contexts.

Learning Outcomes:

By the end of the course, students will be able to:

1. Define and explain the concepts of diversity, equity, and inclusion in education.
2. Analyze authentic literature on inclusive curriculum development and pedagogy.
3. Design and adapt instructional materials that promote inclusivity and accessibility.
4. Reflect on personal biases and assumptions in curriculum design and teaching practices.
5. Apply strategies for creating an inclusive and respectful classroom culture.
6. Communicate effectively with students, parents, and colleagues in diverse settings.

Course Outline:

Unit1: Introduction to Inclusive Curriculum Development

1.1 Understanding Diversity, Equity, and Inclusion in Education

1.2 The Role of Inclusive Curriculum in Diverse Learner Success

1.3 Ethical Considerations in Inclusive Curriculum Design

Unit 2: Culturally Responsive Curriculum Foundations

Unit 3: Strategies for Inclusive Assessment and Evaluation

3.1 Inclusive Assessment Methods and Alternatives

3.2 Addressing Bias in Grading and Assessment

3.3 Authentic Assessment and Real-World Application of Skills

Unit 4: Creating an Inclusive Classroom Culture

4.1 Fostering a Respectful and Safe Learning Environment

4.2 Promoting Empathy and Social Awareness Among Students

Unit5: Designing Inclusive Learning Experiences

5.1 Universal Design for Learning (UDL) Principles

5.2 Differentiation and Tailoring Curriculum to Individual Needs

5.3 Infusing Inclusivity Across Disciplinary Contexts

Unit 6: Reflective Practice and Professional Growth

6.1 Self-Reflection and Addressing Personal Biases

6.2 Collaborating with Colleagues for Inclusive Curriculum Goals

6.3 Engaging with Inclusive Curriculum Communities and Resources

Unit7: Communication and Collaboration for Inclusion

7.1 Effective Communication with Diverse Student Populations

7.2 Engaging Parents and Families in Inclusive Curriculum Practices

7.3 Collaborating with Community Partners for Inclusivity

References

1. Gay, G. (2018). Culturally Responsive Teaching: Theory, Research, and Practice. Teachers College Press.
2. Ladson-Billings, G. (2014). The Dreamkeepers: Successful Teachers of African American Children. Jossey-Bass.
3. Lee, C. D. (2007). Culture, Literacy, and Learning: Taking Bloom in the Midst of the Whirlwind. Teachers College Press.
4. Nieto, S. (2017). Affirming Diversity: The Sociopolitical Context of Multicultural Education. Pearson.
5. Villegas, A. M., & Lucas, T. (2007). Preparing Culturally Responsive Teachers: Rethinking the Curriculum. Teachers College Press.

4- Educational Psychology and Guidance		
Course Code	**Course Title**	**Credit Hours**
EDUC3168	Understanding learners' Psychology	3(3+0)
EDUC3169	Human Development	3(3+0)
EDUC3170	Learning theories and practices	3(3+0)
EDUC3171	Introduction to Cognitive Psychology	3(3+0)
EDUC3172	Psychology of Individual differences	3(3+0)
EDUC3185	Introduction to Guidance	3(3+0)
EDUC3186	Introduction to Counseling	3(3+0)
EDUC3187	Guidance and Counseling in Educational Institutions	3(3+0)
EDUC3188	Educational and Vocational Guidance and Counseling	3(3+0)
EDUC3189	Assessment of Individuals for Guidance and Counseling	3(3+0)

Course Code	Course Title	Credit Hours
EDUC3168	Understanding learners' Psychology	3(3+0)

Course Description

Educational Psychology focus on current psychological principles as they apply to teaching and learning. Topics could include the developmental experience of children and adolescent's namely psychological theory, cognition and problem-solving, the self and social cognition, impact of culture and context on development. The course will encourage the development of a critical and reflective approach to theory and experience and their application to the school setting in Pakistan.

Course outcomes

After completion of this course the students will be able to:

- Develop the conceptual understanding of educational psychology and enable them understand the importance and application of the knowledge of educational psychology in the teaching learning context.
- Understand the major theories of human learning and how they might be applied in the elementary and secondary school setting.
- Understand learning theories and their application into teaching situations.
- Foster an appreciation of the role of the teacher as guide and counsellor.

Course Outline

1. Introduction to Educational Psychology

1.1. Psychology: Meaning, concept and scope
1.2. Education: Meaning, concept and scope
1.3. Scope of educational psychology
1.4. Nature of Educational Psychology
1.5. Role of Educational Psychology in Teaching and Learning

2. School of thoughts in Psychology

2.1. Structuralism
2.2. Functionalism
2.3. Behaviorism
2.4. Cognitivism
2.5. Humanistic
2.6. Gestalt psychology

3. Understanding Motivation

3.1. Needs and drives
3.2. Intrinsic and Extrinsic motivation
3.3. Approaches to Motivation (Behavioral, Humanistic, Cognitive, Social cognitive and socio-cultural)
3.4. Motivation to learn

4. Diversity in Classroom

4.1. Cultural differences

4.2. Economic and social class differences
4.3. Language differences
4.4. Gender differences
4.5. Accommodating diversity in practice

5. Facilitating Complex Thinking

5.1. Forms of thinking associated with classroom learning
5.2. Critical thinking
5.3. Creative thinking
5.4. Problem solving
5.5. Facilitating complex thinking

6. Teaching and Assessing

6.1. Creating a positive learning environment
6.2. Effective teaching
6.3. Individualized instruction versus group instruction
6.4. Innovations in students' assessment
6.5. Grading and reporting
6.6. Communication with parents

Methods of Instruction

Lectures will be the primary method of instruction, but the course will also involve other methods of instruction such as small group activities, group discussions, cooperative learning.

Suggested Reading

Duchesne, S., McMaugh, A. & Mackenzie,E. (2022) *Educational Psychology: For Learning and Teaching*. Melbourne: Cengage.

Woolfolk, Anita E., Winne, Philip H. and Perry, Nancy E. (2019) *Educational Psychology*. (7th Canadian ed.). Toronto: Pearson Education.

Santrock, J.W. (2015) "*Educational Psychology*", 5th edition. Boston: McGraw Hill.

Johnson, J. (2020). '*Reaching all Learners: Understanding Diverse Classroom Populations'*: Cognella

Deckers, L. (2022), '*Motivation: Biological, Psychological, and Environmental'*: Taylor and Francis Limited.

Course Code	Course Title	Credit Hours
EDUC3169	**Human Development**	**3(3+0)**

Course Description

The purpose of this course is to help future teachers to develop understanding about how people grow, develop and adapt at different stages of their lives. The future teachers are expected to understand and apply this knowledge to overcome the developmental challenges of their students during teaching and learning process, in order to achieve the full potential of their students. The understanding of these developmental

stages may help future teachers to plan and implement their teaching and assessment according to the levels of the students. By the end of the course students should be able to:

- Develop an understanding of developmental psychology and its application
- Describe the fundamentals of developmental psychology
- Differentiate between the different stages of development and its application in education
- Analyze different ways of studying development

Course Outline

1. Introduction to Human Development

1.1. Concept and Scope of Human Development
1.2. Domains of Development (physical, cognitive, social)
1.3. Main Stages or Periods of Development
1.4. The goals of developmental science
1.5.

2. Development in Infancy

2.1. Physical, Sensory and Perceptual Development in Infancy
2.2. Cognitive Development in Infancy
2.3. Social and Personality Development in Infancy

3. Development in Early Childhood

3.1. Physical Development in Early Childhood
3.2. Cognitive Development in Early Childhood
3.3. Social and Personality Development in Early Childhood

4. Development in Middle Childhood

4.1. Physical Development in Middle childhood
4.1. Cognitive Development in Middle Childhood
4.2. Social and Personality Development in Middle Childhood

5. Development in Adolescence

5.1. Cognitive Development in Adolescence
5.2. Social and Personality Development in Adolescence

6. Development in Early Adulthood

6.1. Cognitive Development in Early adulthood
6.2. Social and Personality Development in Early adulthood

7. Development in Middle Adulthood

7.1. Cognitive Development in Middle adulthood
7.2. Social and Personality Development in Middle adulthood

8. Development in Late Adulthood

8.1. Cognitive Development in Late adulthood
8.2. Social and Personality Development in Late adulthood

Suggested Readings

Cameron, N. & Schell, L. (2021). *Human Growth and Development*, Elsevier Science.

Duchesne, S., McMaugh, A. & Mackenzie,E. (2022) *Educational Psychology: For Learning and Teaching*. Melbourne: Cengage.

Mitchell, P. & Ziegler, F., (2020) *Fundamentals of Developmental Psychology*: Taylor & Francis Group.

Harris, M. & Westermann, G., (2015) *A Student's Guide to Developmental Psychology*: Psychology Press.

Course Code	Course Title	Credit Hours
EDUC3170	**Learning theories and practices**	**3(3+0)**

Course Description

The purpose of this course is to help future teachers to understand about all important aspects of learning. The future teachers are expected to understand and apply this knowledge in their classrooms to meet the challenges of the modern world. This course will help student teachers to understand different concept, nature and law of learning. This course also aims to develop in-depth understanding about different learning theories, learning styles and learning difficulties which will help student teachers to make the teaching learning process more effective and successful in their classrooms.

By the end of the course students should be able to:

- explain the concepts of learning theory
- describe behaviorist theories and their concepts
- explain the cognitivists theories
- describe the social learning theories
- describe the relationship of teaching and learning theories
- describe the concept, nature and law of learning
- develop skills to teach effectively keeping in view different learners
- understand and analyze different learning theories
- apply the principles of different learning theories in teaching learning process

Course Outline

1. Learning

1.1. Definitions of Learning
1.2. Nature of Learning
1.3. Factors affecting learning

2. Behaviorism and Learning

2.1. Classical Conditioning: Concepts and Meaning
2.2. Experiments of classical conditioning
2.3. Applying classical conditioning in classroom
2.4. Operant Conditioning: Concepts and Meanings
2.5. Applying Operant conditioning in Classroom
2.6. Comparison of classical and operant conditioning

3. The Cognitivism

3.1. Basic ideas and concepts
3.2. Application of cognitive views in the classroom
3.3. Information Processing Approach

4. Social Learning Theory

4.1. Meaning and Concepts
4.2. Albert Bandura: Ideas and Concepts
4.3. Social learning in Classroom

5. The Constructivists

5.1. Historical roots of constructivism
5.2. John Dewey: Basic Ideas and concepts
5.3. Lev.Vygotsky & social constructivism
5.4. Constructivism and Social Constructivism in Classroom

6. Humanism and Learning

6.1. Basic Ideas about Learning
6.2. Key theorists
6.3. Applying Humanistic views in the classroom

7. Connectivism and Learning

7.1. Basic ideas and concepts
7.2. Principles
7.3. Application in the classroom
7.4. Teaching in digital age

Suggested Readings

Aubrey, K., Riley, A. (2022). *Understanding and Using Educational Theories*. London: Sage.

Chaudhary,V.,& Kumar, S. (2021). *Learning and Learning Theories*, Independently Published.

Duchesne, S., & McMaugh, A. (2018). *Educational psychology for learning and teaching*. Cengage AU.

Corno, L., & Anderman, E. M. (Eds.). (2015). *Handbook of educational psychology.* Routledge.

Ormrod, Jeane., (2010*) Educational Psychology*: Developing Learners:Pearson

Mangal, S.K (2005) *Advanced Educational Psychology*. (2 nd Ed). New Delhi: Prentice Hall of India.

Bostan: McGraw Hill Gibb, S. (2002). *Learning and Development*. New York: Palgrave Macmillan.

Santrock, John W., (2001) *Educational Psychology*, Boston: USA. Mc-Graw-Hill

Course Code	Course Title	Credit Hours
EDUC3171	Introduction to Cognitive Psychology	3(3+0)

Course Description

The course is a basic course in cognitive psychology (theory and method). Cognitive Psychology is used throughout the entire range of human knowledge, perception, activity, speech processing, problem solving and thinking about learning and memory. The course will give students knowledge of the most important concepts, themes, problems and empirical research in modern cognitive theory as it concerns how we receive, interpret, edit, use and save information.

Course learning outcomes

- Understand the basic knowledge of cognitive psychology.
- Explain the knowledge of how human cognition works from attention, sensation, perception, action, language processes, problem solving and thinking to learning and memory.
- Understand the processes involved in student's development, thinking and learning.
- Learn the key methods used in modern cognitive psychology research.
- Apply cognitive strategies into teaching strategies to motivate students towards learning.

Outline

1. Introduction to Cognitive Psychology

1.1. Concept of Cognition
1.2. Nature and Scope of Cognitive Psychology
1.3. The Evolution of Cognitive Psychology
1.4. Three Cognitive Models of Intelligence

2. Cognitive Development

2.1. Concept of Cognitive Development
2.2. Nature and Principles
2.3. Cognitive Development Theories (Piaget, Vygotsky, Bruner)
2.4. Implication of Cognitive Development Theories

3. Perception

3.1. Concepts of Perception
3.2. Basic Characteristics of Perception
3.3. Approaches to Perception

4. Attention

4.1. Definition and Concept
4.2. Attention as Information Processing
4.3. Outcomes of Attention
4.4. Divided Attention

5. Memory Processes

5.1. Sensory Memory
5.2. Short-Term Memory
5.3. Working Memory and the Brain
5.4. Long Term Memory
5.5. Encoding, Retrieval and Consolidation

6. Visual Imagery

6.1. Basic Concept
6.2. Imagery and Brain
6.3. Using Imagery to Improve Memory
6.4. Individual Differences in Visual Imagery

7. Complex Cognitive Processes

7.1. Concept Formation
7.2. Decision Making
7.3. Reasoning
7.4. Thinking and Critical Thinking
7.5. Creativity
7.6. Problem Solving

Suggested Readings

Hodges, J. (2022). *Cognitive Psychology: Mind and Brain,* CLANRYE International

Sternberg, R. J., & Sternberg, K. (2017). *Cognitive psychology* (7th edition). Cengage Learning.

Demetriou, A., Shayer, M., & Efklides, A. (2016). *Neo-Piagetian theories of cognitive development: Implications and applications for education*. Routledge.

Eysenck, Michael W., Kean, Mark T. (2015). *Cognitive psychology: a student's handbook* (Seventh edition). Psychology Press.

Baddeley, A. D. (2014). *Essentials of human memory* (Classic edition). Taylor and Francis.

Goldstein, E. Bruce, & Goldstein, E. Bruce. (2011). *Cognitive psychology* (3rd ed). Wadsworth.

Course Code	Course Title	Credit Hours
EDUC3172	**Psychology of Individual Differences**	**3(3+0)**

Course Description

Psychology of individual differences is an important area of psychology which is essential for understanding teaching and learning. The prospective teachers need to get understanding about it. A teacher needs to study the individual differences among students and may help in developing their abilities at optimum level. Learning is more effective when teacher is understanding the individual differences in students.

Course learning outcomes

- Understand the basic knowledge of individual differences
- Differentiate between different students having different abilities
- Know about different dimensions of differences
- Understand about gifted students
- Know about techniques to deal with diversity

Outline

1. Basics of Individual Differences

1.1. The Concept of Individual Differences
1.2. An overview of Individual differences
1.3. Dealing with Individual Differences
1.4. Importance to understand Individual Differences

2. Student Diversity

2.1. Cultural, Ethnic and Racial Diversity
2.2. Teaching to Culturally Diverse Classrooms
2.3. Language Diversity
2.4. Socioeconomic Diversity
2.5. Gender Diversity

3. Individual Differences

3.1. Differences in Intelligence
3.2. Multiple Intelligence Theories
3.3. Ability Differences in the Classroom
3.4. Differences in Cognitive Styles
3.5. Personality Differences

4. Exceptional Students

4.1. Classifying Exceptional Students
4.2. How to Promote the Learning of Exceptional Students
4.3. The Role of Teacher in Inclusive Classroom
4.4. The Concept of Individualized Education

5. Students with Learning Challenges

5.1. Neuroscience and learning Challenges
5.2. Students with Learning Disabilities
5.3. Teaching Students with Learning Disabilities
5.4. Students with Hyperactivity and Attention Disorders
5.5. Teaching Students with ADHD
5.6. Communication Disorders
5.7. Students with Emotional or Behavioral Difficulties and dealing them
5.8. Intellectual Disabilities and Dealing them.
5.9. Students with Health and Sensory Impairments
5.10. Autism Disorders
5.11. Responsibilities of Teachers for Students with Disabilities

6. Gifted and Talented Students

6.1. Basic Concept
6.2. Qualities of Gifted and Talented Students
6.3. Identifying Gifted and Talented Students
6.4. Teaching to Gifted and Talented Students

Suggested Readings

Haslam, N. & Smillie, L. (2022). *An Introduction to Personality, Individual Differences and Intelligence*, London: Sage Publications.
Woolfolk, A. (2018) Educational Psychology, 14th edition. Pearson.

Ormrod, Jeane, (2010) Educational Psychology: Developing Learners: Pearson

Maltby, J.; Day, L. & Macaskill, A. (2007). Personality, Individual Differences and Intelligence. London: Pearson Education.

Davis, G. & Rimm, S. (2004). Education of the gifted and talented, 5th edition. Boston: Allyn & Bacon.

Course Code	Course Title	Credit Hours
EDUC3185	**Introduction to Guidance**	**3(3+0)**

Course Objectives

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

- understand the basic concepts related to guidance
- develop better adjustment with the environment

- analyze their personal, social, emotional, educational problems rationally and suggest the solutions
- develop healthy relationship with their family, teachers and classmates
- understand and help others in solving their problems

Outline

1. Concept of Guidance

1.1. Meaning and Nature of Guidance
1.2. Objectives of guidance
1.3. Need for Guidance
1.4. Principles of guidance
1.5. Forms of Guidance (Informal, Formal, Incidental)
1.6. Agencies of Guidance (Home, School, society)

2. Guidance in Schools

2.1. Role of Guidance in educational Uplift
2.2. Functions of Guidance in Schools
2.3. Basic techniques of guidance

3. Types of Guidance

3.1. Personal Guidance
3.2. Educational Guidance
3.3. Vocational Guidance

4. Guidance Personnel in Schools and their Roles

4.1. Principal
4.2. Counselor
4.3. Teacher
4.4. Resource Person
4.5. Social Worker
4.6. Medical Officer
4.7. Psychologist
4.8. Career Master
4.9. Librarian

5. Services of Guidance

5.1. Orientation service
5.2. Individual Inventory service
5.3. General Information service
5.4. Counseling service
5.5. Placement service
5.6. Follow up service

5.7. Research and Evaluation service
5.8. Testing service

6. Tools and Techniques of Guidance

6.1. Personal Rapport
6.2. Observation
6.3. Interview
6.4. Psychological Tests
6.5. Sociometry tests
6.6. Questionnaires
6.7. Case study
6.8. Cumulative records

7. Vocational guidance

7.1. Concept and aim of vocational guidance
7.2. Career development of students
7.3. Importance of vocational guidance

Suggested Readings

Tinega, C. (2021). *Guidance and Counselling: A Handbook for Teachers and Students*. Nsemia Incorporated.

Ranganathan,N.& Wadhwa, T. (2019). *Guidance and Counselling for Children and Adolescents in Schools*, Sage Publications.

Allyan & Bacon Nayak.A.K (2004) *Guidance and Counseling*, New Delhi. A.P.H Publication Corporation

Peterson, J. Vincent, Bernard, Nisenhd Z. (2002). *Orientation to Counseling* (4th Ed). Needham Heights.

Gibson, R.L. & Mitchell, M.H. (1999). *Introduction to Counseling and Guidance* (5 th Edition). New Jersey: Prentice Hall

Jones, J.A. (1970). *Principles of Guidance* (6th Ed). New York: McGraw Hill

Arbuckle, D.S. (1961). *Guidance and Counseling in the Classroom*. Boston: Allyn & Bacaon.

Course Code	Course Title	Credit Hours
EDUC3186	Introduction to Counseling	3(3+0)

Course description

The elementary teacher needs to have a basic knowledge of school guidance and counseling techniques to address students' personal and social problems she or he may encounter in the classroom. This course will assist the trainee teacher to perform the basic skills of school guidance and counseling. This course will increase the trainee teacher's ability to exercise active listening skills, reflect students' concerns, assist students to arrive at solutions to problems they present, and advise them on potential solutions to stated difficulties.

Course Objectives

On successful completion of this course, learners will be able to:

• Demonstrate knowledge of the importance of guidance and counselling to support the teacher's role in the classroom
• Explain the role of various members of a guidance and counselling system in supporting learners in addressing their future choices and social challenges
• Demonstrate the skills of student advisement in making responsible social choices and decisions
• Assist students in making informed choices to solve personal, educational and social problems they confront
• Refer students to resources that can assist them in solving social and personal problems they encounter.

Outline

1. Concept of Counseling

1.1. Meaning and nature of counseling
1.2. Objectives of counseling
1.3. Principles of counseling
1.4. Difference between guidance and counseling
1.5. Need for counseling
1.6. Steps in Counseling process

2. The Origin of Counseling

2.1. The social and historical origins of counseling and psychotherapy
2.2. The role of Carl Rogers
2.3. Professionalization of counseling

3. Types of Counseling

3.1. Types of counseling (Directive, Non-directive, Eclectic)
3.2. Individual Counseling
3.3. Group counseling

3.4. New trends in counseling

4. Counseling Personnel

4.1. Counselor and career counselor
4.2. Psychologist
4.3. Teacher
4.4. Administrator
4.5. Librarian

5. Cumulative Record Card

5.1. Nature and purpose of Cumulative Record Card (CRC)
5.2. Advantages of CRC
5.3. Design of CRC

6. Evaluation of the Guidance and Counseling Program

6.1. Types of evaluation in Guidance and Counseling
6.2. Program evaluation

Suggested Readings

Parsons, R., & Dickinson, K. (2021). *Introduction to School Counseling: Becoming a Leader, Advocate, and Change Agent,* Cognella,

Neukrug, E. (2021). *The World of the Counselor: An Introduction to the Counseling Profession*, Cognella

Fitch, T., Marshall,J. & Matise, M. (2020). *Introduction to Counselling*, Taylor & Francis Group.

Taukeni, S. (2020). *Counseling and Therapy*, London: British Library.

Nystul, M. (2018). *Introduction to Counseling: An Art and Science Perspective*, Cognella.

Barki, B. G., & Mukhopadhyay, B. (2008). *Guidance and counseling: A manual* (10th reprint). New Delhi: Sterling.

Kinra, A. K. (2008). *Guidance and counselling*. New Delhi: Dorling Kindersley.

Kottler, J. A., & Shepard, D. S. (2008). *Introduction to counseling: Voices from the field* (6th ed.). Belmont

Gibson, R. L., & Mitchell, M. H. (2007). Introduction to counseling and guidance (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Course Code	Course Title	Credit Hours
EDUC3187	Guidance and Counseling in Educational Institutions	3(3+0)

On successful completion of this course, learners will be able to:

- Understand the application of counseling in education institutions
- Solve the practical problems of school life

Outline

1. Guidance and Counseling in Educational Institutions

1.1. Basic skills of counseling
1.2. How a teacher can assist a learner to make career choices
1.3. Assisting the learner in personal and social development
1.4. Identifying elementary social problems the classroom teacher can resolve
1.5. Exercising basic counseling skills in a controlled situation
1.6. The role of school counselor at primary, secondary and higher level

2. Counseling of Students

2.1. Home-centered problems
2.2. School-centered problems
2.3. Community-centered problems

3. Therapies of Counseling

3.1. Client centered therapy
3.2. Gestalt therapy
3.3. Behavior therapy
3.4. Cognitive therapy
3.5. Humanistic therapy
3.6. Psychoanalysis and psychodynamic therapies
3.7. Integrative or holistic therapy

4. Educational Consultation

4.1. The consultation processes
4.2. Consultation models
4.3. Consultation skills
4.4. Consultation in school settings
4.4.1. Consulting with teachers
4.4.2. Consulting with school administrator
4.4.3. Consulting with parents

5. Values and Ethics in Counseling Process

5.1. Values and considerations in counseling procedure

5.2. Guidelines provided by institutions

5.3. Ethical issues in counseling

6. The Role of Research in Counseling

6.1. Role of research in counseling and psychotherapy

6.2. Outcome and evaluation research

6.3. Case studies

Teaching Strategies

- Lecture method followed by discussion
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline

Suggested Books

Holcomb-mccoy, C. (2022). *School Counseling to Close Opportunity Gaps*. Corwin Press

Gladding, S. (2022). Theories of Counseling. London: Rowman Littlefield Publishing Group.

Parsons, R., & Dickinson, K. (2021). *Introduction to School Counseling: Becoming a Leader, Advocate, and Change Agent,* Cognella,

Neukrug, E. (2021). *The World of the Counselor: An Introduction to the Counseling Profession*, Cognella

Fitch, T., Marshall,J. & Matise, M. (2020). *Introduction to Counselling*, Taylor & Francis Group.

Peterson, J., Vincent, B., & Nisenhd, Z. (2002). *Orientation to Counseling (4th Ed).* Needham Heights: Allyan & Bacon.

Gibson, R. L. & Mitchell, M. H. (1999). *Introduction to Counseling and Guidance (5th Edition).* New Jersey: Prentice Hall

Jones, J. A. (1970). *Principles of Guidance (6th Ed)*. New York: McGraw Hill.

Course Code	Course Title	Credit Hours
EDUC3188	**Educational and Vocational Guidance and Counseling**	**3(3+0)**

Objectives

After completion of the course, the students will:

- Develop an insight into the meaning, nature, and origin of vocational guidance
- Become aware of the need for guidance and its relationship with Education.
- Understand the role of teacher as a guide and counselor in educational perspective.
- Understand the career development and become aware of helping youth to plan their careers.
- Understand the process and difficulties of vocational guidance.

Outline

1. Introduction to Educational Guidance

1.1. Concept of educational guidance
1.2. Relationship between education and guidance
1.3. Importance of educational guidance at different levels of education

2. Vocational Guidance

2.1. Meaning, definition and aims of vocational guidance
2.2. Vocational counseling
2.3. Occupational information collection and dissemination
2.4. Theory of vocational choice
2.5. Career development of young children
2.6. Factors influencing career choice

3. Functions and Responsibilities of Guidance Personnel

3.1. At Pre-school and Primary level
3.2. At Elementary level
3.3. At Secondary Level
3.4. At Higher level (In universities)
3.5. Role of career master

4. Testing techniques to know the individual

4.1. Intelligence tests
4.2. Aptitude tests
4.3. Achievement tests
4.4. Interest inventories

5. Non-testing Techniques to know the Individual

5.1. Difference between testing and non-testing techniques

5.2. Anecdotal record
5.3. Autobiography
5.4. Observation
5.5. Rating scale
5.6. Questionnaire
5.7. Interview
5.8. Cumulative Record

6. Career Development Theories

6.1. Roe's theory
6.2. Social learning theory of career choice and counseling
6.3. Social cognitive behavioral theory
6.4. Sociological theory
6.5. Holland's personality theory
6.6. Super's theory of career development

7. Important Considerations in Educational and Career Counseling

7.1. Importance of knowing the environment
7.2. Developing plans at institution level
7.3. Nature and objectives of information service
7.4. Sources of career information
7.5. Job analysis and evaluation of information
7.6. Making appropriate decisions
7.7. Role of placement and follow-up service in educational and vocational guidance

Suggested Books

Malik-Liévano, B., Álvarez-González, B., Sánchez-García, M. & Irving, B. (2020). *International Perspectives on Research in Educational and Career Guidance: Promoting Equity through Guidance,* Springer International Publishing.

Nota, L., Soresi, S., Maggio, I., Santilli, S., & Ginevra, M. (2020). *Sustainable Development, Career Counselling and Career Education*. Springer.

Athanasou, J. & Perera, H.(2020). *International Handbook of Career Guidance*. Las Vegas: Springer.

Gibson, R. L., & Mitchell, M.H. (1999) *Introduction to Counseling and guidance (5th ed)*

New Jersey: Prentice Hall

Watts, A. G., & Others (1996). *Rethinking Career Education and Guidance: Theory Policy and Practice*. London: Routledge.

Frost, D., Edwards, A., & Reynolds, H. (Eds) (1995). *Career Education and Guidance*. London: Kogan Page

Arbuckle, D. S. (1961). *Guidance and counseling in the class room*. Boston: Allyn & Bacaon.

Course Code	Course Title	Credit Hours
EDUC3189	Assessment of Individuals for Guidance and Counseling	3(3+0)

Objectives

After completion of the course, the students will:

- Understand different types of psychological tests
- Use psychological tests in guidance program
- Understand the role of guidance counselor in testing
- Interpret the results of psychological test
- Use psychological tests for counseling and vocational guidance

Outline

1. Role of Assessment in Counseling

1.1. What is individual assessment in counseling?
1.2. Role of personality assessment in counseling
1.3. The training of counselors as assessment professionals

2. Concept of Psychological Tests

2.1. What is a psychological test?
2.2. What makes a good psychological test?
2.3. Need of psychological test
2.4. Major classifications of psychology tests
2.5. Counselor's use of psychological tests

3. Intelligence Testing

3.1. Views regarding intelligence
3.2. Purposes of intelligence tests
3.3. Individual tests of intelligence
3.3.1. Stanford Binet intelligence scale
3.3.2. Wechsler scales (WPPS-I, WISCR, WAIS)
3.4 Group tests of intelligence
3.4.1. School and College Abilities Test SCAT
3.4.2. Otis-Lennon School Ability Test

4. Aptitude Testing

4.1. Concept of aptitude
4.2. Purposes of aptitude testing
4.3. General Aptitude Test Battery (GATB)
4.4. Differential Aptitude Test Battery (DAT)

4.5. Scholastic aptitude test
4.6. Special Aptitude Tests
4.6.1. Minnesota Mechanical Aptitude Test
4.6.2. Minnesota Clerical Aptitude Test
4.6.3. Horn Art Aptitude Inventory

5. Attitude and Interest

5.1. Concept of interest
5.2. Concept of attitude
5.3. Exploring attitudes
5.4. Types of interests
5.5. different interest factors
5.6. Methods of measuring interests and attitudes
5.7. Interest inventories
5.7.1. Strong-Campbell Interest Inventory (SCII)
5.7.2. Thurston interest schedule

6. Personality Testing

6.1. Concept of personality
6.2. Importance of personality testing in guidance and counseling
6.3. Techniques of testing personality
6.3.1. Interview
6.3.2. Observation
6.3.3. Personality inventories
6.3.4. Rating scales
6.3.5. Projective techniques
6.3.6. Autobiography

Suggested Books

Moss,N. & Moss-Racusin. (2022). *Practical Guide to Child and Adolescent Psychological Testing.* New Haven: Springer.

Tobin, R., Schneider, W. & Cohen, R. (2021). *Psychological Testing and Assessment: An Introduction to Tests and Measurement*. McGraw Hill.

Cohen-Swerdlik (2009). ***Psychological Testing and Assessment: An introduction to tests and Measurements.*** McGraw-Hill

Groth-Marnat, G. (2003). *Handbook of psychological assessment.* (4th Ed.). John Wiley & Sons, Inc.

Hogen, Thomas, P. (2003). *Psychological Testing a Practical Introduction*. New York: John Wiley.

Anastasia A. (2002). *Psychological Testing*. New York: Macmillan

Kline, P. (2000). *The Handbook of Psychological Testing*. London: Routledge

Aiken, L. R. (1994). *Psychological Testing and Assessment*. Boston: Allyn and Bacon. Cronbach, L. J. (1990). *Essentials of Psychological Testing.* New York: Harper.

6- EARLY CHILDHOOD EDUCATION		
Course Code	**Course Title**	**Credit Hours**
EDCE1111	Language and Literacy Development in Early Years	3(2+1)
EDCE1112	Approaches to ECE Curriculum and Pedagogy	3(3+0)
EDCE1113	Play in Young Children Classroom	3(3+0)
EDCE1114	Math, Nature and Science in ECE Classroom	3(3+0)
EDCE1115	Arts in Young Children's Classroom	3(2+1)
EDCE1116	Cognitive Development in Young Children	3(2+1)
EDCE1117	Socio-Emotional Development of Children	3(2+1)
EDCE1118	Early Childhood Education Curriculum	3(3+0)
EDCE1119	Assessment for Young Children	3(3+0)
EDCE2111	Parenting and Children Growth and Development	3(2+1)

Course Code	Course Title	Credit Hours
EDCE1111	Language and Literacy Development in Early Years	3(2+1)

Course Objectives

Upon Successful completion of this course prospective teacher will be able to:

- Critically analyze and select high quality literature for children from a range of genres and age levels of the students
- Design age-appropriate activities to extend children's literary experiences across ECE developmental milestones.
- Use multimodal commentaries for supporting the development of analytical and cognitive skills in young children.
- Examine critically the research trends that integrate children's literature with pedagogy, curriculum and reflects society's views of childhood, gender roles, etc.
- Create developmentally appropriate lesson plans/activities for children for supporting them in achieving their **Language and Literacy** milestones.

Content

1. Theoretical Relationship of Children Literature and Child Development

a. Language development in Early childhood
b. Interrelationship of language development with other developmental domains
c. ECE milestones and Children literature

2. Need of literature for young children

- Cognitive needs
- Cultural competence
- Emotional intelligence
- Encourages creativity
- Fostering personality and social development.

3. Selecting books for children under six years

- Principle # 1: "Appropriateness" for children's books
- Principle # 2: Literary Criteria and Artistic sensitivity
- Principle # 3: Child reality
- Design Attributes of Books for toddlers
- Design Attributes of Books for Children from age 2 to 4
- Design Attributes of Books for Children from age 4 to 6
- Contextual Attributes of Books for Children from birth to age 2
- Contextual Attributes of Books for Children from age 2 to 4
- Contextual Attributes of Books for Children from 4 to age 6
- Didactic attributes: What Should never be included

4. Children's Rights to Read

5. Using Children Literature in Early Years Classroom

- Scheming Supportive Literacy Classrooms for young children
- Reading stories in early years' classroom
- Extending children literature to introduce science concepts
- Using Children's Literature to Teach Mathematics

6. Technology-based Children Literature

a. Electronic(E)-books

i. How E-book reading is different than print reading

ii. What teachers know about E-Book Design

7. Using Electronic Books to Improve Emergent Literacy Skills

- Emergent literacy skills
- Shared Storybook Reading
- Reading Engagement
- Scaffolding to Support Emergent Literacy Development
- Microsoft® PowerPointTM and the Preschool Program

8. Children's Literature in the Technology-Based Instruction

- TPACK: Technological Pedagogical Content Knowledge (TPACK) framework
- Implications for reading teachers
- Teacher professional development and technological education

9. Training Teachers to Use Critical Literacy in The Early Years

- Why Critical Literacy Is Important
- Preservice Teachers' Role in Critical Literacy
- Critical Literacy and Culturally Responsive Teaching
- Critical Literacy vs. Reading Comprehension
- Impact of Critical Literacy and critical literacy project

Practical

1. Students will develop a portfolio of 18 lesson plans/activities focusing on **Language and Literacy Development** of young children (see Appendix # A).
2. They will develop 6 activities for 3-yeras old; 6 activities for 5-years old and; 6 activities for 7-years old.
3. UNICEF has defined **Language and Literacy Development** milestones for young children from *"**Early Learning and Development Standards for children by UNICEF coordinator: Mihaela Ionescu, Ph.D." (can download for free from:*** 7 https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old
4. Students will take **Language and Literacy** early learning milestones from *"**Early Learning and Development Standards for children by UNICEF coordinator: Mihaela Ionescu, Ph.D."*** as specific objectives. ***(can download for free from:*** https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old)
5. Students will motivate a real child of respective age (at home/family/friends/neighbors/schools) to do that activities. They will paste the child created activity and pictures of child doing that activity in their portfolios.
6. On the day of practical assessment, students will present a single lesson plan/activity; will practically do the hands-on activity and; shared his/her learning experience of doing this activity with the child in front of teacher and pre-school principal/teacher.
7. Teacher will assess individual student's portfolios and presented activity with pre-school principal/teacher.

Reading References

All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

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15. **Children's Literature in the Technology-Based Instruction:** Brueck, J. S., & Lenhart, L. A. (2015). E-Books and TPACK: What Teachers Need to Know. *The Reading Teacher*, *68*(5), 373-376. ***Download from***: ***https://scholar.google.com/***
16. **Training teachers to use critical literacy in the early years':** Norris, K., Lucas, L., & Prudhoe, C. (2012). Examining critical literacy: Preparing preservice teachers to use critical literacy in the early childhood classroom. Multicultural Education, 19(2), 59-62. ***Download from***: ***https://scholar.google.com/***

Course Code	Course Title	Credit Hours
EDCE1112	**Approaches to ECE Curriculum and Pedagogy**	**3(3+0)**

Course Objectives

After the successful completion of the course, the students will be able to:

- Discuss different curriculum approaches in early childhood
- Explicate how different curriculum used play as a pedagogical tool.
- Examine observation as a key tool for teachers to do assessment in early years in all curriculum approaches.
- Differentiate the role of teacher in early years class and mainstream schooling

Content

1. The Reggio Emilia Approach – Listening to Young Children

a. **The Pedagogy of Listening**
i. Search for meaning
ii. The meanings of listening
iii. Children as listeners
iv. Listening and documentation

b. **Your Image of the Child: Where Teaching Begins**
i. Considering Each Child's Reality
ii. Growing Comfortable with the Unknown
iii. Enjoying Relationships
iv. Finding Our Way in the Forest
v. Learning to Wait
vi. Becoming Totally Involved
vii. Discovering a New Way of Observing
viii. Redefining Roles
ix. Forging Alliances with Families
x. Building Strong Images

c. **The school as a living organism**
i. Image of the child
ii. Relationships
iii. The parent
iv. The environment: The Atelier
v. The teacher as researcher, advocate, collaborator and facilitator
vi. Flexible planning and project work
vii. Documentation
viii. Civil commitment
ix. Children as citizens
x. Responsibility towards the young
xi. Political Resistance and Activism

d. **Children and Place: Reggio Emilia's Environment As Third Teacher**

2. *Te Whãriki* – A Woven Mat for all to Stand On

a. The curriculum framework and Principles
i. Empowerment
ii. Holistic development
iii. Family and community
iv. Relationships

b. Strands, goals and learning outcomes
i. Wellbeing

ii.Belonging
iii.Contribution
iv.Communication
v.Exploration

c. Underpinning theories and approaches
d. Assessment, planning and evaluation

3. The High/Scope Curriculum – Active Learning Through Key Experiences

a. Principles of the HighScope Preschool Curriculum
b. Key Developmental Indicator (KDI) Scaffolding Charts
c. The Ingredients of Active Learning

i.Social Development in the HighlScope Approach
ii.Contrasting Environments for Children
iii.Ways to Support Children
iv.Helping Children Manage Themselves
v.Dealing With a Difficult Child
vi.Multicultural Education
vii."Special" Children: Building on their Strengths

d. Key Experiences for Child Development

i.Strengths and Abilities
ii.Communication: Why It's So Important in the HighlScope Curriculum
iii.Right! Young Children Can Write
iv.Math Learning: Making It Happen Naturally
v.Movement Experiences

e. The Daily Routine
f. Environments for Active Learning

Settings for Active Learning
Types of Play
Defining the Space and Selecting Materials
The play ground: blocks, sand, paints and computers

g. The Team Process: Child Observation, Team Planning, Assessment

4. Guiding Principles of Waldorf Methodology

a. Guiding Principles of Waldorf Methodology
b. Image of the Human Being
c. Purpose of Education

i.Spiritual Orientation
ii.Human Relationships
iii.Developmental Curriculum/Phases of Child Development
iv.“Three-Folding” Impulse

d. Methodology of Teaching
e. Pedagogical Decision Making vs. Teachers’ Freedom in the Classroom
f. Early Childhood Curriculum Guide

i.The Parent Child Program
ii.Nursery Program/Aftercare/Nap Program/Kindergarten Program

5. Experiential Education - Effective Learning Through Well-Being and Involvement

a.The approach
i.The process within the child
ii.What is well-being?
iii.What is involvement?
iv.Assessment of well-being and involvement
v.Analysis of the observations
vi.Improving what you can
b.The Leuven Well-being and Involvement Scales: Measuring levels of well-being and involvement
c.The context should to create:
i.Respect for the child

ii.A rich environment
iii.An open framework approaches
iv.Representation
v.Communication, cooperative learning
vi.Observation

6. *Tools of the Mind*: A Vygotskian Early Childhood Curriculum

a. Introduction to the Vygotskian Approach
b. Acquiring Mental Tools and Higher Mental Functions
c. Developmental Accomplishments and Leading Activity: Preschool and Kindergarten
d. Supporting the Developmental Accomplishments in Preschool and Kindergarten
e. Play and Self-Regulation, lessons from Vygotsky

Reading References
All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

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7. **The High/Scope Curriculum – Active Learning Through Key Experiences**
THE HIGHSCOPE Preschool Curriculum. ***Download from:*** https://highscope.org/wp-content/uploads/2020/02/HighScope-Preschool-Curriculum-Preview-Kit.pdf
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11. Barnes, H. (2001). *Waldorf Education... an Introduction*. AWSNA. ***Download from: https://scholar.google.com/***
12. **The Experiential Education Project by Professor Ferre Laevers**
Download from: https://www.researchgate.net/publication/344072515_The_Experiential_Education_Project
13. Well-being and Involvement in Care A process-oriented Self-evaluation Instrument for Care Settings: ***Download from:*** https://www.kindengezin.be/img/sics-ziko-manual.pdf
14. The Leuven Well-being and Involvement Scales: ***Download from:*** http://www.northumberlandeducation.co.uk/wp-content/uploads/2019/04/Well-Being-and-Involvement-Scales.pdf

15. **Tools of the Mind: A Vygotskian Early Childhood Curriculum:** Bodrova, E., & Leong, D. J. (2018). Tools of the mind: A Vygotskian early childhood curriculum. In *International handbook of early childhood education* (pp. 1095-1111). Springer, Dordrecht. ***Download from: https://scholar.google.com/***

16. Bodrova, E., Germeroth, C., & Leong, D. J. (2013). Play and self-regulation: lessons from Vygotsky. *American journal of play*, *6*(1), 111-123. ***Download from: https://scholar.google.com/***

Course Code	Course Title	Credit Hours
EDCE1113	**Play in Young Children Classroom**	**3(3+0)**

Course Objectives

After the successful completion of the course, the students will be able to:

- Discuss the theoretical foundation of play for learning
- Explain the importance of parent and child play in child development
- Review the relationship between play and other developmental milestones of children
- Create developmentally appropriate lesson plans/activities for children for supporting them in achieving their **physical development** milestones.

Content

1. Theoretical Perspective on Children Play

a. Vygotskian and Post-Vygotskian Views on Children's Play
b. Importance of play in pre-school classroom

2. Children's Play in Cross-Cultural Perspective

h. Variation in Parental Roles in Play across cultures
i. Parent-Child Play
ii. Parental Levels of Investment
iii. Parental Concerns about Levels of Children's Involvement
iv. Endorsement of Play as Contributing to Childhood Development
v. Stylistic Differences in Parent-Child Play

2. *Chapter # 2: Play and Learning in the Early Years from Research to Practice:* Learning to play in a cultural context

3. *Play and Learning in the Early Years from Research to Practice:* **Cooperative play and learning from nursery to year one**

4. *Play and Learning in the Early Years from Research to Practice:* **Identity and young children's drawings: power, agency, control and transformation**

5. *Play and Learning in the Early Years from Research to Practice:* **Play is a complex landscape: imagination and symbolic meanings**

6. *Play and Learning in the Early Years from Research **to** Practice Play*: **metacognition and self-regulation**

7. *Play and Learning in the Early Years from Research **to** Practice Play*: **Understanding playful learning and playful pedagogies – towards a new research agenda**

8. Play-Related Themes

a. Play and gender
b. Play and culture
c. Inclusive play
d. Role of the adult
e. Sensitivity and attachment
f. Observing children at play
g. Interacting with children in play
h. Resourcing the environment

Reading References

All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

1. Theoretical perspective on children Play: Bodrova, E., & Leong, D. J. (2015). Vygotskian and Post-Vygotskian Views on Children's Play. *American Journal of Play*, *7*(3), 371-388. ***Download from:*** https://scholar.google.com/

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7. Chapters 3-7: Broadhead, P., Howard, J., & Wood, E. (Eds.). (2010). *Play and learning in the early years: From research to practice*. Sage. ***Download from:*** https://www.pdfdrive.com/category/14

8. Kroll, L. R. (2017). Early childhood curriculum development: The role of play in building self-regulatory capacity in young children. *Early child development and care*, *187*(5-6), 854-868. ***Download from:*** https://scholar.google.com/

9. Sjoerdsma, S. (2016). Importance of Play: Play-based instruction within a preschool learning environment. ***Download from:*** https://scholar.google.com/

10. Play-related themes. Santer, J., Griffiths, C., & Goodall, D. (2007). *Free play in early childhood: A literature review*. National Children's Bureau. ***Download from:*** https://scholar.google.com/

Course Code	Course Title	Credit Hours
EDCE1114	**Math, Nature and Science in ECE Classroom**	**3(3+0)**

Course Objectives

After the successful completion of the course, the students will be able to:

- Describe the early years foundational competencies required in mathematics and science.

- Discuss pedagogical practices required to include mathematics in early years play.
- Discuss pedagogical practices required to develop scientific behavior and understanding pf world in early years play.

Content

1. **Foundational Competence in Mathematics and Science**
   a. Early Mathematics Competence
   b. Early Science Competence
   c. Connections among Literacy, Mathematics, and Science
2. **Good Mathematics Pedagogy**
   a. Starting with Play
3. **Teaching practices for mathematics**
   a. Meta-Practices
   b. Promotion of Math Talk
   c. Cognitively Challenging Tasks
   d. Formative Assessment
   e. Practices in Integrative Contexts
4. **Content of math for preschoolers**
   a. Number Sense
   b. Representation
   c. Spatial sense
   d. Measurement
   e. Estimation
   f. Patterns
   g. Problem-solving
5. **Using blocks to develop 21st century skills**

i. STEAM
ii. Technology
iii. Engineering
iv. The arts

6. **The Science of Young Children**
   a. The Content of Science for Young Children

i. Science Inquiry and the Nature of Science
ii. Science Content
iii. Science in the Child-Centered Curriculum
iv. Materials for Science
v. Time and Space for Science
vi. Discussion and Representation in Science
vii. The Teacher's Role

7. **Learning Science From Home**
   a. Insects
   b. Water play
   c. Seeds
   d. Shadows
8. **Approaches to Teaching Preschool Children Science**
   b. Responsive teaching.
   c. Responsive teaching plus explicit instruction
   d. Preschool Science: Classroom Environment

9. **The Basic Preschool Science Concepts:**

ϕ Observing
ϕ Comparing
ϕ Classifying

ϕ Measuring
ϕ Communicating
ϕ Inferring
ϕ Predicting
10. **Pocket of Preschool Science Classroom**

Reading References
All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

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7. **Explicit Instruction** https://www.understood.org/en/school-learning/for-educators/universal-design-for-learning/what-is-explicit-instruction
8. **Responsive Teaching** from https://eclre.org/media/84779/responsive-teaching-strategies.pdf
9. Lindeman, K. W., & Anderson, E. M. (2015). Using blocks to develop 21st century skills. *Cover Story). YC: Young Children*, *70*(1), 36-43.
10. ***Download from:*** https://www.naeyc.org/resources/pubs/yc/mar2015/using-blocks
11. **Preschool science concepts** from https://www.preschool-plan-it.com/preschool-science-concepts.html
12. **Pocket of preschool classroom** from https://pocketofpreschool.com/little-learners-science-curriculum-preschool-pre-k-and-kindergarten/
13. **Content of Math** from https://www.zerotothree.org/resources/299-help-your-child-develop-early-math-skill

Course Code	Course Title	Credit Hours
EDCE1115	**Arts in Young Children's Classroom**	**3(2+1)**

Course Objectives
After the successful completion of the course, the students will be able to:

- Describe the importance of art in child development
- Explain the importance of in early years classroom
- Develop creative activities of drawing and paintings for 2–5 years young and grade 1-4 children.
- Develop creative activities of Sculpture for 2–5 years young and grade 1-4 children.
- Develop creative activities of New Media prints for 2–5 years young and grade 1-4 children.
- Develop creative activities of Printmaking for 2–5 years young and grade 1-4 children.

Content

1. Foundations of Art Education: Children, Art, And Society

- Nature of the Visual Arts
- Conceptions of the Learner
- Early Influences of Philosophy and Psychology
- Contemporary Views of the Learner
- Multiple Intelligences
- Brain Research

2. Values of Society

- Public Attitudes in the Schools
- Change in Art Education
- The Teachers of Art
- Creativity and Art Education

3. Children's Artistic Development: How Children Grow and Learn

- Stages of Graphic Representation
- The Manipulative Stage (Ages 2–5, Early Childhood)
- The Symbol-Making Stage (Ages 6–9, Grades 1–4)
- Why Children Make Art
- Children's Conceptual Development in Art
- Artists and Children's Art

4. Drawing: The Studio Experience

- The Manipulative Stage (Ages 2–5): Media and Techniques and teaching
- The Symbol-Making Stage (Grades 1–4): Media and Techniques
- The Development of Pictorial Composition: Form and Idea and Memory and Drawing
- Working with Narratives: Storytelling

5. Painting: The Studio Experience

- Painting Media and Techniques: Teaching
- Developing Color Awareness: Color and Art History

6. Sculpture and Ceramics

- Sculpture: Basic Modes of Forming and Construction: Paper, Box Sculpture, Freestanding Forms
- Sculpture in Plaster of Paris: Media and Techniques and Teaching
- Modeling with Clay: Media and Techniques and Teaching
- Making Pottery: Media and Techniques and Teaching
- Finishing Processes: Media and Techniques & Teaching

6. New Media

- New Media in the Classroom: Media and Techniques
- Creating a Gallery of Self-Portraits
- Responding to Contemporary Art
- Art and Nature
- Art from Everything
- Copy Technology
- **Media for Instruction**
- Projections
- Experiences with a Camera

- Storyboards
- Video
- Computer Technologies in the Art Classroom

7. Printmaking

- Rubbings and Monoprints: Media and Techniques and teaching
- Potato and Stick Printing: Media and Techniques and Teaching
- Styrofoam, Linoleum, Printing: Media and Techniques and Teaching
- Stenciling: Media and Techniques and Teaching

8. Design: Art Language and Application

- The elements of design
- Line
- Shape and Mass
- Color
- Texture
- Space
- The principles of design
- Unity
- Rhythm
- Proportion
- Balance
- Broad Implications of the Design Process

Practical:

1. Prospective teacher will create the mentioned-below art experiences for young children and place them in a portfolio of art lesson plans for children age 2-8. Prospective teacher must make the all art work first by him/herself**.**

2. Each art lesson must have (i) a name; (ii); duration of the activity (iii); materials they will need for the activity (iv) age of child/children; (v); purpose of the art activity (vi) description of art activity. The above-mentioned detail will be followed by (vii) the real pictures of child/children who have done that activity (with parent permission); (viii) picture of art work or real child art; (ix) actual time children will take to do it; (x) prospective teachers discussions with child/children; (xi) and their own learning as an art teacher of young children.

3. The portfolio must have:

a. **Three drawing/painting in three different media by** 2–5 years young children depicting Pictorial Composition (Form and Idea & Memory and Drawing) and Narratives: Storytelling.

b. **Three drawing in three different media by** grade 1-4 children depicting Pictorial Composition (Form and Idea & Memory and Drawing) and Narratives: Storytelling.

c. **Develop activity for 2–5 years young children to create Sculpture of each:** Paper, Box Sculpture, Freestanding, Sculpture in Plaster of Paris, Clay and pottery.

d. **Develop activity for grade 1-4 children to create Sculpture of each:** Paper, Box Sculpture, Freestanding, Sculpture in Plaster of Paris, Clay and pottery.

e. **Develop activities for 2–5 years young children on New Media prints of mentioned categories:** Self-Portraits, Contemporary Art, Nature, Copy Technology.

f. **Develop activities for grade 1-4 children on New Media prints of mentioned categories:** Self-Portraits, Contemporary Art, Nature, Copy Technology.

g. **Develop activities for grade 1-4 children on Printmaking of mentioned categories:** Rubbings and Monoprints, Potato and Stick Printing, Styrofoam, and Stenciling.

h. **Develop activities for 2–5 years young children on Printmaking of each:** Rubbings and Monoprints, Potato and Stick Printing, Styrofoam, and Stenciling. Also, write down the child age who have done the artwork; time he/she took to do it; materials; prospective teachers discussions with children; and their own learning as an art teacher of young children.

The portfolio will be evaluated by the teacher.

Reading References

All the above content has been taken from Day, M., & Hurwitz, A. (2012).

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9. Ring, K. A. (2003). *Young children drawing at home, pre-school and school: The influence of the socio-cultural context* (Doctoral dissertation, University of Leeds). ***Download free from: https://scholar.google.com/***
10. Tombak, A. (2015). Ceramics from stories at pre-school using drama method. *Global Journal on Humanities and Social Sciences*, *1*(1). ***Download free from: https://scholar.google.com/***
11. Wien, C. A. (2008). Sculpture with Three-to Five-Year-Olds. *YC Young Children*, *63*(4), 78. ***Download free from: https://scholar.google.com/***

Course Code	Course Title	Credit Hours
EDCE1116	**Cognitive Development in Young Children**	**3(2+1)**

Course Objectives

After the successful completion of the course, the students will be able to:

- Describe the importance of Mind theory, working memory and executive functions for young children
- Guide parents and early-years educators about the influence of sleep and exercise, emotions and stress, and language on the development of executive functions
- Practicing Executive Function Skills with Children in pre-school
- Develop activities for children by considering Self-Regulation in the First Five Years
- Create developmentally appropriate lesson plans/activities for children to supporting them in achieving their cognitive milestones

Content

1. **Baddeley's Model of Working Memory**
   a. The central executive
   b. The phonological loop
   c. The visuospatial sketchpad
   d. Episodic buffer

2. **Executive Functions of Mind**
   a. Inhibitory Control
   b. Working Memory
   c. Cognitive Mental Flexibility
   d. Effect of a young child's environment of relationships on the development of executive capacities
   e. Effects of toxic stress on the developing architecture of the brain.
   f. Building the Foundations of an "Air Traffic Control" System in the Brain

3. **Implications for Parents and Early-Years Educators**
   a. The Influence of Sleep and Exercise, Emotions and Stress, and Language on the Development of Executive Functions

4. **Enhancing and Practicing Executive Function Skills with Children**
   a. Executive Function Activities for 6- to 18-month-olds
   b. Executive Function Activities for 18- to 36-month-olds
   c. Executive Function Activities for 3- to 5-year-olds
   d. Executive Function Activities for 5- to 7-year-olds

5. **Promoting Self-Regulation in the First Five Years**
   a. How does self-regulation develop?
   b. Role of Parents and caregivers in the development of self-regulation

I. Provide a warm, responsive relationship
II. Structure the environment
III. Teach and coach self-regulation skills
IV. What does self-regulation look like during early childhood?
V. What does effective co-regulation look like during early childhood?

6. **Supporting Young Children's Explanations Through Inquiry Science in Preschool**
   a. Functional or discovery play (exploring and using the senses)
   b. Symbolic play (using objects and language to represent ideas)
   c. Games with rules (organizing games with rules and roles)
   d. Thinking like a scientist
   e. Teachers supporting scientific play

7. **The Science of Young Children**
   a. The Content of Science for Young Children
   b. Young Children's Inquiry by Hubert Dyasi Karen Worth, Education Development Center Inc.
   c. Science in the Child-Centered Curriculum
   d. Materials for Science
   e. Time and Space for Science
   f. The Teacher's Role

8. **Mathematics in Early Childhood and Primary Education (3-8 Years)**
   a. Good Mathematics Pedagogy
   i. Starting with Play
   ii. Principles that Emphasis People, Relationships and the Learning Environment
   iii. Principles that Emphasis Learning
   iv. Engaging Children's Preconceptions
   v. Integrating Factual Knowledge and Conceptual Frameworks
   vi. Promoting a Metacognitive Approach
   vii. Features of Good Mathematics Pedagogy

9. **Teaching Practice**
   a. Meta-Practices
   b. Promotion of Math Talk
   c. Development of a Productive Disposition
   d. Emphasis on Mathematical Modeling
   e. Cognitively Challenging Tasks
   f. Formative Assessment
   g. Play
   h. Story/Picture-Book Reading
   i. Project Work
   j. Learning Mathematics through the Arts and Physical Education.
   k. Digital Tools

Practical

1. Students will develop a portfolio of 18 lesson plans/activities focusing on cognitive development of young children (see Appendix # A).
2. They will develop 6 activities for 3-yeras old; 6 activities for 5-years old and; 6 activities for 7-years old.
3. UNICEF has defined Cognitive development milestones for young children from *"**Early Learning and Development Standards for children by UNICEF coordinator: Mihaela Ionescu, Ph.D."*** ***(can download for free from:*** https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old. ***(can download for free from:*** https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old)
4. Students will take cognitive early learning milestones from "***Early Learning and Development Standards for children from birth to 7 years"*** as specific objectives. ***(can download for free from:***

https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old)

5. Students will motivate a real child of respective age (at home/family/friends/neighbors/schools) to do that activities. They will paste the child created activity and pictures of child doing that activity in their portfolios.
6. On the day of practical assessment, students will present a single lesson plan/activity; will practically do the hands-on activity and; shared his/her learning experience of doing this activity with the child in front of teacher and pre-school principal/teacher.
7. Teacher will assess individual student's portfolios and presented activity with pre-school principal/teacher.

Reading References

All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

Baddeley's Model of Working Memory

1. Cockcroft, K. (2015). The role of working memory in childhood education: Five questions and answers. *South African Journal of Childhood Education*, *5*(1), 01-20. ***Download from:*** https://scholar.google.com

Executive Functions of Mind

2. Building the Brain's "Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function. ***Download from:*** https://www.ncsl.org/documents/cyf/WorkingPaper11.pdf

Implications for Parents and Early-Years Educators

3. Tobar, C. The Influence of Sleep and Exercise, Emotions and Stress, and Language on the Development of Executive Functions: Implications for Parents and Early-Years Educators. ***Download from:*** https://scholar.google.com
4. Center on the Developing Child at Harvard University. (2014). Enhancing and practicing executive function skills with children from infancy to adolescence**:** ***Download from***: http://developingchild.harvard.edu/wp-content/uploads/2015/05/Enhancing-and-Practicing-Executive-Function-Skills-with-Children-from-Infancy-to-Adolescence-1.pdf
5. Promoting Self-Regulation in the First Five Years: A Practice Brief: ***Download from:*** https://scholar.google.com

Supporting young children's explanations through inquiry science in preschool

6. Hamlin, M., & Wisneski, D. B. (2012). Supporting the scientific thinking and inquiry of toddlers and preschoolers through play. *YC Young Children*, *67*(3), 82. ***Download from:*** https://scholar.google.com
7. **The Science of Young Children:** Worth, K. (2010). Science in early childhood classrooms: Content and process. *Early Childhood Research & Practice (ECRP)*, *12*(2), 2184-1489. ***Download from:*** https://scholar.google.com
8. Handout 4: Young Children's Inquiry. ***Download from:*** https://center.uoregon.edu/StartingStrong/uploads/STARTINGSTRONG2015/HANDOUTS/KEY_5189/DiagramforYoungChildrensInquiry_Dyasi.pdf
9. *Worms, Shadows, and Whirlpools: Science in the Early Childhood Classroom* by Karen Worth and Sharon Grollman. 2003 Portsmouth, NH: Heinemann, Washington D. C.: NAEYC. ***Download from:*** https://files.eric.ed.gov/fulltext/ED481899.pdf
10. **Mathematics in early childhood and primary education (3-8 years):** Dooley, T., Dunphy, E., Shiel, G., O'Connor, M., & Travers, J. (2014). Mathematics in early childhood and

primary education (3-8 years). *Teaching and learning*, *18*, 164. ***Download from:*** https://scholar.google.com

Course Code	Course Title	Credit Hours
EDCE1117	Socio-Emotional Development of Children	3(2+1)

Course Objectives

After the successful completion of the course, the students will be able to:

- Describe the importance of parenting in socio-emotional development of children.
- Develop activities for fostering healthy social & emotional development in infants, toddlers and preschoolers
- Develop activities for children by considering Self-Regulation in the First Five Years
- Create developmentally appropriate lesson plans/activities for children for supporting them in achieving their socio-emotional milestones.

Content

1. Social-Emotional Development in the First Three Years

a. Early social and emotional development: a psychological foundation for emerging competence across developmental domains
b. Social and emotional health vulnerability to adversity
c. Children's Emotional Development Architect Their Brains

2. Building Healthy Parent-Child Relationships: A Positive, Rights-Based Approach

a. How do children's rights relate to parenting?
b. Physical and Humiliating Punishment
c. The challenges of parenting
d. Understanding How Children Think and Feel: birth to 5 years

3. Attachment Theory by Bowlby

a. Secure attachment
b. Anxious resistant attachment (resistant/ambivalent attachment)
c. Avoidant attachment
d. Disorganized-disorientated attachment
e. Impacts of Insecure Attachment

i. Neurobiological Effects
ii. Intergenerational Transmission
iii. Child Maladaptation/ Disorders

4. Social Functions of Emotion and Emotion Regulation

a. The Nature of Social Functions
b. The Affiliation Function of Emotions at the Interpersonal Level
c. Affiliation Functions of Emotions at the Group level
d. The Social Distancing Function of Emotion at the Interpersonal Level
e. Distancing Functions of Emotions at the Group level

5. Fostering Healthy Social & Emotional Development with Infants Toddlers Preschoolers

a. Creating a Predictable Nurturing Environment
b. Supporting Children in Developing Social Skills
c. Recognizing and Talking About Emotions
d. Encouraging Positive Behaviors and Using Positive Discipline Practices

6. Promote Young Children's Prosocial Skills

a. Building secure relationships
b. Creating a classroom community
c. Modeling prosocial behavior
d. Establishing prosocial expectations
e. Supporting families

7. Components of Social Competence and Strategies of Support

a. Components of Social Competence

i. Self-regulation
ii. Interpersonal knowledge and skills
iii. Positive self-identity
iv. Cultural competence
v. Adopting social values
vi. Planning and decision-making skills

b. Supportive Intervention Strategies

i. Environmental arrangement
ii. Naturalistic strategies
iii. Planned routine activities

8. Peer Relationship: Friendship and Aggression

a. The Development of Friendships
b. Behaviors lead to friendship
c. Support Strategies

i. Structuring the learning environment
ii. Scheduling the daily routine
iii. Facilitating social and emotional awareness
iv. Facilitating children's interactions
v. Modeling with video and puppets
vi. Preparing peer partners
vii. The buddy system
viii. Priming
ix. Suggesting play ideas
x. Direct modeling
xi. Reinforcement

d. Aggression During Early Years

i. Individual factors
ii. Disturbed family dynamics, parental characteristics, and parenting practices
iii. Exposure to violence and behavioral aggression
iv. Living in violent neighborhoods
v. Attachment relationships

Practical

1. Students will develop a portfolio of 18 lesson plans/activities focusing on socioemotional development of young children (see Appendix # A).
2. They will develop 6 activities for 3-yeras old; 6 activities for 5-years old and; 6 activities for 7-years old.
3. UNICEF has defined socioemotional development milestones for young children. ***(can download for free from:*** https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old)
4. Students will take socioemotional early learning milestones from "***Early Learning and Development Standards for children from birth to 7 years"*** as specific objectives. ***(can download for free from:***

https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old)

5. On the day of practical assessment, students will present a single activity in front of teacher and pre-school principal/teacher.
6. Teacher will assess individual student's portfolios and presented activity with pre-school principal/teacher.

Reading References

All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

1. **Social-Emotional Development in the First Three Years:** ***Download from:*** https://www.prevention.psu.edu/uploads/files/rwjf444708-SELFoundations.pdf
2. Children's Emotional Development Is Built into the Architecture of Their Brains. ***Download from:*** https://developingchild.harvard.edu/resources/childrens-emotional-development-is-built-into-the-architecture-of-their-brains/
3. Moore, T. G. (2007, June). The nature and role of relationships in early childhood intervention services. In *2nd International Conference of the International Society on Early Intervention, Zagreb, Croatia*. ***Download from:*** https://scholar.google.com/
4. **Building Healthy Parent-Child Relationships: A Positive, Rights-Based Approach:** Durrant, J. (2012). A guide to building healthy parent-child relationships: A positive, rights-based approach. Save the children, Italy. ***Download from:*** https://resourcecentre.savethechildren.net/node/6182/pdf/6182.pdf
5. A**ttachment Theory And Child Protection Practice:** Osmond, J., & Darlington, Y. (2001). Attachment theory and child protection practice. ***Download from: https://scholar.google.com/***
6. **Social Functions of Emotions:** KAVAKLI, M. (2019). Why do we have emotions? The social functions of emotions. *Research on Education and Psychology*, *3*(1), 11-20. ***Download from: https://scholar.google.com/***
7. Fostering Healthy Social & Emotional Development in Young Children Tips for EARLY Childhood Teachers and Providers. ***Download from:*** https://www2.ed.gov/about/inits/ed/earlylearning/talk-read-sing/feelings-teachers.pdf
8. **Promote Young Children's Prosocial Skills:** Hyson, M., & Taylor, J. L. (2011). Caring about caring: What adults can do to promote. *Young Children*, *66*(4), 74-83. ***Download from: https://scholar.google.com/***
9. **Components of Social Competence and Strategies of Support**: Han, H. S., & Kemple, K. M. (2006). Components of social competence and strategies of support: Considering what to teach and how. *Early Childhood Education Journal*, *34*(3), 241-246. ***Download from: https://scholar.google.com/***
10. **Peer relationship: friendship and victimization:** Gainsley, S., & DIRECTOR, H. D. P. (2013). Building friendships in preschool. *Highscope Extensions*, *27*(1), 1-18. ***Download from: https://scholar.google.com/***
11. Handley, T. E., Inder, K. J., Kelly, B. J., Attia, J. R., Lewin, T. J., Fitzgerald, M. N., & Kay-Lambkin, F. J. (2012). You've got to have friends: the predictive value of social integration and support in suicidal ideation among rural communities. *Social psychiatry and psychiatric epidemiology*, *47*(8), 1281-1290. ***Download from: https://scholar.google.com/***
12. Reebye, P. (2005). Aggression during early years—infancy and preschool. *The Canadian Child and Adolescent Psychiatry Review*, *14*(1), 16. ***Download from***:

Course Code	Course Title	Credit Hours
EDCE1118	Early Childhood Education Curriculum	3(3+0)

Course Objectives

After the successful completion of the course, the students will be able to:

- Discuss the salient features of developmentally appropriate practices in early childhood education.
- Use the principles for early years education in developing curriculum for young children
- Find out the similarities and differences between integrated, emergent and theme-based curriculum.
- Use observations as a conceptual tool to develop curriculum for young children
- Use yearly years framework for assessment.
- Develop activities for developing subject-based skills in young children.

Content

1. Developmentally Appropriate Practices

a. Teaching and Learning in Developmentally Appropriate Programs

b. Reconceptualization of 'Early Childhood Curriculum

i. Foundation I: child development
ii. Foundation II: social culture
iii. Foundation III: play
iv. Foundation IV: knowledge

c. Early childhood curriculum: contemporary models

i. Montessori method
ii. Reggio Emilia approach
iii. HighScope curriculum
iv. Integrated learning

d. Principles for early years education

i. Putting the principles into practice
ii. Meeting the diverse needs of children
iii. Children with special educational needs and disabilities
iv. Learning and teaching

2. Currently Recognized Curricular Concepts

a. Integrated Curriculum

i. Where We Live, Learn and Grow and What We Believe
ii. NWT Aboriginal Approaches to Learning
iii. Kindergarten Learning Model & Key Competencies
iv. Play, Learning, and Curriculum: How They Fit Together
i. Learning Occurs in Relationships
ii. How Teachers Support Children's Active Meaning-Making
iii. Curriculum Occurs Throughout the Day
iv. Reflective Planning
v. A Cycle of Observing, Documenting, and Interpreting
vi. Observe and Reflect
vii. Document to Hold in Memory
viii. Interpret the Documentation

b. Emergent Curriculum Developing an Emergent and Inquiry-Based Curriculum

i. What does emergent mean in a curriculum?
ii. Understanding emergent curriculum in practice

c. Theme-Based Learning or Thematic Curriculum

i. The Value of Thematic Approaches for Real Learning
ii. Different Styles of Theme Cycles

iii. Sources for Planning Theme Cycles
iv. A Model or Framework for Planning Theme Cycles
v. Principles for Planning Theme Cycles
vi. Theme Cycles as Action
vii. Thematic Approach on Communication Skill in Preschool

3. **Curriculum as a Conceptual Tool: Observation, Content and Programming**
a. Linking Observation to Planning in The Curriculum
b. What Is Observation and Why Is It Important?
c. The Role of Environments: Observations in The Early Childhood Setting
d. The Role of Play: Observing the Child in Action
e. The Role of Transitions: The Importance of Observation,
f. Documentation and Reflection
g. The Role of Relationships: Documenting Observations in The Early Childhood Setting
h. Shaping Curriculum Around Key Informants

4. **Assessing Children and Evaluating Curriculum: Shifting Lenses**
a. What do we mean by assessment?
b. Curriculum context
c. Assessment, learning and evaluation are interdependent concepts
d. Evaluation and assessment: why evaluation matters
e. Ethical framework for evaluation
f. Planning for evaluation
g. Leading evaluations: outcomes, processes, inputs and design
h. Curriculum, assessment and evaluation

5. **Content Knowledge: The Sciences, Maths and Numeracy**
a. Mathematical concept formation within everyday practice
b. A cultural-historical reading of concept formation
c. Thinking consciously about concepts
d. A curriculum model for working with everyday concepts and scientific concepts
e. Curriculum in practice: building scientific conceptual knowledge

6. Content Knowledge: Language, Literacy and ICT
a. How to encourage language and literacy in the early years
b. Assessing children's interests in and experiences with literacy
c. A social practice perspective on literacy
d. Information and communication technologies (ict)
e. Literacy concepts

7. **Content Knowledge: The Arts and Health, Wellbeing and Physical Activity**
i. Physical Education Concepts
ii. Musical Concepts

Reading References

All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

1. **Developmentally Appropriate Practice (DAP).** ***Download from:*** http://bkc-od-media.vmhost.psu.edu/documents/TIPS1401.pdf
2. Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. National Association for the Education of Young Children. 1313 L Street NW Suite 500, Washington, DC 22205-4101. ***Download from:***

https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSDAP.pdf

3. **Principles for early years education.** ***Download from:*** https://www.foundationyears.org.uk/files/2012/10/Curriculum-guidance-for-the-foundation-stage-Principles-for-early-years-education.pdf

4. Integrated Kindergarten Curriculum: A Holistic Approach to Children's Early Learning. ***Download from:*** https://www.ece.gov.nt.ca/sites/ece/files/resources/kindergarten_curriculum_2014.pdf

5. The Integrated Nature of Curriculum: Best Practices For Planning Curriculum For Young Children. ***Download from:*** https://www.cde.ca.gov/sp/cd/re/documents/intnatureoflearning2016.pdf

6. Kindergarten integrated curriculum document. Prince Edward Island Kindergarten Integrated Curriculum Document. ***Download from:*** http://www.gov.pe.ca/photos/original/k_doc.pdf

7. Jones, E. (2012). The emergence of emergent curriculum. *YC Young Children*, *67*(2), 66. ***Download from:*** *https://www.calstatela.edu/sites/default/files/groups/Anna%20Bing%20Arnold%20Children%27s%20Center/Docs/preschool_emergent_curriculum_information.pdf*

8. Developing an emergent and inquiry-based curriculum. ***Download from:*** https://www.aistearsiolta.ie/ga/aistrithe/acmhainni-le-comhroinnt/developing-an-emergent-and-inquiry-based-curriculum.pdf

9. Authority, Q. S. (2010). Queensland kindergarten learning guideline. *Queensland: Queensland Studies Authority*. ***Download from*:** https://lifeofaneducator.files.wordpress.com/2014/01/emergent-curriculm.pdf

10. Ward, G. (2003). Using theme cycles. Wadsworth/Thomson Learning. ***Download from*:** https://researchonline.jcu.edu.au/529/2/ward_1.pdf

11. Ashokan, V., & Venugopal, K. (2016). Impact of Thematic Approach on Communication Skill in Preschool. *Online Submission*, *2*(10), 394-397. ***Download from: https://scholar.google.com/***

12. **Unit 3-**7. McLachlan, C., Fleer, M., & Edwards, S. (2018). *Early childhood curriculum: Planning, assessment and implementation*. Cambridge University Press. ***Download from*:** https://www.pdfdrive.com/category/14

Course Code	Course Title	Credit Hours
EDCE1119	Assessment for Young Children	3(3+0)

Course Objectives

After the successful completion of the course, the students will be able to

- Explain the how early years assessment is different than the mainstream schooling assessment.
- List different purposes and for whom assessment information is used.
- Make an authentic plan for documenting children by using various tools.
- Develop an authentic plan for observing children by using various tools.
- Evaluate the reliability, validity, and appropriateness of measurement instruments and procedures for specific assessment and intervention purposes.

Content

1. Challenges in Early Childhood Assessment

a. What Assessment Means to Early Childhood Educators?
b. How do we account for developmental variability?
c. What gets measured?
d. How should we assess?
e. General Issues in young children Assessment

2. Authentic Assessment Practices

a. Linkage between assessment and curriculum development
i. Alignment of assessment with standards
ii. Administering authentic assessment
iii. Using data for decision making
b. Role of Observation in Authentic Assessment
i. Integrating Observations into Curriculum Planning
ii. The Impact of Authentic Assessment on Child Outcomes and the Classroom
iii. The Need to Incorporate Authentic Assessment Training into Professional Development
iv. Best Practices in Alternative Assessments

3. Assessment in Early Childhood = Getting to Know Children

a. Principles of Early Childhood Assessment
b. Purposes of Assessment
i. Screening Assessment
ii. Instructional Assessment
iii. Diagnostic Assessment
iv. Assessment for Program Evaluation/Accountability
v. Perspectives on Early Childhood Learning Standards and Assessment

4. Documentation in the Early Childhood Classroom

a. What is documentation?
i. What should we document?
ii. Why should we document?
iii. Stages of the documenter
iv. How should we document?
b. What is documentation doing?
i. The agency of documentation practices
ii. Documentation–discourses

iii. Documentation–the child
iv. Documentation–embodied sensory elements

c. Assessment Techniques and Tools for Documentation

i. Anecdotal Notes
ii. Photographs, Videotapes and Audio Recordings
iii. Self-Assessment
iv. Checklists
v. Work Samples and Portfolios
vi. Language Arts Student Profiles

5. Observation and Documentation: The Key to Intentional Teaching

a. Becoming a Skilled Observer

i. Observations can be Spontaneous or Planned
ii. Questions you may want to ask yourself as you plan your next observation
iii. The Role of Documentation
iv. Objective versus Subjective Observation Evidence
v. Recognizing Your Biases
vi. Ethical Guidelines when Observing Children and Documentation Dos and Don'ts

b. Using Observation Methods, Tools and Techniques to Gather Evidence

i. Taking the First Step: Gathering Baseline Data
ii. Understanding the Child
iii. Let's Get Started
iv. A Closer Look at Observation Methods, Tools and Techniques

6. The Purpose, Process and Practice of Monitoring, Screening and Evaluating

a. The Purpose of Monitoring, Screening and Evaluating Young Children

7. Informal Assessments

a. Interviews
b. Parent Interview Small group work (Running Record)
c. Rubrics, Rating Scales, Checklist
d. Observing Cognition; Multiple Intelligences
e. Multiple Intelligences Small group work (Parent Interview)

8. Standardized Tests

a. Brief Statistics Lesson
b. Reliability & Validity
c. Standardized tests Multicultural Critique of IQ testing
d. Cognitive and/or Language Measures (Multiple Intelligence)
e. Normative Sample
f. Interpreting Test Scores

Reading References

All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

1. **Challenges in Early Childhood Assessment:** Syverson, A. N., & Losardo, A. (2004). What assessment means to early childhood educators. *Exchange*. ***Download from: https://scholar.google.com/***

2. How to navigate early childhood assessment A research-based guide to inform assessment planning in the early grades Cindy Jiban, PhD. ***Download from:*** http://info.nwea.org/rs/976-IYI-694/images/How-to-Navigate-Early-Childhood-Assessment-WP.pdf

3. Epstein, A. S., Schweinhart, L. J., DeBruin-Parecki, A., & Robin, K. B. (2004). Preschool assessment: A guide to developing a balanced approach. *Preschool Policy Matters*, *7*, 1-2. ***Download from: https://scholar.google.com/***

4. **Authentic Assessment Practices:** Grisham-Brown, J., Hallam, R., & Brookshire, R. (2006). Using authentic assessment to evidence children's progress toward early learning standards. *Early Childhood Education Journal*, *34*(1), 45-51. ***Download from: https://scholar.google.com/***

5. Authentic Assessment in Infant & Toddler Care Settings: Review of Recent Research: ***Download from: https://scholar.google.com/***

6. **Best Practices in Alternative Assessments:** ***Download from:*** https://www.ryerson.ca/content/dam/learning-teaching/teaching-resources/assessment/alternative-assessments.pdf

7. **Assessment in Early Childhood = Getting to Know Children:** A Guide to Assessment in Early Childhood Washington State Infancy to Age Eight
Download from: https://wvde.state.wv.us/oel/docs/Washington%20Assessment%20Guide.pdf

8. PRINCIPLES AND RECOMMENDATIONS FOR EARLY CHILDHOOD ASSESSMENTS: ***Download from:*** https://govinfo.library.unt.edu/negp/reports/prinrec.pdf

9. **Documentation in the Early Childhood Classroom:** ***Download from:*** https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/pubs/seitz.pdf

10. Albin-Clark, J. (2020). What is documentation doing? Early childhood education teachers shifting from and between the meanings and actions of documentation practices. *Contemporary Issues in Early Childhood*, 1463949120917157. ***Download from: https://scholar.google.com/***

11. **Assessment Techniques and Tools for Documentation:** ***Download from*:** https://www.gov.nl.ca/education/files/k12_curriculum_guides_completely_kinder_8.-section-4-assessment-final.pdf

12. **Observation and Documentation: The Key to Intentional Teaching**
(chapter # 1& 3) OBSERVATION AND ASSESSMENT IN EARLY CHILDHOOD EDUCATION. An Open Educational Resources Publication by College of the Canyons. ***Download from*:**

https://childdevelopment.org/docs/default-source/pdfs/observation-and-assessment-english2-8-20.pdf?sfvrsn=1e9226c1_2

13. **The Purpose, Process and Practice of Monitoring, Screening and Evaluating**: (chapter # 6) OBSERVATION AND ASSESSMENT IN EARLY CHILDHOOD EDUCATION. An Open Educational Resources Publication by College of the Canyons. ***Download from*:**
https://childdevelopment.org/docs/default-source/pdfs/observation-and-assessment-english2-8-20.pdf?sfvrsn=1e9226c1_2

14. Allen, K. E., & Marotz, L.R. (2010). *Developmental profiles: Pre-Birth through twelve.* Belmont, CA: Wadsworth. ISBN: 978-4354-1294-1. ***Download from: https://scholar.google.com/***

15. Buros Institute website – www.unl.edu/buros – The Buros Institute provides access to numerous assessment instruments. They publish the Mental Measurements Yearbook which reviews published instruments.

16. Gardner, H., Feldman, D. H., & Krechevsky, M. (Eds.). (1998). *Project spectrum: Preschool assessment handbook*. New York: Teachers College Press. ISBN: 0-8077-3768-2. ***Download from: https://scholar.google.com/***

17. NE Early Childhood Standards (Early Learning Guidelines): http://www.nde.state.ne.us/ech/ELGuidelines/index.htm -- This website includes a pdf link for the new Nebraska Early Childhood Standards. These are recommended standards for early childhood teachers.

18. Salkind, N. J. (2006). *Tests & measurement for people who (think they) hate tests & measurement.* Thousand Oaks: Sage Publications. ISBN:1-4129-1364-0. ***Download from: https://scholar.google.com/***

19. Wortham, S. C. (2011). *Assessment in Early Childhood Education (6th Ed.)*. Upper Saddle River, NJ: Pearson. ISBN: 978-0132481229. ***Download from: https://scholar.google.com/***

Course Code	Course Title	Credit Hours
EDCE2111	Parenting and Children Growth and Development	3(2+1)

Course Objectives

After the successful completion of the course, the students will be able to:

- Explain parenting effects on children using different theoretical perspectives
- Discuss how different theories reflect on the outcome of parenting styles on children physical, emotional and psychological development and growth
- Advocate positive parenting styles in disciplining children at home
- Guide parents how they can support their children growth and development with positive parenting
- Explain to parents about the effects of their relationship with their children on children academic success

Content

1. Theoretical Perspective: Diana Baumrind's Parenting Styles

- Authoritative Parenting
- Authoritarian Parenting
- Permissive Parenting
- Uninvolved Parenting
- Diana Baumrind's Parenting Styles and Parenting Styles and Outcomes for Children

2. Theoretical Perspective: John Bowlby and Mary Ainsworth Attachment Theory

- **Secure attachment**
- **Avoidant attachment**
- **Ambivalent attachment**
- **Resistant attachment**

3. Theoretical Perspective: Rudolf Dreikurs Positive Parenting

- *Mutuall respect*
- *Use natural consequences*
- *Taught important skills and habits*
- *Pride skills*
- *Play time*

4. **Development and Discipline**

- **(Birth to 18 months)**

ϕ Cry

ϕ Children Sleep

5. Development and Discipline: Toddlers (18 months to 3 years)

- Getting into Everything
- When Toddlers Should Not Touch
- Tantrums
- They're in Charge
- Biting
- Toilet
- Teaching Sharing
- Preferring One Parent

- Making a Mess
- They Can't Sit Still

6. Development and Discipline: Preschoolers (3 to 5 years)

- Bedtime Battles
- The Picky Eater
- Power Struggles
- Wetting the Bed
- Whining

7. **Connections between parents reading to their young children and their cognitive skills**

- Building strong parent partnerships
- Reading to young children
- Understanding the essential components for learning to read
- Stages of reading

8. Research-Based Intervention for Positive Parenting (articles review)

- Positive parenting: link with the child's mental health (Antão, 2020)
- Relationships matter: How clinicians can support positive parenting in the early years (Williams, Biscaro, & Clinton, 2019).
- Externalities in the classroom: How children exposed to domestic violence affect everyone's kids (Carrell & Hoekstra, 2010).
- A parental support program for mothers in Pakistan improves parenting by fathers as well. (Duncan Fisher, 2019)

<u>Practical:</u> Portfolio of Lesson Plans: Role Play of Parenting

At lease develop 5-7 different scenarios where parents ask a child to do different kind of chores and the child says "no." or develop scenarios of child and parent potential conflicts than ask students to illustrate the response of different kind of parents as described in parenting theories. Also, ask student to get their peer response on their ideas as well.

1. Set up multiple scenarios where parents ask a child to do a chore. The child says "no." students will write down how permissive parenting responses and then, authoritarian parenting responses and so on. Students will write down parents' responses came under the category of **Diana Baumrind's Parenting Styles.**
2. Set up multiple scenarios where parents ask a child to do a chore. The child says "no." students will write down how parent responsible for specific attachment style will respond. Students will write down parents' responses came under the category of **John Bowlby and Mary Ainsworth Attachment Theory.**
3. Set up multiple scenarios where parents ask a child to do a chore. The child says "no." students will write down how parent responsible for specific stage of **Rudolf Dreikurs Positive Parenting** will respond. Students will write down parents' responses came under the category of **Rudolf Dreikurs Positive Parenting.**

Teacher will evaluate the portfolio.

Reading References

All the above content has been taken from the following materials. All the mentioned resources are accessible for free online.

4. **Parenting in Theoretical perspective: Download free from: 6: A Closer Look at Parenting - Social Sci LibreTexts**: ***Download from*** https://socialsci.libretexts.org/Bookshelves/Early_Childhood_Education/Book%3A_Child_Family_and_Community_(Laff_and_Ruiz)/06%3A__A_Closer_Look_at_Parenting/6.01%3A_Parenting_styles

5. Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. N. (2015). *Patterns of attachment: A psychological study of the strange situation*. Psychology Press. ***Download from:*** https://mindsplain.com/wp-content/uploads/2021/01/Ainsworth-Patterns-of-Attachment.pdf
6. **The power of positive parenting:** UC Davis Medical Center is part of UC Davis Health: Download from https://health.ucdavis.edu/children/patients_family_resources/Patient_and_Family_Education_A_to_Z/PDFs/Parenting.pdf
7. **Positive Discipline: A Guide for Parents:** https://www.childrensmn.org/images/family_resource_pdf/027121.pdf
8. Kalb, G., & Van Ours, J. C. (2014). Reading to young children: A head-start in life?. *Economics of Education Review*, *40*, 1-24. ***Download free from: https://scholar.google.com/***
9. Brown, C. S. (2014). Language and literacy development in the early years: Foundational skills that support emergent readers. *Language and Literacy Spectrum*, *24*, 35-49. ***Download free from: https://scholar.google.com/***
10. Helping young children learn to read. What parents can do. Department of Education and Training. Queensland Government. ***Download free from:*** https://readingwritingcentre.education.qld.gov.au/rwc-resources/Documents/rc-parent-booklet.pdf
11. **Research-Based Intervention for Positive Parenting.** Antão, C. (2020). Positive parenting: link with the child's mental health. *International Journal of Family & Community Medicine*, *4*, 129-130. ***Download free from: https://scholar.google.com/***
12. Williams, R. C., Biscaro, A., & Clinton, J. (2019). Relationships matter: how clinicians can support positive parenting in the early years. *Paediatrics & child health*, *24*(5), 340-347. ***Download free from: https://scholar.google.com/***
13. Carrell, S. E., & Hoekstra, M. L. (2010). Externalities in the classroom: How children exposed to domestic violence affect everyone's kids. *American Economic Journal: Applied Economics*, *2*(1), 211-28. *Download free from: https://scholar.google.com/*
14. Fisher, D. (2019). A parental support program for mothers in Pakistan improves parenting by fathers as well. Child and family Blog. Retrieved from: https://childandfamilyblog.com/parental-support-fathers-pakistan/ Appendix # A

Exemplary Design of Activity for Portfolios

Activity #1 Stage Dancing

Domain: **Cognitive Development, World Knowledge and Understanding**

(this domain is taken from the "Early Learning and Development Standards for children from birth to 7 years"
https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old

Sub-Domain: Logical thinking and problem solving (pp. 70-71)

(this sub-domain is taken from the "Early Learning and Development Standards for children from birth to 7 years"

https://www.researchgate.net/publication/259194921_Early_Learning_and_Development_Standards_Early_Learning_and_Development_Standards_for_children_from_birth_to_7_years_old

ELDS-UNICEF Indicator:

Child Age:

# of children:

With young children teachers give them opportunity to work in a group not more than 3-5. Individual work can also be created

Time:

(for 3 years old activity will be 8-10 minutes; 5 years old 10-15 minutes; 7 years old 15-20 minutes

Material:

Nature of material	**Quantity**

Procedure: **(general description)**

i. **Beginning**
(How will you begin activity and motivate child to play with you).

ii. **Children will do:**
  i. **First 4-5 minutes:**
  ii. **Last 4-5 minutes:**
  iii. **Winding up activity (last few minutes)**
iii. **Teacher will do:**
  i. **First 4-5 minutes:**
  ii. **Last 4-5 minutes:**
  iii. **Winding up activity (last few minutes)**

Reflection:

i. **Concluding conversation with child about the activity that he/she has done.**
ii. **What works:**
iii. **How to improve in the activity for the next time**

Pictures of child doing the activity and activity itself.

7-Distance Learning and Non-Formal Education		
Course Code	**Course Title**	**Credit Hours**
EDUC3204	The System of Distance and Non-Formal Education	3(3+0)
EDUC3205	Project Management for Online Learning	3(3+0)
EDUC3206	Digital Literacy and Information Skills	3(3+0)
EDUC3207	Practicum in Distance Education (Hands-on Experience and Application)	3(3+0)
EDUC3208	Trends and Innovations in Distance Learning	3(3+0)
EDUC4162	Designing a Distance or Non-Formal Education Program	3(3+0)
EDUC4163	Foundations of Distance Education	3(3+0)
EDUC4164	Educational Outreach And Community Engagement	3(3+0)
EDUC4165	Non-Formal Techniques and Tools	3(3+0)

Course Code	Course Title	Credit Hours
EDUC3204	The System of Distance and Non- Formal Education	3(3+0)

Objectives of the Course.

After Completion of this course, the students will be able to:

- Define and explain the characteristics of distance education and non-formal education.
- Compare and contrast the similarities and differences between distance and non-formal education.
- Identify and analyze distance and non-formal education's historical development and evolution.
- Evaluate and apply different theories and models of distance and non-formal education.
- Utilize various technologies and tools in distance and non-formal education.
- Design and implement pedagogical strategies appropriate for distance and non-formal education contexts.
- Assess and ensure quality assurance in distance and non-formal education programs.
- Analyse and address access and equity issues in distance and non-formal education.
- Identify and explore future trends and innovations in distance and non-formal education.
- Critically evaluate and reflect on the implications of distance and non-formal education for lifelong learning and professional development.

Unit 1: Introduction to Distance and Non-Formal Education
1.1 Definition and Characteristics of distance education
1.2 Definition and characteristics of non-formal education
1.3 Similarities and differences between distance and non-formal education
1.4 Historical development and evolution of distance and non-formal education
Unit 2: Theories and Models of Distance and Non-Formal Education
2.1 Behaviorist Models in distance and non-formal education
2.2 Cognitive Models in the distance and non-formal education
2.3 Constructivist Models in Distance and non-formal education
2.4 Connectivism Models in Distance and non-formal education
2.4 Hybrid and blended learning models in Distance and non-formal education
Unit 3: Technologies and Tools in Distance and Non-Formal Education
3.1 Learning management systems (LMS) and their features
3.2 Synchronous and asynchronous communication tools
3.3 Multimedia and interactive learning resources
3.4 Mobile Learning and its Applications
3.5 Open educational resources (OER) and Open Educational Practices (OEP)
Unit 4: Pedagogical Strategies in Distance and Non-Formal Education
4.1 Learner-cantered Approaches and personalized learning
4.2 Collaborative Learning and social presence
4.3 Assessment and feedback in the distance and non-formal education
4.5 Motivation and engagement strategies
4.6 Cultural and contextual considerations in Distance and non-formal education
Unit 5: Quality Assurance and Accreditation in Distance and Non-Formal Education
5.1 Standards and guidelines for distance and non-formal education
5.2 Accreditation Processes and Frameworks
5.3 Quality assurance mechanisms and continuous improvement
5.4 Evaluation and monitoring of distance and non-formal education programs.
Unit 6: Access and Equity in Distance and Non-Formal Education
6.1 Digital Divide and its Impact on Access to Education
6.2 Inclusive Education and accessibility considerations

6.3 Gender and diversity issues in Distance and non-formal education
6.4 Policies and Initiatives for promoting access and Equity.

Unit 7: Future Trends and Innovations in Distance and Non-Formal Education

7.1 Artificial Intelligence and machine learning in Education
7.2 Virtual reality and augmented reality applications
7.3 Gamification and game-based learning Approaches
7.4 Open Badges and Micro-credentials
7.5Lifelong learning and continuous professional development

Unit 8: Synthesis and Application of Distance and Non-Formal Education

8.1 Integrating Concepts and Theories into Practice.
8.2 Case Studies and real-world examples
8.3 Reflective exercises and discussions
8.4 Final project or research paper on a specific topic related to distance and non-formal education.

Assessment

As per University of Education Rules and Regulations.

Teaching Strategies

In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Reading

- Bates, A. W., & Sangrà, A. (2011). Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning. Jossey-Bass.
- Garrison, D. R., & Anderson, T. (2011). E-Learning in the 21st Century: A Framework for Research and Practice. Routledge.
- Garrison, D. R., & Vaughan, N. D. (2020). Blended Learning in Higher Education: Framework, Principles, and Guidelines (2nd ed.). Routledge.
- Holley, D., Curran, S., & Mills, D. J. (Eds.). (2020). The Future of Distance Education: Research, Policy, and Practice. Palgrave Macmillan
- Jung, I., & Latchem, C. (Eds.). (2020). Quality Assurance in Distance Education and E-learning: Challenges and Solutions from Asia. Routledge.
- Keegan, D. (2013). Foundations of Distance Education. Routledge.
- Moore, M. G., & Kearsley, G. (2011). Distance Education: A Systems View of Online Learning. Wadsworth Publishing.
- Moore, M. G., & Kearsley, G. (2021). Distance Education: A Systems View of Online Learning. Cengage Learning.
- Simonson, M., Smaldino, S., & Zvacek, S. (2019). Teaching and Learning at a Distance: Foundations of Distance Education. Information Age Publishing.
- Tait, A., & Bower, M. (2019). Making Sense of Blended Learning: Treasuring an Older Tradition or Finding a Better Future? Routledge.

Course Code	Course Title	Credit Hours
EDUC3205	Project Management for Online Learning	3(3+0)

Learning Outcomes:

By the end of this course, students will be able to:

- Explain the fundamental concepts and principles of project management in the context of online learning.
- Apply project management methodologies and frameworks to online learning projects.
- Define the project goals, objectives, and deliverables of online learning initiatives.
- Identify and engage stakeholders effectively in online learning projects.
- Assess and mitigate risks in online learning projects.
- Allocate resources and create schedules for online learning projects.
- Monitor and control project progress and performance in online learning initiatives.
- Implement change management strategies and control project scope in online learning projects.
- Ensure quality assurance and continuous improvement in online learning projects.
- Evaluate project outcomes and deliverables in online learning initiatives.
- Apply lessons learned and best practices in online learning project management.
- Solicit stakeholder feedback and measure satisfaction in online learning projects.

Unit 1: Introduction to Project Management in Online Learning
1.1. Overview Of Project Management Concepts and Principles
1.2 Project Management Methodologies and Frameworks
1.3 Project Management Life Cycle in The Context of Online Learning
1.4 Roles and Responsibilities of a Project Manager in Online Learning Projects
Unit 2: Project Initiation
2.1Defining Project Goals, Objectives, And Deliverables for Online Learning
2.2 Stakeholder Identification and Engagement Strategies
2.3Risk Assessment and Mitigation Planning in Online Learning Projects
Unit 3: Project Planning
3.1 Resource Allocation and Scheduling Considerations
3.2 Project Documentation and Communication Plans
3.3 Scope Definition and Work Breakdown Structure (WBS) Creation
Unit 4: Project Execution
4.1 Managing Project Teams and Collaboration In Virtual Environments.
4.2 Monitoring Project Progress and Performance
4.3 Change Management and Scope Control In Online Learning Projects
Unit 5: Project Control
5.1 Quality Assurance and Continuous Improvement In Online Learning Projects
5.2 Troubleshooting and Problem-Solving Strategies
5.3 Managing Project Risks and Issues
Unit 6: Project Closure
6.1 Project Handover and Transition In Online Learning Projects
6.2 Evaluation and Assessment Of Project Outcomes And Deliverables
6.3 Lessons Learned and Best Practices In Online Learning Project Management.
Unit 7: Stakeholder Management and Communication
7.1 Effective Stakeholder Engagement and Communication Strategies
7.2 Managing stakeholder expectations and addressing their needs.
7.3 Measuring stakeholder satisfaction and feedback collection

Unit 8: Advanced Topics in Project Management for Online Learning
8.1 Agile project management methodologies in online learning
8.2 Project portfolio management in the online learning context
8.3 Emerging Trends and future directions in online learning project management

Assessment
As per University of Education Rules and Regulations.

Teaching Strategies
In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Project Management Institute. (2017). A Guide to the Project Management Body of Knowledge (PMBOK® Guide) - Sixth Edition. Project Management Institute.
- Wysocki, R. K. (2018). Effective Project Management: Traditional, Agile, Extreme (8th ed.).
- Wiley. Schwalbe, K. (2021). Information Technology Project Management (9th ed.). Cengage Learning.
- Morris, P. W. G., & Pinto, J. K. (2021). The Wiley Guide to Project Control (3rd ed.). Wiley. Graham, R. J., & Englund, R. L. (2019). Creating an Environment for Successful Projects (4th ed.). Wiley.

Course Code	Course Title	Credit Hours
EDUC3206	Digital Literacy and Information Skills	3(3+0)

Learning Outcomes:

By the end of this course, students will be able to:

- Understand the concept of digital literacy and its significance in the modern world.
- Demonstrate effective internet research skills and information retrieval techniques.
- Evaluate the credibility and reliability of online sources.
- Communicate and collaborate effectively using digital tools and platforms.
- Implement security measures to protect personal information and maintain privacy online.
- Engage in responsible digital citizenship and adhere to ethical guidelines.
- Apply critical thinking skills to analyze digital media messages and evaluate their impact.
- Practice digital wellness strategies and maintain a healthy online/offline balance.
- Stay updated with emerging trends in digital literacy and adapt to new technologies.
- Promote digital inclusion and address digital divides in various contexts.

Unit 1: Introduction to Digital Literacy
1.1 Understanding the Concept of Digital Literacy
1.2 Importance of Digital Literacy in The Modern World
1.3 Key Components of Digital Literacy
1.4 Ethical and Responsible Use of Digital Technologies
Unit 2: Internet Research and Information Retrieval
2.1 Effective Search Strategies for Online Research
2.2 Evaluating the Credibility and Reliability of Online Sources
2.3 Navigating Databases and Digital Libraries D. Ethical Use of Information and Avoiding Plagiarism.
Unit 3: Digital Communication and Collaboration
3.1 Using Email and Instant Messaging Effectively
3.2 Online Etiquette and Digital Communication Best Practices
3.3 Collaborative Tools and Platforms for Virtual Teamwork
3.4 Online Presence and Digital Identity Management
Unit 4: Digital Security and Privacy
4.1 Understanding Online Threats and Cybersecurity Measures.
4.2 Protecting Personal Information and Data Privacy.
4.3 Safe Internet Browsing and Avoiding Online Scams.
4.4 Cyberbullying Awareness and Prevention
Unit 5: Digital Citizenship and Ethics
5.1 Rights and Responsibilities in The Digital World
5.2 Digital Footprint and Managing Online Reputation
5.3 Ethical Considerations in Digital Content Creation and Sharing
5.4 Responsible Use of social media and Online Communities
Unit 6: Media Literacy and Critical Thinking
6.1 Analysing and Interpreting Digital Media Messages
6.2 Recognizing Biases and Evaluating Media Credibility
6.3 Understanding the Impact of Digital Media on Society
6.4 Developing Critical Thinking Skills in The Digital Age
Unit 7: Digital Wellness and Wellbeing
7.1 Managing Screen Time and Digital Distractions
7.2 Balancing Online and Offline Activities
7.4 Promoting Digital Wellness and Mental Health.
7.5 Responsible Digital Citizenship for Personal Well-Being
Unit 8: Emerging Trends in Digital Literacy

8.1 New Technologies Shaping the Digital Literacy
8.2 Digital Literacy for Lifelong Learning and Professional Growth
8.3 Addressing Digital Divides and Promoting Digital Inclusion.
8.4 Ethical Considerations in Emerging Digital Contexts

Assessment

As per University of Education Rules and Regulations.

Teaching Strategies

In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Gilster, P. (2017). Digital Literacy (2nd ed.). Wiley.
- Rheingold, H. (2012). Net Smart: How to Thrive Online. MIT Press.
- Martin, A. (2018). Digital Literacy and Digital Inclusion: Information Policy and the Public Library. Chandos Publishing.
- Hargittai, E. (2016). Hacking the Digital Divide. Oxford University Press.
- Hobbs, R., & Jensen, A. (2018). The Digital Edge: How Black and Latino Youth Navigate Digital Inequality. NYU Press.

Course Code	Course Title	Credit Hours
EDUC3207	Practicum in Distance Education (Hands-on Experience and Application)	3(3+0)

Learning Outcomes:

By the end of this course, students will be able to:

- Apply theories and concepts learned in distance education to real-world situations.
- Design and implement effective instructional strategies in a distance education setting.
- Utilize appropriate technologies and tools for facilitating distance learning experiences.
- Collaborate with stakeholders to develop and deliver distance education programs.
- Evaluate and assess the effectiveness of distance education initiatives.
- Demonstrate effective communication and interpersonal skills in a distance education context.
- Apply ethical considerations and best practices in distance education.
- Reflect on personal experiences and growth as a distance education practitioner.

Unit 1: Introduction to Distance Education Practicum

1.1 Overview of The Practicum Experience and Expectations
1.2 Introduction to The Role of A Distance Education Practitioner
1.3 Ethical Considerations and Professional Standards in Distance Education

Unit 2: Designing Instructional Strategies for Distance Education

2.1 Analysis of Learner Needs and Characteristics.
2.2 Development of Learning Objectives and Outcomes
2.3 Selection and Adaptation of Instructional Materials and Resources

Unit 3: Technology Integration in Distance Education

3.1 Selection and Use of Learning Management Systems (LMS)
3.2 Utilization of Synchronous and Asynchronous Communication Tools
3.3 Incorporation of Multimedia and Interactive Elements

Unit 4: Collaboration and Stakeholder Engagement in Distance Education

4.1 Collaborative Project Planning and Coordination
4.2 Engaging with Instructors, Learners, and Support Staff in A Distance Education Setting.
4.3 Building Partnerships with External Stakeholders for Program Development

Unit 5: Evaluation and Assessment in Distance Education

5.1 Design and Implementation of Formative and Summative Assessments
5.2 Evaluation of Learner Performance and Program Effectiveness
5.3 Feedback and Improvement Strategies for Distance Education Initiatives

Unit 6: Communication and Interpersonal Skills in Distance Education

6.1 Effective Communication Strategies for Distance Education Environments
6.2 Facilitation of Online Discussions and Interactions
6.3 Building Rapport and Supporting Learners in A Virtual Setting

Unit 7: Ethical Considerations and Best Practices in Distance Education

7.1 Copyright and Intellectual Property Considerations
7.2 Privacy and Data Protection in Distance Education
7.3 Promotion of Inclusivity, Accessibility, and Equity in Online Learning

Unit 8: Reflective Practicum Experience and Growth

8.1 Reflection on Personal Experiences and Growth as A Distance Education Practitioner
8.2 Synthesis of Theoretical Knowledge and Practical Application
8.3 Preparation of A Final Reflection Report or Presentation

Assessment

As per University of Education Rules and Regulations.

Teaching Strategies

In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Simonson, M., Smaldino, S., & Zvacek, S. (2019). Teaching and Learning at a Distance: Foundations of Distance Education. Information Age Publishing.
- Moore, M. G., & Kearsley, G. (2011). Distance Education: A Systems View of Online Learning (3rd ed.). Cengage Learning.
- Bates, A. W., & Sangrà, A. (2011). Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning. Jossey-Bass.
- Dron, J., & Anderson, T. (2014). Teaching Crowds: Learning and Social Media. Athabasca University Press.
- Palloff, R. M., & Pratt, K. (2013). Assessing the Online Learner: Resources and Strategies for Faculty. John Wiley & Sons.
- Palloff, R. M., & Pratt, K. (2013). Collaborating Online: Learning Together in Community. Jossey-Bass.

Course Code	Course Title	Credit Hours
EDUC3208	Trends and Innovations in Distance Learning	3(3+0)

Learning Outcomes:

By the end of this course, students will be able to:

- Identify and analyze trends in distance learning.
- Evaluate the impact of technological innovations on distance education.
- Apply emerging pedagogical strategies in distance learning contexts.
- Critically examine issues and challenges in distance education.
- Design and implement innovative approaches for effective distance learning.
- Collaborate and engage with learners and stakeholders in distance education settings.
- Explore future directions and possibilities for distance learning.

Unit 1: Introduction to Trends and Innovations in Distance Learning
1.1 Overview of Trends and Innovations in Distance Learning
1.2 The Impact of Technology on Distance Education
1.3 Current Challenges and Opportunities in Distance Learning
Unit 2: Technological Innovations in Distance Learning
2.1 Mobile Learning and Its Applications in Distance Education
2.2 Virtual and Augmented Reality in Distance Learning
2.3 Artificial Intelligence and Machine Learning in Distance Education
Unit 3: Pedagogical Strategies in Distance Learning
3.1 Personalized Learning and Adaptive Technologies in Distance Education
3.2 Gamification and Game-Based Learning in Distance Learning
3.3 Social Learning and Collaborative Tools in Online Education
Unit 4: Issues and Challenges in Distance Education
4.1 Equity, Access, And Inclusion in Distance Learning
4.2 Quality Assurance and Assessment in Distance Education
4.3 Privacy, Security, And Ethical Considerations in Online Learning
Unit 5: Innovative Approaches in Distance Learning
5.1 Open Educational Resources (OER) And Open Educational Practices (OEP)
5.2 Blended Learning and Flipped Classroom Models
5.3 Competency-Based Education and Micro-Credentials In Distance Learning
Unit 6: Learner Engagement in Distance Learning
6.1 Social Presence and Building Learning Communities in Online Environments
6.2 Feedback and Support Strategies for Online Learners
6.3 Multimodal and Interactive Learning Experiences in Distance Education
Unit 7: Collaboration and Stakeholder Engagement in Distance Learning
7.1 Collaborative Projects and Group Work In Online Settings
7.2 Engaging with Stakeholders in Distance Education Initiatives
7.3 Community Partnerships and Industry Collaborations in Online Learning
Unit 8: Future Directions in Distance Learning
8.1 Emerging Trends and Technologies in Distance Education
8.2 Ethical Considerations and Responsible Use of Technology in Online Learning
8.3 Exploring the Future of Distance Education and Lifelong Learning
Assessment

As per University of Education Rules and Regulations.

Teaching Strategies
In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Bates, A. W., & Sangrà, A. (2019). Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning. Routledge.
- Garrison, D. R., & Anderson, T. (2011). E-Learning in the 21st Century: A Framework for Research and Practice. Routledge.
- Siemens, G., & Long, P. (Eds.). (2011). Penetrating the Fog: Analytics in Learning and Education. Athabasca University Press.
- Bonk, C. J., & Khoo, E. (Eds.). (2014). Adding Some TEC-VARIETY: 100+ Activities for Motivating and Retaining Learners Online. OpenWorldBooks.
- Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2014). NMC Horizon Report: 2014 Higher Education Edition. The New Media Consortium.
- Ertmer, P. A., & Newby, T. J. (2013). Behaviorism, Cognitivism, Constructivism: Comparing Critical Features from an Instructional Design Perspective. Performance Improvement Quarterly, 26(2), 43–71.
- Kapp, K. M. (2012). The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education. Pfeiffer.
- Downes, S. (2010). New Technology Supporting Informal Learning. Journal of Emerging Technologies in Web Intelligence, 2(1), 27–33.
- Siemens, G. (2005). Connectivism: A Learning Theory for the Digital Age. International Journal of Instructional Technology and Distance Learning, 2(1), 3–10.
- Picciano, A. G. (2017). Theories and Frameworks for Online Education: Seeking an Integrated Model. Online Learning, 21(3), 166–190.

Course Code	Course Title	Credit Hours
EDUC4162	Designing a Distance or Non-Formal Education Program	3(3+0)

Learning Outcomes:

By the end of this course, students will be able to:

- Understand the principles and components of designing effective distance or non-formal education programs.
- Apply appropriate needs assessment and analysis techniques to identify learner needs and program objectives.
- Develop a comprehensive curriculum and instructional plan for a distance or non-formal education program.
- Select and utilize appropriate technologies and resources for program delivery and learner engagement.
- Evaluate the effectiveness and impact of a distance or non-formal education program.
- Incorporate principles of accessibility, inclusivity, and cultural sensitivity in program design.
- Demonstrate effective communication and collaboration skills in designing and presenting program proposals.
- Stay abreast of current trends and innovations in distance or non-formal education program design.

Unit 1: Introduction to Distance And Non-Formal Education Program Design

1.1 Overview of Distance and Non-Formal Education Program Design
1.2 Understanding the Needs and Characteristics Of Target Learners.
1.3 Identifying Program Goals, Objectives, And Outcomes.

Unit 2: Needs Assessment and Analysis for Program Design

2.1 Conducting Needs Assessment and Analysis In Distance Or Non-Formal Education Contexts.
2.2 Identifying Learner Needs and Program Requirements.
2.3 Analysing Environmental and Contextual Factors.

Unit 3: Curriculum and Instructional Planning in Distance or Non-Formal Education

3.1 Designing A Learner-Centred Curriculum.
3.2 Developing Instructional Strategies and Learning Activities
3.3 Sequencing and Organizing Content for Effective Delivery

Unit 4: Technology Integration in Distance or Non-Formal Education Programs

4.1 Selecting and Utilizing Appropriate Technologies For Program Delivery
4.2 Leveraging Learning Management Systems and Online Platforms
4.3 Incorporating Multimedia and Interactive Elements

Unit 5: Evaluation and Assessment of Distance or Non-Formal Education Programs

5.1 Designing Formative and Summative Assessment Strategies
5.2 Evaluating Learner Performance and Program Effectiveness
5.3 Collecting and Analysing Data for Program Improvement

Unit 6: Accessibility and Inclusivity in Distance or Non-Formal Education

6.1 Designing for Accessibility and Universal Design Principles.
6.2 Addressing Cultural Diversity and Inclusivity in Program Design.
6.3 Ensuring Equity and Accommodating Learner Needs.

Unit 7: Communication and Collaboration in Program Design

7.1 Effective Communication Strategies for Program Proposals and Presentations
7.2 Collaborating with Stakeholders and Subject Matter Experts.
7.3 Managing Feedback and Incorporating Revisions.

Unit 8: Trends and Innovations in Distance or Non-Formal Education Program Design

8.1 Exploring Current Trends and Innovations in Program Design
8.2 Adapting to Changing Technologies and Learner Needs
8.3 Continuous Professional Development and Staying Current in The Field

Assessment
As per University of Education Rules and Regulations.

Teaching Strategies
In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Guri-Rosenblit, S. (Ed.). (2005). Distance Education and e-Learning: Not Just Another Round of Buzz Words. Brill Sense.
- Plomp, T., & Nieveen, N. (2013). Educational Design Research: An Introduction. SAGE Publications.
- Morrison, G. R., Ross, S. M., Kalman, H. K., & Kemp, J. E. (2019). Designing Effective Instruction. Wiley.
- Bates, A. W., & Sangrà, A. (2019). Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning. Routledge.
- Reeves, T. C., & Hedberg, J. G. (Eds.). (2018). Assessment and Evaluation of Time Factors in Online Teaching and Learning. Springer.
- Burgstahler, S. (2015). Universal Design in Higher Education: From Principles to Practice. Harvard Education Press.
- Lannon, J. M., & Gurak, L. J. (2016). Technical Communication (14th Ed.). Pearson.
- Bates, T. (2019). Teaching in a Digital Age: Guidelines for Designing Teaching and Learning. Tony Bates Associates Ltd.

Course Code	Course Title	Credit Hours
EDUC4163	Foundations of Distance Education	3(3+0)

Learning Outcomes:

By the end of this course, students will be able to:

- Explain the historical development and evolution of distance education.
- Describe distance education's fundamental theories, models, and concepts.
- Identify the key stakeholders and their roles in distance education.
- Analyse the advantages and challenges of distance education.
- Demonstrate knowledge of instructional design principles for distance learning.
- Apply appropriate technologies and media for effective distance education delivery.
- Evaluate the quality and effectiveness of distance education programs.
- Discuss current trends and future directions in distance education.

Unit 1: Introduction to Distance Education
1.1 Definition and Characteristics Of Distance Education
1.2 Historical Overview And Evolution Of Distance Education
1.3 Key Milestones and Developments In The Field
Unit 2: Theoretical Foundations Of Distance Education
2.1 Behaviorist, Cognitive, And Constructivist Theories In Distance Education
2.2 Connectivism and Networked Learning
2.3 Instructional Design Models for Distance Learning
Unit 3: Key Stakeholders In Distance Education
3.1 Roles And Responsibilities Of Learners In Distance Education
3.2 Instructor's Role and Strategies For Effective Online Teaching
3.3 Support Services and Administrative Roles In Distance Education
Unit 4: Advantages and Challenges of Distance Education
4.1 Benefits and Opportunities of Distance Education
4.2 Challenges and Barriers in Distance Learning
4.3 Strategies for Addressing Challenges In Distance Education.
Unit 5: Instructional Design for Distance Learning
5.1 Analysis of Learner Needs and Characteristics In Distance Education
5.2 Designing Effective Learning Objectives And Outcomes
5.3 Selecting Appropriate Instructional Strategies And Assessments
Unit 6: Technologies and Media in Distance Education
6.1 Learning Management Systems and Course Delivery Platforms
6.2 Multimedia and Interactive Technologies For Distance Learning
6.3 Emerging Technologies and Their Impact On Distance Education
Unit 7: Quality Assurance and Evaluation In Distance Education
7.1 Ensuring Quality in Distance Education Programs
7.2 Evaluation Methods and Assessment Of Distance Learning
7.3 Continuous Improvement and Quality Enhancement Strategies
Unit 8: Current Trends and Future Directions In Distance Education
8.1 Moocs and Open Education Initiatives
8.2 Personalized Learning and Adaptive Technologies
8.3 Future Possibilities and Challenges in Distance Education

Assessment
As per University of Education Rules and Regulations.

Teaching Strategies

In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Anderson, T., & Dron, J. (2011). Three Generations of Distance Education Pedagogy. The International Review of Research in Open and Distributed Learning, 12(3), 80–97.
- Bates, A. W., & Sangrà, A. (2019). Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning. Routledge.
- Conrad, D., & Openo, J. (2018). The Theory and Practice of Online Learning (3rd ed.). Athabasca University Press.
- Moore, M. G., & Kearsley, G. (2011). Distance Education: A Systems View of Online Learning (3rd ed.). Cengage Learning.
- Morrison, G. R., Ross, S. M., Kalman, H. K., & Kemp, J. E. (2019). Designing Effective Instruction. Wiley.
- Siemens, G., & Downes, S. (2008). Connectivism and Connective Knowledge. E-Learning Papers, 10.
- Simonson, M., Smaldino, S., & Zvacek, S. (2019). Teaching and Learning at a Distance: Foundations of Distance Education. Information Age Publishing.

Course Code	Course Title	Credit Hours
EDUC4164	Educational Outreach and Community Engagement	3(3+0)

Learning Outcomes:

By The End Of This Course, Students Will Be Able To:

- Understand The Importance And Principles Of Educational Outreach And Community Engagement In Distance And Non-Formal Education.
- Identify Target Communities And Stakeholders For Educational Outreach Initiatives.
- Design And Implement Effective Educational Outreach Programs In Distance And Non-Formal Education.
- Develop Strategies To Engage And Involve Community Members In Educational Activities.
- Collaborate With Community Organizations And Partners For Educational Initiatives.
- Apply Appropriate Technologies And Media For Community Engagement In Distance And Non-Formal Education.
- Evaluate The Impact And Effectiveness Of Educational Outreach Programs.
- Reflect On Personal Experiences And Growth As An Educational Outreach Practitioner.
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Unit 1: Introduction To Educational Outreach And Community Engagement
1.1 Definition and Significance Of Educational Outreach And Community Engagement
1.2 Principles And Ethical Considerations In Outreach And Engagement
1.3 Historical Perspectives and Models Of Community-Based Education
Unit 2: Identifying Target Communities and Stakeholders
2.1 Understanding the Needs And Characteristics Of Target Communities
2.2 Engaging with Diverse Stakeholders In Educational Outreach
2.3conducting Community Needs Assessments and Asset Mapping
Unit 3: Designing Educational Outreach Programs
3.1 Setting Goals, Objectives, And Outcomes for Outreach Programs
3.2 Curriculum and Instructional Design For Community-Based Education
3.3 Incorporating Principles Of Accessibility And Inclusivity In Outreach Programs
Unit 4: Engaging And Involving Community Members
4.1 Strategies For Community Participation And Involvement In Educational Activities
4.2 Building Relationships And Fostering Trust With Community Members
4.3 Promoting Learner Agency And Empowerment In Community Engagement
Unit 5: Collaboration With Community Organizations And Partners
5.1 Developing Partnerships And Collaborations With Community Organizations
5.2 Establishing Mutually Beneficial Relationships For Educational Initiatives
5.3 Managing Expectations And Addressing Challenges In Partnerships
Unit 6: Technology And Media In Community Engagement
6.1 Utilizing Technology For Community Outreach And Engagement
6.2 Digital Tools And Platforms For Distance-Based Community Education
6.3 Designing Multimedia Resources For Community Learning
Unit 7: Evaluation And Impact Assessment
7.1 Methods And Tools For Evaluating Educational Outreach Programs
7.2 Assessing The Impact And Outcomes Of Community Engagement Initiatives
7.3 Using Evaluation Results For Program Improvement
Unit 8: Reflection And Growth As An Educational Outreach Practitioner
8.1 Reflective Practices For Personal And Professional Growth
8.2 Sharing Experiences And Lessons Learned
8.3 Developing A Personal Philosophy Of Educational Outreach

Assessment
As per University of Education Rules and Regulations.

Teaching Strategies
In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Bringle, R. G., & Hatcher, J. A. (2002). Campus–Community Partnerships: The Terms of Engagement. Journal of Social Issues, 58(3), 503–516.
- Eyler, J., & Giles Jr, D. E. (1999). Where's the Learning in Service-Learning? Jossey-Bass.
- Furco, A., & Holland, B. A. (2004). Institutionalizing Community Service-Learning in Higher Education: A Case Study. Journal of Higher Education Outreach and Engagement, 9(2), 7–24.
- Hartley, K., & Bendixen, L. D. (2001). Educational Research in the Internet Age: Examining the Role of Individual Characteristics. Educational Researcher, 30(9), 22–26.
- Jacoby, B., & Associates. (2009). Civic Engagement in Higher Education: Concepts and Practices. Jossey-Bass.
- Kim, J., & Reio, T. G. (2009). The Link between Individual and Organizational Learning in the Context of Community Outreach. Human Resource Development Quarterly, 20(2), 185–205.
- Kolb, D. A. (2014). Experiential Learning: Experience as the Source of Learning and Development. FT Press.
- Stanton, T. K., & Giles Jr, D. E. (1999). Research in Service-Learning: Conceptual Frameworks and Assessment. Jossey-Bass.
- Strand, K., Marullo, S., Cutforth, N., Stoecker, R., & Donohue, P. (2003). Community-Based Research and Higher Education: Principles and Practices. Jossey-Bass.

Course Code	Course Title	Credit Hours
EDUC4165	Non Formal Techniques and Tools	3(3+0)

Learning Outcomes:

By the end of this course, students will be able to:

1. Define non-formal education and its importance in lifelong learning.
2. Identify various non-formal education techniques and tools.
3. Apply effective non-formal education techniques for different learner groups.
4. Design and implement non-formal education programs based on learner needs.
5. Utilize appropriate technologies and media for non-formal education delivery.
6. Assess the effectiveness and impact of non-formal education interventions.
7. Analyse the role of community engagement in non-formal education.
8. Reflect on personal experiences and growth as a non-formal education practitioner.

Unit 1: Introduction To Non-Formal Education

A. Definition And Characteristics Of Non-Formal Education

B. Significance And Scope Of Non-Formal Education In Lifelong Learning

C. Historical Development And Global Perspectives On Non-Formal Education

Unit 2: Techniques For Non-Formal Education

A. Experiential Learning And Hands-On Activities

B. Participatory Approaches And Active Engagement Strategies

C. Creative Arts, Storytelling, And Drama Techniques

Unit 3: Tools For Non-Formal Education

A. Digital Tools And Technologies For Non-Formal Education

B. Mobile Learning And Applications In Non-Formal Education

C. Open Educational Resources (OER) And Online Platforms

Unit 4: Designing Non-Formal Education Programs

A. Assessing Learner Needs And Program Goals.

B. Curriculum Development For Non-Formal Education Interventions

C. Incorporating Learner-Centered Approaches In Program Design

Unit 5: Technology Integration In Non-Formal Education

A. Blended Learning And Hybrid Models For Non-Formal Education

B. Online Communities And Social Learning Platforms

C. Gamification And Game-Based Learning Techniques

Unit 6: Assessment And Evaluation In Non-Formal Education

A. Designing Formative And Summative Assessments For Non-Formal Education

B. Evaluating Learner Performance And Program Effectiveness

C. Feedback And Improvement Strategies For Non-Formal Education Programs

Assessment

As per University of Education Rules and Regulations.

Teaching Strategies

In general, collaborative, participative, and interactive approaches will be employed.
The students may be required to write their reflections on various issues.

Suggested Readings

- Colclough, C. (2013). Non-Formal Education and Basic Education Reform: A Conceptual Review. International Journal of Educational Development, 33(3), 246–255.
- Desai, Z. (2012). Non-Formal Education in India: An Appraisal. Journal of International Development, 24(4), 421–434.
- Hetherington, S. A., & Erkkila, K. (Eds.). (2019). Handbook of Research on Nonprofit Economics and Management. Edward Elgar Publishing.
- Leach, F., & Dunne, M. (2009). Participatory Approaches to Evaluation in International Development: A Meta-Review. The Journal of Development Effectiveness, 1(4), 434–455.
- Wijngaards, G. (2014). Open Educational Resources and the Quality of Higher Education: A Literature Review. Quality in Higher Education, 20(3), 329–344.
- Durrani, N. (2012). Curriculum Design in Non-Formal Education: A Reflective Perspective. Educational Research and Reviews, 7(18), 389–397.
- Hall, G. E., & Hord, S. M. (2015). Implementing Change: Patterns, Principles, and Potholes (4th ed.). Pearson.
- De-Marcos, L., Domínguez, A., Saenz-de-Navarrete, J., & Pagés, C. (2014). An Empirical Study Comparing Gamification and Social Networking on e-Learning. Computers & Education, 75, 82–91.
- Koutropoulos, A., Gallagher, M. S., Abajian, S. C., de Waard, I., & Hogue, R. J. (2012). Emotive Vocabulary in MOOCs: Context & Participant Retention. European Journal of Open, Distance and E-Learning, 15(2).

8- Educational Research and Statistics		
Course Code	**Course Title**	**Credit Hours**
EDUC4121	Research Designs in Education	3(3+0)
EDUC4122	Qualitative Research Methods in Education	3(3+0)
EDUC4123	Research Instrument Development and Analysis	3(3+0)
EDUC3209	Quantitative Research Methods in Education	3(3+0)
EDUC3210	Mixed Methods Research in Education	3(3+0)
EDUC4166	Applied Statistical Procedures in Education	3(3+0)
EDUC4167	Research Writing and Publication in Education	3(3+0)
EDUC4168	Research Proposal Writing in Education	3(3+0)
EDUC4169	Experimental Designs in Educational Research	3(3+0)

Course Code	Course Title	Credit Hours
EDUC4121	**Research Designs in Education**	**3(3+0)**

Course Description

Students who complete this course will have a thorough understanding of the many research designs that are employed in educational research. The choice of acceptable research designs will be taught to students based on the study questions, objectives, and data-gathering techniques. The course covers both qualitative and quantitative research designs, empowering students to plan and carry out educational research with knowledge.

Course Objectives:

1. By the end of this course, students will be abe to:
2. Differentiate between various research designs used in educational research.
3. Analyze research questions and select suitable research designs.
4. Apply appropriate research designs to specific educational contexts.
5. Understand the strengths and limitations of different research designs.
6. Design research studies that align with ethical considerations.
7. Critically evaluate published research studies based on their research designs.
8. Present and communicate research designs effectively.

Learning Outcomes:

1. Upon successful completion of this course, students will be able to:
2. Classify and describe different types of research designs in education.
3. Align research questions with appropriate research designs.
4. Develop detailed research plans for qualitative and quantitative studies.
5. Evaluate the validity and reliability of research designs.
6. Identify ethical considerations relevant to specific research designs.
7. Analyze and critique published research based on their designs.
8. Communicate research designs clearly in written and oral formats.

Course Outline

Unit 1: Introduction to Research Designs in Education

Overview of research designs and their significance
Types of research designs: exploratory, descriptive, explanatory
Understanding the research process and design decisions

Unit 2: Qualitative Research Designs

Ethnographic research design
Phenomenological research design
Case study research design
Grounded theory research design

Unit 3: Quantitative Research Designs

Experimental research design
Quasi-experimental research design
Correlational research design
Survey research design

Unit 4: Mixed Methods Research Designs

Sequential explanatory design
Sequential exploratory design
Concurrent triangulation design
Choosing the appropriate mixing strategy

Unit 5: Longitudinal and Cross-Sectional Designs

Longitudinal research design
Cross-sectional research design
Prospective vs. retrospective designs

Unit 6: Action Research and Participatory Designs

Action research design in educational settings
Participatory action research design
Collaborative and community-based research designs

Unit 7: Comparative and Causal-Comparative Designs

Comparative research design
Causal-comparative research design
Selecting variables and populations for comparison

Unit 8: Single-Case and Single-Subject Designs

Single-case experimental design
Single-subject design
Visual analysis and interpretation of single-case studies

Unit 9: Ethical Considerations in Research Designs

Research ethics and design decisions
Ensuring participant confidentiality and informed consent
Ethical implications of different research designs

Unit 10: Critiquing and Presenting Research Designs

Evaluating research designs in published studies
Communicating research designs in research proposals
Presenting research designs to diverse audiences

Teaching Strategies

- Lecture method followed by a discussion.
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline.

Note: *The assignments will be based on the development of proposals and writing reports on various kinds of research. These will also include theoretical and practical application of data analysis techniques used in different kinds of research.*

Assessment

As per university rules and regulations.

Suggested Readings

- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2015). How to design and evaluate research in education (9th ed.). McGraw-Hill Education.
- Leedy, P. D., & Ormrod, J. E. (2021). Practical research: Planning and design (12th ed.). Pearson.
- Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. Jossey-Bass.
- Gay, L. R., Mills, G. E., & Airasian, P. (2018). Educational research: Competencies for analysis and applications (12th ed.). Pearson.
- Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. International Journal of Social Research Methodology, 8(5), 375-387.
- Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). SAGE Publications.

Course Code	Course Title	Credit Hours
EDUC4122	Qualitative Research Methods in Education	3(3+0)

Course Description

This course provides a thorough examination of the qualitative research techniques frequently employed in academic studies. In educational contexts, students will learn how to plan, carry out, and analyze qualitative investigations. Students will be able to perform rigorous and significant qualitative research in the subject of education thanks to the course's coverage of a variety of qualitative approaches, data-gathering procedures, and analytical tools.

Course Objectives:

By the end of this course, students will be able to:

1. Understand the foundational principles and paradigms of qualitative research in education.
2. Select appropriate qualitative research designs based on research questions.
3. Apply a range of qualitative data collection techniques effectively.
4. Analyze and interpret qualitative data using appropriate analytical methods.
5. Identify ethical considerations specific to qualitative research in education.
6. Evaluate the rigor and validity of qualitative research studies.
7. Communicate qualitative research findings clearly and effectively.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

1. Explain the philosophical underpinnings of qualitative research in education.
2. Develop research questions suitable for qualitative inquiry.
3. Employ diverse data collection methods to gather rich qualitative data.
4. Apply thematic analysis, content analysis, and other qualitative analysis techniques.
5. Synthesize and interpret qualitative findings within educational contexts.
6. Critically evaluate the trustworthiness and credibility of qualitative research.
7. Present qualitative research findings in both written and oral formats.

Course Outline:

Unit 1: Introduction to Qualitative Research in Education

Philosophical foundations of qualitative research
Characteristics and advantages of qualitative inquiry
Research paradigms: positivism, interpretivism, constructivism

Unit 2: Qualitative Research Designs

Phenomenological research design
Grounded theory research design
Ethnographic research design
Case study research design

Unit 3: Data Collection Techniques

In-depth interviews: planning, conducting, and analyzing.
Focus group discussions: organization and interpretation
Participant observation: role and challenges
Document analysis: collecting and interpreting textual data.

Unit 4: Data Analysis and Interpretation

Thematic analysis: identifying and coding themes.
Content analysis: categorization and interpretation
Narrative analysis: exploring individual stories.
Constant comparative analysis: making comparisons and connections

Unit 5: Reflexivity and Researcher's Positionality

Understanding the researcher's role and influence
Practicing reflexivity in qualitative research
Addressing bias and subjectivity in data collection and analysis

Unit 6: Ethical Considerations in Qualitative Research

Ethical principles and guidelines for qualitative research
Informed consent, confidentiality, and anonymity
Handling sensitive issues and ethical dilemmas in qualitative studies

Unit 7: Rigor and Trustworthiness in Qualitative Research

Establishing credibility, transferability, dependability, and confirmability
Techniques for enhancing rigor in qualitative research
Addressing threats to validity and reliability in qualitative studies

Unit 8: Writing and Presenting Qualitative Research

Organizing and structuring qualitative research manuscripts
Presenting findings using narratives, quotes, and visuals
Writing qualitative research for diverse audiences

Unit 9. Qualitative Data Analysis

Arranging Qualitative Data (coding and decoding)
Use and Application of NVIVO
Interpretation and Presentation of Qualitative Research Results

Teaching Strategies

- Lecture method followed by a discussion.
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline.

Note: *The assignments will be based on the development of proposals and writing reports on various kinds of research. These will also include theoretical and practical application of data analysis techniques used in different kinds of research.*

Assessment

As per university rules and regulations.

Recommended Books

- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications.
- Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. Jossey-Bass.
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice (4th ed.). SAGE Publications.
- Denzin, N. K., & Lincoln, Y. S. (2018). The SAGE handbook of qualitative research (5th ed.). SAGE Publications.
- Saldaña, J. (2016). The coding manual for qualitative researchers (3rd ed.). SAGE Publications.
- Charmaz, K. (2014). Constructing grounded theory (2nd ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2017). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). SAGE Publications.
- Van Maanen, J. (2011). Tales of the field: On writing ethnography (2nd ed.). University of Chicago Press.

Course Code	Course Title	Credit Hours
EDUC4123	Research Instrument Development and Analysis	3(3+0)

Course Description:
The principles, methods, and processes used in the creation of research instruments are thoroughly examined in this course. The creation of reliable, valid, and culturally acceptable tools for data collection in various research contexts will be taught to the students.

Course Objectives:
- By the end of this course, students should be able to:
- Understand the importance of research instrument development in empirical research.
- Apply principles of validity and reliability to instrument design.
- Construct research instruments that align with research objectives and questions.
- Demonstrate proficiency in various data collection methods and measurement techniques.
- Evaluate and refine research instruments based on empirical evidence.

Learning Outcomes:
Upon successful completion of this course, students will be able to:
- Explain the fundamental concepts of validity and reliability in research instrument development.
- Design research instruments that effectively measure the constructs of interest.
- Apply different data collection methods, such as surveys, interviews, and observations.
- Evaluate the psychometric properties of research instruments and make necessary adjustments.
- Analyze the impact of cultural and contextual factors on instrument design and implementation.

Unit 1: Introduction to Research Instrument Development
1.1 Importance of Quality Research Instruments
1.1.1 Role of Research Instruments in Empirical Studies
1.1.2 Implications of Poorly Designed Instrument
1.2 Types of Research Instruments
1.2.1 Self-Report Measures: Surveys and Questionnaires
1.2.2 Observational Instruments: Checklists and Rating Scales
1.2.3 Performance-Based Instruments: Tests and Assessments
1.3 Steps in Instrument Development Process
1.3.1 Defining Constructs and Operationalization
1.3.2 Item Generation and Selection
1.3.3 Pretesting and Pilot Testing
Unit 2: Principles of Validity and Reliability
2.1 Concept of Validity in Research Instruments
2.1.1 Types of Validity: Construct, Content, Criterion, and Face
2.1.2 Strategies for Ensuring Validity in Instrument Design
2.2 Ensuring Reliability in Research Instruments
2.2.1 Types of Reliability: Test-Retest, Internal, and Inter-Rater
2.2.2 Techniques for Enhancing Instrument Reliability
2.3 Addressing Threats to Validity and Reliability
2.3.1 Sources of Measurement Error
2.3.2 Strategies for Minimizing Error and Bias
Unit 3: Survey and Questionnaire Design
3.1 Components of a Survey Instrument
3.1.1 Types of Survey Questions: Closed-Ended, Open-Ended, Likert Scale
3.1.2 Structuring the Survey: Ordering and Formatting

3.2 Questionnaire Construction and Item Writing
3.2.1 Principles of Effective Question Writing
3.2.2 Avoiding Biases and Leading Questions
3.2.3 Response Options and Scales
3.3 Survey Administration and Data Collection
3.3.1 Sampling Strategies for Surveys
3.3.2 Online vs. Paper Surveys
3.3.3 Ethical Considerations in Survey Research

Unit 4: Interview and Observation Instruments

4.1 Structured and Unstructured Interviews
4.1.1 Types of Interview Formats: Semi-Structured, Focus Groups
4.1.2 Interview Guide Development and Question Sequencing
4.2 Observational Instrument Design
4.2.1 Developing Checklists and Rating Scales for Observations
4.2.2 Recording and Coding Observational Data
4.3 Qualitative Data Collection and Analysis
4.3.1 Thematic Analysis of Interview Transcripts
4.3.2 Managing Observer Bias in Qualitative Research

Unit 5: Performance-Based Assessment Tools

5.1 Developing Performance Tasks and Assessments
5.1.1 Defining Performance Criteria and Rubrics
5.1.2 Designing Authentic and Meaningful Performance Assessments
5.2 Challenges and Considerations in Performance Assessment
5.2.1 Addressing Subjectivity in Performance Evaluation
5.2.2 Enhancing Fairness and Equity in Grading
5.3 Implementing Performance Assessments
5.3.1 Administering Performance Tasks
5.3.2 Scoring and Analyzing Performance-Based Data

Unit 6: Cultural Considerations in Instrument Development

6.1 Cultural Competence in Research Instrument Design
6.1.1 Addressing Cultural Bias in Questionnaire Items
6.1.2 Translating and Adapting Instruments for Different Cultural Groups
6.2 Cross-Cultural Validation and Adaptation
6.2.1 Guidelines for Translating and Back-Translating Instruments
6.2.2 Piloting and Validating Instruments Across Cultures
6.3 Ethical and Socio-Cultural Sensitivity
6.3.1 Respecting Cultural Norms and Practices
6.3.2 Avoiding Stereotypes and Insensitive Language

Unit 7: Psychometric Evaluation and Validation

7.1 Exploratory and Confirmatory Factor Analysis
7.1.1 Factor Analysis Techniques and Interpretation
7.1.2 Confirmatory Factor Analysis for Model Testing
7.2 Reliability and Item Analysis
7.2.1 Cronbach's Alpha and Inter-Item Correlations
7.2.2 Item Discrimination and Difficulty Analysis
7.3 Validity Testing and Evidence-Based Validation
7.3.1 Content, Construct, and Criterion Validity
7.3.2 Convergent and Discriminant Validity

Teaching Strategies

- Lecture method followed by a discussion.
- Cooperative learning
- Preparing course portfolios
- Assignments and presentations based on the content of the course outline.

Note: *The assignments will be based on the development of proposals and writing reports on various kinds of research. These will also include theoretical and practical*

application of data analysis techniques used in different kinds of research.

Assessment

As per university rules and regulations.

Recommended Books

- Frankel, J. R., & Wallen, N. L. (2018). How to design and evaluate research in education. (12th ed). Boston:McGrawHill.
- Cook, T. D., & Campbell, D. T. (1979). Quasi-Experimentation: Design & Analysis Issues for Field Settings.
- Devillis, R. F. (2012). Scale Development: Theory and Applications (3rd ed.).
- DeVellis, R. F. (2016). Scale Development: Theory and Applications (4th ed.).
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method (4th ed.).
- Fowler, F. J. (2013). Survey Research Methods (4th ed.).
- Hinkin, T. R. (1995). A Review of Scale Development Practices in the Study of Organizations.
- Matsumoto, D., & Juang, L. (2012). Culture and Psychology (5th ed.)
- Nitko, A. J., & Brookhart, S. M. (2011). Educational Assessment of Students (6th ed.).
- Patton, M. Q. (2014). Qualitative Research & Evaluation Methods (4th ed.).
- Popham, W. J. (2011). Classroom Assessment: What Teachers Need to Know (7th ed.).
- Raykov, T., & Marcoulides, G. A. (2016). Introduction to Psychometric Theory.
- Rubin, H. J., & Rubin, I. S. (2012). Qualitative Interviewing: The Art of Hearing Data (3rd ed.).
- Trochim, W. M., & Donnelly, J. P. (2008). The Research Methods Knowledge Base.
- van de Vijver, F. J. R., & Leung, K. (1997). Methods and Data Analysis for Cross-Cultural Research.

Course Code	Course Title	Credit Hours
EDUC3209	Quantitative Research Methods in Education	3(3+0)

Course Description:
This course introduces students to quantitative research techniques in the field of education. The design, execution, and analysis of quantitative research studies will be taught to the students. Students can comprehend and apply findings in the field of education thanks to the course's coverage of essential concepts, strategies, and instruments utilised in quantitative research.

Course Objectives:
Upon successful completion of this course, students will be able to:
- Define quantitative research and explain its significance in educational inquiry.
- Differentiate between quantitative and qualitative research approaches.
- Formulate clear research questions and hypotheses for quantitative studies.
- Design research studies using various quantitative research designs.
- Apply appropriate statistical analysis techniques to interpret quantitative data.
- Discuss ethical considerations and validity in quantitative research.
- Evaluate published quantitative research studies and interpret implications for education.

Learning Outcomes:
Upon successful completion of this course, students will be able to:
- Define quantitative research and its role in educational inquiry.
- Differentiate between quantitative and qualitative research methodologies.
- Formulate research questions and hypotheses suitable for quantitative studies.
- Design research studies using experimental, quasi-experimental, survey, ex post facto, and correlation designs.
- Analyze quantitative data using descriptive and inferential statistical techniques.
- Consider ethical guidelines and enhance research validity in quantitative studies.
- Evaluate and interpret published quantitative research studies, identifying educational implications.

Unit 1: Introduction to Quantitative Research in Education
Role of quantitative research in educational inquiry.
Comparing quantitative and qualitative research approaches.
Variables and Types of Variables
Unit 2: Quantitative Research Designs
Experimental and quasi-experimental research designs.
Survey, ex post facto, and correlation research designs.
Unit 3: Hypothesis Formulation and Testing
Formulating research hypotheses and null hypotheses.
Conducting hypothesis tests and interpreting results.
Unit 4: Sampling Techniques for Quantitative Research
Probability and non-probability sampling methods.
Selecting representative samples for quantitative studies.
Unit 5: Data Collection Methods
Questionnaires,
Observations, and interviews.
Unit 6: Descriptive and Inferential Statistics
Summarizing data using measures of central tendency and variability.
Inferential statistics: t-tests, ANOVA, correlation, regression.
Unit 7: Critical Analysis of Published Research
Evaluating research designs and methodologies in published quantitative studies.
Reviewing statistical analyses and interpretations.
Teaching Strategies:
- Lectures and interactive discussions.

- Hands-on exercises using statistical software.
- Group activities and case studies.
- Guest lectures from practitioners.

Individual and group projects.

Assessment Techniques:

- Quizzes and exams on quantitative concepts.
- Data analysis assignments using statistical software.
- Group presentations on research designs.
- Written critiques of published research.
- Final research project applying quantitative methods.

References:

- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). How to design and evaluate research in education (10th ed.). McGraw-Hill Education.
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
- Levin, J. R., & Fox, J.-P. (2016). Elementary statistics in social research (12th ed.). Pearson.

Course Code	Course Title	Credit Hours
EDUC3210	Mixed Methods Research in Education	3(3+0)

Course Description

Students will learn about mixed methods research in this course, a methodology that combines qualitative and quantitative research techniques. The design, execution, and analysis of mixed methods research in educational contexts will be taught to students. The course introduces fundamental ideas, methods, and ethical issues in mixed methods research, empowering students to combine the advantages of qualitative and quantitative approaches to tackle challenging issues in educational research.

Course Objectives:

Upon successful completion of this course, students will be able to:

- Define mixed methods research and explain its significance in educational inquiry.
- Differentiate between qualitative, quantitative, and mixed methods approaches.
- Formulate research questions and hypotheses suitable for mixed methods studies.
- Design comprehensive mixed methods research designs that integrate qualitative and quantitative data collection and analysis.
- Apply appropriate techniques for collecting and analyzing qualitative and quantitative data.
- Interpret and integrate findings from qualitative and quantitative components to generate holistic conclusions.
- Discuss ethical considerations and challenges in mixed methods research in education.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define mixed methods research and articulate its potential benefits in educational research.
- Differentiate between qualitative, quantitative, and mixed methods research paradigms.
- Formulate research questions that can be addressed effectively using mixed methods approaches.
- Design mixed methods research designs that incorporate qualitative and quantitative data collection methods.
- Apply qualitative data collection techniques such as interviews and observations.
- Apply quantitative data collection techniques such as surveys and experiments.
- Analyze qualitative data using appropriate methods such as thematic analysis.
- Analyze quantitative data using appropriate statistical techniques.
- Integrate and interpret findings from qualitative and quantitative analyses to generate comprehensive conclusions.
- Consider ethical guidelines and challenges related to mixed methods research, including participant confidentiality and data integration.
- Critically evaluate published mixed methods research studies in education and assess their methodological rigor and implications.

Unit 1: Introduction to Mixed Methods Research in Education

Definition and rationale for mixed methods research.
Advantages and challenges of integrating qualitative and quantitative approaches.

Unit 2: Philosophical and Theoretical Foundations of Mixed Methods

Philosophical paradigms underpinning mixed methods research.
Integrating qualitative and quantitative theories in educational research.

Unit 3: Mixed Methods Research Designs

Types of mixed methods designs: convergent, explanatory, exploratory.
Designing research studies that blend qualitative and quantitative components.

Unit 4: Data Collection in Mixed Methods Research

Qualitative data collection techniques: interviews, focus groups, observations.
Quantitative data collection techniques: surveys, experiments, archival data.

Unit 5: Qualitative Data Analysis in Mixed Methods

Approaches to qualitative data analysis: thematic analysis, content analysis.
Integrating qualitative findings into mixed methods studies.

Unit 6: Quantitative Data Analysis in Mixed Methods

Analyzing quantitative data using statistical techniques.
Incorporating quantitative results into mixed methods research.

Unit 7: Integration and Interpretation of Mixed Methods Findings

Strategies for synthesizing qualitative and quantitative results.
Generating comprehensive conclusions from mixed methods analyses.

Unit 8: Ethical Considerations in Mixed Methods Research

Ethical guidelines and challenges in mixed methods research.
Ensuring participant confidentiality and data integrity.

Teaching Strategies:

- Lectures and interactive discussions.
- Case studies and real-world examples.
- Group exercises for designing mixed methods research.
- Hands-on practice with qualitative and quantitative data collection and analysis.
- Guest speakers sharing insights from mixed methods studies.

Assessment Techniques:

- Quizzes and exams on mixed methods concepts.
- Design and presentation of a mixed methods research proposal.
- Qualitative and quantitative data analysis assignments.
- Critical analysis of published mixed methods research.
- Final project synthesizing qualitative and quantitative findings.

References:

- Creswell, J. W., & Plano Clark, V. L. (2017). Designing and conducting mixed methods research (3rd ed.). SAGE Publications.
- Tashakkori, A., & Teddlie, C. (Eds.). (2019). Handbook of mixed methods in social and behavioral research (2nd ed.). SAGE Publications.
- Johnson, R. B., & Onwuegbuzie, A. J. (2016). Mixed methods research: A research paradigm whose time has come. Educational Researcher, 33(7), 14-26.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. Educational Evaluation and Policy Analysis, 11(3), 255-274.
- Morse, J. M. (2003). Principles of mixed methods and multimethod research design. In A. Tashakkori & C. Teddlie (Eds.), Handbook of mixed methods in social & behavioral research (pp. 189-208). SAGE Publications.

Course Code	Course Title	Credit Hours
EDUC4166	Applied Statistical Procedures in Education	3(3+0)

Course Description

Students will learn about applied statistical techniques that are frequently utilized in educational research and analysis in this course. In order to analyze data, come to relevant conclusions, and make decisions in educational situations, students will learn to use statistical approaches. Key statistical theories, methods, and their instructional applications are covered in this course.

Course Objectives:

Upon successful completion of this course, students will be able to:

- Understand fundamental statistical concepts and terminology used in educational research.
- Select appropriate statistical methods based on research questions and data types.
- Conduct data preparation and cleaning for statistical analysis.
- Apply descriptive and inferential statistical techniques to summarize, analyze, and interpret educational data.
- Choose and conduct parametric and non-parametric tests for hypothesis testing.
- Interpret and communicate research findings using statistical results
- Utilize statistical software for data analysis, visualization, and interpretation.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Demonstrate a solid understanding of basic statistical concepts and terminology.
- Choose appropriate statistical methods based on research goals and data characteristics.
- Prepare and clean data for accurate statistical analysis.
- Summarize, analyze, and interpret educational data using descriptive and inferential statistics.
- Apply parametric and non-parametric tests for hypothesis testing and comparisons.
- Effectively interpret and communicate research findings derived from statistical analyses.
- Utilize statistical software to conduct analyses, create data visualizations, and interpret results.

Course Outline

Unit 1: Introduction to Applied Statistical Procedures in Education

Role of statistics in educational research and decision-making.
Key concepts: population, sample, variables, and data types.

Unit 2: Data Preparation and Cleaning for Statistical Analysis

Data collection methods and quality assurance.
Data entry, coding, and validation processes.

Unit 3: Scales of Measurement and Rating Scales

Understanding different scales of measurement: nominal, ordinal, interval, and ratio.
Designing and implementing rating scales in educational research.

Unit 4: Descriptive Statistics in Educational Research

Measures of central tendency: mean, median, mode.
Measures of variability: range, variance, standard deviation.

Unit 5: Parametric and Non-Parametric Tests

Parametric tests: t-tests, ANOVA, regression.
Non-parametric tests: Mann-Whitney U, Wilcoxon signed-rank, Kruskal-Wallis.

Unit 6: Correlation and Regression Analysis

Correlation analysis and interpreting correlation coefficients.
Linear and multiple regression analysis.

Unit 7: Exploratory Data Analysis and Data Visualization

Creating histograms, box plots, and scatter plots.
Utilizing statistical software (e.g., SPSS, R) for data visualization.

Unit 8: Interpreting and Communicating Statistical Results

Translating statistical findings into meaningful insights.
Presenting results through written reports and visual aids.

Unit 9: Practical Applications of Statistical Procedures in Education

Case studies and real-world examples of statistical analysis in educational research.
Addressing challenges and limitations in statistical analysis.

Unit 10: Using Statistical Software for Data Analysis

Introduction to statistical software (e.g., SPSS, R, Tableau, Excel) for data entry, analysis, and visualization.
Students will Perform various analyses and generate output using software tools.

Teaching Strategies:

- Lectures and interactive discussions.
- Hands-on exercises using statistical software.
- Group activities and practical data analysis projects.
- Guest speakers share real-world statistical applications in education.

Assessment Techniques:

- Quizzes and exams on statistical concepts and methods.
- Data analysis assignments using real educational datasets.
- Interpretation and presentation of statistical results.
- Final research project applying statistical procedures to an educational research question.

References:

- Levin, J. R., & Fox, J.-P. (2016). Elementary statistics in social research (12th ed.). Pearson.
- Gravetter, F. J., & Wallnau, L. B. (2019). Statistics for the behavioral sciences (10th ed.). Cengage Learning.
- Field, A. (2017). Discovering statistics using IBM SPSS statistics (5th ed.). SAGE Publications.
- Tabachnick, B. G., & Fidell, L. S. (2019). Using multivariate statistics (7th ed.). Pearson.
- Trochim, W. M., & Donnelly, J. P. (2008). The research methods knowledge base (3rd ed.). Atomic Dog Publishing.
- Pallant, J. (2021). SPSS survival manual: A step-by-step guide to data analysis using SPSS (7th ed.). Open University Press.
- R Core Team. (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing.

Course Code	Course Title	Credit Hours
EDUC4167	Research Writing and Publication in Education	3(3+0)

Course Description:

This course is designed to equip students with the essential skills and knowledge needed for effective research writing and publication in the field of education. Students will learn the principles of scholarly writing, research ethics, and the publication process. The course will cover various aspects of preparing, drafting, revising, and submitting research manuscripts for academic journals and other publication outlets in education.

Course Objectives:

By the end of this course, students will be able to:
- Understand the fundamental principles of research writing and publication in the context of education.
- Apply ethical considerations and guidelines in research writing and publication.
- Demonstrate proficiency in structuring and organizing research manuscripts.
- Develop effective strategies for revising and improving research writing.
- Navigate the submission and review process for academic journals.
- Identify appropriate publication outlets for their research in education.
- Produce a well-structured and properly formatted research manuscript ready for submission.

Learning Outcomes:

Upon successful completion of this course, students will be able to:
- Analyze and critique published research articles in education.
- Apply ethical guidelines for research integrity and proper citation.
- Structure research manuscripts using appropriate sections and headings.
- Revise and edit research writing for clarity, coherence, and conciseness.
- Navigate the submission and peer-review process for academic journals.
- Select suitable publication outlets based on the scope of their research.
- Produce a well-organized and properly formatted research manuscript for submission.

Course Outline:

Unit 1: Introduction to Research Writing and Publication
Overview of research writing and publication process
Understanding different types of publications in education
Importance of ethical considerations in research writing

Unit 2: Scholarly Writing Principles and Style
Elements of effective scholarly writing
APA style formatting and citation
Strategies for clear and concise writing

Unit 3: Structuring Research Manuscripts
Introduction, literature review, and theoretical framework
Methodology, data analysis, and findings sections
Discussion, conclusion, and Implications sections

Unit 4: Revising and Editing Techniques
Strategies for self-editing and proofreading
Peer review and feedback in improving manuscripts
Addressing common writing pitfalls and errors

Unit 5: Submission and Peer Review Process
Selecting appropriate journals and publication outlets
Manuscripts submission guidelines and procedures

Understanding the peer review process and responding to reviewers

Unit 6: Ethical Considerations and Responsible Authorship

Plagiarism, copyright, and intellectual property

Authorship and contributorship guidelines

Ensuring research integrity and transparency

Unit 7: Preparing for Publication and Beyond

Preparing supplementary materials (appendices, tables, figures)

Dealing with manuscript acceptance, revisions, and rejection

Strategies for promoting published research and building an academic presence

Teaching Strategies:

- Lectures and interactive discussions.
- Hands-on exercises using statistical software.
- Group activities and practical data analysis projects.
- Guest speakers share real-world statistical applications in education.

Assessment Techniques:

- Quizzes and exams on statistical concepts and methods.
- Data analysis assignments using real educational datasets.
- Interpretation and presentation of statistical results.
- Final research project applying statistical procedures to an educational research question.

References

- Belcher, W. L. (2009). Writing your journal article in 12 weeks: A guide to academic publishing success. SAGE Publications.
- Day, R. A., & Gastel, B. (2011). How to write and publish a scientific paper (7th ed.). Greenwood.
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
- American Psychological Association. (2020). Publication manual of the American Psychological Association (7th ed.). American Psychological Association.
- Pautasso, M. (2013). Ten simple rules for writing a literature review. PLOS Computational Biology, 9(7), e1003149. https://doi.org/10.1371/journal.pcbi.1003149
- Day, R. A. (1998). How to write and publish a scientific paper (5th ed.). Oryx Press.
- Murray, R., & Moore, S. (2006). The handbook of academic writing: A fresh approach. Open University Press.

Course Code	Course Title	Credit Hours
EDUC4168	Research Proposal Writing in Education	3(3+0)

Course Description:
This course provides students with the skills and knowledge required to develop clear, compelling, and effective research proposals in the field of education. Students will learn the essential components of proposal writing, including problem identification, research questions, theoretical frameworks, methodologies, and anticipated outcomes. The course emphasizes practical techniques for writing persuasive proposals that address relevant educational issues and contribute to the advancement of knowledge.

Course Objectives:
- Upon successful completion of this course, students will be able to:
- Understand the purpose and importance of research proposals in education.
- Identify and define research problems and research questions.
- Develop clear and comprehensive theoretical frameworks.
- Select appropriate research methodologies and data collection techniques.
- Create well-structured and persuasive research proposals.
- Effectively communicate research plans and expected outcomes.

Learning Outcomes:
Upon successful completion of this course, students will be able to:
- Recognize the significance of research proposals in advancing educational knowledge.
- Formulate clear and focused research problems and research questions.
- Construct coherent theoretical frameworks that guide research proposals.
- Evaluate and select appropriate research methodologies and data collection techniques.
- Draft well-organized and compelling research proposals.
- Present research proposals persuasively through written and oral communication.

Unit 1: Introduction to Proposal Writing in Education
Role of research proposals in educational research.
Key components and structure of a research proposal.
Unit 2: Problem Identification and Research Questions
Identifying research gaps and formulating research problems.
Crafting research questions that address educational challenges.
Unit 3: Theoretical Framework and Literature Review
Developing a theoretical framework to guide research.
Conducting a comprehensive literature review.
Unit 4: Research Design and Methodology
Selecting appropriate research methodologies
(qualitative, quantitative, mixed methods).
Detailing data collection techniques and procedures.
Unit 5: Ethical Considerations in Proposal Writing
Addressing ethical considerations and participant protection.
Ensuring research proposals adhere to ethical guidelines.
Unit 6: Data Analysis Plan and Expected Outcomes
Designing data analysis methods and techniques.
Anticipating and articulating research outcomes and implications.
Unit 7: Structuring and Writing Research Proposals
Organizing and presenting research proposals effectively.
Writing persuasive proposal sections, including abstract, introduction, and methodology.
Unit 8: Peer Review and Feedback in Proposal Writing
Providing and receiving constructive feedback on research proposals.
Collaborative refinement of research proposal drafts.
Unit 9: Oral Presentation of Research Proposals
Communicating research proposals through oral presentations.

Addressing questions and feedback from peers and instructors.

Unit 10: Practical Application of Proposal Writing

Students will Apply course concepts to develop and present individual research proposals. They will Incorporate feedback and improve research proposal quality.

Teaching Strategies:

- Lectures and interactive discussions on proposal writing concepts.
- Hands-on exercises in drafting and refining research proposals.
- Peer review and feedback sessions.
- Individual and group presentations of research proposals.

Assessment Techniques:

- Quizzes and assignments on proposal writing principles.
- Development of a comprehensive research proposal.
- Peer review and feedback activities.
- Oral presentations showcasing research proposals.
- Final project involved the submission and presentation of a refined research proposal.

References:

- Locke, L. F., Spirduso, W. W., & Silverman, S. J. (2019). Proposals that work: A guide for planning dissertations and grant proposals (7th ed.). SAGE Publications.
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications.
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. Theory into Practice, 41(4), 212-218.
- McCoy, T. S. (2016). The educator's handbook for understanding and using research. Routledge.
- Dudovskiy, J. (2018). The ultimate guide to writing a dissertation. Research Methodology.
- Bui, Y. (2019). How to write a master's thesis. SAGE Publications.
- Day, R. A., & Gastel, B. (2012). How to write and publish a scientific paper (7th ed.). Greenwood.

Course Code	Course Title	Credit Hours
EDUC4169	Experimental Designs in Educational Research	3(3+0)

Course Description:
This comprehensive course explores experimental designs in educational research, providing students with the skills to design, conduct, and analyze experiments to investigate causal relationships in educational contexts. Key concepts, methodologies, and ethical considerations are covered, enabling students to formulate hypotheses, design experiments, and communicate findings to inform educational practices.

Course Objectives:
Upon successful completion of this course, students will be able to:
- Understand the principles and importance of experimental designs in educational research.
- Formulate research hypotheses and identify suitable experimental designs.
- Design and implement experimental protocols in educational settings.
- Apply appropriate statistical analyses to experimental data.
- Interpret and communicate research findings effectively.
- Address ethical considerations in experimental research.

Learning Outcomes:
Upon successful completion of this course, students will be able to:
- Recognize the significance of experimental designs in establishing causal relationships.
- Formulate clear and testable research hypotheses.
- Design and conduct experiments to investigate educational phenomena.
- Apply statistical techniques to analyze experimental data accurately.
- Communicate research findings through written reports and presentations.
- Apply ethical guidelines to ensure responsible conduct of experimental research.

Course Outline

Unit 1: Introduction to Experimental Designs in Education
Role of experimental designs in educational research.
Key components of experimental designs: variables, control groups, randomization.

Unit 2: Formulating Research Hypotheses and Research Questions
Developing research hypotheses and null hypotheses.
Crafting research questions that guide experimental inquiries.

Unit 3: Pre-Experimental Designs
One-shot case study design.
One-group pretest-posttest design.

Unit 4: True Experimental Designs
Randomized control trials (RCTs).
Solomon four-group design.

Unit 5: Quasi-Experimental Designs
Non-equivalent control group design.
Time-series design.

Unit 6: Factorial Designs in Education
Two-way factorial designs and interactions.
Using factorial designs to explore multiple variables' effects.

Unit 7: Within-Subject and Mixed-Design Experiments
Repeated measures design and its advantages.
Combining within-subject and between-subject factors in mixed designs.

Unit 8: Statistical Analysis for Experimental Data
Descriptive statistics and inferential statistics.
Analysis of variance (ANOVA) for comparing means.

Unit 9: Interpretation and Reporting of Experimental Results
Interpreting ANOVA results and effect sizes.
Communicating findings through written reports and presentations.

Unit 10: Ethical Considerations in Experimental Research
Ensuring ethical conduct of experiments involving human participants.
Addressing ethical challenges in experimental research.
Unit 11: Validity Threats in Experimental Designs
Internal and external validity.
Common threats to validity and strategies for mitigation.
Unit 12: Variables and Their Types
Independent variables, dependent variables, and extraneous variables.
Categorical, continuous, and discrete variables.
Unit 13: Single Subject Designs
Characteristics and applications of single-subject designs.
A-B designs, multiple baseline designs, changing criterion designs.
Teaching Strategies:
- Lectures and interactive discussions on experimental design concepts.
- Hands-on exercises in designing and conducting experiments and single-subject studies.
- Data collection and analysis using statistical software.
- Group projects involving the design and analysis of experimental studies.

Assessment Techniques:
- Quizzes and exams on experimental design principles and concepts.
- Design and execution of experimental protocols and single-subject interventions.
- Statistical analysis and interpretation of experimental and single-subject data.
- Written reports and presentations communicating findings from both designs.
- Final project involving the design and execution of a research study utilizing experimental or single-subject design.

References:

- Campbell, D. T., & Stanley, J. C. (2015). Experimental and quasi-experimental designs for research. Ravenio Books.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference. Houghton Mifflin.
- Trochim, W. M., & Donnelly, J. P. (2008). The research methods knowledge base (3rd ed.). Atomic Dog Publishing.
- Field, A. (2017). Discovering statistics using IBM SPSS statistics (5th ed.). SAGE Publications.
- Rosenthal, R., & Rosnow, R. L. (1991). Essentials of behavioral research: Methods and data analysis. McGraw-Hill.
- Gay, L. R., Mills, G. E., & Airasian, P. (2018). Educational research: Competencies for analysis and applications (12th ed.). Pearson.
- Maxwell, S. E., Delaney, H. D., & Kelley, K. (2018). Designing experiments and analyzing data: A model comparison perspective (3rd ed.). Routledge.
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2nd ed.). Guilford Press.

9- Sustainable Development through Education		
Course Code	**Course Title**	**Credit Hours**
EDUC4132	Leadership and Sustainable Development	3(3+0)
EDUC4133	Peace Education for Sustainable Future	3(3+0)
EDUC4150	Active Citizenship and Cultural Preservation through ESD	3(3+0)
EDUC3116	Environmental Education and Sustainability	3(3+0)
EDUC3167	Teacher Education for Sustainable Development	3(3+0)
EDUC4170	Women Empowerment and Sustainable Development	3(3+0)
EDUC4171	Social Justice in Education	3(3+0)
EDUC4174	Economic Sustainability for a Changing World	3(3+0)

Course Code	Course Title	Credit Hours
EDUC4132	Leadership and Sustainable Development	3(3+0)

Objectives

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

- identify the role of education leadership for Sustainable Development (SD).
- learn the leadership qualities for sustainable development.
- aware about the roles/qualities of leadership for SD.
- describe how informed leader can best contribute in SD.

Contents

1. Educational leadership for Sustainable Development

1.1 Aims and scope of the leadership role for Sustainable Development (SD)

1.2 Goals of leadership for sustainable development

1.3 Characteristics of leader for effective SD

2. SD Stake Holders and their Roles

2.1 Governments and intergovernmental bodies

2.2 Mass media

2.3 Civil society and non-governmental organizations

2.4 The private sector

2.5 Formal education institutions

3. The global challenge: developing globally responsible leaders in the 21st century

3.1 Defining business in the 21st century

3.2 Economic and societal progress

3.3 Action and awareness

3.4 Ethics: the heart and soul of business

4. Leader and Leadership

4.1 Personal Values and Philosophy of Life

4.2 Characteristics of an Effective Leader

5. Coping with the Responsibilities and Pressures of Leadership

5.1 Circumstances faced by leaders

5.2 Leadership within organizations

5.3 Ethics and Values of the Leader

5.4 Roles and Responsibilities of the Leader

5.5 Comapetencies and characteristics of a leader

6. **Problems and issues of educational leadership for sustainable development**
7. **Effective leadership for ESD in the context of Pakistan**
8. **Teacher as leaders**
9. **Role of teachers as leader**

Suggested readings

Avery, G. C (2005). Leadership for Sustainable Futures: Achieving Success in a Competitive World. Edward Elgar Publishing Inc: UK

Course Code	Course Title	Credit Hours
EDUC4133	Peace Education for Sustainable Future	3(3+0)

Course Objectives

After completing the course, students will be able to:

- Demonstrate an understanding of relevant federal and state legislation, regulation, and policies that pertain to the development of educational programs with sustainability for students with special needs, including major categories of disabilities.
- Discuss the concept of least restrictive alternatives and examine the research and rationale(s) for inclusive education for sustainable future of generations.
- Demonstrate an understanding of the role and responsibilities of the general educator in the design of Individual Education Programs (IEP), including identification, referral, IEP development, and implementation.
- Discuss principles of educational assessment for special populations, including testing bias, sensitivity to cultural and language factors, and the importance of adaptations for English Language Learners (ELL).
- Demonstrate an understanding of the characteristics and effective applications of collaboration, including working with families and paraprofessionals in the design and implementation of assessment and instructional programs for students with disabilities.
- analyze classroom and student needs in organizing and planning instruction for special populations, including the design of accommodations and the use of assistive technologies.

Course Contents

1. Introduction to Inclusive Education
2. Historical processes of exclusion and the struggle for inclusion in education
3. Inclusive education and sustainablity
4. Perceptions of Disability
5. Assessing Student Needs
6. Individualized Education Plan Procedures
7. Low Incidence Disabilities
8. High Incidence Disabilities
9. Other Students with Special Needs
10. Strategies for Independent Living
11. Classroom strategies for helping learners with exceptional needs
12. Differentiating classroom learning
13. Role of a powerful, meaningful curriculum in differentiating learning
14. Role of the student and the teacher in a differentiated classroom
15. Teacher's attitudes towards inclusive education for sustainability
16. Instructional Adaptations & Modification
17. Evaluating Student Learning
18. Responding to Student Behavior
19. Support services for exceptional learners
20. Equal opportunities in an inclusive and sustainable education system

21. Peace Education as an essence of ESD

22. Dimensions of peace education

23. Integration of tolerance in inclusive education to promote peace and justice in ESD...Discuss

24. Role of Education in Promoting Peace, Sustainable Development and Global Citizenship

Suggested Readings

Friend, M., & Bursuck, W. (2005). *Including Students with Special Needs: A Practical Guide for Classroom Teachers* (4th ed.). Boston, MA: Allyn & Bacon.

Van Brummelen, H. (2009). *"How do we embrace and support diverse learners?"*, pp. 205-226 (Chapter 7) in *Walking with God in the classroom*, 3rd ed. Colorado Springs, CO: Purposeful Design Publications.

Tomlinson, C. A. & Germundson, A. (2007). *Teaching as jazz*. *Educational Leadership 64* (8), 27-31.

Carolan, J. & Guinn, A. (2007). *Differentiation: Lessons from master teachers*. *Educational Leadership 64*(5), 44-47.

Tomlinson, C. A. (2008). *The goals of differentiation.* Educational Leadership *66* (3), 26-30.

Tomlinson, C. A. (2003). *Deciding to teach them all*. Educational Leadership *61* (2), 6-11.

Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge: Cambridge University Press (pp.21-35)

Gunawardena, C., Wilson, P., & Nolla, A. (2003). *Culture and online education*. In M. Moore W. & Anderson (Eds) *Handbook of distance education* (pp. 753-775). Mahwah, NJ: Lawrence Erlbaum.

Jule, A. (2002). *Speaking their sex: A study of gender and linguistic space in an ESL Classroom*. *TESL Canada Journal, (19)*2, 37 - 51.

Course Code	Course Title	Credit Hours
EDUC4150	Active Citizenship and Cultural Preservation through ESD	3(3+0)

Course Objectives

After completion the course, students will be able to:

- identify skills needed to for active citizenship;
- apply these skills to the environments.
- Inculcate sense of cultural preservation
- evaluate the impact of using teaching materials (photographs, artifacts, tools) from field expeditions;
- appreciate how using community resources enhances the educational experience for diverse learners;
- describe how informed guest presenters can best contribute to a learning experience.

Course Contents

1 The Vision of World citizenship

2 Philosophical and ethical foundations

2.1 Social relations with human beings

2.2 Environmental relations between human beings

2.3 Ecological relations between organism (including human)

3 Social theory, politics and governance

3.1 Epistemology

3.2 Liberalism

3.3 Industrialism

3.4 Marxism

3.5 Constructive postmodernism

3.6 Environmental Citizenship/ Ecological Citizenship

3.7 Hedonism

3.8 Fundamentalism

3.9 Capitalism

3.10 Skepticism

3.11 Democracy

4 Green political theory and the politics of sustainable development

4.1Work of national and international NGO's and governmental agencies

4.2Communication technologies and pedagogies

5 Liberal environmental citizenship

5.1Liberal democracy

5.2Aims and importance of liberal environmental citizenship

5.3Drivers and barriers in environmental citizenship

6 Post-cosmopolitan ecological citizenship

6.1Types of citizenship

7 Post-industrial socialist citizenship

8 How to teach Citizenship education for Sustainable Development?

Suggested readings

Chalkley, B., Haigh, J. M & Higgitt, D (2013). *Education for Sustainable Development: papers in honour of the United Nations Decade of Education for Sustainable Development (2005-2014).* Routledge.

Scott, D & Lawson, H (2002). *Citizenship education and the curriculum.* Ablex Publishing: USA

Course Code	Course Title	Credit Hours
EDUC3116	Environmental Education and Sustainability	3(3+0)

Course Objectives

By the end of the course, the students will be able to:

- Comprehend the various concepts related to natural and built environment.
- Comprehend the value of various natural resources and their value to human beings.
- Analyze critically environmental issues resulting from technological and human interventions.
- Grasp the integral role of environmental education for sustainable development.
- Understand and implement the knowledge, skills and practices acquired in their area of work

Course Contents

1 Understanding the environment and environmental sustainability

1.1 Natural environment
1.2 Eco-systems, ecology and Bio-diversity
1.3 Natural flow in Eco-system
1.4 what is environmental sustainability?
1.5 Why is environmental sustainability important?
1.6 Principles of environmental sustainability

2 Natural resources

2.1 Renewable and Non-renewable resources
2.2 Forests, wildlife, mineral and common property resources.
2.3 Problems to natural resources in Pakistan
2.4 Natural environmental issues and their relationship with natural resources
2.5 Economic growth and environmental sustainability

3 Technological advancements

3.1 Industrial revolution
3.2 Population growth
3.3 Intensification of agriculture
3.4 Economic development
3.5 Global environment issues
3.6 Covid 19, economic downfall and environmental sustainability

4 Built environment

4.1 Brown environment
4.2 Industrialization
4.3 Pollution
4.4 Global environment and greenhouse effect
4.5 Society and nature
4.6 Politics and democracy
4.7 Phases of value creation in environmental sustainability

5 Energy and its conservation

5.1 Renewable and Non-renewable resources of energy

5.2 Alternative sources of energy

5.3 Intermediate technology

5.4 Nuclear Energy

5.5 Sustainability and environmental innovation

6 Historical perspective of environmental education

6.1 Ecological foundation

6.2 Stolkholmes conference

6.3 Earth Summit (UNCED)

6.4 North-South Conflict

6.5 National efforts

7 Environmental education for action towards sustainability

7.1 The nature and scope of EE

7.2 Aims and objectives of EE

7.3 Environmental education for citizenship

7.4 Environmental ethics and values

7.5 Education for sustainability

7.6 Environment,Development and sustainability

7.7 Teachers' role as environmentalist for sustainable development

7.8 Analyse the discrepancy among sustainability concepts ,EE and ESD

8. Billion Tree Tsunami and environmental sustainability

8.1 Billion Tree Tsunami projects in Pakistan

8.2 Billion Tree Tsunami before and after

8.3 Billion Tree Tsunami benefits for environmental sustainability

8.4 The billion trees project helped to change the behaviour of people...JUSTIFY

8.6 The billion trees project a way to tackle unemployment for sustainable future of Pakistan ...Discuss

Suggested Books

Daun,M& Wendt,N.M(1997) *Environmental education teachers manual: environmental education issues in the Pacific*. Amazon.com.

Palmer,J.A (2003). *Environmental Education in the 21st century. Theory ,practice, progress and promises*. London. Routledge Falmer.

Course Code	Course Title	Credit Hours
EDUC3167	Teacher Education for Sustainable Development	3(3+0)

Course Objectives

By the end of the course, the students will be able to:

- Comprehend the importance of ESD in teacher education programs.
- Justify that Sustainability starts with teachers
- Analyze critically sustainability issues resulting from technological and human interventions in teacher education programs.
- Grasp the integral role of teacher education for sustainable development of country and youth as well.
- Understand and implement the knowledge, skills and practices in real life situations.

1. Teacher Education

1.1 Concept of teacher education in Pakistan
1.2 Levels of teacher education in Pakistan and some other countries
1.3 Teacher as a Key change agents for change
1.4 TEPs issues and problems

2. ESD and Teacher Education

2.1 Background related to ESD
2.2 Educational Sustainability in Pakistani Universities
2.3 ESD in teacher education
2.4 Importance of Sustainable education in teacher education programmes.

3. TEPs and sustainability

3.1 21st century skills enhancing sustainability
3.2 Sustainability starts with teachers...justify
3.3 Status of sustainable development goals in Pakistan

4. Quality Education and Sustainability

4.1 SDGs agenda 2030 for quality education
4.2 Integration of SDGs in teacher education programmes
4.3 Level of policy Education for sustainable developmwent
4.4 Quality Teachers incorporate sustainbility in society..give Argument
4.5 Quality education and sustainabilty cause successful future of students

5. Teacher competencies and ESD

5.1 Why is competency important to a teacher?
5.2 Teacher competency :a critical area to quality education....give arguments
5.3 Teacher professional competencies in Education for sustainable dwevelopment

6. Teacher competency models and ESD

6.1 what are Teacher competency models
6.2 ESD related Teacher competency models
6.3 Compare ESD related Teacher competency models with Teaching Models
6.4 Development of an ESD Teacher competency framework

7. ICT skills and sustainability

7.1 ICT skills improve sustainability in teacher education programmes'''Discuss

7.2 Blu prints to achieve SDGs through teacher education

8. Theories of teacher professional development for sustainable generation

9. Interdisciplinary approach to promote peace, tolerance and inclusion in TEPs.

10. Role of Teacher education programs to promote sustainability through co-curricular activities such as drama, debates, discussion, dialogues and essay writing competitions.

11. Ways to discourage 'Hate speech' and avoiding personal biases, prejudice in the society through teaching strategies.

12. Developing an ESD action plan with Community Participation for solving issues

13. Integrating ESD in the School subjects (social studies, Islamic studies, Science).

Teaching strategies

Lecture Method, Discussion Method, Collaborative learning, Field Trips, Project method, problem solving method,role plays etc.

Assignments

Students will conduct Case Study of any aspect of quality education Students can design project on a problematic situation that exit in the teacher education in attaining SDGs agenda 2030 and suggest the intervention strategies to overcome that situation. Creating panel talks to discuss the conflicting situation related to sustainability in education and suggest the solutions.
Preparing Presentation or seminars to promote teacher education for sustainable development in the society.Making hands on projects to foster sustainbility skills among future teachers

Suggested Sources

1. The Professional Teacher Educator: Roles, Behaviour, and Professional Development of Teacher Educators(2014)by Mieke Lunenberg & Jurriën Dengerink & Fred Korthagen (auth.)
2. Qiong Li, Xudong Zhu & Leslie N.K. Lo (2019) Teacher education and teaching in China, Teachers and Teaching, 25:7, 753-756, DOI: 10.1080/13540602.2019.1693429
3. Kalsoom, Qudsia & Qureshi, Naima & Khanam, Afifa. (2019). Teacher Education for Sustainable Development in Pakistan: Content Analysis of Teacher Education Curriculum and Standards. 13. 20-33. 10.2139/ssrn.3388457.
4. Giangrande, Naresh & White, Rehema & East, May & Jackson, J.T. & Clarke, Tim & Saloff-Coste, Michel & Penha-Lopes, Gil. (2019). A Competency Framework to Assess and Activate Education for Sustainable Development: Addressing the UN Sustainable Development Goals 4.7 Challenge. Sustainability. 11. 2832. 10.3390/su11102832.
5. Bertschy, Franziska, Christine Künzli, and Meret Lehmann. 2013. "Teachers' Competencies for the Implementation of Educational Offers in the Field of Education for

Sustainable Development" *Sustainability* 5, no. 12: 5067-5080. https://doi.org/10.3390/su5125067

6. Teacher education in Pakistan: Issues and problems 2020

https://files.eric.ed.gov/fulltext/ED608314.pdf

7. https://d.lib.msu.edu/islandora/object/etd:2681/datastream/OBJ/download/Teacher_education_policies_and_programs_in_Pakistan___the_growth_of_market_approaches_and_their_impact_on_the_implementation_and_the_effectiveness_of_traditional_teacher_education_programs.pdf

8. https://www.amazon.in/Teacher-Education-Mohan-Radha/dp/B07X9SMSM3?source=ps-sl-shoppingads-lpcontext&psc=1

9. https://www.researchgate.net/publication/250917902_teacher_education_for_21st_century_paper

https://www.tandfonline.com/toc/uate20/current

Course Code	Course Title	Credit Hours
EDUC4170	Women Empowerment and Sustainable Development	3(3+0)

Course Description:

The "Women Empowerment and Sustainable Development" course is designed to provide students with a comprehensive understanding of the intricate relationship between gender equality, women's empowerment, and sustainable development. The course delves into the critical role women play in driving social, economic, and environmental progress while exploring the challenges they face and the strategies for fostering positive change.

Students' Learning Outcomes:

After the successful completion of this course the students will be able to:

- Know about the concepts of gender, equity, and sustainable development, and how they intersect to create a more inclusive and prosperous society.
- Examine the various dimensions of gender inequality, including economic, social, political, and cultural factors, and their impact on development outcomes.
- Explore the multidimensional nature of women's empowerment, including access to education, healthcare, economic opportunities, and decision-making power.
- Critically analyze the challenges posed by gender-based discrimination and violence and study strategies to combat these issues within the context of sustainable development.
- Know about international and national policies, legal frameworks, and conventions aimed at promoting gender equality and women's rights in the context of sustainable development.
- Explore how entrepreneurship and economic empowerment initiatives can uplift women economically and contribute to sustainable development goals.
- Examine the role of women in leadership and decision-making positions, both in public and private sectors, and how their presence contributes to better governance and development outcomes.
- Know about the intersection of gender and environmental issues, including women's roles as environmental stewards and the differentiated impacts of climate change on women.
- Discuss strategies for promoting women's empowerment and gender equality as integral components of sustainable development efforts.

Course Outline

Unit 1. Women Empowerment

1.1 Definition and dimensions of women empowerment (economic, social, political, and personal)

1.2 Historical context: Evolution of women's roles and rights

1.3 Importance of women's participation in decision making processes

Unit 2. Sustainable Development

2.1 Definition of sustainable development and its three pillars (economic, social, environmental)

2.2 The Sustainable Development Goals (SDGs) set by the United Nations

2.3 Interlinkages between gender equality and sustainable development

Unit 3. Interconnectedness: Women Empowerment and Sustainable Development

3.1 Relationship between Women Empowerment and Sustainable Development

3.2 Women as agents of change: How empowered women contribute to sustainable development

3.3 Impacts of gender equality on various aspects of sustainable development (e.g., education, health, poverty reduction, environmental conservation)

Unit4. Challenges and Barriers

4.1 Obstacles to women's empowerment (unequal access to education, workforce discrimination, gender-based violence)

4.2 Analyzing how these challenges hinder sustainable development efforts

Unit 5. Strategies and Initiatives

5.1 Government policies promoting gender equality and sustainable development

5.2 Grassroots initiatives, NGOs, and community based efforts

5.3 The role of education in promoting both women's empowerment and sustainable development

Unit 6. Benefits of Integration

6.1 Enhanced economic growth and productivity

6.2 Improved quality of life for families and communities

6.3 Long-term environmental conservation and preservation

Unit 7. Role of Education

7.1 Empowerment through education: Access to quality education for girls and women

7.2 Education's role in changing societal norms and perceptions

7.3 Integrating gender-sensitive education in curricula

Unit 8. Creating an Inclusive Society

8.1 Stereotypes and biases in media and education

8.2 Fostering a culture of gender equality and inclusivity

8.3 Engaging men and boys as allies in the journey towards empowerment and sustainable development

Teaching Methods

Lecture method, Interactive method, Discussion method, Field visits

References:

Alarcón, D. M., & Cole, S. (2021). No sustainability for tourism without gender equality. In *Activating critical thinking to advance the sustainable development goals in tourism systems* (pp. 57-73). Routledge.

Bown, L. (1990) Preparing the Future: Women, Literacy and Development, London: ActionAid.

European Commission and the European External Action Service (EEAS) Joint Staff Working Document on "Gender Equality and Women's Empowerment: Transforming the lives of Girls and Women through EU External Relations 2016-2020" Brussels, 21.9.2015 SWD(2015).https://ec.europa.eu/europeaid/joint-staff-working-document-gender-equality-andwomens-empowerment-transforming-lives-girls-and_en

http://www.europarl.europa.eu/studies

Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic literature*, *50*(4), 1051-1079

Hamlin, K. A. (2019). *From Eve to Evolution: Darwin, Science, and Women's Rights in Gilded Age America*. University of Chicago Press

King, E.M. and A. Hill (1993) Women's Education in Developing Countries: Barriers, Benefits and Policies, Baltimore, USA: John Hopkins University Press.

Lucatello, S., & Huber-Sannwald, E. (2020). Sustainable Development Goals and drylands: Addressing the interconnection. *Stewardship of Future Drylands and Climate Change in the Global South: Challenges and Opportunities for the Agenda 2030*, 27-40.

Reshi, I. A., & Sudha, T. (2022). Women Empowerment: A Literature Review. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, *2*(6), 1353-1359.

Reshi, I. A., Sudha, T., & Dar, S. A. (2022). Women's Access to Education and Its Impact on Their Empowerment: A Comprehensive Review. *MORFAI JOURNAL*, *1*(2), 446-450.

Shetty, S., & Hans, V. (2015). Role of education in women empowerment and development: Issues and impact. *Role of Education in Women Empowerment and Development: Issues and Impact (September 26, 2015)*.

Course Code	Course Title	Credit Hours
EDUC4171	Social Justice in Education	3(3+0)

Course Description

By the end of the course, students will develop the understanding and skills to explore the intersection between social justice and education. This course will cover the key principles of social justice in teacher education, access, equity, equality, justice, identity, democracy, inclusivity, diversity and equal participation. The course will offer the opportunities to critically scrutinize the education system, knowledge paradigms and ideologies and examining their links to political and economic frameworks.
By introducing critical and transformative pedagogies, the course will equip the teachers with the tools necessary to foster equity, inclusivity, and positive change within educational systems. Furthermore, the course will engage the students in collaborative and community-based projects offering them an opportunity to apply the principles of social justice in diverse contexts.

Course Objectives
Prospective teachers will
1. develop an understanding about social justice in education.
2. develop a critical perspective on education system, knowledge paradigms and ideologies and their link to broader economic and political system.
3. explore and analyze different principles of social justice in education nationally and internationally.
4. explore and learn different critical and transformative pedagogies to promote social justice in education.
5. develop skills to become informed, critical and responsible social citizens.
6. develop competencies to contribute actively to promote and apply the principles of social justice in diverse contexts.

Student Learning Outcomes
After completing this course successfully, the prospective teachers will be able to
1. describe the meaning and background of social justice in education.
2. demonstrate the right values and attitude to appreciate diversity, equality, democracy and justice
3. demonstrate and apply the principles of social justice in diverse contexts.
4. Apply different critical and transformative pedagogies to develop the competencies of social global citizenship among school students and young people.
5. engage in practical projects and community-based activities to apply the principles of social justice in diverse contexts.

Course Contents
1. Introduction
1.1. Meaning and concept of social justice
1.2. Historical and philosophical foundations of social justice in education
1.3. Significance of social justice for teachers and classrooms

2. Different Principles of Social Justice
2.1. Access and participation
2.2. Equality and Equity
2.3. Democracy
2.4. Identity and social justice
2.5. Inclusivity and social justice
2.6. Social inequality and its impact on educational outcome and access
2.7. Examining the intersection of race, gender, class and other identities in education

2.8. Political, legal, social and human rights

3. Social Justice in Teacher Education

3.1. Knowledge paradigm and its critique
3.2. Ideological paradigm and its critique
3.3. Critical examination of different education system and its link to political and economic framework
3.4. Social justice leadership in education
3.5. Collaborative partnership between school and community and educational leaders
3.6. Learning from international best practices in social justice education

4. Transformative Curriculum Design for Social Justice

4.1.1. Exploring diverse narratives and voices in educational content
4.1.2. Empowering marginalized students through providing diverse teaching and learning experiences
4.1.3. Integrating social justice principles into curriculum development
4.1.4. Cultivating critical consciousness among learners
4.1.5. Designing learning experiences that challenge dominant perspective and promote critical thinking
4.1.6. Analyzing alternative and inclusive assessment methods aligned with transformative pedagogies

5. Transformative Pedagogies and Social change

5.1. Critical pedagogy
5.2. Student-centered learning and pedagogy
5.3. Project-based learning
5.4. Role-play and drama
5.5. Storytelling
5.6. Action research
5.7. Collaborative problem solving
5.8. Social activism
5.9. Using ICT to develop social justice in education.

6. Ethical consideration in social justice education

6.1. Addressing social injustice in classrooms
6.2. Maintaining safe and inclusive learning environment
6.3. Developing code of ethics in the classroom
6.4. Ensuring transparency, accountability and respect in teaching and learning
6.5. Technology, social engagement and ethical dilemmas

7. Student-led seminars on different social justice principles

8. Community based projects and advocacy campaigns

Teaching/Learning Strategies

1. Lecture/Discussion
2. Action Research Projects
3. Advocacy Campaign
4. Reflective Journals
5. Role-play
6. Drama

Recommended Readings

Ayers, W., Quinn, T., & Stovall, D. (Eds.). (2009). Handbook of social justice in education.

Cochran-Smith, M., Shakman, K., Jong, C., Terrell, D. G., Barnatt, J., & McQuillan, P. (2009). Good and just teaching: The case for social justice in teacher education. *American Journal of Education*, *115*(3), 347-377.

Gorski, P. C., & Pothini, S. G. (2013). *Case studies on diversity and social justice education*. Routledge.

Kaur, B. (2012). Equity and social justice in teaching and teacher education. *Teaching and Teacher Education*, *28*(4), 485-492.

Lopez, A. E., & Olan, E. L. (Eds.). (2018). *Transformative pedagogies for teacher education: Moving towards critical praxis in an era of change*. IAP.

Morrow, R. A., & Torres, C. A. (2002). *Reading Freire and Habermas: Critical pedagogy and transformative social change*. Teachers College Press.

McDonald, M. A. (2005). The integration of social justice in teacher education: Dimensions of prospective teachers' opportunities to learn. *Journal of Teacher Education*, *56*(5), 418-435.

Mills, C., & Ballantyne, J. (2016). Social justice and teacher education: A systematic review of empirical work in the field. *Journal of Teacher Education*, *67*(4), 263-276.

Parson, L., & Ozaki, C. C. (Eds.). (2020). *Teaching and Learning for Social Justice and Equity in Higher Education: Foundations*. Springer Nature.

Smith, E. (2018). Key issues in education and social justice. *Key Issues in Education and Social Justice*, 1-264.

Course Code	Course Title	Credit Hours
EDUC4174	Economic Sustainability for a Changing World	3(3+0)

Course Description

By the end of the course, students will develop knowledge and understanding about meaning and significance of economic sustainability. Students will also investigate the relationship between economic, social and environmental sustainability. Through the exploration of different entrepreneurial case studies, students will gain insights into different strategies and innovative ways to foster economic sustainability. Additionally, students will also get the opportunity to learn and develop skills to integrate economic literacy in their teaching and learning approaches. The course will further provide opportunities to examine the role of technology and globalization on economic growth and sustainability in the changing world

Course Objectives

Prospective teachers will

1. develop comprehensive understating of economic sustainability and its significance.
2. develop the understanding about the relationship of economic, social and environmental dimension of sustainability
3. develop valuable insights from diverse entrepreneurial case studies to foster economic sustainability
4. learn the skills to integrate economic literacy into teaching and learning methods
5. learn to analyse the influence of technology and globalization on economic growth and sustainability
6. develop competencies to contribute actively to foster economic sustainability

Student Learning Outcomes

After completing this course successfully, the prospective teachers will be able to

1. describe the meaning and significance of economic sustainability
2. demonstrate the right values and attitude to appreciate and advocate for economic and environmental sustainability
3. demonstrate and apply the principles of economic literacy in their teaching and learning
4. Apply economic literacy skills for informed decision-making in their consumption of resources and products

Course Contents

1. Introduction to Economic Sustainability

1.1. Meaning of economic sustainability
1.2. Significance of economic sustainability
1.3. Forms of economic sustainability
1.4. Implementing economic sustainability

2. Economic Growth and Environmental Resilience

2.1. Relationship between economic, social and environmental sustainability

2.2. Role of natural resource management in economic growth
2.3. Innovative ways of balancing economic growth and ecological preservation
2.4. Resource efficiency, reducing waste and sustainable economic policies.
2.5. Sustainable consumption for the changing world
2.6. Population, migration and globalization: challenges and opportunities

3. Teachers, Economic and Society
3.1. Entrepreneurial education and its effectiveness
3.2. Entrepreneurship teachers
3.3. Developing entrepreneurship in education
3.4. Innovative programme and projects in Entrepreneurship
3.5. University incubator centers
3.6. Student social enterprise engagement
3.7. Linkage of school, university, community and industry
3.8. Prospects and challenges of educating sustainable entrepreneurship

4. Economic Sustainability and Technological Innovation
4.1.1. Exploring the role of IT in the context of economic sustainability and global challenges
4.1.2. Role of technology advancement in different sectors like education, business, transportation and agriculture
4.1.3. Impact of globalization on economic growth and disparities

5. Role of Teachers for a sustainable Future
5.1. Innovative pedagogies and content
5.2. Integrating economic dimension of sustainability within educational framework
5.3. Understanding the relationship between sustainable, education and economic system
5.4. Economic literacy
5.5. Developing engaging and innovative methods to teach economic literacy
5.6. Integrating resource allocation, supply and demand and resource management in educational content
5.7. Incorporating lessons on sustainable consumptions and principles
5.8. Teaching environmental and economical implication of consumption choices
5.9. Preparing students for sustainable careers and entrepreneurship opportunities

6. Industry experts seminars on innovative entrepreneurship ideas

7. Case studies on entrepreneurial education

Teaching/Learning Strategies
1. Lecture/Discussion
2. Seminars
3. Research Projects
4. Reflective Journals
5. Case Studies

Recommended Readings

Cook, J. W. (2019). *Sustainability, human well-being, and the future of education* (p. 425). Springer Nature.

Edwards, G., Hill, D., & Boxley, S. (2018). Critical teacher education for economic, environmental and social justice. *Journal for Critical Education Policy Studies*.

Fayolle, A., Kariv, D., & Matlay, H. (Eds.). (2019). *The role and impact of entrepreneurship education*. Edward Elgar Publishing.

Ismail, A. B., Sawang, S., & Zolin, R. (2018). Entrepreneurship education pedagogy: teacher-student-centred paradox. *Education+ training*, *60*(2), 168-184.

Karimi, S., Biemans, H. J., Lans, T., Chizari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of small business management*, *54*(1), 187-209.

Henry, C., Hill, F., & Leitch, C. (2017). *Entrepreneurship education and training: the issue of effectiveness*. Routledge.

Henry, C., Rockström, J., & Stern, N. (Eds.). (2020). *Standing up for a sustainable world: Voices of change*. Edward Elgar Publishing.

Lin, T. C. (Ed.). (2021). *Economics of Education and Sustainable Development*. MDPI-Multidisciplinary Digital Publishing Institute.

Mwasalwiba, E. S. (2010). Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. *Education+ training*, *52*(1), 20-47.

Nicolopoulou, K., Karatas-Ozkan, M., Janssen, F., & Jermier, J. M. (Eds.). (2016). *Sustainable entrepreneurship and social innovation*. Taylor & Francis.